

Climate Change Diplomacy

The Way Forward for Asia and Europe











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EU-ASIA DIALOGUE Shaping a Common Future for Europe and Asia -Sharing Policy Innovation and Best Practices in Addressing Common Challenges

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Preface

Climate change and its consequences are one of the biggest challenges for international politics and cooperation. There is no doubt about the devastating effects of climate change for many countries. International "Climate Summits" have repeatedly pointed out the need for joint actions by the international community. However, these summits often could not agree on common targets and policies that include all key stakeholders. In the meantime, international analyses and predictions on the consequences of climate change show that Europe, the USA and the People's Republic of China are among the biggest emitters of CO_2 , while many Asian countries suffer from the negative impacts of climate change. At the same time, economic development in most Asian countries is accompanied by increasing emissions of greenhouse gases – a typical dilemma for many emerging markets and developing countries that requires a clear de-coupling strategy.

Although the problematic consequences of climate change are undeniable, international negotiations are characterized by strategies which are still primarily driven by national interests. How can this attitude be changed? How can agreements and commitments be achieved in international negotiations? While much research has been done on the causes and impacts of climate change, there is a lack of discussion on the way that international climate change diplomacy has been carried out. This gap shall be addressed in our publication.

Despite international efforts to reach common policies and a binding agreement, the achievements are few. This is due to a number of factors. Some developing countries deny responsibility for climate change, arguing that it is mainly the industrialized countries that have caused the high levels of greenhouse gas concentrations in the atmosphere. Other countries fear that a climate agreement might hinder their developments and economic growths. In addition, it has been claimed that less-developed countries lack the financial capacities to adapt to the effects of climate change. Several major developed countries, on the other hand, deny sole responsibility for climate change, on the grounds that emerging and developing markets produce a relatively high amount of carbon dioxide. Since the industries in these countries are expected to grow, developed countries argue that they should utilise green technology, environmentally sustainable production methods and high environmental standards from an early stage. However, these arguments ignore the fact that environmental issues do not stop at national borders, but are a transnational problem.

This pessimistic outlook is underpinned by recent developments. The announcements by Japan, first, to withdraw from the Kyoto Protocol, and then to change its CO_2 emission target from reduction to a lower increment is a counter-productive move by a former key partner. The announcements by Canada and Russia to not extend the Kyoto Protocol as well as Australia's more critical approach also fall in this category. The most recent Conference of

Parties (CoP) in Warsaw, Poland, saw an escalation of the situation with the boycott by the most important Non-Governmental Organizations, showing their disrespect for the uncooperative behaviour of nation-states.

These negative perceptions, however, ignore the fact that certain achievements have been made in the recent CoPs and that a number of countries have started domestic and bilateral initiatives in recent years. The Green Climate Fund and the commitment by developed countries to provide USD100 billion annually from 2020 onwards will help to ameliorate the financial burden for developing countries. The Durban Platform provides another specific mechanism to discuss the new binding agreement in 2015. Domestic measures can impact the domestic situation and ultimately shape a country's position in the negotiations if it sees the positive effects of climate protection. Such actions include the diversification of energy resources, establishment of local carbon markets, limits for big emitters and adaptation measures. Bilateral initiatives can take place between governments or countries and focus on a variety of topics. In addition, bilateral cooperation does not have to be horizontal, but can also be implemented between a country and a local government unit in another country. The local government unit will strongly benefit from such cooperation and can become an advocate for de-coupling. The EU can also support domestic developments (e.g., NAMAs) through bilateral cooperation. Thus, looking only at the multilateral negotiations, where a huge number of states have to agree, does not do justice to the efforts that have been put in place. Both levels have to complement each other and domestic actions can help to establish confidence and trust. The recent negotiations have shown that trust is lacking among the parties, but is absolutely essential for making progress. Once one state or a group of states commits itself to new targets, this can influence the behaviour of other parties as well.

In this context, there are great opportunities for Europe and Asia to emphasize their joint commitment and bring the discussion forward. Such cooperation should be embedded in a two-track diplomacy of multi- and bilateral initiatives. As it is necessary to build up new confidence, the initial cooperation should be on less tense aspects. The cooperation should also focus on sectorial approaches to create strategic climate partnerships and trust. For instance, a reinforcement of the EU-ASEAN cooperation on capacity-building, public awareness and eco-friendly technologies can build up confidence. If these two groups of states can make a first step, others will follow them easily. As the negotiations showed, all countries agree that implementation is needed. If, for instance, the European Union will be the first to commit itself to more ambitious targets, other countries are likely to drop their objections. Additional topics for future cooperation include energy efficiency, energy mix and de-coupling measures. Finally, cooperation on climate change diplomacy should not ignore the crucial role cities and urban areas play in this context. They cause pollution and are, at the same time, extremely vulnerable to the consequences of climate change.

In order to contribute to the understanding of the current developments and initiatives on climate change diplomacy, this publication includes papers with perspectives from Europe and Asia. What is the strategic interest of key countries? How can they cooperate? What roles do alternative forms of cooperation play in the discussions? These and other questions will be addressed in this publication.

Preface

The first paper by **Gang Chen** provides an overview of the current stage of the negotiations and the possible agreement in 2015. Drawing on the lessons from past agreements, he provides an outlook on the new deal. Of particular interest is the role of Southeast Asia in this discussion.

Jusen Asuka discusses the climate change policies in Japan. Having been one of the key countries in previous years, Japan has now taken a step back and reduced its commitments. He looks at the domestic reasons for this shift in policies and analyzes what can be expected from the country in the future.

Martin Frick and **Sabrina Schulz** analyze the climate change policies of Germany and the European Union. Particular attention is given to the aspect of climate risk and how this can be managed. Within the broader EU context, Germany can be seen as a key country. They argue that the recent developments of the Energiewende is not a purely domestic project, but has implications for the whole community.

The Polish perspective is discussed by **Bartek Nowak**. As the effects on the economy shape much of the public climate debate in the country, he argues that the behaviour of the country is rather predictable and unlikely to change too much. He provides a clear analysis of the Polish perspective, which is embedded in the wider EU environment.

Piotr Maciej Kaczyński's paper looks at the EU's climate change diplomacy and its unique role in the negotiations. Since climate change is an area of shared competence, this has concrete impacts on the relationship between the EU and its Member States in the negotiations, which is explained by Kaczyński. He highlights the strategy of the EU and its expectations for the new agreement.

John Vogler analyzes the internal and external dimension of the EU's climate change policies. He describes the EU's engagement with the international climate regime and the key factors that determine the external climate policy. He concludes that the position and success of the EU's engagement will be determined by the respective political environment, but that the EU has the potential to shape this.

Zhu Xufeng elaborates on the participation of scientists in the global climate change agenda. He looks at the historic influence of researchers in the negotiations. Additionally, Zhu analyzes the different roles individual groups of scientists play and how they try to influence the discussions.

Coraline Goron takes a closer look at the EU-ASEAN relations in the climate change negotiations. She analyzes both top-down and bottom-up approaches for inter-regional cooperation. The different positions of these two regional bodies are discussed and possibilities for enhanced cooperation are drawn.

Neil Hirst explores the opportunities for bilateral climate change initiatives between Europe and Asia and their possible impact on the multilateral negotiations. He highlights existing forms of cooperation by the EU and its Member States that can contribute greatly to the \$100 billion annual climate financing.

The final paper by **Jackson Ewing** looks at climate security. The connection between climate change and security in Europe and Asia is addressed within the broader framework

of the United Nations Security Council. Drawing on past experiences, Ewing shows the different positions towards this concept in both regions.

This book is part of the "EU-Asia Dialogue" project, which is co-funded by the European Union and the Konrad-Adenauer Stiftung Germany. In the context of this project, the implementing consortium will publish seven books. More information on the "EU-Asia Dialogue" can be found on the website www.eu-asia.eu.

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Climate Change Diplomacy: Challenges and Prospects for Reaching a Global Agreement

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INTRODUCTION

Climate change, mostly caused by increased greenhouse gas emissions from human activities since the Industrial Revolution and especially in the last half century, did not become an urgent item on the world scientific agenda until the 1970s. On 12–23 February 1979, the First World Climate Conference sponsored by the World Meteorological Organization (WMO) was held in Geneva to promote scientific understanding and public awareness of the climate change problem. The conference, mostly attended by scientists from a wide range of disciplines, triggered the establishment of the Intergovernmental Panel on Climate Change (IPCC), a scientific intergovernmental body tasked with evaluating the risk of climate change and exploring possible policy responses, by the WMO and the United Nations Environment Programme (UNEP) in 1988.

EARLY STAGE OF GLOBAL CLIMATE DIPLOMACY AND THE KYOTO PROTOCOL

Shortly after the IPCC published its first assessment report in 1990, which later served as the documentary basis of the United Nations Framework Convention on Climate Change (UNFCCC), the UN established the Intergovernmental Negotiating Committee (INC) in preparation for a framework convention on climate change. Both industrialized and developing countries took part in the international climate negotiations from the preliminary stages, with many developing economies including China and India viewing climate change as the same type of issue as ozone depletion, involving North–South equity problems. They believed that developed countries should take responsibility for climate change and therefore should provide financial and technological aid to developing countries to facilitate mitigation and adaptation. The UN-tracked climate talks, in sharp contrast to the initial ozone

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negotiations conducted exclusively between rich states, were influenced by such developments and historical concerns due to universal participation from the outset. In the early 1990s, the "bloc of G-77 (the group of 77 developing countries) plus China," which comprised about 90 percent of the developing countries within the UNFCCC, argued for equity on historical grounds, placing the blame primarily on the North and pushing for a convention in which the South should bear far less responsibility than the North, whose high per capita emissions and opulent lifestyles were assumed to be the primary causes of climate change. As early as the 1992 Rio Earth Summit, most developing countries insisted on the principle of "common but differentiated responsibilities" and strongly opposed legally binding emission-reduction targets for developing countries in particular, demanding that industrialized countries should provide technology and fund aid to developing countries. Industrialized nations that were anxious about climate consequences had to make significant concessions that allowed the principle of "common but differentiated responsibilities" to be embodied in the UNFCCC at the Rio summit.

After another five years of heated debates, delegates from about 150 countries and regions passed the Kyoto Protocol in Japan in December 1997. The Kyoto Protocol was the first international treaty setting detailed legally binding obligations for industrialized nations to reduce their greenhouse gases. The Kyoto Protocol came into effect in 2005, requiring 38 industrialized countries to reduce their greenhouse gas emissions between 2008 and 2012 by an average of 5.2 percent below 1990 levels. In practice, the seminal Kyoto Protocol not only forced industrialized nations to curb carbon emissions, but also offered developing countries economic rewards under the Clean Development Mechanism (CDM) and incentivized them to improve their environmental governance domestically. The principle of "common but differentiated responsibilities" advocated by China, India and other developing countries was followed by the Kyoto Protocol, which stipulated that the CDM should encourage developed countries to provide financial and technical assistance to developing countries. Conversely, developing countries had no concrete abatement commitments. They only needed to establish national emissions inventories, report on national programmes and promote cooperation, sustainable development, and information exchange. The success of the Kyoto Protocol owed much to substantial concessions from the bloc of industrialized nations as well as the establishment of three flexible mechanisms. Without such an institution as the Kyoto Protocol that provides incentives and disincentives for individual states, sovereign states would tend to adopt a free-ride strategy and refuse to participate in joint efforts to combat climate change when the cost of cutting domestic emission is too high. International institutions, therefore, become essential for pulling individual states into collective actions for global welfare and overcoming the free-ride preference.

In 2001, US President George W. Bush announced that his country would withdraw from the Kyoto Protocol because the deal did not include meaningful participation by key developing countries. The United States' decision to walk away unilaterally from the protocol immediately aroused enduring global anger and criticism. The US case became a good example, showing how an international image can be badly impaired by refusing to participate in international climate institutions. International institutions refer to rules that govern elements of transnational political and socioeconomic issues and organizations that help implement those rules. Although the international society is still described as anarchical, with world politics being driven by the traditional exercise of state power, international institutions are increasingly important and no longer marginal. In reality, even the most powerful states are relying increasingly on international institutions – not so much on the UN as on other organizations and regimes that set rules and standards to govern specific sets of activities. Refusing to join international cooperation and institutions ranged against such negative externalities will be regarded by other states as selfish and irresponsible behaviour. Institutions create the capacity for states to cooperate in mutually beneficial ways by reducing the costs of making and enforcing agreements – what economists refer to as transaction costs. Therefore, a state's stances over various kinds of international institutions are extremely important for its soft power expansion, because this directly affects its moral stature in the eyes of other states that value cooperation in the frameworks of these institutions.

FROM BALI TO COPENHAGEN: FRUSTRATIONS AND PROGRESS

When the Kyoto Protocol finally came into effect in 2005 after twists and turns, the international community had already started to consider a new climate pact to replace it after 2012 when the protocol's first commitment period was scheduled to expire. The tenth anniversary of the birth of the Kyoto Protocol – 2007 – was a watershed for the post-Kyoto climate change debate, as the Fourth Assessment Report (AR4), released by the Intergovernmental Panel on Climate Change, made the connection between climate change and human activity with a high degree of certainty. The Kyoto Protocol, scheduled to expire in 2012, cannot meet the demand from the international community for further emission reductions. At the UN climate change summit in Bali (Indonesia), December 2007, a new round of international negotiations was formally introduced to work out a new accord that would function after 2012. According to the Bali Roadmap, the UNFCCC should end post-Kyoto talks in 2009 and ensure a new deal can take effect in 2013. The well-known Bali Action Plan endorsed economic incentives on issues relating to reducing emissions from deforestation, putting more emphasis on financial and technology aid for adaptation purposes in comparison with the Kyoto Protocol, which stressed mitigation. According to the Bali Action Plan, funding for adaptation in developing countries, financed by a 2 percent levy on CDM projects, would be managed by the Global Environment Facility.

As the UN-track (or Kyoto-track) climate regime is featured with quantifiable emissioncutting targets, in the post-Bali talks, environmental activists were hoping large polluters like the United States, China and India would be included in the new treaty with such quantitative emission quotas or even a comprehensive carbon tax. Carbon emissions from large emerging economies like China and India have been increasing dramatically in the past two decades and now account for a much larger share in global total carbon emissions than they did in the early 1990s, when the UNFCCC negotiations first started. China has surpassed the United States as the world's largest carbon emitter and in 2009, China alone contributed about 24 percent of the global total carbon emissions from the burning of fossil fuels and cement manufacture, seven percentage points higher than the emissions share of the United States, the second largest emitter, that had been notorious for its high-carbon lifestyle for decades. India meanwhile contributed another 6 percent of the global total, and the top four emitters, namely, China, the United States, India and Russia, accounted for more than half of the world's total carbon emissions. If the big four are excluded from quantifiable emission cutting obligations in the new climate treaty, the prowess of the accord will be significantly compromised while the authority of the UNFCCC will be further damaged. More importantly, if the emissions from major emerging markets continue to increase in synchrony with their sizzling economic growth driven by industrialization and urbanization, then most of the mitigation effect contributed by the newly added greenhouse gas emissions from the developing world. The logic that size and growth rate do matter in terms of global emissions control has put large developing countries under the scrutiny of the international community, which fears that the unchecked emissions increase of the emerging powers might jeopardize the fair play of global actions against climate change.

In the post-Bali climate negotiations, however, most large developing countries have continued to use their low cumulative and per capita emissions as an excuse not to shoulder any compulsory mitigation obligations, as they often say that on the basis of equity, the share of global emissions originating from developing countries should be allowed to grow to meet their social and development needs. Meanwhile China and America, dubbed the G-2 after the global financial crisis in 2008, have been at odds for years over the climate issue, using the other's inaction as an excuse for not capping its own domestic emissions. Although the two giants' acceptance of aggressive emission-cutting targets was vital for a new legally binding climate treaty that was to take effect after the expiration of the Kyoto Protocol's first commitment period, neither has made binding pledges since the Bali climate change conference. International climate change politics has, since its beginning, been a finger-pointing game, and such situations worsened after most governments were plagued with low employment and sluggish economy in the aftermath of the global financial crisis. Due to huge divergences between the industrialized nations and the developing world over whether emerging economies should bear legally binding emission-cutting obligations, the Copenhagen Climate Summit in 2009, to many environmentalists' disappointment, failed to produce a binding emissioncutting treaty as expected by the roadmap of the Bali climate conference. The last-ditch talks in Copenhagen were wrecked by spats between industrialized nations and the newly formed BASIC group (Brazil, South Africa, India and China) that represented emerging economies. The BASIC countries openly defied a legally binding treaty applicable to the developing countries in the post-Kyoto period, demanding more aggressive emission cuttings from the developed world and more technological and financial aid for less-developed countries for mitigation and adaptation purposes. Most industrialized nations, which were afflicted by the economic downturn and provoked by surging carbon emissions in the emerging markets, found it very hard to compromise during the Copenhagen Climate Summit. The BASIC bloc finally brokered the non-binding Copenhagen Accord with the United States and Europe, but since the legal status of the Copenhagen Accord was far from what had been expected

by the roadmap of the Bali climate change conference, the UNFCCC had to proceed to new rounds of negotiations for a legally binding agreement that could set emission ceilings for sovereign states after 2012.

With the persistence from the BASIC bloc, the Copenhagen Accord endorsed the spirit of the Kyoto Protocol and its continuation based on the principle of "common but differentiated responsibilities," agreeing that the increase in global temperature should be below 2 degrees Celsius and that a low-emission development strategy is indispensable to sustainable development. The Copenhagen Accord reaffirmed the Bali Action Plan's recognition of credit from reducing emission from deforestation and forest degradation, and decided to continue to use markets to enhance the cost-effectiveness of mitigation actions. The Accord decided to establish a Copenhagen Green Climate Fund as an operating entity to support projects, programmes, policies and other activities in developing countries related to mitigation, with a technology mechanism set up to facilitate technology development and transfer. Most developed and developing countries had submitted their non-binding emission targets to the UNFCCC by 31 January 2010, with developing countries agreeing to report their mitigation actions once every two years via the UN climate change secretariat, subjected to their domestic measured, reported and verified (MRV) procedures. According to the Copenhagen commitments, by 2020, the European Union aimed to cut carbon emissions by 20 to 30% from the 1990 basis, the United States, 17% cut from 2005; Japan, 25% cut from 1990; India, 20-25% cut from 2005; Brazil, 36% cut from business as usual (BAU) scenario; and China, 40-45% cut in carbon intensity from 2005. More than 130 countries engaged with the Copenhagen Accord, representing 86.76% of global carbon emissions.

CANCUN, DURBAN AND DOHA: AIMING AT A NEW DEAL IN 2015

Under the UNFCCC track, negotiators did not achieve much at the Cancun climate conference one year after the Copenhagen summit. Enormous divergences between industrialized nations and emerging economies continued to block any agreement on a global accord that was to force sovereign states to cut carbon emissions after 2012. With emission-reduction targets and nationally appropriate mitigation actions (NAMAs) communicated by developed and developing nations acknowledged by the UNFCCC, the Cancun conference reiterated the importance of MRV and reducing emissions from deforestation and degradation in developing countries (REDD) that had been emphasized by the Copenhagen summit. The Cancun conference went one step further in underlining the adaptation front through establishing the Cancun Adaptation Framework, which included setting up an Adaptation Committee to promote the implementation of a stronger, cohesive action on adaptation. The Green Climate Fund was set up and designated as a new operating entity of the UNFCCC's financial mechanism to provide financing to projects, programmes, policies and other activities in developing countries via thematic funding windows. The UNFCCC recognized the commitment by developed countries to provide US\$30 billion of fast-start finance in 2010-2012, and to jointly mobilize US\$100 billion per year by 2020. Under the Kyoto Protocol track, industrialized nations were urged to achieve more ambitious emission reduction targets

consistent with the range identified in the Fourth Assessment Report of the IPCC. On the technology front, parties agreed to make fully operational by 2012 a technology mechanism to boost the innovation, development and spread of new climate-friendly technologies.

The UN Climate Change Conference in Durban in 2011 was deemed as a breakthrough because it worked out a new roadmap that required a universal legal agreement on climate change to be developed no later than 2015, and to take effect in 2020. Governments, including those from 38 industrialized countries, agreed to a second commitment period of the Kyoto Protocol from January 1, 2013. To achieve rapid clarity, parties to this second period should turn their economy-wide targets into quantified emission limitation or reduction objectives and submit them for review by May 2012. The conference agreed to adopt a management framework for the operation of the Green Climate Fund that aimed to help poor countries adapt to climate impacts.

Although the UNFCCC failed to replace the Kyoto Protocol with a brand-new accord by 2012, negotiations in Doha that year finally worked out a package of "Doha Climate Gateway" that included amendments to the Kyoto Protocol to establish its second commitment period. With the termination of climate negotiations under the Bali Action Plan, the Doha conference extended the effective date of the Kyoto Protocol and kicked off a new round of negotiations that ought to produce a comprehensive climate treaty by 2015. The Bali Action Plan had not been realized by the end of 2012, but both the UNFCCC-track negotiations and the Kyoto Protocol were able to survive after the Doha conference, which would prepare the ground for the big deal in 2015. While developing countries expressed disappointment with the lack of ambition in outcomes on industrialized countries' mitigation and finance, most agreed that the conference had paved the way for a new phase of negotiations under the Ad hoc Working Group on the Durban Platform for Enhanced Action (ADP). Since industrialized nations had expected post-Bali climate negotiations to mark the transition away from the Kyoto climate regime, where only developed countries have the legal obligation to reduce emissions, to a new system where all countries, developed and developing alike, should make legal commitments, the Doha conference did make progress in that direction with the sharp distinction between developed and developing countries diffused and with one unified negotiation forum, the Durban Platform, established for all countries. In retrospect, the global climate negotiations between 2007 and 2012 failed to produce the most optimistic outcome by 2012, i.e., a brand-new climate pact as a replacement for the Kyoto Protocol, but it also avoided the worst scenario, which would have been the sudden death of the Kyoto Protocol.

SOUTHEAST ASIA'S ROLE IN CLIMATE POLITICS

Amidst increasing attention on climate change, the Association of Southeast Asian Nations (ASEAN) has vowed – in its landmark Climate Change Declaration in Singapore in 2007 – to make concerted efforts to tackle this problem. Year 2007 was not only a watershed for the post-Kyoto climate change debate, as the IPCC Fourth Assessment Report made the connection between climate change and human activity with a higher degree of certainty, but was

also a new milestone for the ASEAN members' collective action against climate change, a new topic of increasing importance on the agenda of Southeast Asian countries due to their special vulnerability and weak adaptation capabilities. As the host region of the Bali Climate Change Conference that kicked off the new round of UNFCCC negotiations, Southeast Asia needed to act immediately to coordinate their positions on the international negotiations for a post-Kyoto regime. More importantly, although global warming poses a threat to all countries, Southeast Asian countries are especially vulnerable due to their special geographic features and weak adaptation capacities. Many Southeast Asian countries are located in tropical areas and some of them are littoral, archipelagic or island states with long coastlines. About 80% of the region's population is within 100 kilometres of the coastline. One of the projected manifestations of climate change is a rise in sea level, which means saltwater intruding into the surface and ground water of coastal areas. This will affect fisheries and destroy mangroves and the habitats of various benthic organisms due to changes in salinity. Global warming also increases the frequency and intensity of tropical storms and induces more cardiovascular and respiratory diseases. Some parts of Southeast Asia are already experiencing a higher incidence of diseases such as dengue fever and malaria due to warmer temperatures.

Take the Philippines and Indonesia as examples. These two archipelagic states are believed to be extremely vulnerable to climate change. Indonesia, consisting of about 17,000 islands, may witness 2,000 of them being submerged by 2030 due to sea-level rises if the current trend of global warming continues unchecked. The Philippines, with approximately 7,100 islands, is suffering from more tropical cyclones and flooding that damage the country's agriculture and infrastructure. Both the Philippines and Indonesia have thus had greater interest in taking an active part in international climate change negotiations since the late 1980s. The Philippines was involved in setting up the Intergovernmental Negotiating Committee at the UNFCCC. It was also among the first countries to set up a national committee to negotiate at the Conferences of Parties of the UNFCCC.

The Asian Development Bank (ADB) released a special report in Bangkok in April 2009, estimating that the total cost of lost agricultural production and other negative impacts from climate change would be 6.7% of GDP in Southeast Asia by 2100, more than double the world's average level. Rice yields would decline 34% in Indonesia and 75% in the Philippines. Mean temperatures could rise 4.8°C by 2100 from 1990 levels, with sea levels up 70 centimetres. The global climate change politics is an unfair game, since the Southeast Asia, which is more vulnerable to climate change consequences than many high-latitude regions, only contributes about 12% of the world's total emissions. Although climate change mitigation is a global public goods serving everyone's interest, it is more important for those especially vulnerable nations that are littoral, archipelagic, tropical or island states. These nations are more likely to become advocators of global collective actions against climate change, while nations that do not value such public goods or face high emission-cutting costs tend to take free-ride attitudes and choose inaction.

Past experience has shown that global climate negotiations involving more than 100 countries tend to be time-consuming with sharp divergences among different countries and blocs. An individual country has to form a bloc with other countries with a similar stance

to magnify its voice, so pre-negotiation policy coordination becomes extremely important. For the talks on the Kyoto Protocol, ASEAN countries aligned themselves with other developing nations and formed the "Group of 77 and China" bloc. Together, they negotiated with industrialised countries and insisted on "common but differentiated responsibilities." The Philippines and Indonesia were particularly strong driving forces in the Kyoto negotiations. In 2007, the 10-member ASEAN welcomed the proposal of Singapore, then the chair of the regional grouping, to make "Energy, Environment, Climate Change and Sustainable Development" the theme, for the first time in history, for discussions during the annual summit. This was partly because the organisation found it necessary to coordinate the stances and policies of its member states on climate change before the forthcoming Bali climate conference. As ASEAN member states differ in their levels of economic development, environmental protection and geographic characteristics, policy coordination becomes highly necessary for the preparation for the new round of global climate talks. Choosing Bali as the venue of the World Climate Change Conference indicated ASEAN's desire to play a special and independent role in the post-Kyoto talks.

It is important for ASEAN to collaborate more closely with its three Northeast Asian partners – China, Japan and South Korea – on the issue of climate change. China, the world's largest greenhouse gas emitter, has been facing increasing international pressure for more emission cuts. Suffering from mounting domestic pollution problems, China has been seeking international aid, especially through bilateral cooperation, to balance its economic development and environmental protection. It needs international support and understanding from other blocs to forestall any legally binding emission-cutting obligations.

Japan, the birth place of the Kyoto Protocol, has a special interest in climate change talks because it regards environmental protection causes as an efficient means to promote its international image. Meanwhile, Japan had found it difficult to fulfil its obligations under the Kyoto Protocol to cut emissions by 6 per cent before 2012. Expansion of global carbon trading and more environmental investment into developing countries serve the interests of Japan, which urgently needs policy coordination and support from ASEAN. South Korea, which has been exempted from mandatory emission cuts under the Kyoto Protocol, may also be pressured to shoulder more stringent obligations in the next climate treaty because of its higher level of industrialisation. Seoul is an active participant in the Asia-Pacific Partnership on Clean Development and Climate. Equipped with high-end technology, it certainly wants to expand regional cooperation in energy conservation and fuel switching. It is timely and of strategic importance, therefore, for ASEAN to not only devote more attention to the climate change issue, but also to expand its bloc negotiations to include China, Japan and South Korea.

POLICY RECOMMENDATIONS FOR CLOSER EUROPE-ASIA COOPERATION

Most Asian countries are developing countries that do not have legally binding emissioncutting obligations under the current climate regime, while EU countries that are mature industrialized states are subject to quantifiable emission reduction targets that have been brought into the second commitment period of the Kyoto Protocol. It has become evident that the process of UNFCCC-track climate negotiations is behind the expected goals set by the Bali Roadmap and there is still a huge gap between the industrialized and emerging economies in the perception of their due responsibilities. EU countries, on the one hand, have to continue to push forward the stagnant climate negotiations as they have done in the past two decades, while Asian countries, most of which are suffering more from climate change impact than many other industrialized nations due to their special geographic locations and weak adaptation capabilities, have to make more effort to strike a balance between economic growth and environmental protection.

Currently, most Asian countries still prioritize fast economic growth ahead of carbon emission cuttings, as many of these governments build their legitimacy on the improvement of people's living standards and high rates of employment. Most Asian countries are yet to be ready for a global binding agreement that will set quantifiable emission reduction targets for all parties, and they are more interested in financial aid and technology transfer from developed countries for both mitigation and adaptation purposes. Many Asian countries, including China India, Malaysia, Indonesia and South Korea, have already been significant players in the carbon trading process under the Kyoto Protocol's Clean Development Mechanism (CDM), with more members in the Asian community being increasingly keen on the Green Climate Fund designated by the UNFCCC as a new operating entity to provide financing to climate-related projects and programmes in developing countries via thematic funding windows. Asian countries are planning to join more regional mechanisms on climate change that emphasize non-compulsory energy-efficiency programmes. Explicitly, the emerging Asian countries still claim that global climate talks should be conducted within the framework of the United Nations, and that the principle of "common but differentiated responsibilities" has to be insisted upon. In practice, however, large emerging economies whose carbon emissions have been growing considerably are readjusting their stances and gradually becoming more flexible in accepting more aggressive emission-cutting obligations in future negotiations. They have also become more active than before in joining all kinds of bilateral and multilateral cooperation mechanisms against climate change outside the UN-track.

Given the dynamics of Asian climate politics and emerging economies, EU countries have a lot to do to engage Asia in a more effective way in the global collective action against climate change. Multilaterally, the EU should persuade Asian countries to be more willing to accept a comprehensive climate pact before 2015 with mandatory emissions-cutting targets included for large emerging economies in the region and voluntary goals applicable to less-developed countries. This will help Asia as a whole to enhance its soft power in global climate politics while not harming its economic strength as its hard power. Outside the UNFCCC

track, new multilateral mechanisms on climate change and low-carbon development could be set up between European and Asian countries. In 2005, Australia, China, India, Japan, South Korea, and the United States decided to jointly establish the Asia-Pacific Partnership on Clean Development and Climate, which emphasized energy conservation and technology cooperation instead of setting mandatory emissions-cutting targets of the UN style. The United States and Australia, two of the members, were outside the Kyoto Protocol at that time. The Asia-Pacific Partnership on Clean Development and Climate is a regional cooperation mechanism different from the UNFCCC and Kyoto Protocol, and by joining this organization, Asian countries have obtained advanced energy-efficiency technology from other industrialized countries, coordinated diplomatic positions with other heavyweights in international climate talks and improved their international image in the green area without touching sensitive legally binding targets. In recent years, many existing multilateral organizations including APEC (Asia-Pacific Economic Cooperation), the East Asia Summit (ASEAN countries plus China, South Korea, Japan, Australia, New Zealand, India, Russia and United States), and G-20, have started to build up special mechanisms on climate change, and many Asian countries, including ASEAN as a bloc, have proven to be active participants or dialogists in forums, conferences, and cooperation programmes held by these mechanisms. In the APEC summit in Sydney in September 2007, the ASEAN countries, China and the United States all accepted a programme with non-binding goals on energy efficiency and afforestation. In contrast, the European countries have yet to build multi-layer cooperation mechanisms with Asian countries to address climate and energy-related issues of common interest.

Amid increasing global concerns about climate change, resource scarcity, and other pollution problems, the low-carbon and environmental industries are booming as major business opportunities in the twenty-first century. Facing mounting environmental problems across the board and growing civic pressures, sovereign states' ambitious plans to boost their environmental and low-carbon industries could serve the dual goals of cleaning up and finding new growth points for their economies in the aftershock of the global financial crisis. As a sunrise industry, the rapidly growing energy-saving and environmental protection sectors that manufacture sustainable products and transfer green technologies are said to be more resilient to economic downturns than their counterparts in traditional industries. The European countries, which have cutting-edge technology and know-how in the development of renewable energy such as wind power, solar panels, geothermal and hydropower, could speed up technology transfer or joint development in Asian countries, helping them to balance the relationship between emission reduction and energy utilization. For instance, the EU could formulate policies that incentivize European corporations to export energy-efficient and lowcarbon equipments to Asia. Joint research and development in the mitigation and adaptation areas between European institutions and Asian universities should also be supported by the EU, with significant financial aid to be granted to facilitate such a process.

In many Asian countries, climate policy has gradually and inevitably become a part of their overall energy strategies, whose fundamental goal is to ensure continued economic growth and prosperity for the local people. Energy consumption is still seen as the key to economic development and is the main factor that prevents these governments from taking on quantified emission-reduction commitments. Therefore, bilateral and multilateral energy cooperation is an indispensable part of climate engagement between the two continents. Cheap energy has engendered rapid economic growth, reduced poverty, and raised living standards in Asian countries and, as the economy develops and living standards rise, the demand for energy rises correspondingly quickly. Asian countries' refusal to accept any legally binding emission-cutting obligations throughout the UNFCCC climate negotiations is closely linked with their energy-sufficiency and development-first strategy. Putting this into perspective, the European and Asian countries should further cooperate in energy-efficiency and renewable technology.

In the carbon trading area, the EU Emissions Trading System (ETS) should give more technical guidance towards Asian countries to help them build domestic or regional emissions-trading bourses. Lessons from ETS have shown that oversupply of carbon credits may be disastrous for carbon trading as an effective way to cut emissions efficiently, so large Asian countries like China and India may have to impose more stringent emissions ceilings and stricter verification procedures to ensure the proper functioning of their domestic carbon trading systems.

The EU needs to continue its climate-related educational campaigns in many Asian countries to help local people better understand the importance of mitigation and adaptation. Many Asian people still regard global climate change as an issue too far away from their daily lives, while some vulnerable groups are not well-equipped with the necessary know-how and facilities to prepare for the upcoming climate change consequences featured with increasing extreme weathers and epidemics. Governments in the two continents need to enhance their cooperation and exchanges in agriculture, medical services, flood control and emergency management that are related to indigenous adaptation capabilities.

Japan's Failing Climate Change Diplomacy

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EXECUTIVE SUMMARY

In December 1997 in Kyoto, Japan, the 3rd Conference of Parties to the UN Framework Convention on Climate Change (COP3) was held and the so-called "Kyoto Protocol" was adopted by the parties. At COP17 in December 2011 in Durban, the parties adopted the amendment to the Kyoto Protocol to set the Second Commitment Period (KP2); however Japan was opposed to participation.

In Sep 2012, the Liberal Democratic Party (LDP), which had been advocating for a more lenient target on climate change mitigation in comparison with other political parties in Japan, won the election of the House of Representatives in Japan and took over the government from the Democratic Party of Japan (DPJ). In June 2013, LDP also won the election of the House of Councillors. As of August 2013, there is a widespread understanding that the present administration let by the LDP will withdraw Japan's current relatively ambitious GHG emission reduction target (25% GHG emission reduction from the 1990 level), which the former Prime Minister, Mr. Hatoyama² of the DP, had pledged in 2009, and that the LDP will substitute the emission reduction target with a lower numerical number.

These two issues will certainly have a huge impact on Japan's climate change diplomacy. For a long time, the Japanese government has advocated leadership in the field of environmental diplomacy, especially climate change diplomacy. However, to some degree, it is just an abstract image, self-declared by the Japanese government.

It is also true that diplomacy and domestic policy are two sides of the same coin and in most cases, diplomacy on climate change is just an expression of the level of domestic understanding on the climate change issue as a whole, and is part of the climate policy.

Therefore, an examination into Japan's recent climate policy, carefully as well as critically through specific case studies, such as denial of KP2 participation, and an analysis of the

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² Mr. Hatoyama used to belong to the Democratic Party of Japan (DPJ), which took office after the Liberal Democratic Party's long reign. He resigned in June 2010.

various domestic discourses in Japan on the climate change mitigation action, will provide useful insights into understanding the current issues and future prospects of Japan's climate change diplomacy.

With this background, Section 2 of this article examines various international and domestic discourses on the KP2 and discusses the political cost and benefit of Japan's non-participation of KP2. Section 3 analyses more general discourses about climate change, including energy security in Japan. Section 4 concludes the analysis and discusses the way forward for Japan's climate change diplomacy.

EXTENSION OF THE KYOTO PROTOCOL

To support or not

On the final day of COP17 in 2011, Ms. Hedegaard, the EU's top negotiator, hugged many negotiators from other nations after the agreement was reached. Yet, no Japanese negotiator was found among the circle of joyous crowds. History will not allow any *ifs*, but if Japan had taken a more flexible position in the negotiations of the Kyoto Protocol Second Commitment Period (KP2) and had decided to participate in KP2, it might have been able to send out a strong signal that "Japan is willing to lead the fights against challenges common to human kind by becoming a member of coalitions of high ambition led by the most vulnerable nations, small island states and the EU".

The most important focus of the Durban Conference was the establishment of the Second Commitment Period of the Kyoto Protocol, and whether a county was on the side of opposing its establishment, such as Japan, or on the side of agreeing to it, with both sides claiming that it wanted to advance climate change measures in the world. In this section, the author would like to briefly review various arguments regarding the Kyoto protocol extension.

Now, how many countries supported the establishment or opposed it? Those taking the same negotiation position as Japan were only Russia, Canada, New Zealand and the US³, five countries out of 194 parties in the UN Framework Convention on Climate Change. In other words, Japan's side was definitely the minority.

Next, let us consider the political realities of Japan's allies, especially Russia, Canada, and the US. Let us look into the views of their policy-makers and those with significant influences in policy-making on the matter of climate change.

Quite a few politically powerful people of these three countries with significant influences in policy-making are actually those involved in the fossil fuel industries and energy-consuming industries, and opposed climate change measures for the reason that they damaged their vested interests. As the current administrations or strong opposition parties have these climate change opponents as their supporters, the leaders of these countries have frequently stated that there is no need for climate change measures. Such statements are based on the claims of climate change sceptics, who state that climate change is not happening; CO_2 has nothing to

³ Australia and New Zealand were two countries which did not make their positions clear about KP2 participation at COP17. Subsequently, Australia decided to participate in KP2 and New Zealand decided not to.

do with climate change; or climate change is good for the community. In other words, these people have not felt the need for climate change measures, beside the issue of "participation" or "non-participation" of China or India in the international framework. And the reason why they think, or they are led to think, or they want to think so, is because their businesses will receive economically adverse effects if climate change measures are established. They may also receive positive effects from climate change (such as resource development in the Arctic Sea). Nevertheless, it is easy to decipher that they take their positions solely based on their own interests with little consideration for national or global interests.

Probably one important criteria of judging the actions of these countries who oppose KP2, will be what vulnerable countries like the African nations and small island countries, that suffer the greatest damages from climate change, will think. Because these countries suffer the most from climate change and can state the important steps to take. Needless to say, these are the very countries that strongly hope for the establishment of KP2.

Misunderstanding in Japan

In this section, the author would like to point out a typical misunderstanding prevalent in Japan regarding the Kyoto protocol. The bureaucrats of the Japanese government and Kyoto Protocol opponents tend to present two major claims: "need to have a framework where every country will participate" and "in this sense, the Kyoto Protocol is no good." (Government of Japan, 2012). By doing so, it can be said that the government has persisted in sending the message to Japanese people that "all those countries wanting the extension of the Kyoto Protocol do not feel the need to have a framework involving every country."

In reality, developing countries do find the need to have a framework "involving" every country and have maintained this claim for some years⁴. It is the same position as the Japanese government's. In other words, when the Japanese government says a framework involving every country is necessary, developing countries merely take it as common sense and think that it is the kind of statement that has no real meaning. These developing countries think that statements calling for a framework involving every country are not only meaningless but also superficial unless the actual, more detailed contents of such a framework are addressed. These include fair burden-sharing, equity, development rights, and the processes of reaching agreement on such a framework. The Japanese government has, so far, failed to mention actual contents or processes for such a framework, with a clear definition of the equity issue.

Many people in Japan are ignorant about the political system of the United States and misunderstanding often prevails. Simply speaking, the political reality in the United States has not been so friendly towards climate change. During the presidential election of 2012, almost all the presidential candidates from the Republican Party expressed their views regarding "not believing the climate science" or "opposing the climate change measures proposed by President Obama". It appeared to be the precondition for getting support from Republican

⁴ It is true that some developing countries oppose the discussion strongly aimed at fixing the difference between developed countries and developing countries semi-permanently. However, they are not the majority even in the group of developing countries any more.

Party members and supporters. It was not an overstatement to say that the Republican Party and US Congress (especially its Senate) had been taken over by climate change sceptics.

Such a political situation in the US makes it almost impossible to develop a framework where every country, the US included, will bear ambitious emission reduction obligations in the near future. Therefore, what the Japanese government has been saying will not only kill the Second Commitment Period of the Kyoto Protocol, but may also send the international community back to a world of chaos, where no regulations or incentives exist to fight against climate change.

Such a result is self-evident for anyone with sufficient knowledge of international negotiations and the US Congress's political situation. The author has frequently heard comments by many researchers from developing countries and the EU lamenting that they do not understand the reason why Japan, which is not subject to powerful lobbying activities by climate change sceptics and energy-intensive corporations and priding itself as the leader in environmental fields with emphasis on environmental diplomacy, continues its non-support of the Second Commitment Period of the Kyoto Protocol. To such questions, the author has no choice but to answer that, unfortunately, there is no real understanding in Japan about the fundamental facts and the negotiation realities surrounding climate change issues. Lobbying activities by energy-intensive industries are powerful and influential in Japan, while the Ministry of Environment is weaker in comparison to other ministries. The sceptics have published many books in Japan, creating certain influences among Japanese nationals. Today, both Japanese politicians and nationals are less interested in any diplomatic issues, especially environmental diplomacy issue.

In Japan, there are some arguments claiming that "the Kyoto Protocol is not good because the total emissions of countries with legally binding quantitative targets cover only 27% of global emissions, which is less (compared with 100%)" (Government of Japan, 2010). Yet, such an argument is a kind of "strategic misrepresentation" using the trick of numbers. If the Kyoto Protocol is not extended, then the emissions of countries with legally binding target will be 0%. In other words, the point is that 27% is much better than 0%, and not that 27% is worth less than 100%. To repeat, the negotiation position taken by Japan will lead to 0%. Despite slight differences in the positions taken by each ministry and agency, what the Japanese government has been saying can be interpreted as trying to set 0% as the target of its environmental diplomacy.

Pulling legs in negotiations

During COP17 held at the end of 2012, the international community, especially the EU and developing countries led by African countries and small island countries that are most vulnerable and damaged by climate change, made many compromises and exerted maximum efforts to create an agreement. It was brought about by the strong awareness of the importance of having climate change measures, resulting in the establishment of paths for building a regime where first 27%, and then 100% of countries will have legally binding targets. In contrast, Japan kept pulling the legs of those countries in negotiations, and eventually was ignored by such countries.

It is certainly true that without the Kyoto Protocol Second Commitment Period, the world will enter a period of chaos. Actually, Japan, with no legally binding target for the Kyoto Protocol Second Commitment period, finds itself less and less aware of climate change issues, except the issues concerning renewable energy policies, which have a slight chance of getting more attention⁵.

The Basic Laws on Global Warming Measures the Japanese government has kept submitting to its Diet for the last two years have been kept shelved. It is also possible that the Ministry of Finance may decrease the budget related to climate change measures. The Ministry of Environment, which should have resisted the weakening of climate change measures, is too preoccupied with the responses to the Fukushima nuclear accidents. It is unfortunate, but Japan is highly likely to have "lost eight years" till 2020, at least in terms of its environmental diplomacy and domestic measures to fight climate change.

What Japan got and lost

What was the thing Japan tried to protect at the price of losing the trust of the international community or becoming the bad guy?

First of all, there were obligations that the Japanese government felt toward Keidanren, the most powerful industry lobbying group in Japan, and other major domestic supporters, as well as the notion of saving face. For many years in the past, the Japanese government, especially the Minister of Economy and Industry (METI), had continued to argue about the unfairness of the Kyoto Protocol; so, they might have thought that they would lose face if they were to allow the establishment of the Second Commitment Period for the Kyoto Protocol. What was important here, however, was the fact that the Japanese government acted mainly to oblige its domestic constituencies and to save face, as well as to maintain conformity with their past actions. When a serious analysis is done, however, it is clear that such a negotiation position is not likely to bring any economic benefits to Japanese corporations or to the Japanese economy as a whole. Rather, it is more likely that it will bring disadvantages to these corporations or to the economy in the long term.

As for the reason for not supporting the Second Commitment Period of the Kyoto Protocol, the government frequently pointed out the possibility of adverse effects on the Japanese economy, such as the decreasing competitiveness of Japanese companies, especially those from the energy-consuming industries, which would result in carbon leakage. However, it is not at all likely that the presence or lack of legally binding reduction targets in the US and developing countries for the period of a mere five to eight years will determine the competitiveness of corporations, considering the vast records of theories and empirical studies on the loss of international competitiveness⁶. This is especially true in view of strict energy

⁵ The relatively ambitious Feed in Tariff (FIT) system was introduced in June 2012 to promote renewable energy in Japan. However, the main reason for the very high tariff was the nuclear power plant accident in 2011 and not climate change mitigation.

⁶ There are several studies on the relationship between carbon constraint and loss of international competitiveness of private companies in Japan. For example, refer to Asuka et al. (2010).

regulations, large-scale investment on renewable energies, energy price hikes, and unstable energy supplies of developing countries, notably among emerging economies, today.

Rather, it is highly likely that more strict emission reduction targets are required for Japan in the next Commitment Period. By then, there may no longer be the feeling of sympathy toward Japan for the earthquake and tsunami of 2011, and the international community may look at Japan more severely. Moreover, by postponing the implementation of climate change measures, the industries will be locked into existing technologies, raising the cost of measures further. The image of Japan as an advanced country in environmental technology will decline, which will negatively affect Japanese businesses.

Second, those political powers who are reluctant to take part in any climate change measures appear to have thought that it would be easier to change the emission reduction target set forth by former Prime Minister Hatoyama (25% reduction from 1990 level by 2020) if Japan were to leave the Kyoto Protocol and have no legally binding target. For this, they attempted to create the situation of 0% reduction as described above, where no country in the world would have legally binding ambitious targets. Japan could then reduce the quantified target of 25% reduction without hesitation, or, even if the target could not be changed, they could take an approach of downgrading the penalty or compliance obligation in the case of non-compliance⁷.

Nevertheless, Japan ended up giving up all the options open to them. For example, the author believes that Japan could have played the negotiation card of "winning compromise between developed and developing countries by taking a leadership position with the EU", while "getting other countries to understand the inevitability of changing its own commitment in consideration of the effects of nuclear accidents", and "for 2030 or 2040 targets, expressing the willingness to accept corresponding targets in consideration of other countries' situations." Yet, the rigidity of the policy-making system of the Japanese government made it impossible to change its political position in the international negotiation once it was decided.

Negotiation card Japan can still use

Actually, the aforementioned negotiation card can be used even now. It is not really an attractive option, yet, if Japan actually changes its quantified target, it is truly possible to set more favourable and advantageous targets for the years after 2020, by formally announcing the target under the Second Commitment Period of the Kyoto Protocol, thereby developing greater trust in the international community and strengthening the negotiation power of the Japanese government. Such an action will further bring the advantage of enabling the official use of carbon offset credits from overseas projects under the Second Commitment Period of the Kyoto Protocol⁸.

⁷ The Japanese government has been opposing the introduction of the stringent compliance system, including the eligibility of the Kyoto mechanism participation since COP3 in 1997.

⁸ The Japanese government has been proposing the Bilateral Offset Crediting Mechanism (Joint Crediting Mechanism), which can be used by the Japanese government for compliance of its target. Now this issue is being negotiated in the UNFCCC COP under the category of "Framework for the various approach".

At present, however, Japan lacks sufficient capacity or capabilities to seriously and collectively analyze the cost-benefits of multiple policy options. This is not because of the bureaucrats but the politicians. For the politicians, who make decisions by a top-down method to a certain degree, the priorities of the climate change issue and diplomacy are too low in today's congress. They do not seem to care too much about these issues.

CLIMATE CHANGE DISCOURSES IN JAPAN

Lack of perpetrator responsibility

Indeed, the climate change issue is not such a pressing or important issue for ordinary Japanese citizens. This is because the current generation cannot feel or find the actual damages and losses. Surrounded by oceans, Japan has been endowed with comfortable and enriched geographical and climate conditions. The possibilities of droughts or floods are extremely limited when compared with other countries. It is an economically rich nation with sufficient systems for its citizens to respond to disasters with aids from the government and insurance companies. Oceans prevent the inflow of environmental refugees from overseas. Europe, on the other hand, has been experiencing the daily waves of many environmental refugees trying to immigrate to Europe, especially from the African continent, which has thus created a good reason for the EU to be active in climate change measures.

Japanese corporations and nationals do not feel the actual adverse effects of climate change because they only talk of such issues using superficial expressions such as "eco" or "earth-friendly." Both the Japanese government and its nationals are satisfied by adopting ambiguous measures like "Cool Biz" or "eco-points." Many Japanese corporations that advocate the image of "environmental-friendly companies" actually oppose the manifestation of substantial climate change measures, such as emissions trading and carbon tax. Yet, the Japanese mass media do not report such facts and do not criticize such corporations for having double-standards.

Nevertheless, we find in Japan an overwhelming lack of awareness that developing countries that have completed development and emitted more amounts of greenhouse gases per capita have the greatest responsibilities as perpetrators. Even the notion of "polluter-pay principle" that provides a principle for thinking about every environmental issues, including Minamata disease, has not truly sunk into Japanese citizens' consciousness. They have no awareness as a perpetrator, whose greenhouse gas emissions in the past is causing suffering among those living in vulnerable regions.

Issue of distribution

It can be said that the climate change issue is the issue of distributing the rare resource or "rights" called CO_2 emission. In order to achieve, with the probability of 50%, the target of limiting the temperature rise since the industrial revolution to within 2°C, we must limit

⁹ "Cool Biz" refers to the business lifestyle where there is no unnecessary formality, such as wearing of neck-ties in summer. "Eco-points" is the scheme to enhance the sales of energy-efficient products by providing a subsidy.

the amount of greenhouse gas emissions for 50 years from 2000 to 2049 to within 1440 giga tons of CO_2 according to Meinshausen et al. (2009). This means that the current and next generation of human beings must distribute this 1440 giga tons of CO_2 on the basis of equity and fairness.

In other words, especially for the people in developing countries, to discuss the climate change issue is the same as to discuss the distribution of food, water and "developing right" among people (Khor, 2012). Therefore, we must inevitably discuss and consider the size of population, in other words, per capita distribution and real distribution today. If Japan has to distribute water and food to each of its prefectures, it must consider the number of population in each prefecture as well as the volume of consumption. If the same amount of food and water were to be distributed to the most-populated prefecture of Tokyo and the least-populated Okinawa, there will be a riot in Tokyo.

Nevertheless, the Japanese government, mass media, and researchers have failed to seriously discuss the issue of climate change responsibilities. (Government officials evaded the discussion, and mass media and researchers followed suit.) Because there was no serious discussion, there was no recognition or awareness. For example, during COP17, the editorial "Ten-sei-jin-go" of *Asahi Shimbun* stated, "national egoism of the US and China, etc." in ignorance of the discussion of population or per capita emissions (*Asahi Shimbun*, November 29, 2012). The article trivialized the climate change negotiation into some kind of a political game between superpowers like the US and China, with no mention of Japan's responsibilities.

Sadly, it seems that the Japanese mass media writes articles on climate change issues from one specific viewpoint, saying, "developing countries that emphasize the priority of economic development and hate any greenhouse gas emission reductions." However, it is the same thing for Japan. Japan too prioritizes economic development and avoids greenhouse gas emission reduction. Their one-patterned reporting clearly indicates the "top-down" viewpoint based on the mistaken recognition of "Japan as an environmentally developed country", as well as the evasion of responsibility.

There was just one person among Japanese senior politicians who has understood the equity problem in the climate change issue and made the official statement on "the need to be based on per capita emissions" at the Cabinet meeting on climate change on December 28, 2010 (*Nihon Keizai Shimbun*, December 28, 2010). It was former Prime Minister Kan¹⁰ of the Democratic Party. Although former Prime Minister Kan attracted both praise and criticism, he at least understood the fundamental facts of the climate change issue. Yet, his statement did not conform to the original policy of the Japanese government, and those surrounding the former Prime Minister tried to negate his statement at every opportunity.

¹⁰ Mr. Kan resigned as the prime minister in 2012. Although he is still a member of the Democratic Party of Japan (DPJ), his influence is not so significant any more due to his strong position against nuclear power etc.

Climate change measures for energy security

This may sound strange but no country in the world implements climate change measures for the sake of climate change measures. Actually, almost every country implements climate change measures to establish energy security. This is because any concrete climate change measure, especially the reduction (limitation) of greenhouse gas emissions, involves mostly the measures for energy savings and the introduction of renewable energies (which may involve nuclear powers in some countries). Such measures are immediate and imminent challenges for any country. In fact, about 80% of the budget officially allocated as climate change measures by the Japanese government (about 1 trillion yen per year) is related to nuclear power, energy savings and renewable energies. (In the case of Japan, the nuclear power measures have a larger share of the budget.) Moreover, these measures will have been implemented whether there is a climate change issue or not.

As seen here, there is no purely climate change mitigation measure. Climate change mitigation is only one factor in the development of energy policies. This is the reality and it will continue to be the reality at least for the medium term.

On the other hand, such a reality is not necessarily a bad thing. If the energy policy can be changed, it may lead to effective climate change measures. Furthermore, the rareness of fossil fuel resources seems to have raised awareness about the need to reform the energy system among national and international fora despite strong resistance from fossil fuel industries.

In this sense, to "participate" in an international framework for climate change does not necessarily imply the implementation of climate change measures. Therefore, whether there is any legally binding obligation under international laws or not is not necessarily relevant to the actual implementation of climate change measures (at least, it is not as simple as that). However, the current situation is not to adhere to a legally binding commitment. Some people find excuses for not taking responsibility based on the reason that other countries do not have legally binding quantitative targets, and many others believe in such excuses.

In other words, as long as people believe in the importance of energy saving and renewable energy (including nuclear power in some countries), they will implement a strict "climate change policy" whether the nation participates in an international framework or not. In this sense, what is important is not the presence of a legally binding framework, but the presence of a concrete domestic system to substantiate quantitative targets and to promote compliance and whether such a system functions assuredly.

Miscomprehension of nuclear power

In Japan, there is a big misunderstanding on the relationship between climate change measures and nuclear power plants. The parties that advocated the usefulness of nuclear powers in climate change measures were the Japanese government, the nuclear power industries, and the mass media. Many Japanese environmental NGOs aiming to promote serious climate change measures, strongly opposed the expansion of nuclear power plants for the reason of climate change. Only a handful of researchers actively promoted nuclear power plants and most of them are related to the energy industries in one way or another (although many other researchers should bear responsibility for not speaking out against nuclear power or indirectly encouraged it).

Nonetheless, before the Fukushima nuclear power plant accidents in 2011, some government officials and energy industry leaders maintained the convenient logic that there was no need for energy saving or renewable energy in Japan as long as there are nuclear power plants to impede the introduction of substantial climate change policies. Nuclear power just crowd out the renewable energy sector and energy conservation. For instance, those people who opposed any practical climate change measures such as carbon tax or emissions trading were almost the same as those who promoted nuclear power generation. There are many Japanese nationals who believe in the misleading argument put forth by the government that there is a national agreement among Japanese people that nuclear power plants should be promoted as climate change measures.

A rather interesting fact is that in the forum of international negotiation on climate change there seems to exist a clear formula – "countries with active climate change measures = energy importers" and "countries with reluctance in climate change measures = energy exporters" – developing.

This proves that climate change measures are directly linked to energy measures, especially to the establishment of energy security. At the same time, many energy-importing countries are aiming to nurture emerging industries in the energy and environment fields, which are called the only growth industries in this century, in order to create jobs through a reform of the energy demand-supply relationship and their industrial structures. The author believes that such a situation will eventually lead to the development of shared feelings among energy-importing countries that "it is inevitable to promote energy saving and renewable energies for the sake of securing energy security and developing new industries. So, there is not much resistance to the reduction of greenhouse gas emission that can be achieved automatically through such measures."

From such a viewpoint, there is a good reason for Japan to become active in climate change measures. It is what can be called the "Japan paradox" that Japan has taken a different course. The reason can be found in the politically influential powers of the fossil fuel industries and energy-consuming industries, where the discussion of structural reform of the industries is taboo. Another reason can be the excessive dependence on nuclear power for energy policy and climate change measures, which has made it difficult to pursue rational policy-making decisions based on long-term perspectives¹¹.

¹¹ Another reason is military use of nuclear power. Mr. Ishiba Shigeru, former defence minister and current leader in the Liberal Democratic Party, publicly mentioned the importance of the nuclear power plant as a military deterrence power (*Mainichi Shimbun*, November 20, 2011).

CONCLUSION: JAPAN TO FACE LOST EIGHT YEARS?

Key is energy policy reform

In conclusion, all the problems Japan faces are the problems of policy-making processes. As mentioned above, to promote climate change measures is to proceed with the reforms of energy policy-making processes and the structure of vested interests, in order to advance energy saving and the introduction of renewable energies. In other words, whether climate change policy can be advanced, or not, fully depends on whether energy policy can be reformed or not. In turn, climate change measures, both domestic and international, cannot proceed unless the vested interest structure surrounding energy policy can be reformed.

Quite a few Japanese people had high expectations that the change of administration to the Democratic Party of Japan (DPJ) in 2009, would lead to a reform of policy-making processes surrounding energy and climate change issues. This was because they believed in the manifestos of the DPJ. They also expected that the power of the bureaucrats in Kasumigaseki and lobbying by energy-intensive industries would decrease. However, the cynical fact was that the DPJ had to look for support from Keidanren, who have strong influences over the energy-intensive industry, as well as support from labour unions. The resistance of bureaucrats in Kasumigaseki was stronger than expected. In the end, the discussion of energy reforms continued to be taboo among DPJ members of Congress. The number of congress members seriously addressing the climate change issue was limited because the issue was not likely to bring more voters. On the contrary, those DPJ members of congress backed by energy industries or labour unions gained greater influences in policy-making.

It is not yet clear how such a policy-making system and power structure changed after the Fukushima nuclear power accidents and the landslide victory of the LDP in the last election. At the minimal, it highly likely that, as of August 2013, the LDP government will try to change the energy policy again and go back to the system in which vested interests have kept the power. At the same time, the climate policy will be more lenient considering the LDP government's low priority on climate change.

Collapse of climate change infrastructure

When the government reverses its climate change measures, the private sector will accelerate the reversal ten folds. In Japan, both the government and the private sector have made efforts to develop an infrastructure to put value on carbon by investing a vast amount of money, despite the lobbying activities of the opposition. This infrastructure was a pilot project of an emissions-trading system and the associated systems of measurement, reporting and verification of greenhouse gas emissions.

However, this carbon pricing infrastructure is close to collapse. It goes without saying that one of the main reasons is because the Japanese government is not supporting the Second Commitment Period of the Kyoto Protocol. Many of those involved in building this infrastructure have changed their jobs these days, taking valuable know-hows away. It is unfortunate, but perhaps inevitable in view of the past environmental policies taken in Japan, especially the history of introducing an environmental assessment system or Feed-In-Tariff (FIT) system for renewable energy. Although Japan started to review the introduction of such policies not too much later than other countries, actual introduction lagged far behind many other countries, including developing countries, because of strong lobbying activities to oppose such an introduction. It is the same pattern seen in many policy-making processes in Japan and the carbon pricing system seems set to follow the same path.

World may move but not Japan

In terms of climate change mitigation action, some parts of the world are moving very fast. The EU, for instance, has decided to apply the EU Emissions Trading Scheme (EU ETS) to the aviation sector. Every flight departure or arrival at the airports of EU member countries must purchase emission allowances traded under EU ETS. This can be considered as the first case in the world where such a practical border tax adjustment has been applied.

Indeed, such a movement is extremely interesting in view of the aforementioned formula, "climate change measure promoters = energy importers." This is because the border tax adjustment is almost synonymous to the common energy tax (carbon tax) imposed upon certain sectors of both importing countries and exporting countries. If many energy-importing countries participate in such measures, and the number of such sectors increases, then it will provide significant positive effects in terms of climate change measures as well as energy security. Such a movement can be a step forward for the introduction of global emissions trading or world common carbon taxation, which used to be considered difficult unless there is one global government. It may mean more than complementing the current international system of country-specific emissions reduction, where confrontation among countries is bringing deadlock.

In addition, during the course of COP17 in Durban in 2011, the overall attitude of the US delegation changed considerably, partly because of the incident where an NGO lady suddenly voiced criticisms of the US during a meeting. The US mass media made a big report on this incident, and the US delegation was forced to explain it. In the future, such direct actions may increase in number and Japan may become an easy target of such actions.

Nevertheless, Japan will quite likely find itself entering an adverse cycle of reduced influence in the international negotiation on the climate change issue, loss of interest among national constituencies, stagnancy in domestic measures, and further inaction in international negotiation. Thus, Japan will have a "lost eight years" till 2020 under the LDP, when the Second Commitment Period of the Kyoto Protocol ends, in terms of its diplomacy as well as domestic policy design, and these "lost years" may extend further if the LDP continues to retain the office. Since the basic principle of Japanese diplomacy is to align with the US, whether Japan can change and escape from such an adverse cycle depends on: (1) whether the general public as well as policy makers in Japan can understand the fundamental facts of the climate change issue and energy issue, (2) whether the climate change policy both in the US and in China change drastically, and (3) whether it can reform its policy-making system on the energy issue. In the past, Japan has changed its fundamental systems by external pressures (disasters, or pressures from China, the US etc.). If the big opportunity that arose from the nuclear accidents has failed to change the energy policies, and hence the climate change policies, of Japan, what kind of external pressures would be needed in order for Japan to change such policy-making systems? It is a fearful and saddening thought.

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Climate Change Politics and Policies: Germany and the European Union in the Climate Negotiations

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EXECUTIVE SUMMARY

The UN negotiations to limit climate change to a manageable degree have been running for more than 20 years, more than often in waves. After their diplomatic collapse in Copenhagen in December 2009, where the anticipated "great global climate deal" could not be reached, political leaders shirked spending further political capital on the climate change agenda. The "post-Copenhagen hesitancy" lasted for almost four years. Eventually, the Durban climate conference in 2011 set a new deadline for developing a binding and inclusive global climate agreement: the upcoming Conference of the Parties (COP) in Paris in late 2015. US President Obama was the first leader to commit a major public speech to climate change. At Georgetown University on 26 June 2013, he signalled that the run-up to the Paris conference has begun.

When the Intergovernmental Panel on Climate Change (IPCC), the scientific advisory body of the UN climate convention, published its fourth report in 2007, the climate agenda experienced a major boost. Together with Al Gore, the IPCC was awarded the Nobel Peace Prize for its work. Therefore, hopes are high that the publication of the next report will be yet another driver for increased speed and ambition when formulating the politics and policies for climate change. Between September 2013 and April 2014, the new report will be published in three stages; they will cover the physical science, the impacts of climate change, and the chances for mitigating these impacts, respectively. Together, they will constitute the Fifth Assessment Report (AR5). AR5 is expected to state that it is "extremely likely" (95% certainty) that climate change is anthropogenic, i.e., caused by the activities of humans. AR5 will probably also predict more severe increases in sea-level rise, a worsening in precipitation patterns, as well as accelerated sea ice decline. Extreme weather events with heavy precipitation are reported to be very likely to increase in the future as well.

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With the perspective of a desirable renewed dynamic for the climate negotiations in mind, this article deals with the challenges of managing climate risks, the role of the European Union in the climate negotiations, and the role of Germany as a key player in Europe.

THE ROLE OF CLIMATE SCIENCE

Science does not provide a manual featuring the policies necessary to deal with the risks arising from a changing climate. Climate science deals with the likelihood of future events and their estimated severity but it cannot predict with precision what type of climate change-related events may occur at a certain point in time. However, climate science provides a sound basis upon which to base policies aimed at curbing greenhouse gas (GHG) emissions and strategies to manage climate risk. It is worth recalling that, according to a study published by the Proceedings of the National Academy of Sciences of the United States (PNAS) in 2010, "97 to 98% of the climate researchers most actively publishing in the field support the tenets of anthropogenic climate change" as outlined by the IPCC.² This represents a degree of certainty which is rare to find in other areas requiring political decisions.

In 2013, a statement by the G8 for the first time explicitly referred to climate change as a "contributing factor in increased economic and security risks globally"³. The setting of an absolute limit to the increase of average global temperatures to 2 degrees Celsius in comparison to pre-industrial levels is much older than that, however: it was first promoted by the European Union (EU) in 1996. The 2009 Copenhagen Accord later adopted this value as the maximum acceptable temperature increase.

Initially, the 2 degrees were brought into the discussion to introduce a political target around which support could be gathered. It has now become clear that 2 degrees is indeed the maximum increase that humankind will be able to cope with from an economic, social, and security point of view. The 2 degrees paradigm is based on findings and projections of climate science which point to the likelihood of uncontrollable, non-linear changes ("tipping points") above this limit. Leaders of almost all countries have agreed to the 2 degrees target, at least in principle. Implementing this decision – a sign of political will – requires ambitious and binding GHG emissions targets at the negotiations of the United Nations Framework Convention on Climate Change (UNFCCC) in 2015. This might be our very last chance to maintain at least the possibility of keeping global temperature increases below 2 degrees.

CLIMATE RISK AND CLIMATE SECURITY

Security, on both the global and regional scales, is linked inextricably to climate change. Climate change will affect a broad range of issues from state instability to border conflicts, and security in the energy, water and food systems. In the coming decades, humankind will experience increased resource scarcity and be faced with levels of climate impacts unknown

² http://www.pnas.org/content/early/2010/06/04/1003187107.full.pdf+html

³ https://www.gov.uk/government/publications/2013-lough-erne-g8-leaders-communique

so far in human history. In a globalised, interdependent world, no country will be able to isolate itself against the impacts of climate change in other parts of the world.

Unless strong action is taken now to slow down global warming, developed and developing countries alike will experience increasing resource scarcity, rising sea levels, extreme weather events such as flooding, storm surges, or extreme heat waves, and new health epidemics. Such events put considerable stress on all countries. But because climate change is a threat multiplier it can push fragile states, for instance in Sub-Saharan Africa, over the edge. The impacts of climate change may also result in mass migration as people are forced to leave land that has been inundated by rising sea levels or regions that can no longer provide the minimal level of basic resources. This is likely to create serious tensions particularly where there are large, poor populations with high climate vulnerability adjacent to rich countries; for example, Mexico and the United States; North Africa and Southern Europe; and Southeast Asia and Australia.

Managing climate change-related risks is therefore a key task of governments in the 21st century. Dealing effectively with these risks will also have to inform foreign policies in fundamental ways. However, to make the "mainstreaming" of climate risks into foreign and security policy possible, an in-depth understanding of their dynamics is essential.

FAILURE TO MANAGE CLIMATE RISKS

Current responses to climate change do not effectively manage climate security risks. There is a mismatch between the severity of climate risks and the political, diplomatic, policy and financial efforts expended to avoid them. This arises partly from conflicts of interest between and within countries. But it also reflects a failure of government bureaucracies to consider the full range of possible scenarios and necessary responses beyond expert workshops and conferences.

Current security assessments are mostly based on mid-range scenarios developed by the IPCC. Whilst useful when considering likely impacts over the next two decades they do not, however, cover the full range of future climate risks. Neither do they reflect the most recent research. To date, impact assessments do not include long-term worst-case scenarios like Atlantic conveyor slowdown, monsoon variation, glacial melting, and Amazon forest dieback. Therefore, they are not a sound basis for long-term risk reduction planning, especially in the area of security policy, as they underplay the implications of the most severe risks.

WORST-CASE SCENARIOS HIGHLY LIKELY

These "worst-case scenarios" do not have a low probability of occurrence; according to climate science, they might become inevitable if we continue the current patterns of investment in high-carbon energy systems and deforestation. As atmospheric concentrations of GHG emissions increase there is little uncertainty over whether extreme impacts will occur. What is unclear is when they might happen and what their precise impacts could be. Moreover, climate risks are not symmetrical; there is a so-called "long tail" on the probability distribution of potential impacts, which makes severe outcomes much more likely than benign ones. In any case, uncertainty should not be a barrier to action. Uncertainty does not mean that we know nothing; it rather indicates that we do not know precisely what the future may hold. Many other public policy decisions are taken under far higher levels of uncertainty than those that exist over climate science, impacts or policy choices.



COMMITMENT TO 2 DEGREES NOT UNDERPINNED BY SUFFICIENT ACTION

Current emission reductions pledged by countries, even if fully delivered, could result in an average global temperatures rise of 3 to 4 degrees Celsius. This reaches well into the range where damages become severe and climate tipping points are likely to be breached. Once a tipping point is reached it will be close to impossible to return to the Earth's previous climate equilibrium. Thus, a "temporary overshoot" of increases in global temperatures is unacceptable if an eventual stabilisation at 2 degrees is considered desirable – because it may be irreversible for centuries to come. At warming levels of 4 degrees and above, large areas of the world will experience widespread disruption to subsistence agriculture, food supplies and water systems, along with increased severe weather extremes. All of these impacts are associated with high levels of social instability and growing international agreements to manage water, food, trade, borders, and other climate-sensitive resources.

It is highly unlikely that the current, relatively benign, global security environment – with largely open trade, travel, and investment, and declining conflict and poverty levels – could be maintained under the pressures of severe climate impact, regardless of the security interventions developed. 450 parts per million (ppm) is currently largely recognised as the maximum CO2 concentration in the atmosphere that can prevent a more than 2 degrees increase in global average temperatures. As the chart below demonstrates, even if we manage

to stabilise the concentrations of GHGs in the atmosphere at 450 ppm there is still a 52% chance that we overshoot the 2 degrees limit. At 400ppm the chance of overshoot is still at a probability of 26%. In 2013, for the first time in human history, the concentration of CO2 in the atmosphere exceeded 400ppm. The last time the Earth's atmosphere contained this concentration of GHGs was several million years ago; at that time the Arctic was ice-free, the Sahara desert covered by savannah, and sea levels were up to 40 metres higher than today.



INVESTING IN GLOBAL GOVERNANCE SYSTEMS

The peaceful management of even moderate climatic change will require investment in increased resilience by national and international governance and security systems. The reality of climate change will require a fundamental readjustment in the conduct of international relations, and it will also alter much of the focus of international security policy. It will change strategic interests, alliances, borders, threats, economic relationships, comparative advantages and the nature of international cooperation. Climate change and international negotiations over mitigation and adaptation activities will also largely determine the continued legitimacy of the United Nations in the eyes of much of the world.

The direct effect on security analysis is clear. Unless climate change is limited to levels where its impacts can be managed effectively, and unless successful adaptation programmes are implemented, we could face significant threats to national and international security. States will have to develop comprehensive strategies to assess and manage climate risks. Thus, the world has a strong interest in promoting an effective and sustainable global regime that avoids the worst risks of climate change.

Climate change geopolitics will link old problems in new ways and require a more holistic approach to understanding threat assessment. Security policy will need to move to a preventative, risk-based approach rather than a reactive attitude; after all, we cannot rely on reactive decisions when it is too late. We need a richer decision-making framework, based explicitly on risk management, which allows decision makers to take a comprehensive approach to managing climate risks, both ex ante and ex post. Furthermore, we need more activist preventative diplomacy from the international community.



A RISK MANAGEMENT APPROACH TO CLIMATE CHANGE

Risk management is a practical process that provides a basis for decision makers to compare different policy choices. It considers the likely human and financial costs and the benefits of investing in prevention, adaptation, and contingency planning responses. Thus, a national risk management approach will be informed by decision makers' values, interests and perceptions.

All societies continually run public debates on existential issues: the balance of nuclear deterrence versus disarmament; or civil liberties versus anti-terrorism legislation. Decisions are constantly made even when significant differences remain over the right balance of action. Political leadership has always been a prerequisite in the pursuit of national and international security. We should expect the development of climate politics to follow similar patterns.

Implementing a risk management approach is not, of course, a panacea that can resolve the politics of climate change, either within or between countries. However it does provide a way to frame these debates around the careful consideration of all available information, and in a way that helps create greater understanding amongst different actors.

A responsible risk management strategy will aim to stay below the 2 degrees limit. However, it has to include effective adaptation policies and contingency plans capable of responding to the full range of potential higher risk scenarios. The latter could result from a failure of mitigation plans and/or a potential degree of climate sensitivity at the upper end of current estimates.

Climate change could either drive a more collaborative approach to international relations – extending into areas such as energy security, conflict prevention, and development – or it could exacerbate tensions between and within countries, leading to a political atmosphere of insecurity, as sovereign nations focus on protecting themselves against climate impacts. The choice is not least with democratically elected governments that have to deliver climate security to their citizens.

The world has the financial resources and the technological potential to realise a global shift to a low-carbon economy. The question is whether nations are capable of making the political choices necessary to mobilise these resources in pursuit of our collective interest in a stable climate. Mobilising the political will to bridge the gap between aspiration and reality will require countries to have a far more realistic understanding of their national interests in reducing climate risks. To date the international climate negotiations provide the best possible tool to shape such an understanding.

CANCUN, THE DURBAN PLATFORM, AND THE "2015 MOMENT"

As many instances of international collective action demonstrate, even the most obvious benefits of joint action do not automatically translate into effective international agreements. The political will to agree upon and implement a global climate deal is decisive. A positive example of international climate governance is certainly the Montreal Protocol on Substances that Deplete the Ozone Layer, which was ratified by 197 countries and has been upheld since 1989. As with issues such as non-proliferation and international trade, effectively limiting climate risk will require a complex and multi-layered yet effective international regime grounded in national action.

The UNFCCC will have to be at the heart of this regime. The process may be imperfect but it is the only one we have. Trust in the process was damaged considerably after the "Copenhagen shock" when international leaders failed to reach the anticipated global binding agreement. A closer look reveals, however, that it was the disrespect for UN procedures that derailed the negotiations at the time. Fortunately, the process recovered relatively quickly. The Mexican Presidency at the 2010 Cancun summit skilfully managed to re-establish trust. Subsequently, the 2011 Durban summit determined the road to 2015: the different negotiation streams were to be brought together to allow work towards a single global instrument until 2015. Although the lack of an effective international climate regime represents a major failure of modern diplomacy, an ambitious global deal is still within reach. It has the potential to open the way for an accelerated global transition to a low-carbon economy with opportunities for new "green" jobs and more sustainable lifestyles.

WHY AN INTERNATIONAL AGREEMENT IS ESSENTIAL AND TIME SENSITIVE

A failure to shift to a global low-carbon economy by 2050 will make it impossible to keep climate risks below the 2-degrees threshold. An international agreement is a prerequisite for decisive national action as it supports ambitious national and regional action in five ways:

- *Impact*: By acting together, countries can see that the aggregate impact of their actions will lead to a material reduction in national climate risks thus encouraging greater domestic action.
- *Trust and Fairness*: By acting within an agreement, countries build confidence that others will deliver and that the allocation of effort has been apportioned fairly.
- *Public Goods and Assistance*: Acting together, countries can pool resources to provide public goods such as an international disaster response capability and assistance for adaptation.
- *Commitment*: By setting binding commitments for countries that extend beyond individual administrations or legislative periods, they provide a more credible signal to investors and the public.
- *Transparency and compliance*: By agreeing common rules and accounting measures, countries lay an objective foundation for ensuring comparability and adherence to the international regime.

THE EUROPEAN PROJECT AND CLIMATE DIPLOMACY

Historically, Europe has played a leading role in shaping the climate negotiations, with Germany taking a pioneering role. With the upcoming COP20 in Poland 2013, COP21 taking place in Paris in 2015 and the German G8 presidency in the same year, Europe will be expected to show leadership again. France and Germany, the European tandem, which recently celebrated the 50th anniversary of the Elysée Treaty committing the former archenemies to friendship, can be the engine for European action once again.

The EU has a positive track record in providing leadership at the international climate negotiations at all milestones in Berlin, Kyoto, Copenhagen, Durban and Doha. The EU's role was also critical in building support for different initiatives by the United Nations Environment Programme (UNEP). EU countries, namely the UK and Germany, initiated debates on climate security in the UN Security Council in 2007 and 2011, respectively. And the EU was instrumental in building innovative international partnerships such as the International Renewable Energy Agency (IRENA), the Extractive Industries Transparency Initiative (EITI), and the Forest Law Enforcement, Governance and Trade Initiative (FLEGT).But Europe is not only a "green-minded" continent; it also has a proven track record in dealing with shared power. The EU is the world's most sustained and far-reaching experiment in the practical and political realities of sharing sovereignty. This experiment is constantly evolving, despite the EU's current crisis. The deployment of soft power, not

least in the process of EU enlargement, has been the hallmark of the Union. Europe has a long-standing tradition of prioritising collaboration and has thus built a legacy of shaping and managing global transitions. Its central tenant is that shared opportunity creates shared responsibility. In the climate process, Europe was successful not by trying to impose changes but by adopting a "we first" attitude, thereby leading by example. Managing the climate will require the same approach.

EUROPE NEEDS SUSTAINABLE MULTILATERAL CLIMATE AND RESOURCE REGIMES

A stable climate, brought about by an international climate regime, is a core interest of the EU. The EU needs a rules-based world as it is built on the governing principles provided by international law. In a multiple-resource crunch, which is likely to be induced by climate change, the EU is vulnerable without multilateral rules to protect it:

- The EU would suffer in a world of "Great Power" competition for resources and energy. It would strain public budgets because more money would likely need to be spent on resource imports as well as, potentially, military preparedness.
- The EU is surrounded by politically unstable and climate-vulnerable countries, especially in the Middle East and North Africa (MENA) region. There could be economic and security spill-over effects that might be hard to contain.
- The EU is a growing importer of fossil fuels; therefore, it depends on regions like Russia and the Middle East. This dependency could limit foreign policy options in the future.
- Europe as a whole is more exposed to climate risks than almost any other OECD country. The potential political, financial, economic, social and security costs of the impacts of climate change for the whole of the EU have not even remotely been addressed yet by European leaders and policy makers.

ECONOMIC OPPORTUNITIES

Any EU internal policy will have strong influence on global action given that the EU is the world's largest market and most important trading area. For instance, EU standards for vehicle emissions, appliances, chemical pollution and waste control are increasingly used in emerging markets. EU regulations have provided a market base for EU companies to transfer technology to other major markets, e.g., SO2 scrubbers and wind turbines to China. Furthermore, the EU is the home of many leading global technology providers in energy-intensive industries. They have been subject to tighter levels of environmental regulation. As the graph below shows, EU decisions to implement these regulations have had effects worldwide.



China's target reflects gasoline fleet scenario. If including other fuel types, the target will be higher.
US and Canada light-duty vehicles include light-commercial vehicles.

Source: http://www.c2es.org/docUploads/PV-fuel-economy-standards.jpg

Globally, climate cooperation has led to the emergence of a \$4-trillion, low-carbon economy in the past decade. Companies and European taxpayers have invested at least \notin 40 billion in carbon credits since the ratification of the Kyoto Protocol, which was strongly pushed for by the EU. The Kyoto Protocol itself, although often portrayed as inadequate, has spurred a global revolution in low-carbon technology development (see graph below).

Incentives for eco-innovation: importance of a clear policy signal



Source: OECD (2010), The Invention and Transfer of Environmental Technologies

CHALLENGES TO EUROPEAN AMBITION

The EU needs to remain committed to playing a leadership role in 2015 as part of a broader group of high-ambition countries. To be credible, Europe will have to lead by example and set tougher and more extensive emissions regulations for itself. However, there is considerable resistance by many industrial players who fear that the EU's unilateral commitments would disadvantage the domestic manufacturing sector. The current economic crisis continues to distract European leaders and makes issues of competitiveness and climate finance harder to resolve. Additionally, the on-going Euro-crisis has dented their confidence. In tackling the crisis, leaders seem to be stuck with passive options in other policy areas, including climate change. Yet, dealing with climate change requires a proactive, forward-looking strategy.

Therefore, the European electorate needs to be equipped with a genuine sense of urgency. This includes awareness of the link between addressing climate change and resolving the economic crisis: a bold policy to promote green jobs in a low-carbon economy could help address not only the EU's economic crisis but also its crisis of legitimacy. Many of the measures required to transition to a low-carbon economy provide jobs at the local and regional levels. However, up to now, the move to a low-carbon economy is being undermined by more traditional high-carbon industry interests that still enjoy a disproportionate influence in political debates.

ENERGY COOPERATION TO UNBLOCK THE EU'S CO2 REDUCTION DEBATE

Working towards the integration of European energy infrastructures could help overcome the EU's inability to set more ambitious GHG reduction targets. A common criticism with regard to the transition to renewable energy is their questionable reliability. On overcast days when the wind is not blowing, for instance, the capacity of wind and solar power is massively reduced. With an integrated European grid, however, power supply and demand could be balanced more easily across countries. A possible first step, which is currently being discussed, could be the construction of power grids connecting the offshore wind parks of different countries in the North Sea. Pioneering initiatives like this can instil trust and demonstrate that it is possible to bring European decarbonisation to the next level.

Up to now, the EU has been experiencing considerable difficulties in achieving agreement to increase its original 20% emission-reduction target by 2020 to 30%. Only a more ambitious target, however, would provide incentives for industry, trigger innovation, and stabilise the emissions trading scheme (ETS). As the 20% target has almost been reached there is little demand for emissions certificates. A price of less than 5 Euros per ton of CO2 – rather than the required price of over 20 Euros which analysts believe would set incentives for innovation – reflects this development. However, whilst this situation is often portrayed as a "failure" of the ETS, it is actually a success story. Political targets have been reached easier and faster than expected – despite the fact that the economic crisis has played its part in the diminishing demand for certificates. In July 2013, the EU Parliament voted – in a second attempt after an unsuccessful vote earlier in the year – in favour of delaying the issuance of new pollution permits for 900 million tons of carbon. This decision, known as *backloading*, certainly means progress for the climate agenda. However, only an absolute reduction in permits will deliver tangible results in the medium and long term. This, in turn, will hinge upon more ambitious CO2 emission-reduction targets.

EU-CHINA RELATIONS ARE ESSENTIAL

As far as the EU's external relations are concerned, the burgeoning relationship between the EU and China has the potential to facilitate an ambitious global deal. A strong EU-China bilateral relationship with its current focus on urbanisation and maintaining open markets to foster low-carbon trade builds trust and it creates the conditions necessary for the spread of low-carbon technologies.

China is the world's largest emitter of CO2 and will continue to be so in the short and medium term. This is mainly due to the rapid industrialisation and urbanisation China is going through, as well as its heavy reliance on coal as the primary energy source. Nevertheless, China is also in the process of aggressively creating one of the largest markets in the world for clean technologies and services. To achieve this ambitious outcome, the Chinese government is using a combination of binding targets and ambitious industrial strategy. For example, it has set a target of a 40 to 45% carbon-intensity reduction by 2020, and it aims for the "green-focused" new strategic industries to account for 15% of GDP by 2020. The Chinese government backs these goals with large-scale public investments in clean energy and infra-structure, as well as innovative governance structures and market-based instruments.

As the leading region in not only climate policy but also clean investment and technology, Europe could and indeed should work with China to promote innovative pro-climate policies and the wider diffusion of clean technologies. The EU-China high-level Partnership on Sustainable Urbanisation can provide the framework for more concrete and in-depth cooperation on the ground. City partnerships can promote mutual learning and the exchange of best practice and experience. In particular, joint demonstration projects, such as in the area of green buildings, should be encouraged to build trust and confidence.

Cooperation on trade is also paramount to ensure that protectionism does not inhibit the growth of international markets for clean technology, products, and services. In addition to EU-China bilateral trade and investment agreements, the EU and China could work with third parties, such as regions in Africa and Latin America, to expand markets for affordable clean technologies. Closer cooperation and partnerships on research and development should also be prioritised to promote technology exchange and diffusion. They should replace a crude one-way technology transfer that usually implies the loss of intellectual property rights or profits.

Europe and China have cooperated on practical climate and energy issues for over a decade. Unfortunately, to date this relationship has not delivered high-level political traction. Opportunities exist to shift the relationship to a new level. But this can only happen if the EU can organise itself to put forward a high-value proposition on low-carbon cooperation, trade and investment. Clearly, the EU's cooperation on low-carbon development should be a key element of European foreign policy and a worthwhile priority for the European External Action Service.

THE EU AND THE TRANSATLANTIC ALLIANCE

Perhaps the most challenging political condition for global climate policy today is the reluctance of the US Senate to agree to the ratification of virtually any international agreement,⁴ including on climate change. President Obama is committed to preventing climate sceptics from thwarting his efforts to curb US GHG emissions: he has tasked the Environmental Protection Agency (EPA) with the development of new standards for existing coal-fired power plants, thereby bypassing Congress. But such a bottom-up approach will not suffice in the long run. Political capital needs to be invested at the international level to create momentum in the run up to COP21 in 2015.

Despite recent difficulties, the transatlantic alliance between the US and its European partners is still the strongest one in the world. An ambitious "climate coalition" between the EU and China could therefore potentially help bring the US onboard. After all, criticism from the US Senate about the absence of China from a global binding deal and the lack of a global level playing field would become immaterial.

If it proves unsuccessful to bring the US onboard, other countries will need to assess whether the cost of not including the US – which in the meantime only produces around 17% of global emissions – is worth the price. A legally binding document is indispensable for a credible agreement after all.

GERMANY'S "ENERGIEWENDE"

In international climate diplomacy, Germany has played a critical role with regard to the EU's level of ambition, the relationship with China, and the transatlantic relationship. The Energiewende, i.e., the transition to a renewables-based energy system whilst phasing out nuclear power by 2022, has made Germany a unique case study that other countries follow with great interest. If a country whose economic success is based on energy-intensive manufacturing manages the transition, chances that others will follow are likely to increase.

This bold move in Germany cannot be understood without understanding the 30-year legacy of the anti-nuclear movement. Anti-nuclear mass protests after the Fukushima disaster in March 2011 forced Angela Merkel's government to "re-instate" and, in fact accelerate, the nuclear phase-out that a previous government coalition had introduced in 2000 and that she had dispensed with just a few months prior to Fukushima. The Chancellor explained why

⁴ The United States has a long history of failing to ratify international treaties across a range of human rights,

environmental, security and economic areas, although this has not prevented it from implementing their provisions in some cases. http://www.internationalcomparison.org/intl_comp_files/sheet026.htm

she had changed her mind about the phase-out: she now considered nuclear energy as simply too risky to maintain as part of Germany's energy mix. It was the very fact that Fukushima happened in a country famous for its engineering skills, she declared, that made her realise that the risks associated with nuclear were simply too high.

When the German government decided on the phase-out in June 2011, the nation had already committed itself to a set of ambitious climate targets, including the accelerated installation of renewable sources of energy. The Energiewende is therefore linked to Germany's emissions targets but also to improvements in energy efficiency. By 2050, GHG emissions are to be reduced by 80% on 1990 levels; the share of renewable electricity, mainly wind and solar, is set to reach 80%; the share of renewables in total energy consumption is to reach 60%; primary energy consumption is to be cut by 50% on 2008 levels; and electricity consumption is to be reduced by 25% on 2008 levels.

Whilst international commentators have labelled the Energiewende as the German equivalent of "putting a man on the moon", it is facing increasing scepticism on the part of the population and, in particular, traditional energy-intensive industries. There are concerns about increasing electricity prices for households and there is strong criticism by energy-intensive industries who are calling for a level playing field for industries across Europe. The German feed-in tariff, based on the Renewables Act (EEG) with its guaranteed prices for electricity prices since 2000. Whilst the price per kWh was 16.65 Eurocents in 2000, it reached 25.14 Eurocents in 2012. However, the bulk of this increase is due to the costs for power generation and distribution and, of course, a rise in the price for fossil fuel. Criticism by industry in particular is partly exaggerated as energy-intensive companies are exempt from the renewables tax.

Unfortunately, to date, most political and policy debates surrounding the Energiewende in Germany address the topic exclusively from a narrow domestic perspective. European or international aspects of the Energiewende are largely absent, which might be a consequence of a mostly energy experts-driven debate.

However, given the high level of integration of European power grids, such an ambitious project in a country in the centre of Europe can only work if neighbouring countries come onboard over time. On the plus side, building an interconnected European grid can mobilise a potential of over 400 billion Euros in savings from European collaboration on decarbonising the electricity sector.⁵ This is due to a more efficient use of power plants and a distribution of renewable power sources in regions where the resource – e.g., wind or solar – is highest. From the viewpoint of grid stability, an extended grid that transcends national borders provides a better chance of buffering peak loads and guaranteeing the continuous delivery of electricity. Modern High Voltage Direct Current (HVDC) transmission lines make it possible to deliver electricity over long distances without substantial losses. Thus, there is considerable potential to achieve affordable low-carbon energy security through closer cooperation. Furthermore,

⁵ http://www.roadmap2050.eu/project/power-perspective-2030

improved European collaboration on technologies such as offshore wind and supply chains and grids bear considerable cost-reduction potential.

Improved connecting grids with European neighbours and stronger cooperation would not only strengthen energy security, they could also become a further driver for European integration and re-establish the perception that the European integration process is of real value to the European people.

A NEW VISION FOR EUROPE

With the vivid memory of the horrors of war, the vision of peace helped overcome national differences and promoted European integration in the twentieth century. Today, peace, political stability, almost unrecognisable borders, and a single currency are achievements which young Europeans consider a given. However, the history of European integration is a dynamic one and it will have to remain dynamic to retain its legitimacy and value proposition. In order for the European project to resume its original pace and meaning, a new unifying vision is necessary. Building new, clean industries in crisis-ridden EU countries and providing secure, affordable power supplies could be building blocks for a future Europe. In addition to post-war peace and post-Cold War freedom, the vision of a sustainable and carbon-neutral continent could be the "21st-century engine of European integration". Such a perspective would allow a meaningful integration of seemingly separate issues such as the Euro crisis, youth unemployment, and climate mitigation. It could also offer a way out of the current economic and political crises.

CONCLUSION

Despite its many internal challenges, as seen from the outside, Europe is a fascinating success story with regard to integration generally and leadership on climate issues, more specifically. Like a bicycle requiring movement to stabilise, Europe now needs the dynamic of further integration. Just keeping the "acquis" will not suffice to hold its member states together in a viable political union. A union for a sustainable and climate-resilient future could offer new momentum.

Europe's role in the climate negotiations has shown how international leadership through a new, soft-handed manner can be achieved. By applying high environmental standards to its member states first, instead of pushing others to be first movers, Europe has positioned itself as a leader on low-carbon development. Furthermore, China has understood the importance of developing a competitive renewable-energy industry and is making progress on its ambitious current five year plan. The EU, in contrast, like the United States, puts its technological and political leadership at stake when failing to build the industries of tomorrow.

Wrongly labelled by many as a "failure", the ETS actually bears witness to the enormous potential for European industry to change and transform in view of environmental regulations and market instruments. The EU clearly needs to have stronger self-confidence with regard to its own capacity by setting more ambitious climate targets. In order to achieve this, a renewed vision for Europe is necessary. It could be that of the first carbon-neutral continent and it could be achieved within a generation. This new vision could have the potential to electrify an entire generation, similar to the original European vision after the horrors of war.

Seen from a global perspective, a Europe focused on the "grand transformation" could find a new form of leadership in a world that has ceased to be centred around Europe. Undoubtedly, the world desperately needs leadership to tackle the looming climate crisis whilst there is still time to prevent the greatest risk from materialising.

Domestic Sources of Multilateral Diplomacy—The Case of Poland's Climate Policy

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INTRODUCTION

The public debate on climate change and the international agreements which bound Poland is a relatively new phenomenon. It started in 2008, when a new government undertook decisive action during the EU summit in order to go back on the consequences of a deal that was signed a year earlier by the President of Poland². For the first time, the argument regarding potentially catastrophic repercussions for the Polish economy and for the households appeared in a wider discourse and in the public perception. This message is still dominant and it highly influences Poland's behaviour in multilateral diplomacy. It is contested today only among narrow circles of experts, but not at the level of the political elites. In that sense, Poland's behaviour at the international scene is rather predictable and it will not vary with the next government.

The official Polish postulates³ on multilateral climate negotiations consist of three points:

- the necessity to take into account the achievements of the domestic climate policy to date as a reference point for new climate policy targets;
- the necessity to distinguish between different specifics of EU member states and the different costs that they bear in the process of implementation of climate policy targets;
- the necessity to ensure that the environmental target of the climate convention will be achieved in a way that the global emission will decrease, and the climate policy within the EU will not lead to the growth of emission outside EU borders.

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² In 2008 the President of Poland was from the party which was the parliamentary opposition to the government.

³ As stated on different occasions by officials from the Ministry of Environment and Ministry of Economy.

Formally there is nothing specific in this kind of attitude. Poland is one of the members of the European Union in the global climate negotiations; therefore its diplomacy does not undermine the EU's global stance. It would not just be unwise, but it would infringe the so-called "Lisbon Treaty" – a basic treaty of the EU – that assumes some kind of basic solidarity among member states in this type of negotiations. So the biggest diplomatic battle does not arise during the global climate negotiations, where Poland tries to be a good member of the club, who even takes the responsibility for organizing major summits. In that sense Poland's strategy is quite subtle. But the diplomatic "fire" goes fully in the direction of modulating EU policy during its own internal negotiations. In climate policy the EU wants to lead in the world by example. For Poland, it is of fundamental importance what kind of example the EU sets. Both the Polish government and the wider political elites assume that the EU should not be at the frontline of the climate battle, at least until other countries do not follow. But a more deeply rooted Poland's conviction reveals its:

- scepticism toward the results of research that suggest human activity as a reason for climate change;
- assertion that preventing climate change can cause only losses and very little benefits;
- unwillingness to undertake an active policy toward departure from fossil fuels, and transition to low-emission economy, and environmental protection;
- tendency to blame the European Union for the rise of energy prices and the lack of modernization in the energy sector.

So, one has to examine the real domestic sources of Poland's climate policy in order to understand the complexity and the direction in which its climate diplomacy is heading.

BACKGROUND

The end of the communist period in Poland was characterized by an ecological disaster. Thus the leaders of the country in the first decade of the post-communist transformation undertook another direction very decisively. It could be called *ecological enthusiasm*. But, in the middle of the 1990s, the energy lobby started to advocate that economic development must be accompanied by the growing use of energy and the ensuing emission. It has undoubtedly affected Poland's position in international negotiations. In Kyoto, Poland committed itself to reduce emission by just 6% despite the fact that its amount of greenhouse gases emission was lower by about 25% in comparison to the base year (1988).

Nevetheless, at that time, Poland was a "catching-up" state, where the need for greening the economy was visible and supported at the level of society due to years of earlier neglect. The government even approved "The 2nd Ecologic Policy of State"⁴ fundamentals in 2000. It had assumed Poland's active international engagement on the climate convention and fast ratification of the Kyoto protocol, the need for doubling efforts to reduce energy consumption

⁴ Ministerstwo Środowiska, II polityka ekologiczna państwa, Warszawa 2001.

in national income and a wide introduction of renewable-energy sources. Two years later, the government acknowledged 40% reduction of greenhouse gases emission by 2020 (in comparison to the base year of 1988) as an appropriate policy target.

The situation changed with Poland's entry into the European Union in 2004. There were two reasons. First, the Polish attitude was shaped during the pre-accession period, in the negotiation process, where the EU's stance was very formalistic. Poland could only "eat the whole cake" of EU *acquis⁵* in environmental policy and implement European rules and obligations to its domestic law. Though warnings regarding post-accession policy reversal were not rare⁶, there was no real dialogue on Poland's actual environmental and climate challenges.

Second, immediately after the enlargement, the EU took a very decisive direction and put the climate policy as one of its flagship projects. The first dispute between the EU institutions and Poland appeared with the arrangements on the emission trading system (ETS). Poland has even won this case in the European Court of Justice – an appellate body of the EU system. It has also started to believe that the EU, in particular its institutions, is playing decisively against the Polish interests.

Although Polish president Lech Kaczynski signed the EU climate and energy pact in 2007, it shortly became admitted as an accidental event, not only by the new government, but also by all political forces in Poland⁷. The country has felt bound by the agreement only in the formal sense. But it has started to defend itself very actively and assertively thereafter.

In 2008, the Polish Committee of Electric Energy introduced "Report 2030", which completely slandered the climate-energy package and painted a bleak picture of 100% increase in energy prices, GDP decline and unemployment rise. The report has become highly influential among decision-makers and strongly contributed to their perception of climate negotiations.

POLAND'S VIEW ON CLIMATE POLICY AND MULTILATERAL NEGOTIATIONS

This evolution of attitudes corresponds with the wider philosophy of the Polish government, led by Prime Minister Donald Tusk. At the general level, he came to the conclusion that during the biggest, for decades, global economic crisis, the safest applied policy could only be incrementalism. Not only should the governments undertake just very targeted and limited steps while pursuing public policies, they should refrain from any wide-ranging visions that extend the scope of time for policy actions. The Polish PM has been repeatedly saying that his interests lay "here and present". In that sense, climate policy seems to be a kind of aberration that is relevant mostly for the visionary needs of EU institutions and that is loosely related to

⁵ The set of common EU law.

⁶ See Z. M. Karczun, *Preparing for EU environmental policy in Poland: The case of the nitrates directive*, "Land Use Policy" 2005, no. 22, p. 245-253.

⁷ Interestingly, the "Green" party in Poland is all the time at the verge of existence.

the reality of the economic crisis. If so, the reality will prevail and the dynamics of climate change negotiations will be reversed at some point of time, at least in Poland's opinion.

Today, Poland assumes that climate negotiations are not primarily about issues of ecology. Rather they are overwhelmingly dominated by the logic that shapes the economic and political global order of the 21st century and the position of states within it. It is frequently argued that the diversity of emission profiles is the major reason why a common strategy on capping global emission is so difficult to realise.

Marcin Korolec, minister of environment, states⁸: "The instrument, which was introduced 20 years ago during the Earth Summit in Rio does not work and is absolutely inefficient. The original sin of Kyoto convention is the division of states between those that have to take greater responsibilities and those who do not, despite the fact that the majority of the world's population live in developing economies. (...) Therefore in Durban we wanted to depart from this sin. Ultimately 192 states decided that they will have an international agreement until 2020, which shall be considered as a success. But we have to remember that apart from the EU, no one is really interested in climate policy. (...) So even the greatest efforts of a lonely Europe will not stop climate change. Contrary to this, if climate change policy is continued, it may result in the unemployment and poverty of our citizens."

Poland would argue that the EU wants to idealistically lead by example, but it is blind to the real situation in the world. If non-OECD countries are accountable for almost 90% of energy demand's rise and approximately 85% of greenhouse gases emission is not accounted for within any binding regime of reductions, Poland assumes that the cost-benefit calculation occurring from the climate policy and the burdens imposed on its economy are simply too asymmetric in comparison to benefits.

"Poland is not against global climate policy. But we ask, what's its purpose if countries do not follow? (...) It is irrational to decide right now what the climate policy will look like in a decade. At this moment we do not even know what will be the assessment of a climate pact until 2020. By then there will be no country out of the EU that will achieve CO2 reduction," Minister Korolec adds⁹.

Furthermore, Poland believes that within the EU, the biggest costs would have to be borne by the "new" members, which joined the EU in 2004-2007. Thus, in climate negotiations it is rather the EU that became the main enemy who wants to act coercively. In the words of Prime Minister Tusk, "we will not allow for the imposition of fast CO2 reduction. That would ruin our economy."

Unfortunately, the debate on climate change is overwhelmingly focused on one side of the story, but the real picture is more blurred. In 2011, shortly before taking over the rotating presidency in the EU Council, Poland alone vetoed a compromise on the "Road map for low-carbon economy – Vision for 2050". It was a document introduced by the European Commission that assumed reduction of CO2 emission by 25% by 2020, 40% by 2030 and 60% by 2040. Polish diplomats were arguing that the targets for 2050 simply meant that: no

⁸ Zielone i czarne, Interview with Marcin Korolec, Minister of Environment, Tygodnik Powszechny, 27 March 2012.

⁹ Ibid.

conventional-power station based on coal or gas could exist; the whole industry would then move out to the countries of Maghreb, India or Ukraine; in the transport sector, including maritime and air transport, the emission should be reduced by 70% so only electric vehicles are rational in such circumstances; furthermore, in their arguments, a 50% emission cut in agriculture means that all the cows should immigrate out of the EU.

Polish diplomats were underestimating the meaning of the veto. The minister of environment stated, "we should not dramatize the word 'veto'. (...) There was a whole night for possible negotiations, but our partners did not use such an opportunity to talk to us. We could even say that it was rather their own veto".

In fact, it appeared to be a real failure of diplomacy. Even none of the "new" member states was supportive of the veto. Poland's argument that it represents the region of Central and Eastern Europe, which was treated unfairly through the burdens imposed over it, appeared not just vague but rather illusive. This argument could have been valid for 2008, when the so-called "Visegrad Group" (Poland, Czech Republic, Hungary and Slovakia) jointly called for the EU to consider the CEE region's view on climate policy, and recognise the efforts that these countries had already undertook; but this time was different.

The whole situation says something more about Poland's overall assumption toward climate negotiations.

First, it proves that neither the government nor the enterprises are capable of introducing their expectations on EU climate policy in a way that could be accepted by the EU partners.

Second, there is no real conviction in Poland that climate policy is an integral part of the EU, and that further EU development must be coupled with reduction of greenhouse gases emission.

Third, there is no conviction in Poland that if it strongly pursues its own interests, the other actors may find themselves on the side of the losers.

Poland argues that 94% of its energy is based on coal and there is no chance for any mid-term revolution. Furthermore, it is already proud of its own achievement in reducing emission by 30% since 1990, when it undertook an immense post-communist transformation toward a less-polluted economy. But it refrains from discussion both on external costs, which are estimated by the European Environment Agency to be circa 12-19 billion Euro, and on replacement of coal subsidies with those directed to clean energy. While defending the interests of the coal industry and assuming the development of atomic energy, Poland delays the development of renewable energy sources and does not use the existing potential of energy efficiency. Instead of rethinking about how to use the climate change policy for the modernization of its own industry, Poland focuses on vetoing more ambitious EU reduction targets. It does not see that the tools of climate policy can work to improve the competitiveness of Poland and Europe. Minister Korolec states: "[C]ontrary to other countries, we are an industrial state. And without a doubt, we want to be (...). Poland is very specific. We are the only economy that is based to such an extent on its own fossil fuels". If that were right, Poland would not be a coal importer today, which is the other side of the story. The Supreme

Audit Office¹⁰ assesses that taking into account the current level of extraction, Poland will be deprived of coal in 25 years. If this is the case, the country will be retarded by decades in comparison to countries that have decided to change their energy policy. There are already huge costs caused by high level of losses of energy efficiency, natural resource losses and the external costs of the energy sector. But Polish officials usually ask¹¹, "why should foreign bureaucrats and politicians decide on energy security in Poland?" They admit that the climate policy is right, but at the same time, they assume that it should be a sovereign decision taken at the domestic level. It leaves little room for manoeuvre in the international arena.

Apart from this, it seems that the hidden fear in Poland concerns the challenge, which real implementation of a climate policy would cause, that it will have to buy new technologies instead of being the producer. The Ministry of Environment has ambiguously admitted this in one of its key documents on ecological policy: "The Polish industry is developing fast with lesser impact on the environment, thanks to new technologies. Unfortunately the environmental protection industry has not developed over the last 18 years, despite investments market worth 1.5-2 billion EUR a year. But in this sector you must enter the market only with the newest technologies; otherwise you are deprived of the chance to compete. However, the cooperation between industry and the R&D sector that can result in inventing such eco-innovations, is definitely unsatisfactory. The state does not deliver the tools which would help the practical usage of such projects."¹²

To sum up, Polish diplomacy on climate negotiations will be primarily shaped by its own domestic interests. This is no different from other countries. The difference lies rather in its very narrowly oriented attitude, a very strong assertiveness in defending this position, and an unwillingness to reorient its policy. It is clear today that the climate policy for Poland is an adaptive challenge. It demands that Polish decision-makers learn new ways, rethink their values and attitudes, and clarify "what matters most, in what balance, with what trade-offs"¹³.

The current economic crisis in the EU does not present a good time to rethink Poland's attitude toward climate policy, but there are a few positive signs.

Poland has recently started to promote internationally a correction in its climate policy. It discovered that it should start changing its image of "climate policy foot-dragger" within the EU. It is still defending coal as a source of energy, but it stresses the need for the promotion of the best available technologies for reduction of emission. In such a case, only those countries that do not use modern technologies will be punished, no matter what is the source of their energy. Each country would also have its own separate benchmark. Although it is difficult to assess the chances for successful promotion of this idea, at least Poland has tried to redefine its attitude.

¹⁰ State institution.

¹¹ Author's anonymous interview with high-ranking official from Ministry of Economy.

¹² Ministerstwo Środowiska, Polityka ekologiczna państwa w latach 2009-12 z perspektywą do roku 2016, Warsaw 2008.

¹³ R. A. Heifetz, *Leadership Without Easy Answers*, Harvard University Press, Cambridge 1999, p. 22.

But most of all, Poland's ambition to play an increasingly important role in world politics is growing. Its economic growth – a so-called "green island" in the sea of economic recession in Europe – and undeniably successful post-communist transformation, which appeared to be frequently referred to during revolutions in North Africa, has created an impressive picture. Today, Poland wants to be at least a leader of the CEE region, if not one of the most important countries of the European Union. It has already announced that it intends to stand as a candidate for a non-permanent seat on the UN Security Council in 2018. So, being considered as a responsible stakeholder in the global climate negotiations is a stake in itself. And the arguments for this are solid:

- an immense reduction of greenhouse gases in the period 1988-2011;
- the efficient management of the 2008 UNFCC conference in Poznan;
- the relative success of the conference in Durban, where Poland had to represent the EU interest while holding its presidency in the EU Council;
- the forthcoming COP19 summit in Warsaw;
- a willingness to support the climate policy in developing countries (mainly in the eastern neighbours of the EU) in the frame of financial support to "fast start".

If Polish authorities decide that there is a need to rethink their attitude and take into account a wider array of arguments, these facts may form a good platform for a more constructive stance in future global climate negotiations. As mountaineers tend to say: "Where there is a will, there is a way".

EU Climate Diplomacy: Cautious Optimism Ahead of 2015

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INTRODUCTION: THE UNIQUE ACTOR IN A DRIVING SEAT

The European Union is a unique actor in the global climate negotiations. It is not a member of the United Nations in its own right but represents the collective views, interests and ambitions of 28 European nations. It is distinguishable from all other groupings of countries by its unique features, namely a strong supra-governmental executive, the European Commission, and a system of internal European laws, which are binding across the entire Union. The European legal acquis in climate matters is substantial. To give an example, the world's first emissions trading system was developed in Europe in the 2000s.

The unique character of European climate diplomacy also derives from the fact that the climate change issue is classified as a shared competence between the EU and its Member States. Accordingly, although the EU is not a member of the United Nations, the individual EU Member States cannot negotiate individually – a characteristic other international groupings, be it ASEAN, the Group of 77 in the UN Framework Convention on Climate Change (UN CCC) context, or the African Union, do not hold. As EU Member States cannot take part in UN talks individually, not only are Member States forced to come up with a unique representation but the European Commission, a supra-governmental body independent of national interests guided by self-perceived "European interest" and bound by the limits of EU treaties, is also committed to show presence.

Due to the principle of shared competence, the European Commission alone cannot represent the EU. Instead, it has to do so in conjunction with the Member States of the Union, which results in the mixed representation of the EU and its Member States during UN environmental conferences such as the UN CCC.

In recent years, the EU's diplomatic activities have focused on multilateral diplomatic negotiations. These negotiations included trade talks within the framework of the Doha Round, rearranging the global financial system in forums such as the G-20 meetings following the outbreak of the current crisis in 2008, and providing multilateral aid to least-developed

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nations. The same holds for environmental issues dealt with in the UN system. The global multilateral approach has been complemented by bilateral trade negotiations. However, in the area of climate change these efforts have been, and remain, multilateral.

Generally, the EU perceives itself as a driver of the global approach to climate change. The Union has stood firmly by the process, and has requested and supported initiatives to bring about legally binding international agreements. In this context, the present paper explains how the European Union proceeds in the decision-making process of climate diplomacy. Further, the paper analyses the Union's objectives and fears and elucidates how these features translate into the EU's strategy in climate negotiations.

THE ORGANISATION OF THE EU AT UN CCC

The representation of the EU in the United Nation's climate change negotiations has been organised gradually and modified systematically over the past years. The system of the EU representation, which involves "lead negotiators" and "issue leaders", was established in 2004. It enables a division of labour among the Union's Member States and the European Commission and serves four purposes: burden sharing, expertise pooling, involvement and co-ownership of Member States, and guaranteeing continuity.²

The System's Internal Structure

The EU's decision-making process in climate issues falls into the Union's environmental dossier. Legislation in this area is initiated by the European Commission and co-decided by the European Parliament and the Council of Ministers.

During international negotiations, the Union is represented by the Commission or the High Representative. At the highest level, the representation is provided by the Commission and the President of the European Council. This setup is determined for all negotiations in which the EU is represented without its Member States. The question of representation is also predefined for situations in which individual Member States are present – as it is the case in the majority of issues – as well as for situations in which the issue remains an exclusive competence of the Union (e.g., trade). In these scenarios, it is the Commission who represents the Union *and* its Member States are present, which occurs when the EU has the status of an observer, for example in the United Nations. However, at this point it must be mentioned that even in cases of shared competence there are situations in which the Commission negotiates on behalf of the Union *and* its Member States.³

² For more on this point, see Tom Delreux and Karoline Van den Brande, "Taking the lead: Informal division of labour in the EU's external environmental policy-making", IIEB Working Papers No. 42, University of Leuven, April 2010.

³ See, for example, 11 June 2009, the Council decided to authorise the Commission to open negotiations with Georgia on a comprehensive air transport system, document 10677/09.

In the case of non-foreign and security policy negotiations, such as climate talks, the EU's Treaty of Lisbon (in force since December 2009) defines that the Commission has the power of initiative, namely by sending a recommendation to open the talks to the Council of the European Union. Subsequently, the Council makes a formal decision to start the process and nominates a negotiator or the negotiating team's head. The negotiations are carried out by the single negotiator or the team. The Council can give directions to the negotiators and may appoint a special committee whose advice must be heeded by the Union's negotiators. For the Council to conclude the agreement upon the negotiators' proposal, it requires the European Parliament's consent (i.e., in climate negotiations). The legislature needs to be updated throughout the entire process. Finally, the Council votes on the proposal by qualified majority voting. Throughout the whole process of negotiations the European Court of Justice keeps an overview of the compatibility of all agreements with the existing treaties.

Preparations for the EU mandate and positions in the international climate negotiations are primarily managed by the Council. The Working Party on International Environment Issues (WPIEI) is the central body of the Council decision-making, since many of the participants of the WPIEI's climate configuration are also – at a later stage or simultaneously – involved in the negotiations with third partners. Following the WPIEI work, Coreper I⁴ and the Environment Council adopt the draft decisions. Issues of financial nature are referred to Coreper II and adopted by the Economic and Financial Affairs Council (ECOFIN). In extreme cases, where internal EU talks on the position or mandate to be provided for the negotiations are of great complexity and importance or if there were disagreements at a lower level, the issue is referred to the European Council.

To add to the complexity of the system, WPIEI is assisted by expert groups. Since 2007, ten expert groups have been responsible for the preparation of draft position papers and background documents while an eleventh group coordinated future action (Expert Group on Future Action – EGFA). All EU Member States and the Commission may send participants to the expert groups and to the Working Party.

Characteristics of the EU Climate Negotiations

The EU-led negotiations are managed by joint representation of the European Commission and of the EU Member States. The country holding the rotating presidency of the Council of the European Union performs a coordinating function.

A considerable number of coordination meetings take place during UN climate negotiations. In the course of a summit, these coordination meetings are held on a daily basis to decide the EU's position. The results are adopted by the WPIEI. The central role in the preparation of those positions lies with the lead negotiators (five persons coming from four national Ministries of Foreign Affairs and the European Commission). In reality this system

⁴ Coreper, or Committee of Permanent Representatives, is composed of EU Member States ambassadors and prepares the meetings of the national ministers. There are two sets of Member States ambassadors (Coreper I and Coreper II) responsible for different issues.

has been changed for every Conference of the Parties. Hence, its precise organisation also depends on the ongoing issues on hand.

The system is designed to provide continuity. Most importantly, the system allows for pooling the expertise of the Commission and the Member States, allowing the EU to be one of the world's best-prepared negotiators at administrative and diplomatic levels. The challenges this system is facing are the generally limited transparency vis-à-vis third partners and representation and decision-making at the political level.

In December 2009, the climate conference in Copenhagen coincided with the entry into force of the new EU's Lisbon Treaty, which has substantially modified the way EU negotiations are led. However, both the outcome of the Copenhagen conference (largely perceived in Europe as a marginalisation of the European Union) and the lack of new diplomatic structures allow for a reasonably slow transition to a new system. Tensions between the Commission and the Member States on how this reformed structure should be organised lasted for about 18 month (this applied not only to UN CCC negotiations, but to all multilateral and bilateral negotiations in which the EU and its Member States share competences). Throughout the debate, some challenged the right of the Commission to speak on behalf of the Union *and* the Member States. They argued that the new Lisbon Treaty does not provide the Commission with the power to replace the Member States in negotiations. In fact, the Member States remain equal partners for the Commission in leading collective efforts. A compromise was finally reached satisfying all partners and reflecting the legal dichotomy of EU competences: the EU negotiators, strictly speaking, do not represent only the EU but they represent "the EU and its Member States".⁵

The earlier mentioned internal coordination meetings have two major consequences. First, the EU makes decisions in a fashion that is more transparent than most other actors participating in the talks. This transparency can be perceived positively, but a negative side effect is evident: EU negotiators have severe difficulties keeping secrets from third parties. The second consequence of the internal coordination meetings is time. The Copenhagen summit was the most telling in this respect. The European Union concluded that other leaders did not want to wait for them and took the decisions without the Member States. As part of the solution to take internal decisions more swiftly, the Council can now take decisions by a majority of votes. Nevertheless, the meetings are sometimes difficult and time-consuming. According to a participant, the meetings "limit the EU's room for manoeuvre as strongly as the internal politics limit the US diplomats".⁶

Within the European Union, agreeing on and preserving a single voice has never been easy. When 28 diverse states agree on a joint position, a certain degree of inflexibility remains in this position. Limited trust among European leaders contributes to the design of a negotiation mandate that includes not only the objectives of the negotiations but also a long list of

⁵ Among more controversial issues were the right to take the floor by the European Commission without a prior mandate from the Council, the preceding order in which the actors were presented, and the nametag with "European Union". "EU and its member states" is a nametag used by EU negotiators since the Cancun UN CCC.

⁶ Interview in Brussels with an EU negotiator, May 2013.

restrictions on how they can be achieved. This limited trust increases the inflexibility of the position of the EU. At the highest political level, when radical shifts in negotiations can occur, they always necessitate another informal gathering of European leaders who may, ad hoc, decide to change the joint position of the EU. In the meantime, other stakeholders might wait for the EU to agree or they pursue the process without the contribution of the Union.

Multilateral international negotiations are managed at many levels simultaneously. Before 2009, the EU lacked a comprehensive set of instruments enabling it to manage these negotiations effectively. Each of the rotating presidencies relied on its national web of diplomatic missions and the Commission built on its network of delegations to third countries. In the UN climate change process, extra resources were necessary. Hence, some Member States' diplomats participated in activities aimed at building coalitions during the negotiations.

Since 2009, the European External Action Service, or the European diplomatic service, leads the process of the climate dialogue with third partners. The EEAS works in liaison with the European Commission and the national diplomatic services.

THE EUROPEAN CLIMATE STRATEGY

The latest European Union document outlining its strategy and preparations for the finalisation of the international climate negotiations in 2015⁷ strongly confirms Europe's dedication to reaching a legally binding and ambitious agreement. This dedication illustrates the importance of the agreement despite the numerous objective facts that undermine global efforts to mitigate climate change. The global economic slowdown and recession in many wealthier countries has challenged these countries' financial commitments. Despite the economic situation and previous obligations, man-generated greenhouse gas emissions continue to rise. Recently published studies of UNEP and the World Bank illustrate the potential limits to the effectiveness of the measures. According to these studies, unconditional pledges altogether contribute only a third of what is necessary "to prevent a dangerous 2°C rise in global mean temperature above pre-industrial levels" by 2020.⁸

However, the more difficult the situation, the more urgent is the implementation of necessary global action. Since climate change is unavoidable and, in fact, already taking place, the European climate strategy consists of two elements. The first element is to maximise the efforts to reach an international agreement on climate change by 2015. In light of the volatility of this agreement and the changing nature of global weather patterns, the second element is equally important: An EU strategy to adapt to climate change.⁹ For the purpose of this

⁷ European Commission, *The 2015 International Climate Change Agreement: Shaping international climate policy beyond 2020*: Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, COM(2013)167 final, Brussels, 26 March 2013.

⁸ European Commission, The 2015 International Climate Change Agreement, page 2.

⁹ European Commission, *An EU Strategy on adaptation to climate change*: Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, COM(2013)216 final, Brussels, 16 April 2013.

paper, the following section will be limited to the presentation of the strategy on reaching an international agreement.

EU's Reading of the State of Play

The European Union strongly believes that there is a chance for a full-scale agreement in 2015. There are three factors influencing the realisation of such an agreement: the level of ambition, the financial arrangements and the political situation in the key countries.

The first condition requires the level of ambition to remain high. The primary reason for this condition is that humanity is already behind in the fight against climate change. The EU's self-perceived position is to push for a higher degree of ambition: "We are perceived as the pushy ones", one of the top European advisors remarked.¹⁰ However, as the EU learned in Copenhagen in 2009, the level of ambition needs to correspond with the other participants' perceptions. In fact, in 2009, the Union experienced divergences in the perceptions as some partners considered the EU's positions as being too far-fetched and not as real-life options. Consequently, they decided on the final outcome of the compromise without the European Union being present at the negotiation table.

It is for this reason that keeping the level of ambitions realistically high is a delicate balance. In this process, the EU tries to be at the forefront of new solutions. It aims at convincing other actors that decarbonising the economy does not have to have a negative impact on economic growth: "Countries that have begun to pursue low carbon development strategies are demonstrating that significant reductions in greenhouse gas emissions can be achieved at affordable cost, and can generate benefits as diverse as new jobs, national energy security, improved urban transportation, lower energy bills and improved air quality".¹¹

The EU's strategy of leading by example is sometimes challenged from inside the Union itself. Some social partners and even some EU governments do not consider it to be an option to impose tougher climate-related regulations that hamper the global competitiveness of the European economy, especially in times of a severe economic crisis. Nevertheless, political signals from within the EU that undermine its credibility and political leadership remain limited and are mainly discussed during internal meetings. Once decisions are made, countries respect the common line.

The second condition is the financial arrangement. An agreement is of central importance to convincing developing countries, which need additional financing and are strongly affected by climate change, of the international community's commitment. Reaching consent with developing countries is particularly difficult for European countries during the economic crisis, which is why alternative sources of financing need to be considered. As resources are limited, each Euro spent on the reduction of greenhouse gas emissions needs to serve multiple purposes; for example, the EU development and trade policies should include more climate-related activities in the future. The European Union also supports initiatives which are aimed at securing private financing (World Bank) or other involvement (for example,

¹⁰ Interview in Brussels with an EU official, May 2013.

¹¹ European Commission, The 2015 International Climate Change Agreement, page 2.

private-public partnerships). It predicts the importance of big pension funds playing their roles in the process.

The success of achieving the 2015 agreement will be determined by political developments outside the European Union. Little is possible without the involvement of the United States. In the United States, the main activities on climate change are not in the hands of the central government, but managed at the local and state level. Currently, the Congress is blocked but the mid-term elections in 2014 might bring about new opportunities for US involvement in the 2015 agreement. In fact, public opinion is changing after environmental catastrophes, such as Hurricane Sandy, took place in 2012. The outcome of the American internal debate will be important not only for the position of the American government, but also for the EU internal debate on the issue.

The European Union believes that the Group of 77 has lost importance since the Durban conference in 2011. Smaller and poorer nations no longer support the Chinese or Indian approach in international climate talks unambiguously. The Europeans realized the opportunity and worked closely with small island nations (so-called Cartagena dialogue) and the least developed countries.

Another important partner in the global talks on climate change is China. In fact, the situation in China is different from that in the United States. China recognizes the problem of climate change. However, it will only commit to an international solution if it is ahead of the agreed action. Chinese diplomats are very active in Africa, which remains a diplomatic challenge for the European Union. As a matter of fact, EU officials seem to believe that only a joint EU-US diplomatic activity can be effective in counterbalancing China's involvement in negotiations.

Apart from the above, other international actors are not as central as they used to be in the past, e.g., Russia, or are expected to be in the future, e.g., India. India is of particular concern and "remains problematic" because it "is not moving ahead".¹²

The EU also welcomes the involvement of the United Nations Secretary General Ban Ki-moon in the debate on climate change, especially in the context of political ambition and private financing.

Building the Foundations of the 2015 Agreement

The European strategy in the negotiations leading to the 2015 agreement focuses on three main questions addressed by the European Commission in March 2013. Their objective is to determine the foundations of the agreement in a way that prevents the repetition of mistakes and shortcomings from previous engagements. Consequently, the central element is not the formation of the agreement itself but its successful implementation. The questions are:¹³

 How can the 2015 agreement be designed to ensure that countries can pursue sustainable economic development while they are also encouraged to do their equitable and fair share in reducing global greenhouse gas emissions so that global emissions

¹² Interview in Brussels with an EU official, May 2013.

¹³ European Commission, The 2015 International Climate Change Agreement, pages 4-5.

are put on a pathway that allows us to meet the below 2° C objective? How can we avoid a repetition of the current situation in which there is a gap between voluntary pledges and regulated reductions that are required to keep the global temperature increase below 2° C?

- How can the 2015 agreement ensure the contribution of all major economies and sectors and minimise the potential risk of carbon leakage between highly competitive economies?
- How can the 2015 agreement encourage the mainstreaming of climate change in all relevant policy areas effectively? How can it encourage complementary processes and initiatives, including those carried out by non-state actors?

The process of mainstreaming climate change is of particular importance, especially in the context of a broader sustainable development including, for example, the review of the Millennium Development Goals and the Rio+20 Conference. Other activities involving the civil society and private sector need to be encouraged.

Design of the Agreement

It is the EU's objective that the 2015 agreement delivers more than its previous commitments. Many of its partners share this goal. In order to achieve this, the agreement needs to be inclusive ("applicable to all countries"), ambitious ("2°C target"), effective ("incentives for implementation") and fair. Last but not least, the agreement needs to be legally binding.

The primary purpose of the 2015 agreement is to mitigate greenhouse gas emissions. More particularly, the global growth of those emissions shall be reversed by 2020, resulting in a drop of emissions below the levels of 1990 by 2030. The European Commission states that, according to information by the World Bank, previous conferences (from Kyoto to Cancun) have set up an "ambitions gap". This gap shall be removed by a final 2015 agreement.

Adaptation should be an important element of the agreement. As the effects of climate change vary between countries, different approaches are necessary to address local needs and locally changing weather patterns. The European experience suggests that there is a strong need for the "full mainstreaming of adaptation issues into a broad range of policy areas such as regional and spatial planning, coastal area and water management, agriculture and health".¹⁴ More international cooperation on these issues will be necessary in the future.

The means of implementation, especially the financial set-up, will remain a crucial problem in 2015. In 2010-2012 the European Union has fulfilled its pledges and provided 7.34 billion Euro in "fast start" climate financing to developing countries, which is slightly more than the 7.2 billion Euro it had initially pledged.¹⁵ The 2015 agreement shall not only address the mobilisation of private funding but also establish international pricing on carbon emissions of certain markets, especially in the aviation and maritime transport sectors.

¹⁴ European Commission, *The 2015 International Climate Change Agreement*, page 7.

¹⁵ Council conclusions on climate finance – fast start finance, Council of the European Union, Brussels, 14 May 2013.

One of the outstanding problems is the fact that 32 countries are still considered as "developing countries" under the UN CCC despite having a higher GDP per capita than the poorest EU Member States. This contradiction is due to these countries' continuing economic growth. The 2015 agreement will have to confront these changing realities by replacing the division into developed and developing nations with a different paradigm.

Technology is another important element in the process of decarbonising the global economy. The 2015 agreement shall include incentives for developing these new technologies, driving down their costs or providing an international framework for an easier dissemination of the technological know-how.

The European Union also hopes to advance the ideas of market-based mechanisms, such as the EU emissions trading system (ETS), to cut emissions. Apart from the European initiative covering some 30 countries, there are negotiations with Australia to join the ETS system. Similar local developments are also taking place in China, Korea and in the United States.

Lastly, a binding agreement needs a robust system of compliance and enforcement. In this regard, the Kyoto Protocol reporting system has had mixed results. In fact, its partial successes could be inspiring for the 2015 agreement negotiations.

CONCLUSIONS

Although EU negotiators are clearly aiming at constituting a legally binding international agreement, they do not yet know what will happen in 2015. Alternatives such as a framework agreement with a series of smaller agreements are under discussion. The adoption of a legally binding international agreement would be a major development. Currently, the negotiators are still "defining the level of ambitions".¹⁶ Hence, the 2013 European strategy still focuses greatly on the ambitious approach. The same negotiators admit, however, that playing only for "a big deal, the international, legally binding agreement" could be a gamble. Alternative options will have to be developed, equally ambitious in scope, but more realistic in form.

In the meantime, the European Union is streamlining the climate policy into its own foreign trade and development policies. A new approach has started linking climate change with security issues. While climate change used to be an issue for social movements and civic society, the world has recently developed the term "green economy", which has also entered some of the lexicon of European foreign policy and military decision-makers. In June 2013, the issue of climate change was addressed by the Foreign Affairs Council of the European Union for the first time ever. Looking at climate from the security perspective can give the process a new dimension and be a game changer as "the generals move things".¹⁷

In any case, the European Union remains cautiously optimistic and realistic. It has prepared itself for the 2015 agreement with utmost care, targeting a legally binding global agreement with common, yet differentiated responsibilities. It considers itself to be a leader despite its limited abilities to convince the largest players, namely the United States of

¹⁶ Interview in Brussels with an EU official, May 2013.

¹⁷ Interview in Brussels with an EU official, May 2013.

America and China. The European belief in its own leadership comes from the fact that it has comparably large expertise. The limited political clout over Washington and Beijing has another dimension, namely civil society meetings, which take place alongside the main negotiations. Disproportionately, many of them are initiated by the United States. Hence, the US perspective remains dominant in the public discourse. With regard to this element (public relations), the Union remains largely in a defensive mode.

Nevertheless, realism is also strongly present in the approach of the European Union. The EU has also started its own initiatives, which include many actions (for example, ETS). It mainstreams climate change-related actions through its sectoral policies, most notably development and trade but also foreign and security. In any case, Europe wants to be ready for the climate change. Hence, the network of national adaptation strategies is continuously developing across the continent.

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EU Climate Diplomacy—Internal and External Dimensions

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EXECUTIVE SUMMARY

The EU has been centrally involved with the building of an international climate regime under the United Nations Framework Convention on Climate Change (UNFCCC) since before its signature in 1992. In comparison to other aspects of the EU's emergent foreign policy, notably the CFSP, climate policy has been a resounding success. The EU has been able, on a number of occasions, to exercise leadership in the detailed negotiation and implementation of the Kyoto Protocol to the UNFCCC. Despite a disappointing setback at the landmark Conference of the Parties (CoP) at Copenhagen in 2009, the EU appeared to resume its leading role at the Durban CoP of 2011. Climate policy has consistently received strong support by public opinion across the Union (Adelle & Withana 2010) and been highly significant in the development of the EU's positive identity as an international actor in contra-distinction to the United States (Vogler & Bretherton 2006).

The first part of this paper provides a brief survey of key events in the EU's engagement with the international climate regime, describes the consistent policy positions that the Union has adopted, and attempts to evaluate its claims to a leadership role. The second part considers some of the key factors that determine the success or failure of external climate policy. Prominent is the increasingly close connection between external climate policy and internal energy policies. It will be argued that there are special reasons why the Union was able to take a leading role prior to 2005 without incurring significant internal costs, but that situation altered markedly during the search for a post-2012 international climate agreement. The final section covers determinants at the international level. Ultimately, the fate of external climate policy will rest upon the political and economic environment within which it operates. In the beginning, this was relatively favourable, but structural change and the rise of the emergent economies of the South have complicated matters for the Union. The Union can maximise its influence by using the political and economic leverage potentially bestowed by its trade and aid relationships alongside the substantial diplomatic resources of its member states.

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Unfortunately, there is often "incoherence" between its trade, aid and environmental policies, but one of the strongest elements of external climate policy is the power of example and the way in which internal policy developments can provide a basis for "cognitive" or perhaps "normative" leadership. This may be imperilled if energy and climate policy is seen to fail or fall short of its ambitions.

THE EU AND THE INTERNATIONAL CLIMATE REGIME

Climate change emerged on the agenda of international politics during the 1980s. There had been speculation about the "enhanced greenhouse effect" from the early nineteenth century but it was only in the later part of the twentieth century that this crystallised into a real policy concern, based upon a series of international scientific conferences leading to the creation of the Intergovernmental Panel on Climate Change (IPCC) in 1988. In 1989, the UN General Assembly agreed to set up a process, the International Negotiating Committee (INC), with a view to formulating a convention to respond to the risk of a dangerously altered climate. It drew up the text of what was to become the 1992 United Nations Framework Convention on Climate Change. The European Community (EC) – and soon the European Union – was involved at the outset.

It is important to note what was actually meant by numerous references at the time and subsequently to "Europe" in the climate negotiations. "Europe" comprised both the member states and the Commission negotiating under shared competence. These rather arcane arrangements depend upon treaty provisions and the extent to which decision-making authority has passed from the member states to the Union. In trade and in some areas of environmental policy this transfer is complete or far-reaching, and the Commission will represent the entire Union in negotiations based on a mandate agreed by the Council of Ministers. Climate change was originally regarded in Brussels as primarily a matter of environmental policy and the European Community had already acquired significant competences in this area (Vogler 1999). However, there are still very significant areas of member state competence in energy policy and taxation. This means that competence really is shared between the Union (in effect the Commission) and member states and sometimes subject to dispute. The Lisbon Treaty that entered into force in 2009 can be read as giving the Union the right to conduct negotiations where the conclusion of an agreement is necessary to the achievement of the objectives of the Treaty (Art. 216 (1) TFEU). Under Art. 191, combating climate change is one of these objectives. In early 2010, there was a dispute over whether the Commission or the Council would submit information required by the Copenhagen Accord. There was also an argument over who should represent the Union in the upcoming UNEP negotiations for a convention on the control of mercury. At its first meeting, the Union was unable to present a position because of this dispute between the Commission and member states. This was widely interpreted as a test case for the much more significant climate negotiations.

In international climate negotiations the Union is represented by the rotating presidency of the Council of Ministers and the "troika" and it can be said that the EU negotiates at 29 (28 member states and the Commission). The "troika" in this case is made up of the presidency, incoming presidency and Commission and, because of the complexity of the issues, a procedure has been established where certain "lead states" have a continuing role in developing and representing the EU's position (Oberthür & Roche Kelly 2008). In the climate change Convention, the European Union is recognised as a Regional Economic Integration Organization (REIO) which allows it to participate and sign treaties alongside its member states according to their respective competences (This formula was established in the 1979 Long Range Transboundary Air Pollution negotiations and has been widely used in environmental treaty-making ever since.). There have been occasional displays of disunity, but strangely enough, these extraordinary arrangements have not meant that the Union is mired in endless co-ordination meetings rendering it incapable of effective negotiation.

Early on in the climate negotiations the EC adopted a "targets and timetables" approach to the mitigation of greenhouse gases that has been a cardinal part of the Union's position ever since. Thus in the INC talks immediately preceding the signature of the UNFCCC at the Rio "Earth Summit" of 1992, the EC pressed for a binding commitment to actual reductions of greenhouse gas emissions to 1990 levels by the year 2000. The reference to a 1990 "baseline" in the Convention was to prove highly significant in the evolving story of EU climate policy. The US response also set a course, opposed to "targets and timetables", that was to last. There were various other possibilities open to the Parties to the Convention including a stress on "policies and measures" or the rather weak notion that nations would simply offer reductions as "pledges" that would then be reviewed under the Convention. The first Bush administration, in an election year, was not prepared to subscribe to any commitment that might have negative effects on economic growth. In the end, a compromise was reached through the intervention of the British environment minister which led to the non-binding aspiration to stabilise emissions under Article 4.2 of the Convention. This meant that the only real obligation undertaken by signatories was the provision of national greenhouse gas inventories and reporting. Also evident as part of the Union's conception of climate leadership was a continuing aspiration to bridge the gap between the developed OECD countries and the G77/China. Because of Europe's extensive development activities and long-standing relations with the ACP countries, EU policy-makers typically saw themselves as being especially fit to playing such a mediating role. Thus in climate change and other environmental negotiations, the EU would normally take up a more moderate position than "hard-line" developed economies such as Japan, Canada, the United States and Australia. They were sometimes known by the initials of their members as JUSSCANZ (Japan, US, Switzerland, Canada, Australia and New Zealand). Post-Kyoto they became the Umbrella Group, without Switzerland, which adopted a line closer to that of the EU on the question of offsets and carbon sinks. Switzerland formed its own Environmental Integrity Group (EIG) with South Korea and other states outside the main groups. For climate purposes, the G77 was itself very divided, with states dependent upon fossil fuel exports at one end of the spectrum and the Alliance of Small Island States (AOSIS) at the other. The EU would also engineer support for its positions through the influence it could bring to bear upon aspirant accession states and through close connections with European Economic Area neighbours such as Norway.

In what, with hindsight, seems a remarkably short span of time the Convention acquired a set of clear and binding reduction targets under the 1997 Kyoto Protocol. The Convention entered into force in 1995 and at the first Conference of the Parties (CoP) held in Berlin set itself a mandate to agree a control protocol. By this time, EU representatives were already speaking in terms of the Union's climate leadership. The policy was once again to pursue ambitious targets and timetables for greenhouse gases and the figure proclaimed from Brussels was for a 15 per cent reduction by developed countries against a 1990 baseline. However, the Union was not actually in a position to deliver on such a high target and neither were Japan, Australia or the United States. The latter countered with a proposal for a set of "flexibility mechanisms" that would assist countries in achieving whatever targets were to be agreed. These were the market instruments of emissions trading and offset mechanisms under Joint implementation (for developed countries) and the Clean Development Mechanism (CDM) for developed-developing country deals. Emissions trading, with which the US had already experimented, ran directly counter to the Union's regulatory tradition of "command and control" and its late introduction into the negotiations appears to have come as something of a surprise to Brussels. Even more surprising was the alacrity with which the Union was to adopt emissions trading as its own main response to Kyoto implementation, once the Protocol had been agreed (Cass 2005). In the agreement were targets and timetables for which the "mechanisms" were a quid pro quo. The targets were differentiated between developed countries: eight per cent for the EU as a whole, six per cent for Japan and seven per cent for the USA. The timetable that was to be followed indicated that such reductions were to be achieved before the end of the first "commitment period", 2008-12.

The Kyoto Protocol, as agreed in 1997, was really an outline rather than a coherent plan that could be ratified and implemented. Even before signature, it had become clear that the US was unlikely to be able to ratify it because of the hostile position of the US Senate expressed in the Byrd Hagel Resolution. This made it clear that the US should not agree to reductions that were not shared with its developing country economic competitors such as China and India. Kyoto only required reductions by developed countries and the developing world was able to assert that this followed the key principle of "common but differentiated responsibilities and respective capabilities" that had been established in the 1992 UNFCCC. The nations which had been responsible for most of the excess carbon dioxide that had been pumped into the atmosphere since the industrial revolution bore a historic responsibility which they were obligated to shoulder through taking the lead in emissions reductions. This requirement, along with the economic costs of meeting its seven per cent-reduction target, became increasingly unacceptable to successive US administrations, and the 2000 CoP at The Hague revealed the extent of transatlantic disagreement over Kyoto. The EU was relatively ineffective at The Hague (Grubb & Yamin 2001) as the UK attempted unsuccessfully, and to the dismay of its EU partners, to negotiate a compromise with the US over allowing sinks to be counted against emissions targets. In the following year, the incoming administration of George W. Bush formally renounced American signature of the Protocol and set a course of active opposition to its development and implementation. This left the Union in a difficult position but in June 2001, the European Council decided to proceed with the Protocol. In

the face of US obstruction, it had to flesh out an agreement of some complexity and novelty, particularly with regard to organising and ensuring compliance with the CDM. This onerous task was completed during the remainder of 2001 at an additional CoP 6 Bis held at Bonn and at CoP 7 which produced the so-called Marrakesh Accords turning Kyoto into a ratifiable instrument. Various developed countries were already inclined to follow the US lead and the Union was forced to make substantial concessions to accommodate them. Having developed the Protocol the task was then to ensure ratification and entry into force. This required not only that 55 per cent of the Parties ratify but that they must also be responsible for 55 per cent of global emissions. With the leading emitter (the USA) absent, this meant that both Japan and Russia had to be persuaded to ratify. In a concerted diplomatic effort, which in the Russian case involved trade-related promises, the Union achieved its aim (Bretherton & Vogler 2006: 109). Having received the necessary ratifications the Protocol entered into force on 16 February 2005. At the same time the EU, as the major part of its own domestic action to fulfil its Kyoto emissions reduction commitments, introduced the initial phase of the world's first international emissions trading scheme - the ETS I. By any standard, the period between 1997 and entry into force in 2005 demonstrates consistent political resolve and creative climate policy leadership by the Union, only occasionally interrupted by internal dissension.

It was evident that, even if implemented, the overall 5.2 per cent reduction in emissions to which the developed signatories to Kyoto were committed, would go nowhere near what was required to hold global mean temperatures below the 2°C threshold for "dangerous" climate change. It was equally clear that the rapid growth of Southern economies would soon lead to a situation in which they would be responsible for the majority of greenhouse gas emissions, and in 2007 Chinese emissions surpassed those of the United States. They were not, of course, responsible for the historic emissions of the developed countries and greenhouse gases can have atmospheric lifetimes of up to 100 years. Neither were their *per capita* emissions anything like those of the old industrialised countries.

The minimum demand of the large developing countries was that Kyoto should be extended if they were even to consider reductions in greenhouse gases that might damage prospects for their overriding priority of economic growth. At the same time, the United States remained implacably opposed to Kyoto and the whole business of timetables and targets. Such was the political and economic conundrum faced by the EU as it attempted to renew its climate leadership in the search for a post-2012 agreement. With this I would also like to highlight the fact that, whereas setting and meeting the Kyoto target had been a relatively cost-free exercise for the EU, this was no longer the case for target-setting post-2012.

Both the British and German EU presidencies of the Council were coordinated with their respective presidencies of the G8 at Gleneagles 2005 and Heiligendamm 2007. Each of these "lead states" attempted to use these occasions to move forward on a post-2012 climate agreement within alternative forums to the rather ponderous UNFCCC. The attempt was made not only to engage the US but also to bring in major developing countries in the G8+5. When it appeared that the objections of the Bush administration could not be removed, the Commission experimented with an alternative approach by discussing the linking of the EU

emissions trading scheme with schemes that existed at a sub-federal level in the United States. In spring 2007, the EU announced a new set of targets for a 20 per cent reduction by 2020 against a 1990 baseline and a 30 per cent reduction, conditional upon a similar commitment by other developed Parties. At the Bali CoP, in December 2007, the EU was instrumental in finding a way to persuade the US to re-enter climate discussions. A new negotiation track was created to produce the text for an agreement on the future of the Convention to be concluded at the Copenhagen CoP, scheduled for 2009. There were already talks amongst the Kyoto Parties on the renewal of the Protocol after 2012 without US participation. The US was persuaded to participate in parallel discussions on Long Term Co-operative Action under the Convention.

In advance of the Copenhagen meeting, the EU made considerable internal efforts to produce a new climate and energy package that would give credibility to its proposed emissions targets. Its leaders, notably Gordon Brown in the UK, made it clear that the Copenhagen CoP was, unlike previous meetings, to be held at the highest political level with heads of government and the newly elected President Obama in attendance. Major public expectations were aroused and on the eve of the meeting, the Council of Ministers managed to agree a "fast start" funding package which, it was hoped, would provide incentives for developing countries to undertake their own "nationally appropriate mitigation activities". Copenhagen came as a shock for the Europeans and was described in some quarters as a "disaster" for the Union. Far from exerting its customary leadership, the EU and its carefully crafted positions were largely ignored. Instead, eager to produce some outcome that would justify their presence in Copenhagen, the leaders of both the US and the major emerging economies, now grouped together as the "BASIC" countries, consisting of Brazil, South Africa, India and China, cobbled together an "Accord" which was not even formally accepted by the Conference and was very far from EU expectations of a new comprehensive and binding climate agreement. It recognised for the first time the 2°C threshold, but was content that countries would merely record their pledges of mitigation action. Monitored commitments by developing countries would be such as not to involve violations of their sovereignty and there would be "fast start" funding for climate change action by developing countries plus finance for forestry (REDD+). The whole issue of a new agreement would be revisited in 2015.

Herman van Rompuy, President of the European Council, privately described Copenhagen as an "incredible disaster" in which the Europeans had been "totally excluded and mistreated".² The gloom in EU circles that followed the Copenhagen outcome was, however, probably excessive. The CoP had laid bare the emerging structure of interests and power in global climate politics and the limits of EU influence. However, contrary to widespread expectations, it did not mark the end of the EU's potential for climate leadership. Along with Australia, the EU encouraged the *Cartagena Dialogue*, which brought together a diverse group of nations, including small island states and rapidly developing Southern economies (van Schaik 2012). It appears to have enabled EU negotiators to play their accustomed mediating

² These remarks were reported in a US diplomatic cable of 4 January 2010 released by WikiLeaks and reported in *The Guardian*, 4 December 2010: 6.

role between North and South and to have contributed to the relative progress made in two subsequent, comparatively low key, CoPs at Cancun (2010) and Durban (2011). The European Council for Foreign Relations published a scorecard, rating the success or failure of EU external actions. The score achieved, notably through the activism of the new Directorate-General (DG) Climate Action under Commissioner Connie Hedegaard, was B+ for Cancun and a rare A- for Durban. The EU had "made diplomatic progress where none seemed likely. Although imperfect, the deal was a significant victory for European diplomacy" (European Council for Foreign Relations 2012: 122). One key element of this success was a renewed EU interest in extending the Kyoto Protocol (abandonment of the Protocol at a preparatory meeting before Copenhagen had done much to damage the EU in the eyes of developing countries). At Cancun, the elements of the Copenhagen Accord were formally adopted. More significant was the Durban outcome that charted a future direction for the climate regime. It was agreed that there should be a second commitment period for the Kyoto Protocol, with the EU as the only major developed world participant. Alongside this, the "Durban Platform" committed the Parties to the Convention to produce a new "legal agreement" by 2015. The EU is said to have "drafted the script for Durban" and made its renewal of the Protocol dependent upon acceptance of the new climate change "roadmap" (ENB 2011:30). At the CoP it made critical alliances with the small island states and a number of other less developed countries and negotiated the compromised final text with a sceptical India. As environmental activists have pointed out, this achievement is minimal in comparison with the scale of the impending climate crisis and represents another phase of political procrastination in which a comprehensive climate agreement is pushed further into an indefinite future. Nonetheless, when viewed in term of the Copenhagen outcome it represents a real revival of EU leadership and provides at least some chance that, buttressed by a second phase of Kyoto, a full climate agreement involving the key emitters may be negotiated. In terms of mitigation, there are six actors responsible for 71 per cent of current emissions. They are: China, 29 per cent; US, 16 per cent; EU, 11 per cent; India, 6 per cent; Russia, 5 per cent; and Japan, 4 per cent. This does not take account historic emissions, nor all the other elements of a climate agreement on carbon sinks, forests, financial transfers and increasingly, the costs of adaptation.

INTERNAL AND EXTERNAL POLICY

Climate action differs from many other aspects of the EU's foreign relations because of its intricate connection to the internal energy policies of the Union. As Oberthür and Pallemaerts (2010a: 27) observe: "Throughout their two decades of history, international and European climate policy have evolved in tandem and have fed back on each other". Originally, despite the multi-sectoral ramifications of climate change, the Union chose to classify it in terms of environmental policy, allowing DG Environment and the Environmental formation of the Council to take the lead. This situation persisted in the Commission until a new Climate Action DG was created, under Commissioner Hedegaard, in 2010. Environment had been a major area of internal legislative development and under the 1970 ERTA³ ruling of the European Court of Justice, the external competences of the Union had been greatly extended. However, the way in which the international regime had been constructed placed carbon dioxide mitigation and, hence, energy policy at the heart of its activities. The EU had failed to produce an integrated approach to energy despite its origins in the European Coal and Steel Community. When confronted with the problem of climate change it had also failed to implement a carbon tax in advance of the signature of the UNFCCC in 1992. As the regime developed, it became clear that, if EU leadership on targets and timetables was to have credibility, there would have to be some internal attempt to deliver on them in advance of the final negotiation of the Kyoto Protocol. This would involve an agreement on burden sharing between a diverse set of member states with widely differing energy requirements and perspectives. Countries such as France and Finland had invested heavily in virtually carbonfree nuclear power generation while the new cohesion states Spain and Portugal, along with Ireland, saw that their economic development would necessitate quite substantial increases in their carbon emissions. The internal agreement, lying behind the EU's performance at Kyoto, almost amounted to legerdemain and was a source of some resentment amongst its negotiating partners. In effect, the "EU bubble" - more precisely the Burden Sharing Agreement of 1997 and its revised version of 1998 - entailed hardly any economic costs or sacrifices from the member states, although some of the *cohesion* countries expected to be allowed greater increases in their emissions than those allowed under the agreement.

The Burden Sharing Agreement allowed the EU to achieve first a ten per cent reduction and subsequently an eight per cent reduction under the terms of Kyoto. The official position, in advance of the Kyoto CoP, was a target of 15 per cent contingent upon similar commitments by other developed Parties. In a Council discussion prior to the conference, the Dutch Presidency was able to propose that members simply contributed reductions that they had already confirmed were possible. These amounted to an overall reduction of ten per cent and these were felt to be sufficient in the face of the reductions that the EU's negotiating partners were likely to offer. If this assumption was to be proven false, then the situation could be revisited (Ringius 1997, Vogler 2011). In the event, the EU share of the global Kyoto "bubble" was only a collective eight per cent reduction. The key to the internal EU "bubble" was the critical baseline date for these calculations that had been set, under the UNFCCC, at 1990. This allowed two major emitters, Germany and the UK, to offer, respectively, 25 per cent (21 per cent in 1998) and ten per cent (12.5 per cent in 1998) national reductions, to be achieved prior to 2012.

³ In the case of *ERTA* (1971), the ECJ established the principle that where the Community implements a common internal policy, all member states are prevented from entering into any commitment in their external relations which might have an impact on the common policy.

Country	% from 1990 baseline
Austria	-13.0
Belgium	-07.5
Denmark	-21.0
Finland	0000
France	0000
Germany	-21.0
Ireland	+13.0
Italy	-06.5
Luxemburg	-28.0
Netherlands	-06.0
Portugal	+27.0
Spain	+15.0
Sweden	+04.0
UK	-12.5
EU Total	-08.0

Table 1: The 1998 Burden Sharing Agreement

By using a 1990 baseline, reductions achieved through German re-unification and the closure of plants in the East, and the British abandonment of high levels of coal-fired power generation under the Thatcher government, could be counted. This also enabled *cohesion* states within the "bubble" to enjoy quite large increases in their projected carbon dioxide emissions while adhering to the overall EU reduction target. By way of contrast, the United States would have had to make very substantial and real reductions in energy-related emissions to achieve its seven per cent Kyoto target. The US government was not prepared to endure the economic costs and was, in any event, unconvinced by the science and unwilling to enter into an agreement that did not constrain its industrial competitors in the emerging economies of the South. Under these circumstances, the Union was able to reap political benefits by contrasting its progressive attitude to the climate problem with the obscurantism of the Bush administration (Vogler & Bretherton 2006).

The Union's internal responses for the implementation of the Kyoto Protocol were twofold. First, a range of proposals under the Commission's 2000 Climate Change Programme; and second, the development of one of the Kyoto "mechanisms" – the world's first international emissions trading system – the ETS (European Emissions Trading Scheme). In the first instance, this would help to ensure that member states actually achieved their burden-sharing targets. The power generation sector covered by the ETS was scheduled to deliver some 40 per cent of the EU's pledged emission reduction commitment and the scheme (ETS I) started operating in 2005. ETS I was really an experimental phase and after initial successes the carbon price collapsed in 2006-7. The problem was that member states were allowed (in all but one case) to over-estimate their national emissions in the allocation plans that they submitted to the Commission. The inevitable result was that far too many permits to emit carbon were allowed onto the new market. At one point, this seemed to threaten the achievement of the Union's eight per cent commitment and it was certainly necessary to reform the system if the EU was going to set credible emissions reductions targets for the future. For the second phase - ETS II – from 2008-12, the Commission embarked upon a rigorous review of National Allocation Plans and was prepared to reject them. The Central and East European accession states were now included in the scheme (although as economies in transition they still had separate national emissions targets under Kyoto) and were prepared to take the Commission to court over what they regarded as an unfair and restrictive approach to the carbon emissions that they would need for future economic growth.

At the same time, the Union was engaged in the search for a new post-2012 climate agreement. One possibility was that continued US hostility to Kyoto would mean that there was no question of negotiation with the US administration and attention turned to the possibility of enlarging the ETS through co-operation with US authorities at a sub-federal level, who were also interested in carbon trading. The main concern was, however, still to build an internal position that would support renewed EU leadership in the UNFCCC. Italian and then Polish objections meant that there was no consensus in the Council and the European Council on setting new targets and timetables.

At the end of 2006, the Environment Council began a discussion of the target that the Union should adopt for the period after 2012. Although the fall of the Berlusconi government in Italy, which had openly sided with the US position on climate change, meant that it was possible to discuss future targets, there were divisions between member states, with the East Europeans in particular being wary of undertaking potentially expensive new commitments. The Commission, too, appears to have been divided over the level of ambition of any target, with Commissioners for Enterprise and Internal Market urging caution. In the event, the Council at its March 2007 meeting endorsed a compromise proposal. This set out the famous 20/20/20 position. There was to be a 20 per cent increase in the use of renewable energy and a similar percentage increase in energy efficiency. While it was acknowledged that, over the longer term, there would be a requirement for 60-80 per cent reductions in greenhouse gas emissions by developed countries if climate change was to be stabilised at a safe level, the immediate EU offer would be a 20 per cent cut by 2020. A 30 per cent offer was also envisaged but only if other developed countries were prepared to do likewise. In sharp contrast to events prior to the Kyoto agreement, the means to achieve these targets would entail real economic costs and pose substantial internal difficulties. In January 2008, the Commission published a climate and energy "package" of the draft decisions and directives that would be required to achieve the targets agreed in the previous year which would, it was believed, provide the credibility required for a re-assertion of EU climate leadership in the post-2012 negotiations. To achieve this, the ETS would be extended into a third phase and would now be designed to deliver 60 per cent of the EU's promised emissions reduction. Henceforth the Commission would allocate permits to avoid the previous haggling over national plans, and rights to emit would now be auctioned off (Commission 2008a). The remaining non-tradable emissions (from agriculture, transport, building etc.) would now be subject to "effort sharing" by member states on the basis of GDP per capita (Commission 2008b).

2008 was the year of widespread banking failures and the beginning of a long economic downturn. It was against this sombre background that the climate and energy package wound its tortuous path through the processes of co-decision in the European Parliament and at the

Council. There were, inevitably, worries that the measures, by raising energy costs, would make the economic situation worse and destroy international competitiveness. There was the danger of "carbon leakage": the flight of energy-intensive industries such as steel, cement and aluminium production to China and elsewhere. Added to this were the continuing demands by Poland, Italy, Romania and Bulgaria for more equitable treatment under the revised ETS. At a difficult European Council meeting, held in December 2008, the French presidency negotiated a whole series of compromises on re-distribution of allowances, the restriction of auctioning and the further use of offset mechanisms that managed to accommodate the various national economic interests involved. It was a substantial achievement, but it was not to have the desired galvanizing effect on the 2009 Copenhagen climate conference.

Box 1: The EU Climate and Energy Package

Provides the means to achieve the EU's 20-20-20 climate and energy targets and was finally agreed at a European Council held in December 2008, entering into force in June 2009. The key elements were as follows:

- A revised Emissions Trading System (ETS) to commence from 2013. National allocation plans will be replaced by a single EU-wide emissions cap. This will be progressively reduced in order to yield a 21% reduction in emissions by 2020 relative to 2005. The auctioning of allowances will be introduced to replace the system of free allocation although derogations from this rule were negotiated to assist some coal-dependent power generators and to counter the risks of "carbon leakage" where foreign competitors might otherwise take advantage of relatively high EU energy prices. A limited use of JI and CDM credits will continue to be allowed (Directive 2009/29/EC amending Directive 2003/87/EC).
- An "Effort Sharing" Decision to cover emissions from transport, agriculture, housing and waste not controlled under the ETS (which covers power generation and from 2012, aviation). Member States have agreed to binding national targets, which vary according to their level of development in much the same way as the previous "Burden Sharing Agreement". The overall 2020 target is for a 10% reduction from 2005 levels but within this new EU "bubble" there are wide variations. Denmark is committed, for example, to a 20% reduction and the UK to 16% while Bulgaria is allowed a 20% increase (Decision 406/2009/EC).
- There are similar binding national targets for the introduction of renewable energy sources to achieve an EU average of 20% by 2020. Again, there are substantial differences reflecting national circumstances; the Finnish target is 38% while that for Malta is only 10% (Directive 2009/28/EC).
- The promotion of Carbon Capture and Storage technology is the final part of the package – whereby it is hoped that the carbon dioxide released by burning coal can be prevented from adding to the greenhouse effect through capture and then storage underground. This technology is as yet unproven on a large scale and is the subject of EU collaboration with China (Directive 2009/31/EC).

During the Copenhagen conference itself and in its aftermath there was a continuing debate over the adequacy of the EU's headline target of a 20 per cent emissions reduction. It became increasingly clear, not only that in comparison to the pledges announced by other Parties under the Copenhagen Accord that the EU's 20 per cent target lacked ambition, but that the economic downturn would, in itself, serve to achieve a substantial part of this reduction (Commission 2010). Environmental NGOs, DG Clima and some member states, including the UK, pushed for a target of 30 per cent regardless of any action by other Parties. Advocates argued that, far from putting economic growth at risk, a 30 per cent commitment would encourage investment in low-carbon technologies that would inject dynamism into a flat European economy. The Commission developed a "road map" to a "competitive low carbon economy" which makes the case for the economic and energy security benefits of ecological modernisation through developing "cost efficient pathways" in key economic sectors. The target is for an overall emissions reduction of 40 per cent by 2030, 60 per cent by 2030 and no less than 80 per cent by 2050 (Commission 2011). However, neither the unilateral offer of 30 per cent nor the "road map" have been agreed by the member states and the arguments continue. Most seriously, the Emissions Trading Scheme ran into difficulties as the carbon price fell to levels that would compromise its effectiveness in reducing emissions, and the European Parliament, in 2013, failed to support a reform proposal by the Commission.

INTERNATIONAL LEADERSHIP

The touchstone of EU climate policy has been leadership. Such claims are hardly unique to the Union; the US, Japan and, most certainly, the Alliance of Small Island States, have made similar declarations at various points in the history of the climate regime. For the latter and for the Union, such claims have some foundation. The literature on environmental leadership provides a framework for the consideration of the ways in which the EU has been able to act in global climate politics. Wurzel and Connelly (2011: 130) describe three significant types of leadership: *structural, entrepreneurial* and *cognitive*. All are relevant to the analysis of the Union's role and its successes and failures.

Structural leadership "relates to the actor's hard power and depends on its material resources" (ibid.). In gross terms, the opportunity for Europe to exercise structural leadership has been in relative decline. At the beginning of the process of creating the climate regime, the EC accounted for around 19 per cent of global CO_2 emissions and was second only to the United States. In a situation that was quite similar to that which pertained within the WTO, the critical axis of climate politics was between these two powers. American abdication post- Kyoto provided the space for the EU to dominate the process of ratification and implementation. Interestingly this seems to coincide with the point at which the Union was at the apex of its international status and influence – around the period of the 2004 eastern enlargement (Bretherton & Vogler 2009). Enlargement brought its own internal complications, manifested in the difficulties of negotiating the Climate and Energy package and meant that, overall, the Union was a less-wealthy actor. Subsequent developments with the continuing crisis of the Eurozone and the problems of the Single Market have meant that in comparison to the United States and the dynamic "emerging markets" of Asia, the EU's stock could only have sunk.

The EU's structural problem also arises from the fact that it is no longer accountable for such a major proportion of global emissions as heretofore. By 2007, China had surpassed the US as the principal emitter (current not cumulative historic emissions) and by 2011, the Union's share was under 11 per cent (Commission 2011: 13). In the early period of the climate regime, Russia was preoccupied with its internal problems in the aftermath of the collapse of the USSR, and the spectacular economic growth of China and other members of the BRIC club was only just getting under way. China, Brazil and India were in any case excluded from making any contribution to emissions reductions under the "common but differentiated responsibilities" formula that was applied to the Kyoto Protocol. It is often forgotten that this principle, as originally stated in the climate Convention, also includes the phrase according "to their respective capabilities". By 2005 the balance of "respective" economic capabilities had apparently shifted and the main problem faced by the EU, in attempting to lead the creation of a new comprehensive climate agreement, was not just the old one of enticing US participation but also of finding a way to persuade the new fast-developing economies, who would be responsible for the bulk of future emissions, to undertake their own "nationally appropriate mitigation actions". Before Copenhagen, a new BASIC climate coalition had been formed comprising Brazil, South Africa, China and India. In a clear, indeed brutal, demonstration of the new structural realities of climate politics, it was they who negotiated the Copenhagen Accord. By all accounts, EU representatives were not in the room.

The underlying shift in capabilities can be over-stated. For all its problems, the economy of the Single Market is still second only to that of the United States in terms of GDP and the BASICs lag some way behind, even if they enjoy high growth rates.⁴ In 2010 the EU accounted for 25.8 per cent of world GDP against the US share of 22.9 per cent. The Chinese share was 9.1 per cent, Brazil's 3.3 per cent and India 2.7 per cent. In many ways the notion of underlying structural change in the global economy is, thus, a projection into the future but one that is absolutely relevant to any new comprehensive regime for the long-term reduction of emissions. The issue for the EU, here as elsewhere, is how it can mobilise its undoubted potential assets in support of its foreign policy objectives. This involves the exercise of relational power. Military strength will, unfortunately, be involved in coping with the effects of alterations in the climate but is essentially irrelevant in the international politics of greenhouse gas mitigation and adaptation. As has frequently been observed, this puts the spotlight on resources related to "civilian power", of which Europe should be well endowed. As the largest development-aid donor in the international system, the EU is in a position to exert influence through contributions to climate funds within the UNFCCC system. The agreement to provide "fast start" funding in advance of Copenhagen is a case in point and the EU will be a primary donor to the new climate fund as agreed in 2009. These activities, along with other bilateral and multilateral development funding outside the UNFCCC, underpin the Union's diplomacy towards the LDCs and members of AOSIS, although it is difficult

⁴ Eurostat:epp.eurostat.ec.europa.eu/statistics_explained/indexphp?title=File:Share_of_world_GDP_2010.

to pin down precise instances of the political effectiveness of aid. EU external relations were founded upon trade and the control of access to the Single Market. This has certainly been a factor in ensuring that countries such as Turkey and other states aspiring to membership or to have improved trade relations with the Union, adhere to EU positions in the climate negotiations. Russian ratification of Kyoto was, in part, produced by the effective use of EU inducements involving WTO membership and the export of gas.

Measures to reduce greenhouse gas emissions are not limited to the formal concerns of the UNFCCC and Kyoto. Indeed two of the most important and increasing sources are specifically not covered by Kyoto - shipping and aviation. The relevant international bodies, the International Maritime Organisation and the International Civil Aviation Organisation (ICAO) have failed, over many years, to regulate and reduce the "bunkering-related" emissions of their members. Indeed aviation fuel, the fastest rising source of greenhouse gas emissions, is not subject to any taxation. The EU has attempted to deal with this problem by the requirement that from 2012, international airline operators using EU airspace purchase ETS allowances for their emissions (Directive 2008/1001). This caused a storm of protest from the US Congress and others and a threat of retaliation against Airbus by the Chinese government. The Commission has suspended the operation of the plan on the understanding that the ICAO will, at last, bring forward its own system for the regulation of aviation emissions. If it fails to do so in 2013, the inclusion of international airlines in the ETS system will proceed (EU Memo/12/854, 12 November 2012). This is just one of the actual and potential forms of relational power available to the EU - the additional taxation of oil produced from Canadian tar sands provides another controversial example. As with the larger issue of "border tax adjustments" to cope with carbon leakage, such moves will involve the EU in litigation at the WTO and will often set parts of the Commission at odds with one another as well as member states.

Entrepreneurial leadership "relates to diplomatic, negotiating and bargaining skills in facilitating agreement". Here, too, the Union possesses very substantial resources in the diplomatic missions of its members and the new External Action Service. They are probably under-utilised and the existing Green Diplomacy Network that links foreign office officials across the Union and co-ordinates *demarches* could be better developed. There are examples of what can be done if the member states are prepared to concentrate on achieving climate objectives. The concerted and high-profile campaign for Kyoto ratification provides one example. On the other hand, there are contrary instances of diplomatic disarray and confusion when the EU failed to operate as a single purposive actor at The Hague CoP in 2000 and at Copenhagen in 2009. In general, however, the EU has managed to display entrepreneurial leadership throughout the twenty-year history of the climate regime. Most encouraging has been the post-Copenhagen operation to use the *Cartagena Dialogue* to find diplomatic means to formulate the basis for a new, comprehensive, climate agreement announced in the 2011 Durban Platform.

Closely related to entrepreneurial leadership is cognitive leadership. This is defined as "the definition and re-definition of interests through ideas". In a way, this is true "normative power" in the sense that it attempts to shift prevailing understandings of the nature of the

climate problem and how it should be addressed. In wider international environmental politics the EU has had a significant impact with the popularisation of its own policy concepts such as the "precautionary" and "polluter pays" principles. In climate politics, it can point to the early adoption of the 2°C threshold, which finally gained full international recognition at the Cancun CoP in 2010. Perhaps more important has been the way in which internal policies have external effects. This is not simply a matter of being able to make credible emissions reductions commitments, but also involves "standard setting". Because of the scale of the Single Market it has always made sense for external firms to adopt its regulatory standards for products. In this sense the Union can be regarded as a regulatory super power, even though this aspect of the EU's relationship with the outside world does not require the exercise of relational power. Thus, the development of the ETS through all its phases and the other measures involved in the Commission's work on the roadmap to a low-carbon economy may represent a significant source of cognitive leadership. In a very practical way as well, any new international emissions trading schemes will most likely be linked to and draw inspiration from the ETS. It is for this reason that the fate of the Union's own emissions trading experiment is so important.

In summary, the internal and external elements of EU climate policy are closely intermeshed. This did not always raise problems because of the fortuitous circumstances that allowed the Union to promise significant greenhouse gas reductions in advance of Kyoto. The international environment also favoured the exercise of climate leadership by the Union in constructing the Kyoto Protocol system. Opposition by the United States was in some ways turned to the EU's advantage but meant that Kyoto could never be a fully comprehensive, or even marginally effective, means of ensuring that global mean temperatures did not exceed the 2°C threshold. When the Union did have to engineer real change in its internal energy policies in 2008, it was confounded by the outcome of the 2009 Copenhagen conference. The emergence of the BASIC countries and the Union's diminishing share of global carbon emissions, alongside the re-entry of the US into climate discussions, may indicate the erosion of the structural basis of EU leadership. However, the EU has been able to recover from what seemed to be the nadir of its leadership aspirations in 2009 - and has successfully deployed entrepreneurial, cognitive and some structural resources to achieve the Durban Platform for a new comprehensive climate agreement. The likelihood that this will produce, between 2015 and 2020, a really effective regime to counter the ever-rising concentration of greenhouse gases in the earth's atmosphere, is another matter entirely.

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Participation by Scientists in the Global Climate Change Agenda

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EXECUTIVE SUMMARY

The climate change issue has served as a typical case study when investigating the interactions and relationships between scientists and decision makers. While the decision-making bodies involve various participants from every national and international institutional level, the participation and function of scientists in the global climate change agenda are comparatively more complex. Some scholars argue that scientists played a crucial role in intellectual leadership during the 1980s, promoting climate change to the international political agenda.² However, when governments took over the role of climate governance under the international regime of the United Nations Framework Convention on Climate Change (UNFCCC, 1992), scientist communities were gradually politicized and marginalized³. They became the tools of their countries, to achieve political ends⁴.

However, the above-mentioned assessment is only partially correct. Nowadays, scientist communities still play an important role in the global climate change agenda. In fact, various types of scientist organizations play unique roles at different stages of the agenda. Scientists owe their political image to the "international negotiation stage"⁵ in climate change policies. National actors frequently refer to their own scientific spokespersons for political defence. During this policy stage, the role of domestic official scientist organizations stands out.

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² W. T. Golden. *Worldwide Science and Technology Advice to the Highest Levels of Governments*. New York/ Oxford: Pergamon Press, 1991; R. Grundmann. "Ozone and Climate: Scientific Consensus and Leadership". *Science, Technology, & Human Values*, 31(1): (2006), 73-101.

³ S. Andresen & S. Agrawala. "Leaders, Pushers and Laggards in the Making of the Climate Regime". *Global Environmental Change* 12(2002): 41–51.

⁴ A. J. Hoffman. "The Growing Climate Divide". *Nature Climate Change*, 1: (2011), 196-197; A. McCright & R. Dunlap. "The Politicization of Climate Change: Political Polarization in the American Public's Views of Global Warming". *The Sociological Quarterly*, 52: (2011), 155–194.

⁵ This article defines this political stage as from 1992, the establishment of the UNFCCC, to 2005, Kyoto Protocol in effect, illustrated in detail in the following section.

However, other types of scientist organizations also participate effectively in the global climate decision-making process by using different methods. The present paper investigates the participatory channels and mechanisms of various scientist communities in the global climate policy-making process by raising the following questions: How many categories of scientist organizations exist and what are the differences between these categories, particularly regarding their relationship with decision makers? What are the effective mechanisms for scientists to participate in climate change policy-making? Why do different types of scientist organizations emerge as prominent promoters in each stage of the climate change agenda?

STAGES OF THE GLOBAL CLIMATE CHANGE POLICY

1. Agenda-Setting Stage (End of the 1950s - 1991)

Initially, climate change was merely a scientific discovery. In the 1950s, a few individual scientists who were studying the issue of the rising sea-level accidentally discovered the phenomenon of global climate change. These scientific researches were sporadic discoveries with a lack of solid scientific foundation to catch the attention of the international community. Only in the 1970s did the United Nations start to commission related institutions to study climate change. Their interest resulted from worldwide climate anomalies leading to a series of spotlight events such as the reduction in grain yield and economic recession. In the 1980s, climate scientists, environmental organizations, and a number of interest groups jointly called on governments to pay attention to the climate issue. In this context, they held a series of conventions. In the meantime, the international community, represented by the United Nations, actively responded to this issue. Climate change gradually developed from a scientific discovery to a global public issue and formally entered the international political agenda with the establishment of the UNFCCC.

2. Legalization and Negotiation Stage (1992 - 2005)

It was between 1992 and 2005 that the climate change issue became legalized in the international political agenda in the form of an international convention. At this stage, countries were committed to participate in annual international climate negotiations and to discuss collectively how to respond to and resolve climate-related issues. In fact, national actors officially participated in global climate governance. As a consequence, climate change evolved from a merely environmental problem to a global challenge influencing international politics, economy, diplomacy, and security issues. However, the countries involved had conflicting interests and substantial divergences with one another in numerous issues ranging from the accountability of each country to the methods and the amount of carbon dioxide emissions to be reduced.⁶ Each country expected the climate to be protected but only without its economic and societal development being affected. Consequently, the annual intergovernmental climate change negotiations, which have been held annually for the past eighteen years (1995

⁶ S. Andresen & S. Agrawala. "Leaders, Pushers and Laggards in the Making of the Climate Regime". *Global Environmental Change* 12(2002): 41–51.

- 2013), have produced only limited results. Two substantial results have been achieved in the international climate treaty negotiations, namely the establishment of the United Nations Framework Convention on Climate Change (UNFCCC) in 1992 and the adoption of the Kyoto Protocol in 1997.⁷ While the former provides the basic framework for international negotiation and cooperation by raising the climate change issue to the political level, the latter proposes practical mechanisms, which exert legally binding obligations in order to reduce national emissions.

3. Incomplete Operational Stage (2005 - 2012)

Generally speaking, at this stage, three alliances formed the basic structure in the global climate negotiation process:

Alliance I: The European Union Group consisting of 27 Nations.

The EU was the first alliance to initiate climate change negotiations. It did not only lead the international climate negotiations, it also took the lead in reducing carbon dioxide emissions and implementing international obligations.

Alliance II: The Umbrella Group represented by the United States.

The Umbrella Group, comprising the US, Australia, New Zealand, Canada, Japan, Russia, raised a number of procedural questions for continuing to tackle climate finance at the Ad Hoc Working Group on Long-term Cooperative Action (AWG-LCA). The Umbrella Group has long been criticized for their reluctance to reduce carbon dioxide emissions, though they have much higher capabilities compared with many other countries.

Alliance III: The Developing Countries Group or 77 Nations Group + China. Except developed countries in the EU and Umbrella Group, developing countries form the third bloc in the climate change international negotiations. The 77 Nations Group at the United Nations is a loose coalition of developing nations, designed to promote its members' collective economic interests and create an enhanced joint negotiating capacity in the United Nations frameworks. Developing Countries are listed in Annex II of the Kyoto Protocol without binding targets of carbon dioxide reduction.

4. "Multi-Level Governance" Stage in the Post-Kyoto Era (After 2012)

Although it is difficult to predict the future trend of climate change policies, one development can be expected with certainty: In order to mitigate climate change, all actors at the national and societal levels must be involved and participate actively. Following a longitudinal review of the three stages during which the climate change issue evolved and national actors got primarily involved in global climate governance, it becomes evident that sovereign nations have inherent limitations to functioning effectively. After all, national actors can never cease

⁷ W. D. Nordhaus & J. G. Boyer. "Requiem for Kyoto: An Economic Analysis of the Kyoto Protocol". *The Energy Journal*, 22 (1999): 93.

to pursue the maximisation of their own countries' interests. At the same time, the nature of the climate policy-making processes obstructs international cooperative efforts.⁸ Fortunately, between 2005 and 2012, the incomplete operational stage of climate policies began to demonstrate changes in the composition and roles of climate governance participants. Corporations, International Organizations (IOs), Non-Governmental Organizations (NGOs), and Scientist Organizations (SOs) started initiatives, proposing solutions to respond to the climate change issue. Therefore, it can be assumed that the future of climate change policies will evolve into diversified *multi-level governance*, which might achieve multiple cooperation on diverse subjects by sovereign states, IOs and NGOs, global enterprises, and scientist communities. This will help to establish multi-level operations on the global, regional, national, and even on the individual level. Thus, it can ultimately protect humans from the threats of climate change.

SCIENTIST ORGANIZATIONS AND THEIR PARTICIPATION

The subsequent section illustrates a framework of the following four categories of scientist organizations: Domestic Independent Scientist Organizations (DISOs), Governmental Scientist Organizations (GSOs), Transnational Scientist Alliances (TNSAs), and Intergovernmental Scientist Organizations (IGSOs). The role of each category will be explained and their participatory methods and working mechanisms will be described.

	Independent Organizations	Official Organizations
National Organizations	A=Domestic Independent Scientist Organizations Science Promotion	B=Governmental Scientist Organizations Policy-making Consulting
International Organizations	C=Transnational Scientist Alliances Epistemic Diffusion	D=Intergovernmental Scientist Organizations Track-two Diplomacy

Table 1 Classification and Participatory Mechanisms of Scientist Organizations

Source: This table is developed by the author.

The roles and participatory channels of the four categories of scientist organizations in the climate change agenda (see Table 1) vary from one another. In this context, participatory channels determine how scientist organizations participate in the climate change agenda and why they have chosen to participate in this way.

Briefly speaking, DISOs are involved in the decision-making process through science promotion. They promote their views by, for example, drawing support from external media or advocating their opinion to the public and using public opinions to exert pressure on decision makers.

GSOs are directly involved in the governments' decision-making processes. They are commissioned by the government to directly propose policy advices to policy makers.

⁸ O. R. Young. "Political Leadership and Regime Formation: On the Development of Institutions in International Society". *International Organization*, 45(3), (1989), 281-308.

Although GSOs have easy internal access mechanisms and close ties to policy makers, they may look for external support so as to become indirectly involved in the policy-making process if their advice is not taken into account. Nonetheless, their legal status restricts their freedom to express their opinions and to select other participatory channels. Thus, their indirect influence is not as effective and successful as the DISOs'.

TNSAs are mainly involved in epistemic diffusion. They take advantage of intellectual elites from the international level participating in policy making. With regard to the climate change issue, TNSAs play an irreplaceable role in the agenda-setting stage through epistemic communities.⁹ However, within the framework of climate change policy the effects of such participation are gradually undermined.

IGSOs are primarily involved in the track-two diplomacy. They directly conduct scientific evaluation and policy consulting for governments in the global climate change regime. The behaviour of IGSOs has considerable impact on the climate change agenda so long as their scientific authority and impartial objectivity are not compromised. One prominent example of such impact is the Intergovernmental Panel on Climate Change (IPCC), which has released four scientific assessment reports on the climate change process, promoting the agenda to the next stage.

RESOURCES OF SCIENTIST ORGANIZATIONS

The above-listed categories of scientist organizations differ in their organizational resources. It is for this reason that each type of scientist organizations can apply its features in different policy stages in order to generate different effects in the various policy processes¹⁰. This chapter explains why each type of scientist organization stands out at a different stage of the policy process.

A. DISOs

DISOs have two principal organizational resources. First, they are scientist non-governmental organizations holding a certain degree of autonomy. Scientists working in DISOs enjoy relative freedom of speech and behaviour and are less influenced by governments. Thus, they usually take bottom-up approaches such as obtaining support from the media and approaching decision makers indirectly to exert pressure on the government. Second, DISOs often form alliances with environmental NGOs and other participants in order to influence decision makers before the convocation of International Conferences on Climate Change.

B. GSOs

The first advantage of GSOs is the informal close ties they have with decision makers. William Domhoff explains the influence of these informal interactions and communications

⁹ P. M. Haas. "Introduction: Epistemic Communities and International Policy Coordination". *International Organization*, 46(1), (1992), 1-35.

¹⁰ Jasanoff. *The Fifth Branch: Science Advisers as Policymakers*. Cambridge: Harvard University Press, 1990.

between scientists and policy makers on public policies. He argues that the link between scientists and policy makers through communications and close interactions is more powerful than formal, written reports.¹¹ Therefore, in addition to formal, hierarchical relationships, members of GSOs build informal personal relationships with officials in decision-making processes. Thereby, scientists may gain more trust from decision makers than by expressing their opinions through unofficial channels.

Second, GSOs serve as legitimate national scientific spokespersons. For instance, official scientist institutions represent a country's scientific authority. By investing heavily in scientist institutions, governments generate political supporters. In return, GSOs become legitimate national scientific representatives, a position that endows them with the organizational resources that no other scientist group can obtain. In some cases, GSOs stand out while other scientist groups have hardly any impact on decision-making, no matter which participatory mechanisms they use.

C. TNSAs

Most scientists in TNSAs are intellectual authorities in their own fields. The epistemic community is a multinational scientists alliance, which brings together leading scientists worldwide. For instance, the International Council for Science (ICSU), which was established in 1931, is the most authoritative non-governmental international organization in the world of science. It congregates representatives from each major field of natural sciences, reflecting many issues of common concerns in various disciplines and each country's scientist communities. One of the main advantages of the ICSU is having a large number of top scientists who are committed to the objectives of the Council and notably abundant knowledge resources.

A second resource of TNSAs is transnational networking platforms. These platforms bring together scientist organizations on an international basis. Each academic conference or collective action by these epistemic communities is considered the bellwether of the scientific progress in climate change issues and, therefore, receives widespread recognition.¹² For instance, the American Association for the Advancement of Science (AAAS), founded in 1848, is the world's largest non-profit scientific organization involving natural and social sciences, with 265 branches and 10 million members. Each annual conference attracts thousands of scientists and journalists and its publication, *Science*, is one of the world's most renowned natural science journals. On March 12, 2012, the AAAS Science and Diplomatic Center founded the online journal *Science* & *Diplomacy*, which underlines the American mainstream's recognition of the key role of international cooperation in science as well as technology development, and inter-governmental diplomatic relations in public policy. When AAAS Chief Executive Officer Alan I. Leshner announced the publication of the online journal, he emphasized that the intention of publishing the online journal is to bring the two communities of science and international relations together. Although these two communities often speak different

¹¹ Domhoff, William G. and Thomas R. Dye (1987), Power Elites and Organizations. London: Sage.

¹² E. Adler & P. M. Haas. "Conclusion: Epistemic Communities, World Order, and the Creation of a Reflective Research Program". *International Organization*, 46(1), (1992), 367–390.

languages and pursue somewhat different goals, they share a common global perspective.¹³ This approach verifies the third resource of epistemic communities. It suggests that epistemic communities might cooperate with the government in the future multi-level governance stage to resolve the climate change issues together despite the trend that they may be marginalized in current negotiations and operational stages.

D. IGSOs

IGSOs have direct channels to convey advice to the international community at international, legitimate platforms which are crucial components in the global climate regime. The institutional provisions of the IPCC ultimately require three science assessment groups to make an executive abstract Summary for Policymakers (SPM) based on assessment reports, i.e., about eight pages for the reference of the nations' policy makers.

IGSOs not only possess scientific authority as epistemic communities but scientists working for IGSOs are also authoritative in international communities and under governmental organizations. For instance, the IPCC was originally a greenhouse gas consulting group, which was founded by the World Meteorology Organization (WMO) and administered by the ICSU and the United Nations Environment Programme (UNEP). Although it was initially established without official standing, it involved the most significant scientist resources. Ever since its foundation, each publication of the climate assessment report has become the most important scientific evidence in climate negotiations and reference for governments to determine their stance.

SCIENTIST ORGANIZATIONS AND POLITICAL STAGES IN CLIMATE CHANGE AGENDA

Table 2 summarizes the involvement of the four categories of scientist organizations in the climate change agenda. Due to the different resources scientist organizations possess, various categories of scientist organizations have emerged as prominent promoters at the multiple political stages in the climate change agenda.

TNSAs are the epistemic communities in climate change issues. In fact, even before the climate change issue was put on the international political agenda, TNSAs were committed to calling on governments and international communities to respond to climate change. Initially, they were the most significant groups to push the United Nations to found the official scientific consulting organization IPCC and to raise the climate change issue to the international political agenda. Certainly, their prominence is a result of being the initial and most intellectual scientist organization and of meeting the demands of scientific consensus in the first stage of negotiations. In the meantime, the transnational networking platform has eased the way for TNSAs to meet the needs of the scientific consensus.

Particularly with regard to the later stages of the climate change agenda, a number of scholars have argued that scientists and their scientific knowledge are downplayed and

¹³ See: http://www.sciencediplomacy.org/.

gradually politicized and marginalized.¹⁴ In fact, this change is a result of the accumulation of increasingly available knowledge and the growing influence of other scientist organizations. As the international community and governments paid more attention to climate change, this weakened the supremacy of TNSAs as not one single scientist group was able to achieve a dominant intellectual status, as was the case in the first stage. In addition, the scientific participants have been replaced by national actors for whom scientific uncertainty provides room to negotiate and compromise.¹⁵ On the other hand, governments want scientific spokes-persons to support their political standing and behaviours. Thus, in-government scientist organizations gained importance.

With climate issues and policies changing, national actors lost dominance in the arena. Instead, NGOs and adaptive enterprises are gradually getting involved. The strong demand for new scientific knowledge and information from different participants makes it impossible for any type of scientist organizations to stand out, particularly because no one type of scientist organizations monopolizes knowledge. In this environment, scientist organizations play the role of honest brokers for policy choices and suggest multiple policy schemes for all parties to satisfy their diverse needs for information.

It is evident that only those scientist organizations that possess the most relevant scientific resources in the current policy process can stand out.

¹⁴ L. R. Cass. "The Dilemmas of International Climate Commitments and Energy Policy Reform in Germany,

the United Kingdom, and the United States", International Studies Association, 2002; S. Andresen & S. Agrawala. "Leaders, Pushers and Laggards in the Making of the Climate Regime". *Global Environmental Change* 12(2002): 41–51.

¹⁵ R. Grundmann. "Ozone and Climate: Scientific Consensus and Leadership". *Science, Technology, & Human Values*, 31(1): (2006), 73-101.

Table 2 Resources and Performances of F	our Types of Scientific Organizations
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Scientist Organizations	Participatory Channels	Participatory Mechanisms	Organizational Resources	Prominent Political Stages	Typical Cases
A=Domestic Independent Scientist Organization	Science promotion	1.Scientist joint statement 2.Public enlightenment	1.Some degree of autonomy 2.Local executive ability	No special performance	American Union of Concerned Scientists (UCS) urging the government to sign the Kyoto Protocol by a co-signed petition of 1500 scientists ¹⁶
B=Governmental Scientist Organization	Policy consulting	1.Internal entry 2.Externally exerting pressure	1.Close ties with decision makers 2.Representatives of nations' science	Stage II: Policy- legalization stage	AAAS stimulated clear skies and global climate change action
C=Transnational Scientist Organization	Epistemic diffusion	1.Forming common knowledge 2.Publishing research results through international conferences 3.Stimulating international regimes	1.Intellectual authority 2.Transnational networking platform	Stage I: Agenda- setting stage	Stockholm's International Institute of Meteorological Sciences (IMI) published global warming assessment report in 1985 Villach Conference
D=Intergovernmental Scientist Organization	Track-two diplomacy	Publishing scientific assessment reports	1.Internationally legitimate platform 2.Having the most scientific authority	Very influential overall; slightly declining impact in the later period of Stage II	The IPCC's first Assessment Report contributed to founding of the UNFCCC; second report led to the Kyoto Protocol; fourth Assessment Report led to Bali Road Map

¹⁶ "World's Nobel Laureates and Preeminent Scientists Call on Government Leaders To Halt Global Warming", *Science Daily*, Oct. 2, 2007.

CONCLUSION

The present article conducts a meticulous classification and analysis of the mechanisms for the involvement of scientists in the climate change agenda. While previous studies mainly focused on individual scientists as their research subject¹⁷, the present article considers scientist organizations as the object of study. This research classifies scientist organizations into four categories based on a matrix of dimensions. Such a matrix distinguishes organizations according to their political dependence, i.e., whether they are dependent or independent of governments, as well as based on their organizational orientation, i.e., whether they are national or international organizations. The author analyzes the participatory methods and channels of all four categories at the various stages of the climate change agenda. This two-dimensional classification framework provides some theoretical innovation to facilitate the investigation and analysis of the behaviour and participatory channels of scientist organizations.

It is the aim to provide an objective evaluation of the role scientists play in the climate change issue. Scientists are often regarded as a tool for country blocs to serve their political ends. However, in fact, scientists play different roles in the various stages of the policy process. Their roles are constantly adapting to the changing needs of the respective policy stages. Scientist groups are crucial but unique participants in the climate change agenda. They possess unparalleled intellectual resources but they do not have any tangible actions. Therefore, it is inevitable for scientists to be involved in climate change decision-making processes and to cooperate with other actors such as nations, enterprises, IGOs or NGOs.

The present article also analyzes and explains the inherent mechanisms different scientist groups have in the different political stages of the climate change agenda. These different political stages consist of different participants and require scientific knowledge in order to be able to adapt to changes. Thus, those scientist organizations that can meet the various policy requirements and have access to the participants through their relevant resources will have a bigger impact. At the climate change agenda-setting stage, the intellectual authorities and international scientist alliances with the most transnational networking platform resources succeeded in influencing the policies. At the climate change policy-legalization stage, science consensus lost its influence on the national actors. Instead, scientific uncertainty succeeded by providing the political sphere with substance for their standpoints. Thus, in-government scientist organizations representing national standpoints played the key role in climate decision-making. Since the climate change agenda has entered into an incomplete functional stage, participatory entities other than governments, i.e., enterprises and NGOs, become mature. Nowadays, the climate change negotiations show the trend of more diversified participants and multi-level governance. All participants and actors involved in the climate change agenda have strongly demanded more scientific knowledge and information.

¹⁷ R.Landry, M. Lamari & N. Amara. "The Extent and Determinants of the Utilization of University Research in Government Agencies", *Public Administration Review*, 63(2): (2003), 192–205; R. Pielke, Jr. *Honest Broker: Making Sense of Science in Policy and Politics*. Cambridge, MA: Cambridge University Press, 2007.

At this stage, the four types of scientist organizations no longer try to promote a consensus between political and scientific standpoints, but instead provide alternative schemes of exercising multi-level governance routes for all parties. In the future multi-level governance stage, inter-governmental scientist organizations will become the science arbitrators for various participants based on their respective scientific authoritative resources.

Scientist communities can choose many mechanisms to participate in the climate change policy. However, in order to exert influence they must make a choice according to their organizational resources and the demands of the political stage. Future investigations need to be concerned with refining more precise dimensions of the framework proposed in this article and analyzing the similarities and differences of each scientist organization category.

EU–ASEAN Relations in the Post-2015 Climate Regime: Exploring Pathways for Top-down and Bottom-up Climate Governance

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EXECUTIVE SUMMARY

"If not us, then who? If not now, then when? If not here, then where?" The speech delivered by the Philippines' lead negotiator, Naderev Saño, at the Doha climate change conference, just as typhoon Bopha ravaged the Island of Mindanao, was reportedly the highlight of an otherwise low-key event, expected mainly to ensure the transition towards reaching a new global climate agreement by 2015². The speech echoed the fact that Southeast Asia is one of the regions that is assumed to be the most affected by the adverse consequences of climate change, especially by more frequent and extreme weather events, increased risks of tropical epidemics and sea-level rise³. The geographical vulnerability of the ten countries of the Association of

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² IISD Report Summary of the Doha Summit, 26 November to 8 December 2012, Vol 12 No 567.

³ According to the Global Climate Risk Index 2013, among the 10 countries most affected by extreme weather events in 2011, half were located in Southeast Asia, including Thailand, Cambodia, the Philippines and Lao PDR, while Myanmar is found among the world's three most seriously affected countries over the past twenty years (together with Honduras and Nicaragua). See Eckstein D., Harmeling S, "Global Climate Risk Index 2013, Who Suffers most from Extreme Weather Events? Weather Related Loss Event in 2011 and 1992 to 2011", Germanwatch Briefing Paper, November 2012. For an authoritative assessment of the climate impact in Asia, see Cruz, R.V., H. Harasawa, M. Lal, S. Wu, Y. Anokhin, B. Punsalmaa, Y. Honda, M. Jafari, C. Li and N. Huu Ninh, 2007: Asia. *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, eds., Cambridge University Press, Cambridge, UK, 469-506.

Southeast Asian Nations (ASEAN)⁴ is further aggravated by the lack of resilience capacity of many poor communities in the region, although with important variations depending on the level of development⁵.

But the climate change equation in Southeast Asia is no longer a one-way street. The projected sustained economic growth of the region, assumed to be around 5-6% annually up to 2030, is also expected to lead to a large increase in energy consumption and to a corresponding annual increase from 4.4% to 5.7% of regional CO_2 emissions⁶, especially from coal burning for power generation. Therefore, although ASEAN's current share of global CO_2 emissions is still modest, especially compared to its giant neighbours China and India, the assumption is that it will increase sharply in the future. Caught up in the dilemma of meeting its development goals while already facing the creeping costs of climate change, ASEAN has an undeniable role to play in future global climate governance.

The EU has traditionally taken on a leadership role in the multilateral climate regime and has pledged to engage with key partner countries in order to increase the momentum for global action. In recent years, it has streamlined climate change in its strategic dialogues with the so-called "emerging powers" and signed tailored partnership agreements with the Asian BRICs, China and India⁷. In contrast, despite regular contacts since the 2000s, the EU's engagement with ASEAN countries has not reached the same strategic level. Most of EU-ASEAN cooperation on climate change has taken place under the umbrella of EU cooperation for development, through a series of programmes, dialogues and grassroots projects. Although consistent with the implementation of the provisions of the UNFCCC and the "differentiation" of responsibilities to address climate change, the political impact of this practical engagement is difficult to assess. In other words, a "bottom-up" input in the form of a convergence of positions of European and ASEAN member states (AMS) in the global climate negotiations has yet to materialise. As a result, in the aftermath of Doha the two regions seem to remain split along the "North-South" divide.

Climate negotiations have become tremendously complex and there is a growing sense among the different stakeholders that chances to "save the climate" by means of a stand-alone global agreement (top-down approach) are unrealistic (Grubb, 2013; Rajamani, 2012). The protracted multilateral process and the widely acknowledged "commitment gap" between the parties' actions and the level of ambition recommended by science have convinced many that climate governance will increasingly stem from actions undertaken at different levels,

⁴ ASEAN was established in 1967 by five original members: Indonesia, Malaysia, the Philippines, Singapore and Thailand. Brunei Darussalam joined the Association in 1984. Vietnam joined in 1995, followed by Lao PDR and Myanmar in 1997 and finally Cambodia in 1998.

⁵ See Yusuf, A.A, Francisco, H.A, "Climate Change Vulnerability Mapping for South East Asia", IDRC, January 2009.

⁶ According to the 3rd ASEAN Energy Outlook released in 2011, 5.7% is the projected growth in CO2 emissions in a "business as usual" (BAU) scenario and 4.4% in the case where the planned energy saving goals and related policies are implemented. See 3rd ASEAN Energy Outlook, February 2011.

⁷ See EU DG CLIMA, Bilateral Cooperation at http://ec.europa.eu/clima/policies/international/cooperation/index_ en.htm

primarily at national level, but also within regional and plurilateral settings such as the G20 or the Major Economies Forum (MEF)⁸. However, for these "decentralised" actions to be factored into a global governance system, a key challenge remains to ensure the overall effectiveness of dispersed efforts, their accountability and – particularly important to overcoming collective action dilemmas – the equitability of their distribution among all the players.

As these "top-down" and "bottom-up" dynamics become a major feature of global climate governance (Boyle, Aguilar, 2012), this paper argues that, while the hopes for "alliance-building" between the EU and ASEAN in the multilateral negotiations are unlikely to materialise in the near future, enhanced inter-regional cooperation on climate change can yield large benefits for climate governance. The EU's and ASEAN's simultaneous efforts to anchor climate change into their regional development paths can be mutually encouraged and reinforced. Moreover, multilateral cooperation automatisms developed at regional levels can provide learning experiences for the global negotiations. In particular, a distinct ASEAN process of mainstreaming climate change in its regional community-building project can potentially develop south-south cooperation and other innovative cooperation patterns that can then feed into the global level.

The first section analyses the EU and ASEAN countries' negotiating positions on core issues put forward in the current negotiations under the Ad-Hoc Working Group on the Durban Platform for Enhanced Action (ADP). The second section provides an assessment of EU-ASEAN cooperation in the context of ASEAN community building and highlights the difficulties and areas for improvement. Finally, the third section offers some conclusions and recommendations on the cooperation dynamics that can be encouraged and become part of the upcoming governance system on climate change.

EU-ASEAN AND THE DURBAN PLATFORM: THE CHALLENGES OF INTER-REGIONAL ALLIANCE-BUILDING

Despite recognition of the importance of engaging relevant partners on climate change, EU-ASEAN joint contribution to the climate negotiations has not been given much political attention, especially when compared with the dialogues with China and India. Several factors have contributed to discouraging EU's efforts to upgrade its climate diplomacy towards ASEAN. The structural rift that separates the two regions into the "developed" and "developing" camps is an obvious obstacle to the rapprochement of their positions. Yet another hindrance stems from the political organisation of ASEAN, which, despite the institutional efforts detailed below, has not yet developed a functional regional climate governance system and failed to speak with a coherent voice in the multilateral regime.

⁸ The MEF was initiated by the United States. It comprises 17 "major economies", among which Indonesia is the only Southeast Asian member, but which also includes Japan, China, India, South Korea, as well as the United States and the EU. In the wake of the Copenhagen Summit in 2009, a Clean Energy Ministerial (CEM) was also established, to which Singapore also participates.

Setting the scene: Challenges of the new round of climate talks

The Doha Summit of December 2012 closed the door on the negotiation process launched five years earlier in Bali, as evidence of the fact that global GHG emissions had surged again in 2012 was getting the UNFCCC widespread criticism in the global media. Among the milestones of the reform process started in 2005, the Cancun and Durban Agreements achieved consensus on "the global boundaries" of the future climate regime (the 2°C target) and agreed to set up a number of global institutions (the diverse climate finance instruments and the Technology Transfer Framework) that should enable enhanced climate actions by the parties, while engaging in a new round of negotiations towards a global legally binding agreement by 2015. Notwithstanding this progress, at least "two-third of the glass" is yet to be filled (Grubb, 2013).

Doha mainly secured the survival of the Kyoto Protocol, in spite of the desertion of several developed countries participants (Japan, Canada and Russia) and the core challenge of the Ad-hoc Working Group on the Durban Platform (ADP) in the run-up to 2015 remains to reach an agreement on the "new rules" of the climate game regarding *what actions* and *how much* will avail the parties of their duty to contribute their "fair share" of "enhanced actions" to the global effort to address climate change. In this process, the application of the principles of the Convention is a key issue, in particular the principle of "Common but Differentiated Responsibilities and Respective Capacities" (CBDR).

Efforts to enhance EU-ASEAN relations in the climate negotiations therefore primarily aim at reconciling their views on how to apply the Convention's principles to the new global agreement. This enterprise is constrained by the fact that the EU and ASEAN are separated by the climate regime's institutional structure between the "Annex I" developed countries comprising the countries recognised at the time as being historically responsible for most of the emissions and wealthy enough to bear the bulk of the greenhouse gas mitigation costs - and the "Non-Annex I" developing countries. A solid body of literature has shown how this formal division, seen as embodying the CBDR and equity principles (Rajamani, 2001), has become more and more rigid throughout the evolution of the climate regime (Castro and Al 2011, Depledge 2009), even though it has been fiercely opposed by the United States since the negotiation on the Kyoto Protocol in the late 1990s. Almost 15 years later, this "bipolar division" (Grubb, 2013) remains a major drag on the adoption of a new binding global agreement. It pervades the negotiation tactics of the EU and ASEAN not only for the definition of appropriate mitigation commitments, but also all the so-called "implementation" issues, including the compliance mechanisms and the contributions to climate finance and technology transfers.

However, beyond this division, a wider spectrum of approaches exists among individual countries within the two blocs, especially among ASEAN countries. Unfortunately, this variety can hardly be capitalised upon for an efficient communication with the EU because of the dispersion of voices.

EU and ASEAN asymmetries in the UNFCCC negotiations

The negotiations' dynamics have developed a peculiar process of coalition-building around various clusters of members. These groups then often serve as the main vehicle to voice their members' perceived shared interests and values. The location of EU and Asian countries in this institutional landscape highlights the current distance between the two regions' negotiating positions. But more importantly, their existence demonstrates the dispersion of ASEAN voices, making it an uneasy, "moving" target for the EU's climate diplomacy efforts.

Over the years, the EU has managed to achieve a significant degree of unity in the climate negotiations (Van Schaik, 2010), notably through the informal "Green Diplomacy Network⁹", and has managed to maintain and expand its own negotiation group in the Annex I "camp". On the other side, although ASEAN countries all belong to the established G77/ China group of developing countries, they hardly present a comparable degree of cohesion. At its best, the G77/China tends to search for a "lowest common denominator," and vaguely worded declarations reflect its increasingly diversified membership.

Under this wide umbrella, some regions have formed distinct geographic groups (such as the African Group or the "Independent Association for Latin America and the Caribbean"). But ASEAN, whose membership admittedly already contains a microcosm of the G77/China in terms of its different levels of development and geographic circumstances, has yet to do so. Instead, ASEAN Member States (AMS) have expressed their interest individually or as part of different coalitions (see Table I and Chart 1), which illustrates the failure of the regional organisation to build an appealing common narrative on climate change.

Singapore, although it presided over the first declaration to the COP issued jointly by ASEAN environment ministers in 2007, has more often expressed its views individually or through the coalition of small Islands States (AOSIS), stressing the threat it faces from the rising sea level¹⁰. Brunei Darussalam, ASEAN's other high-income economy, has not joined any group. Laos, Cambodia and Myanmar belong to the Least Developed Countries' group, which has achieved special status since COP 7 in 2001, due to its members' particular vulner-ability to the adverse effects of climate change. ASEAN middle-income developing countries have also split along less formal alliances: e.g., Indonesia and Thailand have taken part in the "Cartagena Dialogue for Progressive Action" since 2010 (together with, among others, the EU); Malaysia, Thailand and the Philippines¹¹ have joined the Like-Minded Developing Countries group (LMDC) created in the view of the ADP in November 2012 with, among others, China and India. Finally, Vietnam, like a number of ASEAN countries, participates in the activities of the Coalition for Rainforest Nations¹², which has put forward specific claims on REDD issues. AMS have been particularly strong on REDD+ issues, as forests represent a large part of their natural resources and have large potential for carbon sinks.

⁹ See the EU Green Diplomacy Network webpage: http://www.eeas.europa.eu/environment/gdn/index_en.htm

¹⁰ Forgaty D, "Singapore raises sea defences against tide of climate change", Reuters, 27 January 2012.

¹¹ Thailand joined the group's early meetings and declarations, but does not appear on the list of countries in the last March 2013 communication. It was nonetheless again part of the group at the Bonn Meeting in June 2013.

¹² These include Indonesia, Malaysia, Thailand and Vietnam.

Country	GHG emissions	% global GHG	Status under UNFCCC		Coalitions					
EU-27	4999	10.00	Annex I	MEF				Cartagena Dialogue		
ASEAN-10	3858	7.71	Non-Annex I							
Brunei Darussalam	/	Below 0.10	Non-Annex I		G77+China					
Cambodia	192	0.38	Non-Annex I		G77+China	LDC				
Indonesia	1946	3.90	Non-Annex I	MEF	G77+China			Cartagena Dialogue		Coalition of Rainforest Nations
Laos PDR	100	0.20	Non-Annex I		G77+China	LDC				
Malaysia	330	0.66	Non-Annex I		G77+China				LMDC	Coalition of Rainforest Nations
Myanmar	362	0.72	Non-Annex I		G77+China	LDC				
Philippines	159	0.32	Non-Annex I		G77+China				LMDC	
Thailand	413	0.82	Non-Annex I		G77+China			Cartagena Dialogue	LMDC	Coalition of Rainforest Nations
Singapore	50	0.10	Non-Annex I		G77+China		AOSIS			
Vietnam	306	0.61	Non-Annex I		G77+China					Coalition of Rainforest Nations

Table I: Comparative GHG emissions and coalitions ASEAN-EU

Annex I Japan; New Zealand; Norway; Portugal: Romania: Slovakia; Australia; Canada; Iceland; Austria; Belgium; Bulgaria; Denmark; Estonia; Finland; France; Germany; Greece; **European Union** Belarus; Coratia; Monaco; Slovenia; Spain, Sweden, Cyprus; Czech Republic; Russia; Ukraine; United Hungary; Ireland; Italy; Umbrella Group Netherlands; Poland; Luxembourg; Malta; Latvia; Lithuania; United Kingdom Mexico Lichtenstein Switzerland States Turkey В Ε South Korea Cameroon, Congo; Gabon; Ghana; Georgia; Kazakhastan; Moldova; Uzbekistan Bodswana; Côte d'Ivoire; Egypt; Morocco; Namibia; Swaziland; South Africa Equatorial Guinea; Lesotho; Liberia; Madagascar, Mali; Mauritania; Mozambique; Niger; Rwanda; Albania; Armenia; Benin; Burkina Faso; Burundi; Chad; Djibouti; Central African Republic; D.R. Congo; Uganda Turkmenistan Brazil China Eritrea; Ethiopia; Gambia; Guinea; Malawi; BASIC India Senegal; Somalia; Sudan; Tanzania; Togo; CACAM Tunisia; Zimbabwe; LDC Bangladesh; Afghanistan; Kenya Bhutan; Nepal; Yemen Iran; Iraq ; Kuwait; Qatar; audia Arabia United Arab Venezuela Niger Algeria Emirates Zambia: Equador Angola OPEC Lybia Salomon Islands Cap Verde; Mauritius; Bolivia Kiribati; Tuvalu African Group Seychelles Haiti; Maldives Guinea-Bissau Sao Tome and Azerbaijan; Macedonia; Israel; Kyrgyzstan; Montenegro; San imor-Leste Vanuatu Comams Antigua and Barboda; Cuba; Principe SV&Grenadines; Dominica imoa: Nicaragua ALBA Dominican Republic; Suriname; Bahamas; BarbadosMicronesia Saint Kills and Nevis; ; Grenada; Jamaica; Trinidad and Tobago Fiji; Guyana; Papua Saint Lucia; Tonga; Cook Island; Nauru; Nine; Palou Guatemala SICA Marshall Islands; New Guinea; El Salvador Costa Rica Honduras Panama Malaysia Lao P.D.R ASEAN Singapore Belize Marino; Serbia; Tajikistan Syrian Arab Republic Vietnam Cambodia Brunei Darussalam Myanmar Non-Annex I Coalition of Rainforest Nations * Paraguay Uruguay Argentina Herzegovina Oman Peru D.P.R Korea Bosnia and Pakistan Colombia Mongolia Sri Lanka Lebanon Chile Bahrain Jordan



⁴Countries in Italics participate in the activities of the Coalition of Rainforest Nations Countries in RED participate in the "Like Minded Developing Countries" Group (LMDC) Countries in GREN participate in the Cartagena Dialogue for Progressive Action Thailand has participated in both the Cartagena Dialogue for Progressive Action latest Bonn meeting in June 2013 it sat with the LMDC group
Since 2009, the task of coordinating ASEAN countries' position in the negotiations has been assigned to an ASEAN Working Group on Climate Change (AWGCC), chaired by Thailand, to implement the ASEAN Climate Change Initiative (ACCI). The ACCI was the outcome of a process started two years earlier in 2007, when ASEAN issued its first collective statement to the COP, an exercise which has been repeated since, although not always in a consistent manner (see Table I). Even so, these declarations do not stand out from the general line advocated by the G77/China and many lacunas remain in the coordination of ASEAN countries' positions in the UNFCCC.

Such dispersion can be attributed in part to the region's development gap and to the diversity of national situations, in particular in terms of access to energy and water resources, both of which are reflected in each country's national strategy (or the lack thereof) for addressing climate change. Under these circumstances, expecting ASEAN to follow the EU's struggle to succeed in "speaking with one voice" in the multilateral negotiations would be unrealistic. It would also overlook the region's traditional reluctance towards any form of "sovereignty pooling"¹³. Furthermore, it would anticipate the modest functions attributed to the ACCI, which are limited to providing a "consultative platform to exchange views on international climate negotiations"¹⁴ in the hope that it will lead to a common position "where possible".

Nonetheless, in light of the fragmentation of voices described above, it is fair to say that the ACCI has come short of delivering even on these limited expectations. The absence of an ASEAN submission to the ADP gives credit to NGOs' criticisms that "the so-called 'ASEAN Way' has made it a passive group in the international negotiations, thus unable to capitalize its advantage even within the G77/China¹⁵".

¹³ There is already a large volume of literature discussing this issue. See among others: Richard Higgott, "Alternative Models of Regional Cooperation? The Limits of Regional Institutionalization in East Asia", in Mario Telo, *European Union and New Regionalism, Regional Actors and Global Governance in a Post-Hegemonic Era*, second edition, 2007, pp. 75-106; Sophie Boisseau du Rocher and Bertrand Fort, "Paths to Regionalisation: Comparing Experiences in East Asia and Europe", 2005, Asia-Europe Research Series; and Simon, Sheldon, "ASEAN and Multilateralism: the Long, Bumpy Road to Community", *Contemporary Southeast Asia*, Vol 30, No, 2 (2008), pp. 264-92.

 ¹⁴ According to the 2010 ASEAN Joint Statement on Joint Response to Climate Change, the ACCI is envisaged as a "consultative platform". Its terms of reference entitle it to pursue four objectives: (i) policy and strategy formulation;
(ii) information sharing; (iii) capacity building; and (iv) technology transfer.

¹⁵ A-FAB, Coalition of WWF-Oxfam-Greenpeace, "ASEAN's Challenge in the Cancun Climate Change Talks", Policy Brief 2010-01.

2007	•	ASEAN Declaration on Environmental Sustainability (13th ASEAN Summit, 20 November 2007)
	•	ASEAN Declaration on COP13 to the UNFCCC and CMP3 to the Kyoto Protocol
	•	Singapore Declaration on Climate Change, Energy and the Environment (3rd
	•	Joint Ministerial Statement of the First EAS Energy Ministers Meeting (2007)
2008	•	Ministerial Statement of the Inaugural EAS Environment Ministers Meeting (2008)
2009	•	ASEAN Joint Statement on Climate Change to COP15 and CMP5 (15th ASEAN
	•	Singapore Resolution on Environmental Sustainability and Climate Change (11th AMME, 2009)
2010	•	ASEAN Leaders' Statement on Joint Response to Climate Change (2010)
2011	•	ASEAN Leaders' Statement on Climate Change to COP17 and CMP7 (2011)
2012	•	Bangkok Resolution on ASEAN Environment Cooperation, which adopted the ASEAN Action Plan on Joint Response to Climate Change, 26 September 2012

Table I: ASEAN Climate-Environment Statements 2007-2012

The lack of cohesion in ASEAN's position makes it particularly challenging to have a dialogue on equal footing with the EU, and to find common ground for inter-regional rapprochement. ASEAN joint declarations, from which one might gauge the bottom-line commonalities among the ten, provide an insufficient basis for a comprehensive engagement across the board.

As a result, rapprochements on negotiation themes, where they occur, do not seem to stem from any EU-ASEAN bilateral coordination. An illustration of this is the EU's and AMS' common support for multilateralism and for a globally binding agreement¹⁶. While this position has consistently been advocated by the EU as a matter of principle since the inception of the climate regime, for AMS, it seems more linked to their conception of the UNFCCC as the only forum where they can influence global climate governance, despite their lack of political clout on the global stage.

Besides this shared preference of forum for global climate change governance, ASEAN and the EU seem to have taken different views on virtually all the issues at stake in the negotiations, including the distribution of responsibilities among the parties and the interpretation of the convention's principles. On the latter, for instance, the EU, although it has embraced the CBDR principle and recognised its particular responsibilities in the process of taking a leadership role on climate action, has grown convinced that the initial division among the annexes needed revision. Thus, since 2005, it has pressed for a more nuanced approach to differentiation in the form of a "wide spectrum of commitments" to be specified on the basis of "evolving" responsibilities and capacities. On the contrary, the wording of ASEAN's latest joint submission to the COP in 2011 suggests a lukewarm reception to such "flexible" conception of differentiation, as it repeatedly stressed the rupture between developed and developing countries' obligations.

¹⁶ ASEAN Leaders' Statement on Climate Change to COP17 and CMP7 (2011).

On par with China and India and contrary to the LDCs, these countries have voiced their preference for the "self-differentiation" of developing countries' enhanced actions¹⁷, while retaining a strong compliance system for Annex I countries. However, "self-differentiation" raises accountability and effectiveness issues that need to be addressed in order to motivate higher levels of ambition and guarantee against free riding.

However, ASEAN's joint position hides important nuances among individual AMS. For instance, observers have noticed a convergence of preferences between the EU and the LDC group in pushing for a strong, "top-down" system that would commit all the parties to binding targets calculated so as to satisfy the requirements of climate science¹⁸. This has implications for the three ASEAN LDCs, even though the extent to which this position reflects their preference is unclear, considering the fragility of their involvement with the UNFCCC process¹⁹.

The individual submissions of Indonesia and Singapore also differ significantly on this point. While Indonesia seems open to discussing differentiation in a broader sense, Singapore stresses the historical responsibility of the parties for global warming. The Philippines and Malaysia, through the LMDC group, have voiced a more conservative position, rejecting any potential change in the current distribution of responsibilities and any reshuffling of the annexes²⁰.

The issue of finance and technology transfers has also been a growing irritant in the EU-ASEAN relationship, but again with various levels of relevance depending on each individual AMS. ASEAN-level submissions have echoed the G77/China position that demands new and additional financial support and technology transfers from developed countries and calls upon these countries to deliver on the promise to scale up climate finance by up to \$100 billion per year by 2020. Although the EU has adopted a constructive attitude on the provision of financial and technical assistance to developing countries, especially towards the most vulnerable (ASEAN's poorest countries have benefited from several such programmes, as discussed below), austerity-budget-tied European governments have pointed out the need to secure both a larger base of public contributions (i.e., extending the list of donors recorded in the current Annex II of the UNFCCC) and alternative sources of financing (from the private sector) to replenish the climate funding instruments of the UNFCCC in the future. Solving these implementation issues is generally agreed as a prerequisite for the multilateral negotiations to move forward.

¹⁷ See the Submission of Singapore on 26 February 2013 and Indonesia on 8 March 2013 to the ADP, available at http://unfccc.int/bodies/awg/items/7398.php

¹⁸ Submission of the LDCs to the Durban Platform, 3 March 2013, available at: http://unfccc.int/bodies/awg/ items/7398.php

¹⁹ Cambodia submitted its National Adaptation Programme of Action (NAPA) as late as 2007; Laos, only by the end of 2009 and Myanmar has just submitted it in December 2012. Their weight on the regional position is also questionable. This is an issue for ASEAN, as its chairmanship will be rotated to Myanmar (2014) and Lao PDR (2015) in the run-up to COP21 in Paris in 2015.

²⁰ LMDC submission to the ADP, 13 March 2013, available at: http://unfccc.int/bodies/awg/items/7398.php

Further discussions between the EU and ASEAN should focus on and provide solutions to the "chicken-egg" issues opposing the EU and Southeast Asian governments regarding what, from international finance or local climate policies, should come first. Hence, the two regions, which are in the position of "donor" and "recipient" of climate finance, have faced tremendous difficulties in finding a common ground on this issue. On the one hand, AMS governments often face weak institutional capacity, unequally mature climate strategies, as well as competition for funds from all potential recipients. They often insist that financial and technical support is a prerequisite for their governments to engage in climate action. On the other hand, there has been increasing concerns among European donors that the funding made available to developing countries is allocated and managed in a "cost-effective" manner. The result is that they are keener on supporting governments which have already adopted a climate strategy. An inter-regional settlement on such a mechanism that would concretely implement the convention's "north-south cooperation" goals would be a major stepping stone for the global climate governance system.

BOTTOM-UP CLIMATE GOVERNANCE AND THE ROLE OF EU-ASEAN COOPERATION

Climate policies at the bottom and their relations to the multilateral negotiations

The grim picture of the UNFCCC negotiations described above may unfairly distract attention away from the achievements of twenty years of global climate governance. The process can indeed claim some praise for the wide range of decentralised climate-related actions that have been engaged at the grassroots level, within the domestic and regional spheres starting in Europe, and also elsewhere and perhaps most remarkably in several Asian countries, including an increasing number of ASEAN countries.

This phenomenon is having a deep and complex impact on the multilateral negotiation process, the understanding of which would require additional research beyond the limited scope of this paper. For the purpose of the present argument, it can already be observed that the diffusion of climate policies through bilateral cooperation and learning has created potential *de facto* alternative solutions to achieving the goals of the UNFCCC. Such a process entails a reconsideration of the contribution of regional organisations like the EU and ASEAN to global climate change governance, independently of the pursuit of multilateral negotiations. In addition, such an evolution may also give credit to the argument of "self-differentiation," advocated by emerging Asian economies as a credible alternative to the top-down criteria for the distribution of obligations pushed for by the EU. Several Asian governments seem to be heading in that direction with "low-carbon" policies.

Yet, these efforts at the domestic level do not automatically feed into the global climate governance system. Indeed, there is an increasing gap between actions undertaken in the domestic sphere and the commitments of the governments in the multilateral negotiations (see the table in Annex). This is particularly visible among ASEAN countries. Hence, most ASEAN countries have not submitted any pledge under the Cancun Agreements: e.g.,, Thailand, although it has been the Chair of ASEAN Working Group on Climate Change since 2010, has refrained from laying down its domestic energy intensity targets²¹ in a National Appropriate Mitigation Action (NAMA); Singapore, despite its economic capacities and its relatively high per capita emissions ratio, has only put forward a conditional pledge of 16% reduction from the undefined BaU baseline by 2020²², even though its "Sustainable Blueprint" adopted in 2009 lays down the objective to reduce the energy intensity of its GDP by 20% by 2020 and 35% by 2030²³ – targets that do not feature in its NAMA – the island state justifies this cautious approach by its difficulty in accessing and deploying renewable energy resources²⁴. Interestingly also, Singapore has concluded several forward-looking "south-south" bilateral cooperation agreements, which show its willingness to take the lead in the diffusion of low-carbon technologies among its Asian neighbours²⁵. And yet, it will not be listed under Annex 2 of the UNFCCC.

These examples illustrate the non-participatory, distrustful attitude of a majority of ASEAN governments towards the UNFCCC's still undefined "pledge" system. Indonesia is a notable exception. ASEAN's largest economy and only representative in the G20 and the "Major Economies Forum on energy and climate change", and also the largest emitter of GHG by far (accounting for a good half), Indonesia has nonetheless pledged an emissions reduction target of 26% from BaU by 2020. Domestically, in 2010, it adopted an ambitious "Vision 25/25", a plan to attain a mix of 25% renewable energy by 2025 (mainly from abundant geothermal resources). These targets have received much international attention, and while some civil society organisations have challenged the capacity of the Indonesian government to deliver, UNEP and other international agencies have moved relatively quickly to offer their support²⁶.

Under the present regime's structure, it is difficult to factor in ASEAN countries' individual actions in a global climate governance system if they do not translate into ambitious commitments and targets that can be accounted for and compared. This trend raises concerns

²¹ Thailand's energy plan includes to increase the share of renewable energy supply by 19.1% in 2016, and to reduce its energy intensity by 15% in 2020, compared with the baseline year 2005. See the report from the Thai Ministry of Energy, "Thailand is the 2010's: Thailand's Renewable Energy and its Energy Future", 2009, available at: http://www. nstda.or.th/attachments/7918_CASAVA-2.pdf

²² WWF found that Singapore had the largest carbon footprint per capita in the Asia-Pacific in "Living Planet Report 2010" but this finding was strongly rebutted by the Singaporean government, who challenged the calculation methods. See "WWF, S'pore Disagree over Emissions Count", *Strait Times*, 18 March 2012.

²³ Update on meeting Singapore Green Plan 2012, Ministry of the Environment and Water Resources, accessible at http://app.mewr.gov.sg/web/Contents/Contents.aspx?ContId=1342

²⁴ Singapore NAMA, available at: http://unfccc.int/meetings/cop_15/copenhagen_accord/items/5265.php

²⁵ The National Climate Change Secretariat lists already the following projects: Sino-Singapore Tianjin Eco-City Project, the Peatland preservation project in the Jambi province of Indonesia and the technical trainings provided to less-advanced Small Island States. See the information available on the National Climate Change Secretariat (NCCS) website: http://app.nccs.gov.sg/page.aspx?pageid=55

²⁶ Private interview with Jonathan Gilman from UNEP regional office for the Asia Pacific, March 2013.

that dispersed efforts undermine the perception of the value-added of the UNFCCC process instead of building capacity to support it. It is also feared that it increases uncertainties around the calculations of the "commitment gap" towards achieving the 2°C target. Furthermore, the resulting information gap could lead the world towards a "race to the bottom" by nurturing concerns about competitiveness and carbon leakage. In fact, these risks are already reflected in the debate on climate policies within the EU, where wariness of global economic competition has withheld the adoption of more ambitious targets²⁷.

Understanding the reluctance of ASEAN countries to come forward with their national policies would require more in-depth research and analysis. One reason often heard in informal talks with Southeast Asians is the lingering lack of trust in the negotiation process and related fears that the communication of any quantified targets would be captured and then used as means to pressure their government, while on the other hand the promised technical and financial support promised to implement them would remain unsatisfied. In this regard, the success of Indonesia in attracting sufficient international assistance to realise its climate policy goals is crucial, because it can serve to showcase the benefits of a developing country's active participation in the multilateral governance system. It would be critical to motivate other ASEAN countries to transform their domestic climate strategies into NAMAs in the post-2020 global agreement.

Yet another argument often invoked to justify the shallow participation of ASEAN countries in the global mitigation efforts is the comparable lack of ambition in developed countries' pledges²⁸. On this, the capacity of the EU to galvanise internal political support for more ambitious targets during the consultations process that was launched in March 2013 in view of the "meeting of the leaders" called upon by UN Secretary General Ban Ki-Moon in 2014 is of tremendous importance. To this end, giving more publicity to the climate actions undertaken in emerging economies in ASEAN, as well as the ensuing trade opportunities for European green businesses, could also legitimise ambitious targets for 2020 and further.

Regional climate policies – ASEAN's role and avenues for further developments

To a large extent, the difficulties faced by ASEAN in issuing a common vision on climate change in the multilateral negotiations echoes the ambiguities and shortcomings of climate governance at the regional level. On the one hand, ASEAN has endorsed a potential role of coordination of AMS climate policies, as well as regional and international cooperation on climate change, (including "south-south" cooperation) as part of the region's community-building project. On the other hand, these efforts have fallen short of establishing a comprehensive system of regional climate governance.

²⁷ See among others: "Debate on CO2 Target Exposes Rift among EU Businesses", Euractive, 14 December 2012, available at: http://www.euractiv.com/climate-environment/debate-co2-target-exposes-rift-e-news-498843

²⁸ Kartha Sivan, Erickson Peter, "Comparison of Annex-1 and non-Annex-1pledges under the Cancun Agreements", June 2011, *Stockholm Environment Institute*, WP-US-1107

Since the adoption of the Singapore Resolution on Environmental Sustainability and Climate in 2009, ASEAN communications on climate change have put more and more emphasis on the shared vulnerability of Southeast Asian nations to the threat of climate change²⁹ and its transboundary impacts across the region and sub-regions. The transboundary nature of pollution became magnified by the "haze" problem which affects relations between Singapore, Malaysia and Indonesia. A regional agreement was signed in 2002 and ratified by all AMS except Indonesia, where most of the pollution originates – mainly from land clearing in the island of Sumatra. Nonetheless, the recognition of the issue has led progressively to one of the most comprehensive regional strategy on an environmental issue, notably the ASAEAN Peatland Management Strategy (2006-2020), which is reviewed periodically by a sub-regional steering committee³⁰. In this regard, as with the EU, there is awareness among institutional actors and civil society organisations of the potential linkage between climate change policy and the creation of a shared regional identity. Accordingly, climate change has been formally arranged under the so-called "ASEAN Socio-Cultural Community" (ASEC).





Source: Dr Raman Letchumanan, ASEAN Secretariat, Environment Division, "Is There an ASEAN Policy on Climate Change", Analysis, LSE publication, 2009

Several climate-related regional policy strategies and projects have come out of the regular meetings of ASEAN Ministerial Meetings and ASEAN Senior Officials on the Environment (ASOEN), often in conjunction with other sustainable development issues, such as food security, air pollution, urbanisation, and disaster relief (see Table 2). Those linkages were both a necessity to justify taking pro-active local measures to combat climate change and a strategy

²⁹ ASEAN multi-sectoral Framework on climate change (AFCC), 2009, p 1

³⁰ The last occurrence took place in the Indonesian city of Surabaya on 25 September 2013

to integrate it in the broader sustainable development agenda. However, the institutional link between these diverse components remains weak and the material impact of ASEAN-level efforts beyond institution-building has been "slow and lacklustre" (Trevisan, 2013).

ASEAN Climate Change Initiative (ACCI) has not yet managed to provide an effective transversal policy coordination framework, even though its mandate, which includes "enhancing regional and international cooperation to address climate change and its impacts in ASEAN member states through both mitigation and adaptation measures", would allow it to take up such role. Needless to say, the ACCI comes nowhere near an equivalent "DG CLIMA" in the EU and was certainly never intended to.

Furthermore, it is problematic that in the elitist "ASEAN Way" governance system, climate change seems to have lost some of the political attention since the political momentum brought by the adoption of the Community Blueprints in 2009. Hence, it was not included in the agenda of the 2011 ASEAN summit and was only briefly mentioned in the 2012 summit. In addition, Thailand's mandate as chair of the Climate Change Working Group will expire this year and no candidate has yet proposed to take up its responsibility.

Table 2: ASEAN Regional Policies on Climate Change

- ASEAN Multi-Sectoral Framework on Climate Change: Agriculture and Forestry towards Food Security (2009) with Germany
- Adoption of the Terms of Reference of the ASEAN Climate Change Initiative, 31 March 2010
- ASEAN Action Plan on Joint Response to Climate Change (2011)
- ASEAN Action Plan on Disaster Management and Emergency Response (AADMER) 2010-2015 (featuring Climate Change Adaptation as key component)
- ASEAN Agreement on Transboundary Haze Pollution (2012)
- ASEAN Plan of Action for Energy Cooperation 2010-2015 (2009)
- ASEAN-Japan Action Plan on Environment Improvement in Transport Sector 2010-2014 (AJ-APEIT) (2009) – with Japan
- ASEAN Initiative on Environmentally Sustainable Cities with USAID

The absence of an overall ASEAN climate governance and policy strategy becomes more problematic with mitigation climbing ASEAN's sustainable economic development agenda. The most recent economic forecasts predict that ASEAN's economic growth up to 2030 will entail 4.5% annual growth in energy consumption with a corresponding annual increase of 4.4% to 5.7% growth in CO_2 emission (mainly due to increased coal consumption)³¹. These figures entail that climate change in ASEAN is bound to have a growing energy security and economic development dimension. Hence, as already discussed above, several ASEAN

³¹ According to the 3rd ASEAN Energy Outlook released in 2011, 5.7% is the projected growth in CO₂ emissions in

a "business as usual" (BAU) scenario and 4.4% in the case where the planned energy saving goals and related policies are implemented. See 3rd ASEAN Energy Outlook, February 2011.

governments have already begun to integrate parts of the "low carbon" discourse, although with important variations depending on the particular national circumstances.

These shared concerns are reflected in the adoption of the ASEAN Plan of Action for Energy Cooperation 2010-2015 (APAEC) adopted in 2009 and entitled "Bringing Policies to Actions: Towards a Cleaner, more Efficient and Sustainable ASEAN Energy Community", which recognises the "tremendous challenges to simultaneously meet the goal of energy security and environmental protection" and puts forward some aspirational goals for energy conservation (of reducing regional energy intensity by at least 8% by 2015 based on 2005 levels) and for increasing the share of renewables in the overall energy mix of the region (up to 15% of total power installed capacity by 2015). But the APAEC, although it should be considered as a foundation for the region's mitigation efforts, falls under the "ASEAN Economic Community" (AEC) pillar and is therefore carried out separately from other climate-environment initiatives.

Energy is not the only climate policy component governed under the "trade policy pillar". Further linkages between climate change and the regional economy also stem from ASEAN experience with the Kyoto Protocol's market-based instruments mechanisms under the Kyoto Protocol and the trade dimension of low-carbon technology transfers from industrialised countries. In this policy area as well, the lack of regional coordination bears some responsibility for the relatively low level of Clean Development Mechanism (CDM) carried out in ASEAN compared with its large neighbours China (2044 registered projects) and India (839), as well as for the differences among them. Although some efforts at awareness building and experience sharing have been made under the ACCI and through activities promoted by the EU³², sharp differences still remain. By the end of 2012, Vietnam had registered 120 CDM projects and Malaysia 106, while Thailand and the Philippines only received just above half these amounts and LDCs less than 10³³. In the future, more intra-ASEAN cooperation seems a necessity to further enhance the horizontal technology transfer capacity of intra-regional trade, as well as to attract relevant green businesses from developed countries, especially EU member states.

The separation between trade and energy on the one hand, and climate change on the other hand in the design of the ASEAN Community constitutes an institutional hindrance to the implementation of a comprehensive climate change strategy encompassing both mitigation and adaptation. In a large majority of ASEAN countries, until recently climate change was (and often remains) primarily considered from the sole perspective of "adaptation" and

³² See the CDM-ASEAN project under the EU-ASEAN Energy Facility: http://cdmasean.pelangi.or.id/index.html

³³ See UNEP report: "Status and Barriers of CDM Project in Southeast Asian Countries".

basically as an additional source of international aid for related poverty alleviation and development initiatives³⁴.

EU-ASEAN bilateral cooperation on climate change – Between practical cooperation and inter-regional dialogue

ASEAN countries have looked towards Europe in sharing best practices as well as financial and technical assistance to develop their climate policies. Since the mid-2000s, the EU and individual countries, especially Germany, Finland and Sweden, have supported the region's effort to address climate change and its adverse effects. Hence, international assistance has played a determinant role in the overwhelming majority of ASEAN flagship climate change projects. In the field of adaptation, ASEAN LDCs and the Mekong River sub-region have benefited from the EU's "Global Climate Change Alliance" programme (GCCA)³⁵. Indeed, for most ASEAN countries, but especially Cambodia, Laos and Myanmar, the main priority has been to build resilience and adaptation to extreme climate events and integrating environmental consideration in the poverty reduction/MDG strategies. Furthermore, the EU Switch-Asia Programme, set up in 2007 to spur change towards environment- and climate-friendly consumption and production in Asia, has also funded a number of smallscale projects with a climate policy dimension³⁶ in Indonesia, Malaysia, the Philippines and Thailand. Finally, the EU is also actively involved in adaptation efforts related to disaster management (with the EU-ASEAN Disaster Management Dialogue) and sustainable forest management through the FLEGT initiative³⁷. Both target high priorities for AMS governments. The former is crucial for building resilience to extreme climate events in the poorest

³⁴ Adaptation Knowledge Platform (2013), "Adaptation or Development? Exploring the distinctions (or lack thereof) through case studies in Bangladesh and Vietnam", *Stockholm Environment Institute and Regional Climate Change Adaptation Knowledge Platform*, Bangkok. One of the key findings of the research was that in project implementation, the difference between adaptation and development cooperation is mostly considered insignificant. In practice, the actions taken to achieve adaptation can hardly be distinguished from those required to achieve sustainable development. Available at: http://www.weADAPT.org or http://www.asiapacificadapt.net

³⁵ The GCCA was set up by the European Union in 2007 to support climate policy efforts in LDCs and Small Island States, see: http://www.gcca.eu/. In Cambodia, the GCCA set up a multi-donor facility to provide resource for climate change capacity building at national and local levels; it runs from 2010 until 2014 and brought together a pool of €8.35 million. In Lao PRD, the GCCA supports mainstreaming of climate change in the government's poverty eradication efforts through funding of various activities. It was launched in 2012 and will last until 2017, with a total budget foreseen of €6.2 million. In addition, a GCCA programme for Myanmar is undergoing EU approval and would likely support the country's effort to design its climate change strategy.

³⁶ For instance, the ASEAN Energy Manager Accreditation Scheme (AEMAS), running from 2010 until 2014, with the specific objective to increase the energy efficiency of industries in ASEAN through the establishment of the ASEAN Energy Management Accreditation Scheme, implemented by the ASEAN Centre for Energy in Jakarta, Indonesia.

³⁷ The Forest Law Enforcement Governance and Trade (FLEGT) initiative aims to improve sustainability and legality in the forest sector. It was launched by the EU as a REDD support facility in 2003 and the FLEGT Asia was signed in 2010 in Kuala Lumpur, following three years of negotiations with Indonesia and Malaysia. It has a budget of €7 million.

ASEAN communities, while the latter is linked to climate change directly through the UN-REDD agenda, which is a cluster in the multilateral negotiations where AMS have relatively more weight, and also indirectly linked to addressing regional pollution with the haze issue.

However, how far EU's limited cooperation and support is able to make a real impact compared with the tremendous needs remains a frustration. Moreover, these projects are not coordinated with the ASEAN institutions directly and there have also been temptations of competition over funds and projects. Although development aid for climate change has shown recurrent cooperation between the EU and UN agencies³⁸, overlapping efforts and information gaps remain numerous. Building capacity in the ASEAN secretariat to effectively manage and coordinate such pan-regional cooperation programmes can yield great benefits to increase the project's effectiveness and cost-efficiency³⁹, an increasing concern for the budget-constrained donor community.

Moreover, climate projects funded by international donors and implemented locally have not produced incentives to develop a cross-border dimension, except in already-established sub-regional organisations such as the Mekong River Basin. In other words, there has been "a general trend to consider climate change as being manageable through pollution control and disaster management policies, not as a systemic problem that requires to be faced by a unitary policy, first to be shaped at the regional, then at the global level" (Trevisan, 2013). These changes may take time, and external encouragements, notably from the EU, should persist. The "ASEAN Action Plan for a Joint Response to Climate Change" of 2011 took a first important step in giving the direction of a comprehensive approach, which was taken up at a meeting organised by the ASEAN secretariat and attended by the EU and other international partners in March 2013. But unless such an issue is addressed at the institutional level, these aspirations will be difficult to realise and the capacity of the ACCI to deliver on its mandate will remain limited.

Another shortcoming of inter-regional cooperation on climate change being carried out mainly through grassroots development projects is the difficulty to provide input and link them to the political level. To be fair, both the GCCA and SWITCH do foresee a dialogue with national policy-makers in their design. For instance, the GCCA organised a conference in 2010 in Bangladesh, to which Cambodia, Laos and Myanmar (among others) participated and which resulted in a joint political statement between the EU and a number of Asian LDCs, including Cambodia⁴⁰. The statement recognised the urgency of climate change and the threat it posed for LDCs' achievement of MDGs. It praised the role of EU-LDCs

³⁸ For instance, UNEP has been implementing several European-funded projects such as the "Network of Climate Change Focal Points" (Finland), and parts of the EU Climate Change Alliance Programme (EUCCA) in Cambodia. It will also implement the EUCCA in Myanmar (with UN-Habitat). Cooperation has been facilitated by the fact that climate change is also a focus area of the MoU signed between ASEAN and the UN in 2008.

³⁹ Francisco H.A, (2008), "Adaptation to Climate Change, Needs and Opportunities in Southeast Asia", *ASEAN Economic Bulletin*, Vol 25, No 1, pp. 7-19.

⁴⁰ See EU GCCA webpage: http://www.gcca.eu/policy-dialogue-and-experience-sharing/policy-dialogue/asiaregional-conference-may-2010. Cambodia was the only one of the three ASEAN LDCs to sign, although, according to EU sources, Myanmar and Laos subscribed in principle (private communication, June 2013).

cooperation on adaptation, in particular in relation to ensuring agricultural production and food safety, as well as risk management and resilience against natural disasters linked to climate change (flash floods and mud slides, tsunamis, droughts, and fires etc.). In addition, building capacity for fostering LDCs' participation in the multilateral negotiations was invoked as a way to work towards a consensual post-2012 legally binding agreement.

Yet, there has been little evidence of the impact of these efforts either on ASEAN climate policies or on the local perception of the EU's engagement with the region. Other attempts at stimulating dialogue at the strategic level include some events organised by the European External Action Service on climate policy⁴¹ and interactions at the biennial ASEM summits and the ARF⁴² but these may lack follow-up and the substance gained from concrete bilateral cooperation. In other words, there is potential for improvement in linking the practical and political levels, which could be enhanced through a more strategic approach.

But even so, a strategic approach to EU-ASEAN cooperation on climate change cannot afford to remain confined to the realm of adaptation and development aid. Arguably, what distinguishes the EU from other international donors is its unique experience in regional governance. Sharing this experience has always been part of EU-ASEAN inter-regional dialogue and it should take a more prominent place in the domain of climate change. This lacuna in EU-ASEAN climate change dialogue is illustrated by the fact that until now, bilateral support to ASEAN under the "mitigation label" (a typical governance issue) has had a much lower profile.

Admittedly, some cooperation projects have taken place in related fields such as energy, market-based instruments and S&T cooperation⁴³, either with the EU or individual MS. But the main instrument for EU-ASEAN dialogue at the policy-making level, namely the Regional EU-ASEAN Dialogue Instrument (READI), which was set by the EU to support ASEAN regional integration in non-trade related issues, has been clearly under-performing in the field of climate change. Despite the political will expressed in the bilateral EU-ASEAN Nuremberg Plan of Action of 2007 and the follow-up Bandar Seri Begawan Plan of Action

⁴¹ For instance, the Roundtable Meeting organized by the EEAS and DG CLIMA in Brussels on 4 June 2012, entitled "Engaging the Asia-Pacific on Climate Change". Papers and presentations are available at: http://ec.europa.eu/clima/ events/0052/index_en.htm

⁴² The ARF discussed for the first time climate change security in 2010; see the report on the follow-up event in Brussels with the Philippines Ambassador Enrique Manalo: "Results of the ASEAN Regional Forum: Security Implications of Climate Change", January 2011, http://www.eias.org/documents/EIAS_Report_ARF_Challenges_ Climate_Change.pdf

⁴³ 2012 was EU-ASEAN Year of Science, Technology and Innovation. An EU-ASEAN energy facility ran from 2002 to 2007, with a total budget of €21.5 million, which involved activities in several AMS in order to facilitate their adoption of sustainable common policies in the energy sector. In the transportation sector, the EU has been involved in the building of a sustainable ASEAN civil aviation (the ASEAN Air Transport Integration Project (AATIP) (ASEAN-EC) under the READI structure). Germany has provided support to railway development (the Energy Efficiency and Climate Change Mitigation for the Land Transport Sector (ASEAN-Germany)) as well as to the setting-up of a support platform on renewable energy under the ASEAN Centre for Energy (The project ASEAN-RESP, implemented jointly by the ASEAN Centre for Energy and GIZ, contributes to improved preconditions for the use of renewable energy in the ASEAN region, see: http://resp.aseanenergy.org/).

endorsed by the EU in 2012⁴⁴, thus far READI has not provided direct support to a ASEAN climate change initiative, besides a workshop on CDM that was organised in 2008⁴⁵. But as climate change has been singled out in the EU-ASEAN Plan of Action 2013-2017, it has gained more attention under the new multiannual cooperation programme starting in 2014⁴⁶. In this regard, the EU and ASEAN held a very first roundtable on climate change in August 2013, which agreed to meet annually back-to-back with the AWGCC. Climate change was accordingly elevated to become one of READI's nine components⁴⁷ and a work plan is under preparation under the new EU budget.

In its strategic partnership with China and India on climate change, the EU has insisted on taking an integrated approach to energy security and climate change. An EU-ASEAN cooperation that would take a similar direction holds great potential to support such integration in ASEAN climate change strategy and eventually inspire AMS to better coordinate the development of their domestic low-carbon policies. Furthermore, the EU has recently articulated its own adaptation policy⁴⁸, giving an important political signal towards breaking the traditional dichotomy of "Annex-I is Mitigation" versus "Non-Annex-I is Adaptation". This also creates room for experience-sharing with ASEAN on how both approaches can be combined so as to maximise their impact and positive synergies at a systemic level.

CONCLUSIONS: HOW CAN EU COOPERATION WITH ASEAN MASTER CLIMATE POLICIES IN A DECENTRALISED GOVERNANCE SYSTEM?

According to a Communication of the European External Action Service of January 2013, the EU and ASEAN share a common DNA, which makes them "natural partners" in global affairs⁴⁹. In climate change governance though, the picture that emerges from this research is unsurprisingly much less straightforward. But the Communication is right in that

⁴⁴ Bandar Seri Begawan Plan of Action to Strengthen the ASEAN-EU Enhanced Partnership (2013-2017), 18th ASEAN-EU Ministerial Meeting in Madrid, 26 May 2010.

⁴⁵ READI Workshop on the Clean Development Mechanism, "The EU and ASEAN: Making a Success of the Global Carbon Market", 10 July 2008, Bangkok, Thailand, which built upon the experience of several CDM facilitation projects in AMS; for instance on the production of biomass in Thailand (Achievements of this project are reviewed in Flamos A et al. (2008), "EU and Asian countries policies and programmes for the diffusion of sustainable energy technologies", *AEJ*, Vol 6, pp. 261-276).

⁴⁶ Presentation DG CLIMA at the Bonn Workshop "Policy Dialogue Resolving Deadlock in Climate Change Negotiations" under the "EU-Asia Dialogue Programme", Bonn, 25-26 April 2013. It was subsequently validated at a ASEAN-EU meeting.

⁴⁷ See the release on the webpage of the new "EU-ASEAN Dialogue Instrument": http://readi.asean.org/news/129-asean-eu-roundtable-on-climate-change-launched, accessed on 15 October 2013.

⁴⁸ European Commission, "An EU Strategy on Adaptation to Climate Change", COM(2013) 2016 final, 16 April 2013.

⁴⁹ European External Action Service, EU Delegation to ASEAN in Jakarta "EU-ASEAN: Natural Partners", 6th Edition, January 2013.

it recognises the increasing economic and political weight of Southeast Asia and its central position at the heart of the world's most dynamic region. These elements constitute many arguments to envisage ASEAN as a strategic partner for the EU on climate change alongside major regional players like China and India and overcome the challenge of internal diversity on both sides.

In a "top-down" climate governance system, the EU and ASEAN have been in a difficult position to build a common understanding on issues of principles and ASEAN's "lowest common denominator" joint positions have hardly come close to EU preferences. But this should not dismiss EU-ASEAN cooperation on climate change as irrelevant or ineffective. On the contrary, the emerging "bottom-up" dynamics of multi-level climate actions which is taking roots in both regions provides extended opportunities for them to make a joint contribution to global climate governance, through the unique channels of inter-regional dialogue and cooperation.

Admittedly, much capacity building is still required in ASEAN and there is wide recognition that most of the international effort should focus on providing solutions for immediate local challenges rather than diverting precious capacity to the multilateral negotiations. It is nevertheless also crucial to engage AMS governments on governance issues, where the EU and ASEAN, as distinct but comparable regional governance structures, can play a complementary role. Some areas of cooperation offering immediate benefits for all AMS and directly input on climate governance include enhancing joint climate science and monitoring and joint disaster prevention and alleviation mechanisms. On the other hand, unilateral climate change policies may have negative regional impacts. A major concern in this regard is the construction of dams for hydro-power generation as a major alternative green energy resource, which exacerbates the region's internal tensions over water security⁵⁰. Strengthening the regional institutions for climate diplomacy is thus crucial to supporting a sustained capacity for the region to engage in pro-active climate policies.

Furthermore, the EU can stimulate awareness in ASEAN that the coordination of climate strategies can yield benefits for the region's economic development. ASEAN countries' wish to move along the low-carbon development path opens up a new window of opportunity for cooperation and experience-sharing with the EU on climate change, beyond development assistance. In particular, anxiety about regional and global economic competition, which is a great challenge to climate actions that impose costs on industries in Europe, is certainly as much a challenge in Southeast Asia, where regional economic competition remains fierce despite the history of economic integration⁵¹. Conversely, Southeast Asian countries have a lot to gain from a well-integrated and more harmonised regional market for the diffusion of

⁵⁰ On such example is the controversial Xayaburi project in Laos. See, among others: Daniel Ten Kate, "Thai Lawsuit Threatens to Derail Laos Plans for Mekong River Dam", *Bloomberg Businessweek*, 7 August 2012; and Ame Trabdem, "Laos Evades Responsibility with Dam Construction", *The Nation* (Thailand), 8 November 2012.

⁵¹ Raymond Atje, Prativi Kartika, "A Bumpy Road Towards ASEAN Economic Community 2015", *ISEA*, 2010, pp. 125-143; Paul Vandoren, "*Regional Economic Integration in South East Asia*", 2005, *ASEAN Economic Journal*, 3, pp. 517-535.

low-carbon technologies. Engaging in candid exchanges of views on these shared concerns and building solutions to alleviate them should become a priority in the inter-regional dialogue. In particular, concrete discussions on the operationalization of the Green Climate Fund (GEF) and the Adaptation Fund at the regional level would provide more political certainty and contribute to building mutual trust, as well as confidence among ASEAN countries that they can go ahead with enhanced mitigation actions. Ultimately, the success of ASEAN's low-carbon policies can only but legitimise EU's cooperative efforts on climate change and serve as a supplementary motivation to follow a green economy development path.

Finally, ASEAN's emerging climate governance also links up to global climate governance by promoting the contribution of Southeast Asia to effective multilateralism. Looking ahead, building on the consultative institutions in place, such as the network of climate focal points, and on past experiences in other areas, such as the "scorecard" mechanism in the AEC, ASEAN governments could develop more systematic and institutionalised discussions of their climate actions at a political level. Such a process could for instance be coordinated with the biennial periodic review of the national communications (BURs) of the UNFCCC. In other words, without going as far as building a supranational compliance mechanism, improvements to the "ASEAN way" could be made in order to reap the benefits of coordination and avoid individual low-carbon policies becoming a trade irritant instead of an incentive for collective action. It would also make an important contribution to global climate governance by embarking ASEAN on more sophisticated reporting, as well as making the necessary access to climate finance from public sources, but even more from private sources, more effective. In this regard, climate change provides an opportunity to train AMS in diffuse reciprocity and integrative bargaining, which constitute precious skills for the multilateral level (Ruggie, 1992; Gupta, 2012).

Moving away from the "hedging utility" model of ASEAN's traditional interaction with multilateral institutions (Rüland, 2011), it can provide new models for climate governance at the global level and help preserve the region's interest for multilateralism from diversion to other fora like the G20 or the Major Economies Forum, where most AMS are not represented. Such an achievement would give flesh to the aspired "common DNA" of the EU and ASEAN as two regional entities engaged in the sustainable development of their societies in the 21st century.

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UNFCCC website: http://unfccc.int/2860.php

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Country Information	GHG emissions*	World share %*	Unconditional Pledge	Conditional pledge	Some unilateral mitigation actions besides the pledges (not exhaustive)
Annex I Major GHG	6 Emitters				
EU-27 (G20; MEF) Annex I	4999	10	Reduce emissions by 20% below 1990 level by 2020	Reduce emissions by 30% below 1990 level by 2020	
United States of America (G20; MEF) Umbrella Group Anne I	6715	13	No unconditional pledge, BaU emissions growth assumed	Reduce emissions by 17% below 2005 level by 2020	
Japan (G20; MEF) Annex I ASEAN+3	1379	2.8	No unconditional pledge, BaU emissions growth assumed	Reduce emissions by 25% below 1990 level by 2020	
Major Asian non-Ai	nnex I Developini	g Economies			
China (G20; MEF) Non-Annex I BASIC "Like-Minded Countries" Group ASEAN+3	11182	22	Lower CO2 emissions per unit of GDP by 40-45% by 2020 compared to the 2005 level; increase share of non- fossil fuels in primary energy consumption to around 15% by 2020; increase forest coverage by 40 million hectares and forest stock volume by 1.3 billion cubic meters by 2020 from 2005 levels		

Annex: Selected Information on Mitigation Actions by ASEAN Countries and Cancun Pledges of Major GHG emitters under the UNFCCC*

Country Information	GHG emissions*	World share %*	Unconditional Pledge	Conditional pledge	Some unilateral mitigation actions besides the pledges (not exhaustive)
Korea (South) Non-Annex I (G20; MEF) ASEAN+3	647	1.3	Reduce emissions by 4% net cut from 2005 levels by 2020, corresponding to a 30% reduction below BaU		
India (G20; MEF) Non-Annex I BASIC "Like-Minded Countries" Group	2692	5.4	Reduce emissions intensity of GDP by 20 to 25% by 2020 in comparison to the 2005 level		
ASEAN Countries					
ASEAN-10	3858 (aggregate)	7.71 (aggregate)			Aspirational goal of reducing regional energy intensity of at least 8% by 2015 based on 2005 level Aspirational goal to achieve a collective target of 15% for regional renewable energy in the total power installed capacity by 2015
Indonesia Non-Annex I (G20; MEF) Cartagena Dialogue	1946	9.5	Reduce emissions by 26% on BaU by 2020	Reduce emissions by 41% on BaU by 2020 (government announcement, not an official pledge)	Vision 25/25: attain 25% of renewables in the energy mix by 2025
Singapore Non-Annex I (Attended MEF) AOSIS	50	0.10	None, assumed to follow BaU trajectory	Reduce emissions by 16% below BaU by 2020	the objective to reduce the energy intensity of its GDP by 20% by 2020 and 35% by 2030 laid down in the 2009 Sustainable Blueprint

Country Information	GHG emissions*	World share %*	Unconditional Pledge	Conditional pledge	Some unilateral mitigation actions besides the pledges (not exhaustive)
Malaysia Non-Annex I "Like-Minded Countries" Group	330	0.66			Aspirational goal to reduce its carbon footprint by 40% (in terms of energy intensity of GDP) by 2020 compared to 2005 levels
Philippines Non-Annex I "Like-Minded Countries" Group	159	0.32			Deviate by 20% from BAU of their emission growth path; 10% reduction in energy demand by the commercial, residential, industrial, transport and agriculture sectors by 2030; double the country's renewable energy capacity from a 2008 base-line (2009- 2030 Energy Plan of 2008);
Thailand Non-Annex I Non-Annex I "Like-Minded Countries" Group (apparently no longer as of March 2013) Cartagena Dialogue	413	0.82			Increase in renewable energy's share to 19.1% by 2016 and 20.3% by 2022; reduction of energy intensity per country's GDP by 25% in the year 2030 compared with the based year in 2005. A short term and mid-term target has been set as a reduction of energy intensity for 8% and 15% in year 2015 and 2020 respectively
Vietnam Non-Annex I	306	0.61			Reduce the intensity of greenhouse gas emissions by 8-10% as compared to 2010 base by 2020; in the energy sector by 10% - 20% compared to BAU (10% voluntarily and 20% conditional of International Support) Increasing the share of energy produced from renewables to 5% in 2020, 8% by 2025 and 11% by 2050

Country Information	GHG emissions*	World share %*	Unconditional Pledge	Conditional pledge	Some unilateral mitigation actions besides the pledges (not exhaustive)
Brunei Darussalam Non-Annex I		(Below 0.1)			Reduce energy intensity by 45% by 2035; 10% renewable energy in the total energy mix
Cambodia Non-Annex I LDC	192	0.38	Some actions on forestry		To achieve 100% Electrification of Rural Villages by the year 2020 and 70% household electrification with grid- quality electricity by 2030
Lao PDR Non-Annex I LDC	100	0.20			In the long run (beyond 2020): Promote new, economically viable, renewable energy technologies and encourage full competition based on equality Promote Lao PDR to become a regional bio-fuel exporter
Myanmar Non-Annex I LDC	362	0.72			Encourage share of RE to at least 15% of the total power generation mix Promote RE projects and sharing of experience
*Information collecter and official presentatii (http://resp.aseanene	d by May 2013 froi ons on ASEAN cou ergy.org).	m various source Intries' energy po	is, including the countries' Natio blicy made available on the ASE,	onal Communications t AN-RESP – Renewable	o the UNFCCC secretariat, UNEP "gap report" Energy Support Programme for ASEAN

Bilateral Climate Change Initiatives between European and Asian Countries and their Contribution to Climate Mitigation Negotiations

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EXECUTIVE SUMMARY

Climate-related aid through bilateral cooperation accounts for the majority of climate support from developed to developing countries and the aid given from Europe to Asia is a substantial part of that. According to the OECD², the EU and its member countries contributed just over half of the world total of \$23 billion given in bilateral climate aid in 2010, and about half the total funding went to Asia. This support is clearly a crucial part of the global climate change effort.

Climate support has been growing rapidly and is set to increase by a further order of magnitude as donors move to comply with their Copenhagen commitment to mobilize \$100 billion per annum of climate support by 2020. However, now that the UNFCCC has set up its Green Climate Fund, how large a share bilateral aid will occupy in this increase is an open question.

This paper draws on examples of bilateral climate cooperation programmes between the EU and its member countries and countries in Asia. It offers some discussion points on their effectiveness and possible areas for improvement.

The EU's bilateral climate support for Asia is highly diverse both as regards the nature and scale of cooperation programmes and the sectors and technologies involved. Many of the projects that have been undertaken are impressive. It is difficult to generalise, but there is no reason to doubt that this support is making a highly valuable contribution to climate mitigation and adaptation around the world.

It is also reasonable to assume that bilateral support programmes have contributed to relations between experts, senior officials, and Ministers of the countries involved and that this

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² OECD DAC Statistics on Climate Related Aid, June 2012.

has been helpful in climate change negotiations. This may help the EU in its efforts to build alliances with developing countries. To the extent that these programmes have opened up low -carbon growth options for developing countries, they may have made them more willing to set climate targets. However, there is no direct evidence that the programmes have changed the negotiating positions of developed or developing countries in climate negotiations.

Apart from the above-mentioned programmes, there may also have been commercial benefits – a topic that is, however, not explored in any depth in this paper.

Most of the criticisms of these bilateral programmes focus on their (for the most part) rather ad hoc nature and the lack of any agreed international framework for reporting, coordination, and accountability. One could argue that the flexibility of these programmes is a virtue in that donor countries are able to respond to identified needs and opportunities in a flexible way without too much administrative baggage. However, as these programmes grow, and as they play an increasingly significant role in the low-carbon transformation of developing countries and in the equation of climate negotiations, a stronger framework is required.

The first need is for an internationally accepted system for measuring and recording bilateral climate assistance. At the moment, both the necessary definitions and the organisation are lacking. The EU has stated that "a comprehensive and globally coherent set of statistics is clearly needed"³ and the Brookings Institution, in a recent report, has called for a "climate information facility"⁴.

The second need is to try to make bilateral climate aid programmes more coherent with and better integrated into multilateral initiatives. Programmes might increasingly support the development and implementation of Nationally Appropriate Mitigation Actions (NAMAs) and coordinate with the new Technology Mechanism of the UNFCCC. Improved reporting is needed to make the bilateral element of the promised Copenhagen aid properly accountable. Bilateral aid programmes can also link better with the agreed principles of aid effectiveness set out in the Paris Declaration of 2005 – with its emphasis on harmonisation with development strategies, support for local institutions, predictability, transparency, accountability, and measurement of results. The efforts of the Brookings Institution to develop a system for measuring performance against these and other specifically climate-related criteria is welcome.

Making progress in these two areas is not going to be easy and, indeed, there may be a risk of reducing the flexibility that is a virtue of the current system. It seems, however, essential to make progress if increasing levels of bilateral climate support are to be *measurable*, *reportable*, and *verifiable*, and thus to "count" fully in the equation of climate-change negotiations. The alternative might be to devote a larger share of support to dedicated multilateral climate vehicles such as the Green Climate Fund.

³ Council of the European Union. EU Fast Start Financial Report. Brussels, 6 November 2012.

⁴ Brookings Institution and Center for Global Development; First Steps Toward a Quality of Climate Finance Scorecard, June 2013.

INTRODUCTION

Efforts to achieve a multilateral agreement on climate mitigation and adaptation continue through the UNFCCC and are now centred on the Durban agreement to adopt a universal legal agreement on climate change as soon as possible, but not later than 2015. The contribution that developed countries will make to climate mitigation and adaptation in developing countries is an essential element in the equation of climate negotiations. Today, a large part of this contribution, according to the OECD, some \$23 billion in 2010, is channelled through bilateral cooperation schemes (see statistics Annex). Climate aid is due to increase by an order of magnitude in the next few years, as governments move to comply with the Copenhagen commitment of developed countries to mobilise an annual amount of \$100 billion by 2020 (see Box below).

Funding Commitment in the Copenhagen Accord

Scaled up, new and additional, predictable and adequate funding as well as improved access shall be provided to developing countries, in accordance with the relevant provisions of the Convention, to enable and support enhanced action on mitigation. The funding shall include substantial finance to reduce emissions from deforestation and forest degradation (REDD-plus), adaptation, technology development and transfer and capacity-building for enhanced implementation of the Convention.

The collective commitment by developed countries is to provide new and additional resources, including forestry and investments through international institutions, approaching USD 30 billion for the period 2010–2012 with balanced allocation between adaptation and mitigation.

Funding for adaptation will be prioritized for the most vulnerable developing countries, such as the least developed countries, Small Island Developing States and Africa. In the context of meaningful mitigation actions and transparency on implementation, developed countries commit to a goal of mobilizing jointly USD 100 billion a year by 2020 to address the needs of developing countries. This funding will come from a wide variety of sources, public and private, bilateral and multilateral, including alternative sources of finance. New multilateral funding for adaptation will be delivered through effective and efficient fund arrangements, with a governance structure providing for equal representation of developed and developing countries. A significant portion of such funding should flow through the Copenhagen Green Climate Fund.

This paper concentrates on bilateral initiatives between European and Asian countries. It offers preliminary comments on how effective these countries have been in meeting their objectives and on their role in the wider mitigation and adaptation efforts, including the UNFCCC negotiations. The paper does not claim to make a comprehensive analysis of existing bilateral programmes, which are many and diverse. However examples are given of some existing schemes and their respective critiques.

EFFECTIVENESS IN DELIVERING CLIMATE BENEFITS

Bilateral cooperation on climate mitigation and adaptation has some important advantages in delivering effective support for developing nations. If the purpose of climate cooperation is to pool experience and expertise in developed and developing countries, bilateral cooperation programmes provide the most flexible and direct means to achieve this purpose. For instance, the Brussels Institute for Contemporary Studies reported that "China has welcomed the EU's cooperation initiatives and has paid attention to Europe's past experience with clean energy policies." Flexibility is especially important, bearing in mind the exceptional diversity of climate-related projects. Bilateral cooperation avoids the administrative complexity and the burden of politics involved in creating and working through multilateral structures and, arguably, offers the most straightforward way of bringing the right experts on specialist topics in developed and developing nations together.

It is difficult to generalise about the effectiveness of bilateral climate cooperation. The programmes and projects, of which examples are given below, are highly diverse. Projects range from policy discussions between experts, capacity buildings and training, joint R&D, to cooperation to complete major energy installations. The sectors these projects are undertaken in are also diverse. They include buildings, transportation, conventional and renewable generation, industry, energy efficiency, rural energy and water management. The published evidence dealing with the effectiveness of these programmes is fairly limited. An EU publication released in 2012⁵ gives short reports on 25 projects undertaken as part of the EU-India cooperation on climate change and describes the results/impacts of each project. In some cases the expected or actual results are quite specific. For instance, a new PV plant saves 155,000 tonnes of CO, per annum. However, in most cases the end result is much less specific, for example, "support policy development and implementation through capacity building and best practice exchange". Such projects may, of course, be at least as valuable, but the results may be more difficult to pin down. There is no reference in this EU document to any independent evaluation of results. However, a February 2011 report by Germanwatch⁶ on German climate financing says that the GTZ undertakes independent evaluation reports and that judged on relevance, effectiveness, impact and sustainability, 67% of energy projects performed well or very well.

Several commentators mention a lack of coordination of projects. This issue was raised in studies by the UK's Parliamentary Committee⁷ and by Germanwatch, which criticised the lack of coordination of UK and German programmes respectively. The Brussels Institute for Contemporary Chinese Studies reported that "Chinese officials have also pointed to a lack of coordination between the Commission and member states on their aid programmes"⁸.

⁵ Working with India to Tackle Climate Change, European Union, 2012.

⁶ German Climate Finance Put to the Test, Katrin Enting and Sven Harmeling. Germanwatch. February 2011.

⁷ House of Commons Energy and Climate Change Committee, Report on Low Carbon Growth Links with China, July 2012.

⁸ Climate for Cooperation: the EU, China and Climate Change. Brussels Institute for Contemporary Chinese Studies.

However, for relatively small and diverse programmes it is arguable that flexibility and responsiveness are more important than top-down coordination.

The literature yields other anecdotal criticism of some projects and programmes. For instance, although the UK's Parliamentary Committee was generally positively impressed with the UK's bilateral projects with China, during their visit to China they heard some comments that the UK was "all talk and no action" and that "the need to deliver applied both to the successful completion of engagement work in China and to the effective implementation of UK domestic climate change mitigation commitments"⁹. An Oxford University Masters dissertation on EU cooperation¹⁰ with India quotes an Indian participant as saying: "The Energy Panel Meetings have been useless. They are only discussing well-known issues and pleasantries. A radically new mechanism for technology transfer is needed" (Boldt and Das 2008) – perhaps a warning against too much administrative super-structure.

There are also criticisms of the scope and balance of some of the programmes. The dissertation argues that because security of energy supply is an issue of high priority with the Indian government there has been too much emphasis on traditional power generation and not enough on renewable energy or other environmental topics. Nevertheless, the study recognises the value of focusing on areas of mutual benefit.

An interesting comment on the role of bilateral funding comes from the German Institute for Economic Research: "Bilateral cooperation offers the flexibility to tailor a grant to specific needs of a sector or country and might, therefore, be the preferred option to facilitate transition strategies. Only where incremental costs are more clearly defined e.g. with technical demonstration projects, are multilateral organisations more able to use standardised methodologies to offer grant support"¹¹.

A study by the Brookings Institution¹² draws mainly on the criteria in the Paris Declaration on Aid Effectiveness (2005) and the subsequent Accra Agenda (2008) to outline a framework for benchmarking the quality of climate finance. The criteria in the Declaration include alignment with recipient countries' national strategies and priorities, simplified procedures building the capacity of national institutions, predictability from year to year, transparency and accountability, elimination of duplication, and monitoring and evaluation of outcomes against specific targets. The Brookings study proposes adding a number of indicators specific to climate objectives. These include scale of commitment, degree of leveraging of other funds, cost effectiveness in terms of emissions reduction per dollar or capacity building/transformation, focus on the countries with the highest mitigation potential and, for adaptation, on the most vulnerable. The Brookings Institution recognises that much of the data needed for this benchmarking is absent and they conclude that "[i]t is clear that

⁹ Ibid. House of Commons Energy and Climate Change Committee Report.

¹⁰ Climate Change Cooperation Across the North South Divide – The case of EU and India, University of Oxford School of Interdisciplinary Area Studies.

¹¹ Discussion Paper. Structuring International Financial Support for Climate Change Mitigation in Developing Countries. German Institute for Economic Research. Berlin, 2010.

¹² Ibid. First Steps Toward A Quality of Climate Finance Scorecard.

more robust reporting standards are needed, and a climate information facility of some sort is sorely needed". They acknowledge the experience of the OECD and the World Bank in this area but suggest that an independent group should lead or contribute to the work which, they say, could ideally be done under the authority and supervision of the UNFCCC.

EFFECTIVENESS IN INFLUENCING CLIMATE POLICIES OF DEVELOPING COUNTRIES

It is very difficult to judge to what extent the existence of bilateral cooperation initiatives has influenced the climate policies of Asian developing countries. It certainly cannot be claimed that these countries have aligned their policies with those of the EU. On the other hand, there has been some convergence of the policies of Asian developing countries with those of the EU as is reflected in the voluntary mitigation targets that all major players set for themselves at the Copenhagen COP and the agreement on the Durban Platform (the latter is particularly difficult for India, which had originally resisted all legally binding targets for developing countries). It is certainly possible that the building of relations between Ministers and senior officials of the EU and Asian developing countries through bilateral climate programmes may have contributed to the dialogue on climate policy. However, regarding the numerous cooperation agreements relating to these programmes, none of them embodies any specific shift in the climate policy of either country. A Joint Declaration on Climate Change between the EU and China in 2006 to "strengthen dialogue on climate change policies and exchange views on key issues in climate change negotiations"¹³ is fairly typical.

It is likely that many programmes in which European and Asian experts have compared experiences and knowledge on climate-related issues will have contributed to the policy making in specific areas. Amongst the most prominent programmes is the new Chinese pilot carbon trading programme, which may be at least partly attributable to what China has learnt (both positive and negative) from the European experience. It may have influenced policies in climate negotiations, at least to the extent that bilateral cooperation and resulting policies have made Asian countries more confident of their ability to implement climate policies. These policies can be consistent with other energy policies and growth objectives that may also have influenced policies in climate negotiation.

Can bilateral climate cooperation help the EU to forge alliances with key climate change players? As far as relations with Asia are concerned, the EU policy of "strategic partnership" with China and India might point in this direction. At the Copenhagen climate summit of 2009 the EU found itself marginalised in an agreement forged mainly by the US and China. However, at Durban in 2011 the EU was successful in building alliances, mainly with African and less-developed states, which enabled the Union to have a leading influence on the outcome of the conference. Bringing China and especially India on board for the resulting Durban platform was a major achievement of European diplomacy and it is possible, although there is no clear evidence, that relations forged through bilateral climate cooperation

¹³ China-EU Partnership on Climate Change Rolling Work Plan, Beijing, October 2006.

may have helped to achieve this. China is acutely aware of the environmental challenges that it faces and is embedding demanding targets for energy efficiency and low-carbon energy in its national plans. Some experts now regard China as a natural ally of Europe in pressing for a strong international regime. Pursuing bilateral energy cooperation with China and India might contribute to forging a positive alliance with China and to managing India's reluctance to accept climate change targets for developing countries.

ACCOUNTABILITY AND THE UNFCCC

The building of trust between developed and developing nations is critical for the success of the UNFCCC process. In general, one would expect that the delivery of worthwhile programmes of climate cooperation contribute to energy policy objectives in developing countries and to mutual trust. However, in the context of the UNFCCC negotiations and the pressure for climate measures to be "Measurable, Reportable, Verifiable"¹⁴, the lack of an agreed framework for measuring the funds that should count against pledges of climate support represents a potentially serious problem.

This problem is not new. In fact, in the Bonn Declaration of 2001 the EU and five other developed nations pledged \$410 million per annum until 2008 to help developing countries to tackle climate change. But no adequate mechanism was put in place for reporting these payments. In a report published by the BBC in November 2009¹⁵ the EU's climate change negotiator was reported as saying that the pledge was delivered through bilateral and multilateral channels but admitted that the EU could not provide the data to demonstrate this. UN Secretary-General Ban Ki-moon was quoted as saying, "There have been promises which have not been fully materialised. There is an issue of trust"¹⁶. The fact that very little of the money was paid through UN funds earmarked for the purpose was also a source of controversy.

The EU has reported to the UNFCC on its delivery of its share of "Fast Start", namely \$30 billion pledged for 2010-12 in the Copenhagen Accord¹⁷. However, the report has been criticised¹⁸ on the grounds of (i) limited transparency, (ii) inclusion of loans as well as grants, (iii) absence of any baseline for additionality (which was part of the pledge), (iv) the fact that only 3% of the payments went through UN funds, and (v) no evidence of priority of adaptation funds for the least-developed countries (also in the pledge). While these criticisms do not demonstrate that the EU has not met its pledge, they do highlight the lack of clear agreed

¹⁴ Measurable, Reportable, Verifiable Mitigation Actions and Support. A Summary of OECD/IEA Analyses for COP 15. International Energy Agency.

¹⁵ "Action on 2001 climate change financial pledges falling way short, reveals BBC World Service investigation". BBC World Service, 2009.

¹⁶ Ibid. BBC World Service.

¹⁷ Council of the European Union. EU Fast Start Financial Report. Brussels, 6 November 2012.

¹⁸ International Institute for Environment and Development (IIED) briefing, "The Eight Unmet Promises of Fast Start Climate Finance".

measurement criteria. Consequently, the EU's 2012 report recognises, "a comprehensive and globally coherent set of statistics is clearly needed"¹⁹.

Agreeing on necessary rules for statistics at the UNFCCC would be a complex and, no doubt, politically contentious process. The EU suggests that this process should "build on experiences with existing reporting systems such as the OECD-DAC system for monitoring financial flows to developing countries and avoid developing competing reporting systems"²⁰. This seems to be the most practical approach.

COHERENCE AND INTEGRATION INTO THE UNFCCC PROCESSES

Another major problem with bilateral aid, which is linked to the question of accountability, is the lack of integration with UNFCCC mechanisms. In recent years, the UNFCCC has been developing a number of mechanisms and institutions to frame the contributions of developed countries for mitigation and adaptation in developing countries, including the Green Climate Fund, Nationally Appropriate Mitigation Actions, and the Technology Mechanism. These contributions are seen as an essential part of the equation in which developing countries are to commit themselves to mitigation measures and targets. So far, there has been very little linkage of the support given through bilateral mechanisms with these UNFCCC institutions. Reporting through National Statements has been patchy at best and, as described above, the reporting of the performance of the \$30 billion Fast Start Copenhagen pledge lacks the rigour of a clear accounting framework.

If too large a share of the developed countries' support is in the form of bilateral cooperation outside any formal international framework, they leave themselves open to the suspicion that they may be serving their own interests (including commercial interests) and prejudices more than the true interests and national strategies of developing countries. Other criticisms may be that the reported support may not be truly additional or may not be mainly or entirely for climate purposes. On the whole, from examination of current programmes, such suspicion does not appear justified. But, there is an important question of trust. One aim of UNFCCC institutions is to achieve a sharing of control between developed and developing countries whereas in bilateral cooperation, especially where the developing country is not a major international player, there is a reasonable concern that the developed country, as paymaster, will be dominant.

An IEA/OECD paper published in 2009 suggests a framework for linking developed country climate support with the "Nationally Appropriate Mitigation Actions" of developing countries proposed under the UNFCCC²¹. The suggested goals for such a system is "to ensure the GHG performance of NAMAs; to identify support needs; to target support to NAMAs in a cost-effective manner, to steer financial and other forms of support to where it is needed

¹⁹ Ibid. Council of the European Union.

²⁰ Ibid. Council of the European Union.

²¹ Linking Mitigation Actions in Developing Countries with Mitigation Support: A Conceptual Framework. OED/ IEA, March 2009.

most from an environmental and economic perspective over time; to strengthen domestic capacity and enabling environments for low-carbon investments; and to ensure procedural efficiency and equity in the provision of support". This set of objectives is demanding but an increasing linkage between bilateral support and NAMAs seems like a worthwhile aim.

A paper by the German Institute for Economic Research²², published in 2010, discusses the role of bilateral and multilateral mechanisms for climate change mitigation in developing countries. The paper concludes that "bilateral co-operation offers the flexibility to tailor a grant to the specific needs of a sector or country, and might therefore be the preferred option to facilitate transition strategies. Only where incremental costs are clearly defined, e.g. with technology demonstration projects, are multilateral organizations more able to use standardised methodologies to offer grant support. Multilateral organizations offer a stronger track record in the provision and management of loans and project finance, e.g. for infrastructure development." Besides, "it will be essential to anchor the different support frameworks in an overarching framework, preferably a UNFCCC umbrella, to create synergies of international co-operation, rather than risk fragmentation of efforts".

EXAMPLES OF BILATERAL CLIMATE COOPERATION PROGRAMMES BETWEEN EUROPE AND ASIA AND CRITICAL ANALYSIS

EU Bilateral Climate Change with India

The EU-India Strategic Partnership was created in 2004. Its Joint Action Plan established an EU-India initiative on Clean Development and Climate Change. An EU-India Joint Working Group on Environment meets regularly to discuss a range of issues, including climate change. In 2008, a Joint Work Programme for EU India Cooperation on Energy, Clean Development and Climate Change was agreed upon. In 2012, the two governments agreed on a Joint Declaration for Enhanced Cooperation on Energy²³.

The Joint Work Programme reiterates the commitment of the partners to "urgently address climate change", "in accordance with the principle of common but differentiated responsibilities" and it recognises that this commitment "must go hand in hand...with improving the conditions of the poorest sections of the population". The programme states that "in the context of the ongoing negotiations for a post 2012 regime, the EU and India reiterate their determination to reach by 2009 an ambitious and agreed outcome". It focuses on a commitment to "work together to improve energy security, safety, sustainability, access, and energy technologies". Further, it welcomes an agreement of the Energy Panel to "extend dialogue to include...coordination of positions in international organisations and initiatives

²² Ibid. Discussion Paper. Structuring International Financial Support for Climate Change Mitigation in Developing Countries. German Institute for Economic Research. Berlin, 2010.

²³ Working with India to Tackle Climate Change, European Union, 2012.

on energy^{"24}. Obviously, there was an intention that this bilateral cooperation should include, to some degree, cooperation on international negotiations, including UNFCCC climate negotiations.

The foreword by the EU's Ambassador to India of the book *Working with India to Tackle Climate Change*²⁵, published by the EU in 2012, states that "our overall objective is to support India's efforts towards sustainable growth and to build mutual understanding on global environmental issues including climate change". Interestingly, there is no reference to the objective of creating business opportunities. According to the report, the total public funding by the EU and its Member States for ongoing operations in India is "more than \in 3.1 billion". It appears that this includes finance in the form of loans from public sector institutions as well as grants.

The main areas for cooperation are given in Figure 1 below.



Figure 1: Main sectors of intervention in sustainable development in India (European Union Budget) (as a % of funds committed)

Source: Delegation of the European Union to India, 2009

The 25 examples given in this EU publication range from fairly modest capacity-building projects (for instance developing the expertise of 3,000 professionals and 200 technologists at a cost of & 830,005 mainly in the form of a grant from the Commission) to major energy construction projects (for instance, the building of a 125 MW solar pv power plant with a & 250 million loan from KFW, the German government's development bank). A number of projects are aimed at improving the living standard of the poor or reducing local pollution. For instance, a & 10 million project funded by the UK will, amongst other things, deliver improved cook stoves to 100,000 households. Another project, funded by the Swedish

²⁴ Joint Work Programme for EU-India Cooperation on Energy, Clean Development, and Climate Change, announced at the EU-India Summit of 2008.

²⁵ Working with India to Tackle Climate Change, European Union, 2012.

Development Agency, will develop sustainable sanitation solutions in flooded areas. There are also projects to help India to deliver some of its ambitious energy policies, for instance, the PAT scheme to improve industrial energy efficiency, and to promote small businesses, for example by establishing a model eco-friendly textile park. In addition, there are adaptation projects, for instance, for minimizing the risks of vulnerable coastal communities.

The Commission's document also mentions the "results/impact" of each project. Most of these are expressed in qualitative terms giving actual or intended outcomes, such as "enhanced capacity of the Indian authorities", "delivered training modules", "new best-practice standards", "draft State Action Plan" or production of "purified bio gas". For a few projects the actual or intended CO₂ savings are listed, i.e., a solar PV plant saves 155,000 tonnes of CO_2 p.a. and a pump storage plant 1.38 million tonnes of CO_2 p.a.. However, the document does not suggest that there has been any comprehensive retrospective review of effectiveness.

An Oxford University Masters dissertation²⁶ aimed to assess the experience with the EU's climate change cooperation with India as an example of North-South cooperation. The study argues that energy security has been intrinsically linked with climate change in the case of EU-India negotiations.

According to the paper, one of the causes of insistence on "additionality" is the "deep mistrust" at the heart of the North-South divide. The reasons for this mistrust can be traced back to colonial times. Developing countries, particularly India, have been strong defenders of the principle of sovereignty and have insisted on fair treaties which clearly state the responsibilities of developed countries as well as mechanisms to trace commitments.

The dissertation states that India has continuously reminded the international community that pledges made at the Earth Summit in 1992 on technology transfer and additional finances for mitigation and adaptation measures have not been implemented²⁷. At the sixth Session of the UNFCCC Conference of the Parties in 2001, the EU 15 plus Canada, Iceland, New Zealand, Norway and Switzerland pledged to contribute \$ 410 million per year by 2005 to the cause of climate change adaptation and mitigation²⁸. These payments were to be "new and additional" (Muller 2009)²⁹. However, only an estimated \$ 260 million was received (BBC 2009). Pallemaerts and Armstrong (2009) find that "it is very surprising that there is not a single official document issued by the EU with reliable and verifiable information on the total level of finances proposed to developing countries for climate change mitigation and adaptation...This lack of transparency is clearly inconsistent with the EU's claim to global leadership in the climate change process". Ban Ki-Moon was quoted stating that "there have been promises which have not been fully materialised". At the Copenhagen conference in

²⁶ Ibid. Climate Change Cooperation across the North-South Divide.

²⁷ Korppoo et al., "India" section, in *Towards a New Climate Change Regime? Finnish Institute of International Affairs Report* No 19, 2009, pp. 47-65.

²⁸ Financial support to developing countries for climate change mitigation and adaptation: Is the EU meeting its commitments? Marc Pallemaerts, Jonathan Armstrong, November 2009. Institute for European Environmental Policy.

²⁹ Copenhagen 2009: Failure or final wake-up call for our leaders? B Müller, 2010. Oxford Institute for Energy Studies.

2009, the issues that led to impasse included "mitigation commitments, financing, measurement, reporting and verification".

However, according to the Oxford study, the cooperation has only selectively addressed issues related to climate change. Instead, emphasis has been on traditional power generation and energy-related issues while other climate change-related issues have been neglected. Activities on traditional energy sources such as fossil fuels have regularly been expanded and the EU lists "the development of clean coal technologies [and] increasing energy efficiency and saving" among its priorities for cooperation with India³⁰ with lesser mention of renewables such as solar. The dissertation says that discussions have focused on strategies that enhance energy security and neglected other areas such as biodiversity loss and renewable energies. This may have been the case during the early stages of cooperation with India, but this bias cannot be recognised among the projects listed in *Working with India to Tackle Climate Change*. Nevertheless the dissertation concludes that "cooperation in areas of mutual benefit and policy interdependence is a positive development".

Some Indians were, however, reported to be critical of the cooperation. Not only do they see the Energy Panel Meetings as useless, but the dissertation quotes an Indian government official, who claims that the EU has "no comparative advantage" and "cannot deliver operational activities". According to the official, it was "very difficult to cooperate with the EC on activities yielding tangible results". Yet, cooperation between the EU and India is acknowledged to have direct benefits, such as knowledge transfer through exchange, and to have resulted in direct positive outcomes, particularly in confidence building and trust.

EU Bilateral Climate Change Cooperation with China

The EU and China have been cooperating on energy since at least 1996³¹. In 2003, a vice-Ministerial-level Environment Dialogue was started, including a five year programme with a jointly financed budget of €45 million. The EU and China launched their Partnership on Climate Change at a bilateral summit in 2005. Endorsing the objectives of the UNFCCC and the Kyoto Protocol, this partnership particularly aims at strengthening the dialogue on climate change policies and exploring practical cooperation. The partnership deals with five main topics: clean coal, methane recovery, Carbon Capture and Storage (CCS), hydrogen and fuel cells, and power generation. Its main priority until 2020 is to develop and demonstrate advanced near-zero emission coal technology through carbon storage and to reduce the cost of such technologies. The Commission has indicated that it will invest €50 million for the construction and operation of a demonstration plant. In 2007, the European Investment Bank extended a €500 million loan to China to support the partnership. The Commission's Framework Programmes for Research and Technology Development have also contributed €12 million for joint climate change and clean energy projects with Chinese institutions. The total funding committed by the EU for cooperation with China on climate change and clean

³⁰ European Commission. DG Energy 2010. "External Dimension-Bilateral Cooperation-India".

³¹ Ibid. Climate for Cooperation: the EU, China and Climate Change. Brussels Institute for Contemporary Chinese Studies.

energy (including the EIB loan) sums up to €633 million. According to the OECD-DAC Database³² and Member States' governments, the individual EU member states have contributed €238 million to cooperation with the Chinese energy sector between 2000 and 2007.

A study carried out by the Brussels Institute for Contemporary Chinese Studies throws some light on the impact of the EU's bilateral climate change initiatives with China³³. The report recognises that China and the EU have highlighted clean energy cooperation as a key pillar of their partnership, and adopted a number of mechanisms to cooperate on climate change and that various EU Members States have their own initiatives. These mechanisms have created a substantial basis of cooperation on climate change, focusing on a number of key issues such as CCS. However, "despite the many cooperative projects that exist between the EU and China, it is not clear that their effect has been as great as desired by either side". The report makes a number of remarks that give the impression of being fairly sceptical about the impact of this programme at the time when the report was written in 2009:

- While both China and the EU consider climate change a serious problem there has been no convergence of their policies on climate change negotiations
- The commercial gains from providing aid to China have "remained limited". Many companies continue to complain that Chinese policies remain protectionist. There are also concerns about the violation of property rights
- The Chinese government is spending more than twice as much as the EU on clean energy research and development and China has great difficulty in regarding Europe as a champion in the combat against climate change
- The means China has adopted to address climate change derive very much from domestic circumstances. The state still plays a central role in the Chinese economy and there has been a strong emphasis on state direction through administrative targets
- As of 2009, China had not chosen to apply the same measures as Europe, namely the implementation of emission trading schemes (although, currently, China's attitude towards the implementation of such measures seems to be changing)
- Chinese officials have pointed to a lack of coordination between the Commission and Member States regarding their aid programmes
- Beijing can be dismissive of the EU's lack of political courage in not accepting tougher greenhouse gas emission targets

The report notes that "China has welcomed the EU's cooperation initiatives and has paid attention to Europe's past experience with clean energy policies, but that does not yet mean that the EU has successfully influenced Beijing's policy making". The report calls for better coordination between the EU and its Member States. It claims that the EU must protect its commercial interests and that it needs to improve its recognition of the internal domestic

³² OECD DAC Statistics on Climate Related Aid, June 2012.

³³ Ibid. Climate for Cooperation etc.
policy process in China and "harness it to international goals". Besides, it calls for a scaling up of existing projects.

UK Bilateral Climate Change Cooperation with China

The UK is committed to working with China to tackle climate change. Government cooperation on low-carbon activities has strengthened over the last few years. The UK government continues to discuss low-carbon policy options and objectives for international negotiations with China's leaders and actively shares UK's experience on how to accelerate the transition to a low-carbon economy³⁴.

The high-level framework for this cooperation is the 2006 "China-UK Working Group on Climate Change" and the 2008 joint "Declaration on Climate Change". Further, a Memorandum of Understanding on Low Carbon Cooperation was signed in January 2011 between the NDRC and the UK's Department of Energy and Climate Change.

The two high-level objectives of the UK's programmes, as recorded by the House of Commons Committee³⁵, are to "drive ambitious action on climate change at home and abroad" and "winning high value opportunities in overseas markets for businesses of all sizes". The government told the Committee that "achieving high ambition internationally is key to our own emission reduction goals, just as delivering our own ambition is crucial to our credibility in pushing for higher ambition internationally". Also, "we agree that there is an opportunity to capitalise [in terms of trade opportunities] on China's low-carbon ambitions".

The range of the UK's bilateral cooperation is diverse. Not only in terms of the nature of the cooperation itself, for instance, whether it involves policy discussions between experts on the one hand or very specific joint research or deployment projects on the other, but also as to the energy sector concerned, for instance, buildings, transport, conventional power, renewables, or industry. It does not appear that cooperation on specific areas of low-carbon development has led to a joint approach to climate change negotiations at the UNFCCC, nor is there evidence that it has directly influenced the setting of China's national carbon and efficiency targets – although it may have influenced these by facilitating low-carbon options and by supporting the low-carbon planning of China's provinces and cities. The level of spending on the programme is fairly modest.

There are seven major elements to the UK's programme³⁶:

1. Prosperity Strategic Programme Fund

The Prosperity Strategic Programme Fund is run by the British Foreign Office through the British Embassy in Beijing. The project brings together British, Chinese, and international experts to deliver policies with low-carbon, economic and energy security objectives. The total budget is £4-5 million, enabling a wide range of projects with an average cost of about £100,000 per year.

³⁴ Written evidence submitted by the Department of Energy and Climate Change to the inquiry of the House of Commons Energy and Climate Change Committee into Low-Carbon Growth Links with China. 2011/12.

³⁵ Ibid. Report of House of Commons Energy and Climate Change Committee.

³⁶ Government Response to Commons Committee Report. Ibid.

- 2. NDRC-DECC Memorandum of Understanding on Low Carbon Cooperation The NDRC-DECC focuses on low-carbon administration and policy, emissions accounting and trading, standards, labelling and procurement, and especially on China's low-carbon pilot regions and cities. It fosters collaboration between UK and Chinese experts. The 2012/13 budget aggregates to a total of £200,000.
- 3. Adaptation to Climate Change

The Adaptation to Climate Change programme was initiated by the UK's Department for International Development (DFID) to develop and share China's experience of integrating climate adaptation into the development process. The programme receives a £3 million UK funding and is also co-funded by the Swiss development agency.

4. UK-China Clean and New Energy Research Collaboration

The UK-China Clean and New Energy Research Collaboration involves joint research with Chinese institutions on cleaner fossil fuels, CCS, solar energy, smart grids and electric vehicles. The programme is funded by UK Research Councils with a budget of £24 million.

5. UK/China Sustainable Cities Initiative

The UK/China Sustainable Cities Initiative includes MOUs with four Chinese cities. The project brings experts and policy makers together and stimulates business activities. UK Trade and Investment (UKTI) funds the delegations and has allocated £28,000 to promote the initiative.

6. Green Buildings and Eco-cities Group

The Group includes leading UK companies and universities and a number of key Chinese Ministries. It has developed a road map for building sustainability and efficiency and supports capacity-building programmes. It operates under an MOU between the UK's Business and Housing Ministries. There is no specific budget but the UKTI funds events and activities.

7. China New Energy High Value Opportunism Programme As part of the China New Energy High Value Opportunism Programme, UKTI pro-

As part of the China New Energy High Value Opportunism Programme, UK11 provides intensive support to UK companies which win major Chinese contracts, especially for civil nuclear, wind, and smart-grid developments.

While there is general political support for these programmes, questions have been raised as to whether they would benefit from stronger central coordination and on whether it would be better to focus on a smaller number of more major initiatives rather than spreading the UK's efforts so widely. However, others argue that it is important to be flexible and respond to opportunities, especially with regard to areas in which the Chinese themselves are looking for cooperation. The Prosperity Fund, for instance, runs a competition in which Chinese and UK institutions make joint bids for funding.

It is not yet clear how effective these projects have been, although many of them are kept under review as they progress. The Parliamentary Committee said that during their visit to China they had heard that there was a perception that the UK was "all talk and no action". "The need to deliver applied both to the successful completion of engagement work in China and to the effective implementation of UK domestic climate change mitigation commitments."

In the Annex to the UK's 5th National Communication to UNFCCC of 2009, the UK listed £3.5 million for the UK-China NZEC initiative under "mitigation" and £2.63 million over 2006-9 for the Prosperity Fund.

German Bilateral Climate Finance

A study published by Germanwatch³⁷ in 2011 reviews the adequacy and effectiveness of Germany's support for climate change mitigation and adaptation in developing countries. Germany ranks as the second largest donor of climate-related finance after Japan. According to the German government, in 2010 approximately €1.27 billion was allocated in the federal budget for spendings with at least partial relevance for climate protection and adaptation in developing countries. Most of this money is spent through the Development Ministry (BMZ). Unlike the UK and the USA, who channel the majority of their climate aid through multilateral channels, Germany, along with Norway and Japan, mainly uses bilateral channels.

Usually, only those countries that have a development cooperation agreement with Germany are eligible for climate finance. The funds are allocated according to a set of broader development strategies and agreements. A country needs to have a climate-related priority area to be entitled to climate funds. The agreements are negotiated between the German government and the partner country and set out in priority area strategy papers. It is then up to the partner country to put forward funding proposals, which are scrutinised by the BMZ.

The paper reports that Germany has been relatively reliable in delivering its climaterelated funding pledges. However, Germany's performance is comparably weak with regard to the 2002 pledge of developed countries to spend 0.7% of GDP on development aid.

Further, the paper raises a number of issues related to Germany's climate-related bilateral aid as well as to the climate finance debate more generally. The first problem is the lack of a clear definition of what counts as climate finance within the terms of the various pledges that have been given. This refers especially to the Copenhagen commitment to provide \$30 billion in the period 2010-12 and \$100 billion annually by 2020. According to the Copenhagen Accord these funds must be "new and additional". Few countries have been specific about how they interpret this. Germany has been clearer than most other countries in stating that all funds must be additional to the baseline in their 2009 climate finance budget or "originate from innovative sources" such as the revenues from the European Trading Scheme that Germany has earmarked. However, this implies that other political commitments previously entered into to increase this budget are arguably double-counted. There are also problems as to whether all the funds allocated to projects with climate change benefits should count, or only some measure of the incremental cost related to climate change. There are also questions of what share of concessionary finance should be counted.

³⁷ Ibid. Germanwatch, February 2011.

Two mechanisms exist for developed countries to report their bilateral climate-related aid. One is the National Communications that governments send to the UNFCCC four times a year. These reports contain an annex in which all financial support for the implementation of the Treaty is shown. The other mechanism is the reporting system operated by the OECD Development Assistance Committee (DAC) to record Official Development Assistance (ODA) spending in support of the 1992 Rio Conventions. However, the criterion for climaterelated spending as defined in the Copenhagen Accord leaves room for interpretation.

Other questions raised in the report by Germanwatch concern the heavy concentration of German spending on mitigation rather than adaptation, the limited coordination between different German spending bodies, and the lack of a clear overall strategy for German international climate funding. The report states that there is no overall impact analysis available on projects financed through German development aid. However, the GTZ (Organisation for Technical Cooperation) has carried out independent reports of sector-specific impact analyses and 67% of the energy projects performed well or very well.

Danish Bilateral Climate Change Cooperation with Vietnam

In March 2012 the Danish Government announced that it would provide DKK1.2 billion (approximately \$200 million) over the period 2010-12 "as start-up funding for the developing countries for climate adaptation, emission mitigation, capacity building, technology, and forests"³⁸. This amount was Denmark's share of a total of \notin 7.2 billion that the EU had announced for the same period. In 2010, the funds were mainly allocated through multilateral channels, but in 2011 the Danes announced their intention to focus increasingly on bilateral initiatives³⁹.

One of these bilateral projects is with Vietnam. In November 2012, the Danish Energy and Building Minister signed an agreement with the Vietnamese government on the "cooperation to reduce energy consumption in Vietnamese buildings and industry". Under the agreement, Vietnam will draw on Danish expertise on using energy as efficiently as possible. The countries specifically aim at helping small and medium-sized enterprises in Vietnam, particularly focusing on brickworks and the ceramics industries. "Denmark will also assist in implementing new requirements for energy efficient buildings." "Efficient use of energy should be seen as a major contribution to reducing greenhouse gas emissions in the short term".⁴⁰

CONCLUSION

Bilateral climate support and cooperation play a major role in the international effort to combat climate change. Contributions from the EU and its member countries to Asia are

³⁸ "The Danish Climate Pool". Announcement of the Danish Government, 15 March 2012.

³⁹ Ibid. The Danish Climate Pool.

⁴⁰ "Lidegaard signs agreement on energy cooperation in Vietnam". Announcement of the Danish Energy Agency, 8 November 2012.

an important part of that. This paper has illustrated the impressive range and extent of that support.

It is hard to generalise on the effectiveness of this cooperation. Critics have pointed to the lack of overall coordination and (generally speaking) systematic examination of outcomes. However the flexibility and diversity of the programmes, and their ability to respond to specific needs without too much administrative baggage, may also have been strengths. Generally there can be no doubt that these programmes have had major impact on climate mitigation.

The programmes have also helped to forge relations between experts, officials, and Ministers of developed and developing stations which, it is reasonable to assume, have oiled the wheels of the climate dialogue and negotiations.

However, climate support generally is due to increase by an order of magnitude by 2020 under the Copenhagen Accord. Developed countries will need to be able to demonstrate that they are delivering on their commitments if they are to win the trust of developing nations in future climate negotiations. In this respect, the lack of agreed criteria and mechanisms for measuring, reporting, and verifying bilateral support, and also the lack of integration with UNFCCC mechanisms and institutions, are serious problems for the future.

The EU, which represents some of the largest donor nations, can provide the lead for the international community on how to address these difficult problems. First steps might be for the Commission to co-host informal discussions, first with Member States and then with the Secretariats of the UNFCCC and the OECD, and officials from major donors and recipients (especially the EU's Asian partners) of bilateral climate support. Such discussions might help the EU to put forward proposals on how it plans to categorise, measure, and verify bilateral support and how this support will fit in with the UNFCCC framework.

Annex

STATISTICS ON CLIMATE-RELATED AID AND COOPERATION

This Annex reviews the available statistical sources relevant to climate-related bilateral cooperation.

OECD DAC Statistics on Climate Related Aid

The OECD publishes statistics on climate-related bilateral aid by the members of its Development Assistance Committee. These are by far the most comprehensive and systematic data available. The definitions used in the statistics are based on the "Rio Markers" and the aid is categorised as to whether the climate objective (mitigation or adaptation) is the "principal" or a "significant" objective.

The latest report⁴¹ records the total bilateral climate change-related aid in 2010 of \$22.6 billion of which just over half (\$12.1 billion) was contributed by the EU and its Member States. Aid for which mitigation is the principal objective is the largest category, amounting to \$13.4 billion, of which almost half (\$5.8 billion) was from the EU. Aid figures include public sector loans that are at least 25% concessional. The report also describes the geographical distribution of the aid (from all donors). The aid was mostly allocated to Asia (51% for mitigation and 41% for adaptation) followed by Africa and the Americas.

EU Fast Start Finance Report for 2010-12

According to the EU's Fast Start report⁴², the Commission and the Union's Member States have "mobilised" \$9.45 billion in support of the commitment of the developed countries to provide \$30 billion during 2010-12. Since the accounting of some governments for the period was incomplete, the report is confident that the EU's \$9.5 billion share of the total will be reached by the end of the period. Slightly more than half of the funds were provided through bilateral channels (52%) and the rest through multilateral channels. 62% of the funds were given in the form of grants; the rest was concessional loans. 84% of the total funds had climate as the principal objective and 16% as a significant objective. 30% of the funding was for adaptation, 40% for mitigation, 13% for forestry (REDD), and the rest served multiple purposes.

OECD/IEA Analysis of Climate Finance

A paper published by the OECD and IEA in 2012 identified what we know about climate finance based on existing data systems and examined the difficulties of tracking climate finance⁴³. The paper highlighted the fact that there is as yet no agreed definition of "climate finance" and no centralised system for tracking all relevant climate finance flows. This is in

⁴¹ Ibid. OECD, June 2012.

⁴² Ibid. EU Fast Start Financial Report.

⁴³ Tracking Climate Finance: What and How?. OECD and IEA, May 2012.

addition to the question, beyond the scope of the paper, as to what counts as climate-related activities for the purpose of the commitment.

Drawing on such data as are available, the paper offers the estimates in Figure 2 of North-South climate finance flows in 2009-2010. However, it recognises that these are very uncertain.



Figure 2: Estimates of North-South climate finance flows (~\$70 - 120 billion per year, latest year estimates 2009-2010)

Interestingly, Figure 2 shows that depending on the definitions, it is possible that developed countries are already meeting the Copenhagen commitment to mobilise \$100 billion per year by 2020 if private investment is included. To put it another way, it appears that the true significance of this commitment may depend on questions of definition. The figure also suggests that, in the public sector, bilateral finance may be at least as important as multilateral finance.

The report recognises that the Creditor Reporting System run by the OECD's Development Assistance Committee, which mainly reports bilateral development aid, is the most comprehensive system for tracking aid flows related to climate change. To that extent, the information on bilateral public sector aid may be more reliable than the multilateral and private sector data.

Source: Tracking Climate Change: What and How. OECD/IEA 2012

UNEP Bilateral Finance Institutions Climate Change Working Group

The UNEP Bilateral Finance Institutions Climate Change Working Group (BFI CCWP) publishes details of the financing flows from its member countries to developing countries for mitigation or adaptation⁴⁴. The figures include "climate-specific" and "climate relevant" finance although finance to the "conventional high-emitting energy sector" is ruled out. The members of the Group are the development banks of France, Japan, and Germany, and the Nordic Environment Finance Corporation (NEFCO). Together, these banks committed \$10 billion of qualifying finance in 2011, a decline of 27% from 2010. More than half of this amount (\$5.7 billion) was contributed by French and German banks. About three quarters of this funding was for mitigation rather than adaptation. Most of the total funding was in the form of concessional loans (70%), non-concessional loans (17%) and grants (11%). A majority of the finance went to Asia (South Asia 40%, Central, East, and Southeast Asia 14%). Most of the mitigation finance went to the energy sector (62%) with transport and water the next most important. Energy sector finance went mainly to renewables (62%) and energy efficiency (37%).

⁴⁴ UNEP Bilateral Finance Institutions and Climate Change; A Mapping of 2011 Climate Finance Flows to Developing Countries, 2012.

Climate Security and the United Nations: Views from the East and the West

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EXECUTIVE SUMMARY

On 17 April 2007, the United Nations Security Council (UNSC) convened to debate the security implications of climate change. The meeting was promulgated by the United Kingdom (UK) and was the highest level international security forum ever to address the issue. It occurred during a year in which an outpouring of literature sought to determine the relevance of climate change for national and international security, along with how best to address notional "climate security" challenges (Busby 2007; Campbell et al. 2007; CNA 2007; Paskal 2007; Sindico 2007; Smith and Vivekananda 2007). Climate security foundations have since been challenged, re-conceptualised and extended, and climate change has garnered the attention of military actors, policy-makers, and strategic thinkers throughout a myriad of domestic and international security-focused channels (European Council 2008; Dupont 2008; Burke 2009; Moss 2009; NATO 2009; Smith and Vivekananda 2009). In a sign that the issue was no flash in the pan, climate security again made the UNSC docket in 2011, and both scholarly and policy-oriented efforts have continued henceforth. However, despite the conceptual and practical maturation of many climate security concepts, there remains serious discontinuity over how best to frame climate-security connections, and the avenues through which climate security problems should be addressed.

UNSC experiences demonstrate that, while it is relatively uncontentious to suggest that addressing climate change requires international architectures and multiscalar collaboration, the shape of international climate *security* efforts, and the role of intergovernmental organisation (IGOs) more specifically, remains murky. Specifically, the UNSC climate change agenda has been driven by western powers while key Asian countries have voiced misgivings about framing climate issues in securitised terms. While "Eastern" and "Western" positions are not

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uniform, evidence suggests greater proclivity in Europe and North America for high-level climate security dialogue than in South, East and Southeast Asia. This paper presents such evidence, explores the roots of the divergent positions, and questions the future trajectory of international climate security dialogue. To do so, the paper reviews the genesis of climate security scholarship, analyses UNSC experiences in 2007 and 2011 and concludes by addressing the likely shape of intergovernmental climate security (in)action.

CLIMATE CHANGE AND AN EXPANDING SECURITY AGENDA

Environmental concerns rose up the international policy spectrum during the last three decades of the 20th century, and converged with an expanding security discourse to underpin future climate security thinking. Waning threat perceptions over great power conflicts and growing evidence of anthropogenic environmental stresses provided a setting in which synthesising environmental and security concerns became more likely and appropriate (Dabelko, Lonergan and Matthew 1999; Deudney and Matthew 1999; Dabelko 2008). Growing environmental awareness and international policy attention during the 1980s and 1990s prefaced later efforts to synthesise climate and security response efforts; with the 1987 publication of the so-called Brundtland Report and the convening of the 1992 Rio Earth Summit proving to be formative events (Brundtland et al. 1987; UN 1992). Both the Report and the Summit discussed "security threats" of a new ilk – those resulting not from the deliberate actions of a perceivable enemy, but emanating from seemingly progressive attempts to utilise resources for the sake of development across societies (Deudney 1991).

Notions of "security" were expanding elsewhere concurrently with this bourgeoning international environmental awareness. The threat calculations of the Cold War had led a majority of Western scholarship and policy-making to equate security studies with military strategy (Baldwin 1995; Krause and Williams 1996; Dalby 1999). Realigning international security priorities during the 1990s saw vocal calls to expand this narrow security scope, and post-Cold War security thinking was characterised by the re-evaluation of norms that had defined the field during previous decades (Baldwin 1995; Krause and Williams 1996; Buzan et al. 1998). Much post-Cold War literature from the West reveals a desire to foster broader views of security that address "non-military external threats to national well-being as security issues" (Baldwin 1995, p. 118). Constricting security studies to focus on threats from external military forces was viewed by many as no longer sufficient in the post-Cold War era, and there were calls to "broaden", "deepen" and otherwise expand security studies to include additional actors and emergent issue areas (Krause and Williams 1996, p. 230). Expansionist post-Cold War literature challenged the assumptions upon which decades of Western security thinking had been predicated, as well as conventional answers to the elemental questions of what or who is being secured, from what threats, and by what means. These challenges paved the way for a growing list of issues entering influential security discourses.

The United Nations Development Programmes (UNDP) entered this fray through the contribution of "human security" (UNDP 1993; UNDP 1994). A reflexive term, human security proposes shifting the primary referent object of security studies from states to individuals. The UNDP defended such a shift in 1994 by arguing that "[t]he concept of security has for too long been interpreted narrowly: as security of territory from external aggression, or as protection of national interests in foreign policy...forgotten were the legitimate concerns of ordinary people who sought security in their daily lives" (UNDP 1994, p. 22). Human security goes on to offer guidelines for security in the economic, food, health, environmental, personal, community and political sectors; each of which speaks about regular plights faced by vulnerable individuals. The concept has since received much scholarly and policy attention, resulting in several definitional variances (Newman 2001; King and Murray 2001; Henk 2005). The point of convergence amongst these variances however, and the most important contribution made by human security, is the movement of individuals from being actors simply bearing the effects of state security policies to subjects of securitisation in their own right. As will be shown, such conceptions have had implications for high-level intergovernmental dialogue on climate security.

Proposals for security expansion came from traditionally military circles as well. In 1992, the sitting North Atlantic Treaty Organisation (NATO) Secretary General, Manfred Worner, stated that "the immense conflict building up in the Third World, characterised by growing wealth differentials, an exploding demography, climate shifts and the prospect for environmental disaster, combined with the resources conflicts of the future, cannot be left out of our security calculations" (quoted in Kahl 2006, p. 2). Similarly, the International Institute for Strategic Studies (IISS), an organisation with a history of traditional security analysis, expanded its focus during the early 1990s from the issues of "modern warfare" to a more encompassing agenda that included "any major security issues, including without limitation those of political, strategic, economic, social or ecological nature" (Vale 1992, p. 100). These shifts represented an extensive reconsideration of concepts and policy strategies encompassed within the security rubric, and, coming from traditional security strategisers, they made clear that the evolution of security thinking was taking place throughout highly differentiated sectors.

The proposed security expansions proffered by academics, the UNDP and traditional security organisations were united by the recognition that threats originate from multiple channels, and that strictly focusing upon state-based military actions and postures was insufficient for forming security calculations in changing global systems. These expansions lent the necessary foundation for climate change's entry into international security discourses and, ultimately, climate security attention in the UNSC level. They differed significantly, however, on key questions of who or what should be the target of securitisation, and what the securitisation of environmental issues meant for international action and policy formulation. These differences remain, and help explain contemporary problematics in the climate security subfield.

The Climate Security Argument Emerges

Analyses that assert connections between climate change and insecurity converge in some important ways. The character of regions, states, communities and individuals deemed to be at the greatest risk of climate-driven insecurity extends from more general assertions on climate vulnerability, which the Intergovernmental Panel on Climate Change (IPCC) defines as "the degree to which systems are susceptible to, and unable to cope with, adverse impacts of climate change" (IPCC 2007, p. 48). Susceptibility is a function of both physical vulnerability, in which the ecological services of an area are exposed to the physical effects of climate change, and social vulnerability, in which social systems are closely tied to these physical effects and struggle to adapt (IPCC 2007; Parry et al. 2007; UNDP 2008). It is in the developing world, where vulnerability is often high, adaptive capacity regularly low, and livelihoods frequently closely tied to natural resources, that climate change is argued to have the greatest potential to foment insecurity (Smith and Vivekananda 2007; Global Humanitarian Forum 2009).

Disparate climate security work has followed from this basic premise, and added urgency and criticality to the issue (Campbell et al. 2007; CNA 2007; European Council 2008; NATO 2009). Speaking in 2007, Thomas Homer-Dixon made a comparison to more traditional security concerns when he stated that "[c]limate stress may well represent a challenge to international security just as dangerous - and more intractable - than the arms race between the United States and the Soviet Union during the Cold War or the proliferation of nuclear weapons among rogue states today" (quoted in Campbell et al. 2007, p. 20). The military advisory board to the US Center for Naval Analyses (CNA) wrote that "[c]limate change can act as a threat multiplier for instability in some of the most volatile regions of the world, and it presents significant national security challenges" (2007, p. 3). The Center for New American Security (CNAS) and the Center for Strategic and International Studies (CSIS), for their part, constructed scenarios in 2007 predicting large-scale migration patterns, increased ethnic, social and religious cleavages, and greater deprivation and conflict throughout the developing world as a result of climate change (Campbell et al. 2007). Since these formative works of the late-2000s, analysis has continued to tie instability and civil strife to a changing climate - perhaps most notably through arguments citing climate change as a factor in the timing and characteristics of the Arab Spring (see volume by Werrell and Femia 2013).

A thread running through such analyses is that climate change will not spur insecurity in isolation, but will create some new problems, amplify others and act as a threat multiplier in vulnerable areas around the world. Climate security enquiry typically presents a range of social, political, economic, group identity and developmental variables, among others, to explain the climate insecurity picture. Smith and Vivekananda warn for example that the "[h] ardest hit by climate change will be people living in poverty, in under-developed and unstable states, under poor governance...Many of the world's poorest countries and communities thus face a double-headed problem: that of climate change and violent conflict" (2007, p. 3). These authors see a potential for climate and conflict to create a mutually enforcing vicious cycle in which climate change will contribute to conflicts that will in turn lead to reductions in state capacities to deal with climate challenges. They are not alone in such claims. Authors at the CNAS, for instance, suggest that the "effectiveness and viability" of governments will be challenged by climate change and could result in a loss of public support for sitting regimes and ultimately violent uprisings and altercations (Campbell et al. 2007, p. 107). As both the causes and effects of climate change transcend state boundaries, such climate-fuelled instability would be fundamentally international in nature. These and other scenarios have driven calls for high-level intergovernmental actions to mitigate risks of climate-induced insecurity and violence.

THE UNSC AND THE EAST-WEST DIVIDE

2007

The UNSC responded to the growing attention that climate change was receiving as a security concern by hosting a debate in 2007 on the impacts of climate change for peace and security. The meeting was underwritten by a United Kingdom background paper arguing that climate change threatens international security through its effects on border disputes, migration, resource shortages, social stress and humanitarian crises (UNSC 2007a). The push from the UK, along with support from other Western powers, saw climate change debated as a security issue under the UNSC purview for the first time. Climate challenges necessitate the highest levels of international security deliberation, suggested supporters of the meeting, as emergent climate threats are having direct and indirect effects throughout international systems.

However, UNSC struggles to find common ground on climate change and security connections revealed pervasive divides. Opposing parties disagreed fundamentally over whether climate change is a "security issue" or a topic that is more appropriately addressed through other channels as part of a wider sustainable development agenda. As the driver of the 2007 deliberations, the UK argued vociferously that climate change would amplify a range of challenges, including violent conflicts, in ways that required attention from the security community. The UK found support from states appealing to human security notions to validate climate's place on the UNSC agenda. Papua New Guinea's representative, for instance, spoke on behalf of the Pacific Islands Forum in claiming that the dangers posed by climate change to small islands were tantamount to the threats posed by guns and bombs in other localities (UNSC 2007b). Conversely, officials from China and Pakistan claimed to speak on behalf of developing nations, including the Group of 77 (G77), when they argued that climate change lacked relevancy for the UNSC. The Pakistani representative argued that the UNSC has the primary task of maintaining international peace and security, and that climate change, which pertains most directly to sustainable development efforts, should remain within more appropriate bodies such as the UN General Assembly and the UN Economic and Social Council (UNSC 2007b). The session degenerated from a discussion on the relevancy of climate change as a potential cause of insecurity into a row over which UN bodies were most suitable for dealing with particular issues. Influential Asian countries such as China and India and traditional Western powers in Europe and North America took fundamentally different positions in this debate.

2011

Four years later, German representatives brought climate change back to the UNSC and again the Western powers rallied in support (Adiázola et al 2012). The German Foreign Office, which held the UNSC Presidency at the time, emphasised the causal processes by which climate change could drive insecurity and the degree to which such insecurity would not be confined to individual states. The German Ambassador to the UN stated near the outset of the 2011 debate:

If we look at the conflicts on the Council's agenda, it is noticeable that many of them, even today, are fuelled by desertification, water scarcity and cross-border migration...We know that conflicts of this kind do not remain within the borders of a single country, but rather tend to destabilise entire regions (Wittig in Pieper 2012, p. 18).

The German delegation would later argue that virtually all national security apparatuses saw climate change as a serious threat, but not all countries had the capacity to deal with these threats and the UNSC should therefore have a role. It was a call for internationalising broadly defined climate security threats at the highest levels.

The meeting found Europe unified and the United States unequivocal. The US Ambassador to the UN claimed that the UNSC has an "essential responsibility to address the clear-cut international peace and security implications of climate change" and that it must be better prepared to tackle one of the central threats of our age (Rice in UNSC 2011). The Ambassador went on to cite cases in Darfur, Sudan and Somalia as displaying the fingerprints of climate change. European supporters of the agenda focused not just on the threats of climate change for international security, but made efforts to assuage concerns that the UNSC was overstepping its mandate and encroaching into an issue best dealt with elsewhere. The Portuguese delegation argued that while the UNSC was clearly not the forum for climate change *negotiations*, climate should nevertheless be squarely on its radar as a potential conflict driver. The UK echoed this sentiment by calling climate change a "threat multiplier" and arguing that the UNSC deliberations "respected" the mandates of other UN bodies dealing with climate change (Grant in UNSC 2011). Just as these other bodies have particular responsibilities in facing climate change, the arguments went, so too the UNSC has a duty to consider emerging threats to international peace and security from climate change. Other European states put forward similar lines, and called upon European Union statements and background papers to solidify their foundations. Australia and Canada joined the chorus a bit more quietly, and emphasised their support for the most vulnerable states - notably small islands - that see climate change as an existential threat. The 2011 meetings were hailed as a modest success by its supporters as the UNSC officially acknowledged that climate change can pose a threat to international peace and security. Specifically, the Council "expressed concern" that climate change could "aggravate certain existing threats" and that losses of territory, particularly in small island states, "could have possible security implications" (UNSC 2011).

Much of the developed world, including emerging Asian powers, appeared unconvinced. The Chinese delegation argued that while climate change could affect security, "it was fundamentally a sustainable development issue" (Wang in UNSC 2011). China's representatives emphasised that efforts to combat climate change should be steeped in the UNFCCC refrain of "common but differentiated responsibilities" and that the UNSC "did not have the means and resources to address it" (Wang in UNSC 2011). China went so far as to presume positions from other developing states, claiming that "most" of them believed that the Council's discussions did not contribute to alleviating climate problems. Chinese delegates focused rather on the primacy of development and assisting vulnerable states through capacity building; an ostensible desecuritisation of climate issues.

India took a different route to reach a similar conclusion to its Chinese counterparts. The Indian delegates acknowledged that climate change could "induce" threats and vulnerabilities, but argued that the UNSC "did not have the wherewithal to address the situation" (Puri in UNSC 2011). Indian voices contended that even those threats viewed as existential by highly vulnerable states could not be addressed by Council under its Charter rules. They concluded from this that there is "some difficulty in accepting the assertion made that the effects of climate change go beyond the mandate of the UNFCCC", and then echoed China's sentiments on the importance of focusing a development lens on the climate problem.

Other Asian countries were more equivocal, but still kept distance from the largely Western climate security agenda. The Philippines and Pakistan both acknowledged climate security challenges, and argued that a greater emphasis on climate justice for the most vulnerable was needed. Again, the UNFCCC was seen as the most apt forum for such a shift. Singapore, in a move unsurprising given its tendency to bridge Asian and Western agendas, took a middle ground by saying that the Council had a role and should work with other UN agencies to try to bring greater political momentum to UNFCCC processes. Japan urged caution when considering the appropriate role for the UNSC to play, arguing that there are different timescales attendant to climate change and conflict considerations, but did not discount action outright. South Korea was perhaps the most open to climate security dialogue among influential Asian countries, and praised the 2007 and 2011 UNSC debates as important steps for bolstering climate change response efforts. These efforts, however, should continue to take place within the UNFCCC and other "relevant UN organs", according to the South Korean delegates (Kim in UNSC 2011).

The 2011 UNSC meetings were in many ways a redux of past points of contention. Advocates for the talks emphasised the importance of including climate change in the larger basket of conflict drivers, the need to prepare for climate-induced population movements and refugee situations and the plights of highly vulnerable island states. Oppositional voices questioned the legitimacy of the UNSC for addressing climate change and again proposed other UN forums that they perceived to be more fitting. There were further questions about what the UNSC was positioned to *do* in response to the problems under discussion, with representatives from India, China and elsewhere politely asserting that the talks were largely just that. While there was not a clear-cut divide between the East and West on the issue, with Asia's small island states being particular vocal in securitising the climate problem, influential states in Asia and the West drove the two sides of the debate. This reflects broader-based divisions between the two groups which, while far from uniform, do show central differences

in the desire to securitise issues outside the traditional security domain. The differences also demonstrate incongruities on the nature of security concepts.

Whither to Securitise? Where Theory meets Practice

The UNSC sessions are manifestations of longstanding security problematics. Critiques of efforts to expand security argue that adding new variables and sectors erodes the theoretical possibilities and analytical value of security thinking, and often lacks much practical import (Gray 1995; Mearsheimer 1994-1995). Walt asserts for example that the scope of security should be "the study of the threat, use, and control of military force" and tasks security inquiries with exploring "the conditions that make the use of force more likely, the ways the use of force affects individuals, states, and societies, and the specific policies states adopt in order to prepare for, prevent, or engage in war" (1991, p. 212). For Walt, as with critical actors within the UNSC, expanding the field beyond these narrow parameters can "destroy its intellectual coherence" and make the emerging problems added to security studies more difficult to address (1991, p. 212). This position finds affinity with countries questioning the relevance of the UNSC for the climate problem and calling for action within other bodies. Walt's premises and oppositional voices within the UNSC challenge Western positions that because climate change may be driving conflict, and the UNSC is tasked with preventing and addressing conflict, that it represents an appropriate body for a climate-oriented discourse. There rebuttals, in basic terms, say "not necessarily".

Arguments along human security lines face parallel opposition. There are voices within the UNSC dialogue that couch the vulnerability of their populations as security problems, such as statements by Namibia and Tuvalu likening greenhouse gas emissions to chemical warfare (Detraz and Betsill 2009). These states are not suggesting that violence, conflict or cross-boundary friction will result from climate change, but are rather using the UNSC forum to highlight the *human* insecurities facing their people. However, the inclusiveness of human security can also be seen as its undoing. Paris claims, for instance, that the concept has little utility for either policy makers or scholars and that the excessive inclusiveness of human security means that it lacks the analytical separation necessary to discuss security threats (2004). He concludes that "if human security means almost anything, then it effectively means nothing" (2004, p. 255). For Paris and Walt, as for China and India in the UNSC, retaining a confined definition of security is vital for preventing the co-option of the field by an unmanageable agenda.

Whether the UNSC is an appropriate forum for airing such grievances is clearly contentious. The positioning of states on either side of this divide is understandable, however, within the context of the wider environmental security debate. Existing arguments have described multiple ways in which environmental stresses can undermine political institutions, exacerbate deprivation and poverty among affected populations, cause significant human displacements and migration, and contribute to the causes of violent altercations (Baechler and Spillman 1995; Homer-Dixon 1999; Kahl 2006; Ewing 2009). Such positions underpin the policy platforms of actors that are supportive of UNSC forays into climate change, because as the world's leading intergovernmental security body it must be prepared to address a range of contemporary security threats. Others, conversely, challenge the value added by environmental security syntheses and suggest that the maintenance of continuity and analytical coherence often warrants primacy over holistic approaches to the underlying causes of insecurity (Deudney 1990; Deudney 1991; Levy 1995; Gleditsch 2001). These positions mirror those opposing security expansion more generally, and suggest that security and environmental issues are best left to specialists in those respective fields. As the tools for addressing environmental challenges and those deployed against traditional security threats are profoundly different, arguments contend, it is counterproductive to seek convergences between the environment and security and amalgamated response strategies. Such perspectives suggest that synergising environmental and security issues within international dialogue risks creating convoluted analyses and policies that are of little practical use.

This divide dovetails with differences between security concepts in the West which focus on threats emerging from elsewhere and issues that are securitised domestically by large Asian countries. China, for example, has used the chapter and verse of security when discussing pressing domestic environmental challenges, but does so to convey a sense of policy prioritisation rather than suggest that security apparatuses should be involved in addressing them. India likewise has instituted policies and used language in the development space that speaks to the country's security and the security of its people. Yet it retains an emphasis on developmental responses to these challenges; essentially using security as a term to convey *importance.* At the international level, these countries likewise have shown some movement on the importance of climate change as a security threat, but challenge responding to these threats through international security bodies like the UNSC.

Arguments for international policy separation of climate change and security are bolstered further by fundamental differences in the nature of threats stemming from environmental challenges and threats more traditionally addressed in security studies. Environmental degradation and strategic resources stress typically result from environmental mismanagement and the consequences of development policies. The "culprit" in these cases is often one's own society, and therefore the "enemy" that is responsible for the problematic environmental situation cannot be clearly identified (Deudney 1991, pp. 24-26). This is somewhat different in the case of climate change, in which blame could be apportioned based upon emissions, but it is difficult to foresee (at least at present) foreign interventions against an enemy predicated on greenhouse gas emissions (leaving aside the reality that major emitters typically enjoy at least a modicum of military power). Moreover, since environmental stresses typically accumulate over time, assigning blame for contemporary environmental problems becomes even more difficult (Deudney 1990). Past generations can be incriminated for contemporary environmental plights, but these generations clearly cannot be protagonists in confrontations like those typically addressed within international security forums. These inherent characteristics of climate-security connections make coalescence around the issue difficult to achieve through politicised international dialogue.

CONCLUSION

It is unsurprising that environmental and climatic issues have garnered the attention of security communities at the international level. Collaborative international activities, while diffuse and differentiated, are informed by relationships among social groups, natural environments and an unremitting search for security. Resources and environmental systems underwrite an exhaustive range of human activities, and the goal of attaining and preserving security, however defined, drives a comparably extensive range of social actions. Climate change, as the world's most comprehensively shared environmental challenge, exemplifies the necessity of international coalescence around global environmental issues. However, despite the relevance of both climate change and international security for high-level intergovernmental discussions, combinations of the two have proven problematic. Difficulties stem from competing notions of what is meant by "security", dissimilar positions on the causal linkages between environmental and security dynamics, and fundamental questions about the wisdom of pursuing such linkages at all. These challenges are compounded by the reality that efforts to understand and address climate-security relationships must amalgamate the work of multiple disciplines in both the natural and social sciences, and eschew agenda-driven decision-making processes in favour of sober, evidence-based approaches.

Rough dividing lines on these issues exist between Asia and the West. As nebulous and highly diverse groupings, these lines are sufficiently blurry – but it remains that the leading Asian and Western voices at the UNSC disagree elementally on climate security questions. As such, future high-level intergovernmental activity addressing climate change and security connections will likely proceed only in fits and starts and may be relatively inconsequential. Military bodies at both state and international levels, security analysts, foresight-focused actors and various arms of the IGO community will continue to posit climate security questions as they explore the trajectory of both human and strategic security threats around the world. These are rational endeavours and are more likely to accelerate than fade into obscurity. It is highly uncertain, however, whether the language and concepts of climate security will gain greater purchase at the highest international security table in the land.

There is nonetheless no viable alternative to international cooperation when it comes to pre-empting and/or responding to climate change challenges. These challenges require, broadly put, aggressive mitigation and judicious and effective adaptation; and this is true regardless of how one defines and evaluates the relevance of climate security concepts. They also require cooperation between major Asian and Western players that extends beyond both the past and the status quo. The most appropriate role for IGO actors is one with which many are already familiar: offering logistical and resource-based support to individuals, communities and states facing climate response deficits. When effectively pursued, such strategies include a range of co-benefits that strengthen development paradigms, lead to less reliance upon vulnerable environmental systems and promote healthier and more resilient populations (Smit et al. 2001; Thomas and Twyman 2005). In some cases, such actions will concomitantly erode the susceptibility of societies to instability and conflict; and this holds true regardless of the state of play in the UNSC or elsewhere. The climate security problematic will continue to extend in masked and challenging forms, and parties on both sides of the Asian-Western divide would do well to revisit their responding efforts.

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