



- EVENT INVITATION -



Konrad
Adenauer
Stiftung

**The South African Institute of International Affairs (SAIIA)
cordially invites you to a Futures Scenario Discussion**

on

The Impact of the Electric Vehicle on the Southern African Development Community

Date: Tuesday, 27 July 2018 from 09h30 – 15h30

Venue: [Townhouse Hotel, Cape Town](#)

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Programme

09h30-10h00: Arrival tea and coffee

10h00-10h15: Introduction and welcome, Henning Suhr (Konrad Adenauer Foundation)
and Talitha Bertelsmann-Scott (SAIIA)

10h15-10h30: Brief introduction to Futures Methodology, Tanja Hichert

10h30-12h30: Setting the parameters for the discussion - Scope and context, role-players,
key issues, key uncertainties

12h30-13h15: Lunch

13h15-15h15: What regional futures can come about because of the electric vehicle?
Selected impacts and implications deep-dive

15h15: Close

Introduction

The Regional Observatory at the South African Institute of International Affairs (SAIIA) is a flagship futures-orientated initiative that has been created to anticipate key emerging disruptors that will have a major impact on the member states of the Southern African Development Community (SADC) over a 10-30 year horizon. By examining the potential

impact of such disruptors through an inter-disciplinary, complex systems scenario-building approach, the Regional Observatory hopes to contribute to an anticipatory approach to regional policy making in sectors that will be most affected.

Electric Vehicles

Electric vehicles are seen as new developments of the same generation as Artificial Intelligence and mobile technology, but we forget that in the early 1900 almost a third of all cars in the US were electric. They were popular in urban settings, especially with housewives that needed small cars for domestic purposes. However, the discovery of abundant, cheap oil in Texas and the fact that electricity was still considered a luxury in rural America, the internal combustion engine, in the form of the Ford Model T car, swiftly overtook electric vehicles as they were cheap to drive and easy to fill up. Interest in the electric car has waxed and waned since then, with spikes of interest around periods of oil crisis. More recently, the world has become increasingly aware of the adverse impact of the pollution caused by petrol fumes. Climate change activists have called for a reduction in our oil dependency and climate change obligation and emission targets have spurred countries across the world to find alternative modes of transport.

Two important events have, however, made the possibility of a complete change-over to electric vehicles (EV) a very real possibility: the development of the Toyota Prius in 1997 in Japan, which became an instant hit with celebrities and the more well-off; and Tesla Motors' ambition to develop a luxury EV that promised speed and beauty in 2006, which quickly led to large-scale investment into the company to develop a cost-effective and efficient EV for mass consumption. Motor companies across the world are investing heavily in becoming the Model T of the 21st Century and a number of EVs have seen the light, including the Nissan LEAF, the BMWi3 and the Chevy Volt. Most companies have a version of the EV, ranging from hybrids – like the Prius – to plug-ins like the LEAF. Apart from the challenge to get to a point of mass-production and consumption of e-vehicles the challenge lies in finding the best version of the EV. Currently there are a range of EV energy sources, ranging from 'plug-in hybrids', which offer both a combustion engine and an electric motor, to 'battery electric' vehicles. Progress in battery life and speed of charge are important determinants on whether battery EVs will come out tops. There are also models that make use of hydrogen fuel cells which convert hydrogen gas into electricity.

What do these developments mean within a global context? Pushed by unacceptably high levels of pollution in their most populous cities, China and India have pledged to cap emissions and roll-out electric vehicles by 2030. This is an ambitious target with only Norway aiming to get to full EV roll-out by 2025. The impact on Southern Africa could be significant as the region both consumes vehicles from the rest of the world, produces vehicles for the world market and is the major sources of raw materials needed for both types of vehicles – namely oil on the one hand and cobalt and lithium on the other as well as coal and a potential unlimited source of renewable energy. In terms of mobility, Southern Africa still has a deficit when compared to other regions, millions of people still walk or make use of unreliable public transport to reach schools, clinics and employment opportunities. How can we accelerate their access to services?

Questions without answers

In 2018, the Regional Observatory is focusing its attention on the Electric Vehicle and is asking penetrating questions about which sectors will be most affected in the region, as well as the development trajectories that might evolve in the region following the worldwide adoption of electric vehicles as the preferred mode of transport. SAIIA believes that there will be significant impacts on the following four sectors: mining, energy, automobile manufacturing and infrastructure with significant legislative and policy implications for the region.

The member states of the Southern African Development Community (SADC) will need to consider whether the region wants to encourage early adoption of e-vehicle technology or whether it wishes to protect the auto-market from electric car imports. Does Southern Africa want to accept second hand internal combustion engine vehicles from the rest of the world that will certainly seek markets for redundant technology? Cheaper vehicle imports could have a positive impact on the mobility of people in rural and unconnected areas but at what cost do we stay fixed in old technology and behind the rest of the world? In Southern Africa there are significant impacts for the energy sector and a potential shift in mining away from oil and coal towards cobalt and lithium. How does this shift affect the mining power balance in the region? The introduction of the electric vehicle also poses questions around the roll-out of infrastructure, the impact of savings in terms of our crude oil imports as well as petrol and diesel imports, anticipated job losses at refineries, job gains in the renewable energy market.

Roundtable

The objective of the roundtable is to bring a few industry experts and thought leaders from a broad spectrum together to brainstorm the future that the electric vehicle may bring. We will be using futures methodology to tease out what impact the electric vehicle may have on Southern Africa and how we may reach a preferred future in terms of anticipating change, laying the policy foundations now for smart adaptation in the medium term.