

Empowering Communities through Renewable Energy Investment

Research report on the South African Renewable Energy Independent Power Producers Procurement Programme (REIPPPP) in facilitating economic development in local communities



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EMPOWERING COMMUNITIES THROUGH RENEWABLE ENERGY INVESTMENT

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Independent Power Producers Procurement Programme in facilitating
economic development in local communities

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ACRONYMS

BBBEE	Broad-Based Black Economic Empowerment
COP	Conference of the Parties
CSIR	Council for Scientific and Industrial Research
DBSA	Development Bank of Southern Africa
EWSETA	Energy and Water Sector Education and Training Authority
GHG	Greenhouse Gas
IDC	Industrial Development Corporation
IDP	Integrated Development Plan
IPAP	Industrial Policy Action Plan
IPP	Independent Power Producer
IRP	Independent Resource Plan
KAS	Konrad Adenauer Stiftung
Km	Kilometres
LED	Local Economic Development
MW	Megawatts
NDP	National Development Plan
PIC	Public Investment Corporation
PPAs	Power Purchase Agreements
RECE	Renewable Energy Centre of Excellence
REIPPPP	Renewable Energy Independent Power Producer Procurement Programme
SAREC	South African Renewable Energy Council
SED	Social Economic Development
TVET	Technical and Vocational Education Training
UNFCCC	United Nations Framework Convention on Climate Change



FOREWORD

South Africa, like other developing countries, is faced with a serious challenge balancing its socio-economic development aspirations and the global call to address climate change. The South African economy is energy intensive and grew on the support of a fossil-fuel-driven energy sector. South Africa is among the largest emitters of greenhouse gases. The country does not dispute this and has made serious commitments to reduce its carbon footprint from the energy sector through a sustained renewable energy programme. Since 2003, the country has developed a policy framework to enable renewable energy to enter its energy mix. However, there have been limited legal developments, until the recent implementation of the Renewable Energy Independent Power Producers Procurement Programme (REIPPPP). In the attempt to promote developmental objectives through the programme, the government developed a procurement system which requires mandatory local economic development commitments by the private sector.

This empirical study investigated the extent to which the REIPPPP has managed to promote local development within project communities in line with commitments made by Independent Power Producers (IPP) during the bidding and project-award process. The REIPPPP is without doubt one of the exemplary procurement models in Africa for the procurement of renewable energy in the electricity sector; and South Africa has been presented as a leader in this respect. Indeed, in reality, the REIPPPP has enabled the despatch of substantial amounts of generating capacity onto the grid and many projects are promising to meet the scheduled timelines. The uniqueness of this study is that it involved field study and interactive engagement with the stakeholders to get realistic feedback on the implementation of the REIPPPP.

The study, however, also discovered that there are several challenges with the REIPPPP particularly in relation to the expectations that the programme could be an avenue to promote local economic development. Among other challenges, the study found that there are some gaps in transparency and information flow deficit across spheres of government that disrupt the realisation of the commitments by IPPs. Regulatory gaps in project oversight; sustainability concerns; inadequate coordination between government and the private sector; as well as unclear community mapping issues, present challenges to the realisation of the local economic development targets. The community benefit models are also not properly organised: community expectations are often misaligned to project benefit timelines due to information asymmetries. There is therefore incoherence in understanding of outcomes of enterprise and economic development between industry and communities.

The study recommends improved communication between the Department of Energy IPP Office, IPPs and local communities on the project deliverables to properly manage community expectations. IPPs should integrate their planning to enable economies of scale in terms of their local development initiatives by preventing duplication and spreading the benefits to broader community groups. Greater oversight by the government including monitoring and evaluation is crucial to ensure that IPPs deliver on commitments undertaken to create employment, local enterprise development and community development.



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1. INTRODUCTION

This document is the final report on the Renewable Energy and Socio-Economic Development Project ('the project') conducted by the Mandela Institute with support from the Konrad-Adenauer-Stiftung (KAS) from June 2014 to February 2016. The Mandela Institute team on the project consisted of Tumai Murombo (Project Lead); Fola Adeleke (Researcher and Project Coordinator); Edith Kiragu (Researcher), Kgaugelo Chiloane (Independent Researcher) and Elvis Nkoana (Independent Researcher). The Mandela Institute is a centre situated at the School of Law, University of the Witwatersrand, Johannesburg, and is therefore subject to the requirements of the Human Research Ethics Committee (non-medical) of the University. Any research carried out that involves human subjects must go through the ethics application process. The Committee under protocol number H15/05/01 approved the ethics application. The research is not designed to be conclusive evidence regarding renewable energy and development. Rather, it is designed to test the accuracy of the assumptions identified and provide a foundation for further research on the implementation of the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP).

All three methodologies used yielded consistent evidence that affirms that renewable energy in the electricity sector plays a central role in addressing energy insecurity and sustainability in South Africa. Renewable energy can also facilitate the socio-economic development of the host communities in South Africa.

2. CONTEXT

2.1. Regulatory Context

South Africa introduced a competitive bidding process for renewable energy procurement in 2012¹ that has delivered 92 IPPs and will contribute over 6,327 megawatts (MW) of power to the national grid.² South Africa's success hinges on an abundance of solar and wind as sources of energy.³

The development of renewable energy in South Africa has been facilitated by the development of three policies since the dawn of constitutional democracy. These policies are the White Paper on Energy Policy,⁴ the White

1 Electricity Regulations on New Generation Capacity General Notice R721 in Government Gazette 32378 of 5 August 2009 made in terms of the Electricity Regulation Act 4 of 2006, see also IPP Procurement Programme, 2012 General Notice 1074 in Government Gazette 36005 of 19 December 2012; The Renewable Energy Independent Power Producer Procurement Programme <<http://www.ipprenewables.co.za>> accessed 13 October 2016.

2 Department of Energy, 'State of Renewable Energy in South Africa' (2015), 5. Of these IPPs 48 are located in the Northern Cape province, 17 are in the Eastern Cape and 11 in the Western Cape province. Free State and North West provinces share five each. Limpopo province has three and the rest have one IPP per province.

3 Ibid. With over 2,500 hours of sunshine per year and average direct solar radiation levels range between 4.5 and 6.5kWh/m² per day, South Africa ranks in the top three in the world.

4 White Paper on the Energy Policy of the Republic of South Africa General Notice 3007 in Government Gazette 19606 of 17 December 1998



Paper on Renewable Energy⁵ and the National Climate Change Response White Paper Policy (Climate Change White Paper).⁶ The Climate Change White Paper was published just before the 17th session of the Conference of the Parties (COP17) to the United Nations Framework Convention on Climate Change (UNFCCC)⁷ and established the overarching policy framework for South Africa's climate change response. Renewable energy presents a low carbon energy solution to reduce the country's Greenhouse gas (GHG) emissions. Renewable energy is one of the flagship programmes on the basis of which South Africa's climate change mitigation strategy is anchored.⁸

In addition, the Department of Energy published a twenty year Integrated Resource Plan 2010-2030 (IRP)⁹ as the long term plan for electricity supply. To support this plan, a number of regulatory instruments have been developed. The Electricity Regulation Act¹⁰ (with the accompanying Regulations on New Generation Capacity¹¹) is the legal framework for the REIPPPP. The IRP was published as a regulation under the Electricity Regulation Act with the intention of giving effect to national policy and providing a planning framework for the management of electricity supply in South Africa for the period 2010 to 2030. Publication of the IRP is a statutory requirement and the plan is supposed to be updated regularly. The IRP therefore formalises and extends government's aims as set out in the Renewable Energy White Paper.

The central aim of South Africa's renewable energy policy is the creation of conditions for the implementation of renewable energy technologies and to facilitate the deployment of renewable energy projects. This will ensure that South Africa's national energy mix caters for the energy needs of the country, and meets its international climate change obligations, while promoting sustainable livelihoods and improvement of the standard of living of South Africans.¹²

The National Energy Act¹³ seeks to ensure a diverse energy mix which is sustainable, affordable, in support of economic growth and poverty alleviation while taking into account environmental management.¹⁴ It also advocates for Integrated Energy Planning that balances the above government priorities.¹⁵ The Act aims to

⁵ Renewable Energy Policy of the Republic of South Africa General Notice 513 in Government Gazette 26169 of 14 May 2004.

⁶ National Climate Change Response White Paper General Notice 757 in Government Gazette 34695 of 19 October 2011. Hereinafter cited as (Climate Change Response White Paper).

⁷ United Nations Framework Convention on Climate Change (UNFCCC) 1992 <http://unfccc.int/essential_background/convention/items/6036.php> accessed 13 October 2016.

⁸ Climate Change Response White Paper (n 12) 31.

⁹ Electricity Regulations on the Integrated Resource Plan for Electricity 2010–2030 General Notice R 400 in Government Gazette 34263 of 6 May 2011 (draft November 2013 update not yet approved)

¹⁰ Act 4 of 2006


¹¹ Government Gazette 34262, May 4 2011 (Regulation Gazette No. 399).

¹² Department of Minerals and Energy, White Paper on Renewable Energy (2003) vii.

¹³ Act 34 of 2008.

¹⁴ M Roussos, 'Energy Planning and Sustainability' in Antoine Francis (ed) 'Keeping the lights on' The Journal of the Helen Suzman Foundation (2012) 69.

¹⁵ National Energy Act 34 of 2008, s 6. See Department of Energy, Draft 2012 Integrated Energy Planning Report, General Notice 513 in Government Gazette 36690 of 24 July 2013, 45-46, which indicates that energy planning should take into consideration the cost and benefits of each particular form of energy and proposes a suitable balanced energy mix. It also provides that energy planning should not compromise the government's objective to reduce South Africa's GHG emissions.



strengthen energy planning in order ‘to ensure that diverse energy resources are available, in sustainable quantities and at affordable prices, to the South African economy...’ as well as to ‘provide for energy planning, increased generation and consumption of renewable energies.’¹⁶

As identified in the Renewable Energy White Paper, renewable energy was expected to play a key role in providing new electricity capacity in the country. The REIPPPP was introduced as the primary vehicle for securing private sector investment for the development of new electricity generation capacity, thereby giving effect to the policy decision captured in the Renewable Energy White Paper. Undoubtedly, the private sector plays the dominant role in REIPPPP.

As per the 2015 Department of Energy report on renewable energy, the REIPPPP has attracted R193 billion of private investment across the four bidding windows.¹⁷ The programme has attracted foreign investments amounting to R53.2 Billion across all four bidding windows.¹⁸ The foreign equity share in REIPPPP is over R35 billion which is equivalent to 34 per cent of the total foreign direct investment attracted into South Africa during 2013.¹⁹

To advance their social license to operate, ‘REIPPPP contracts require IPPs to contribute to socio-economic development within their immediate locality, set within a 50km radius of plant location.’²⁰ The New Growth Path²¹ developed by the Department of Economic Development outlines a strategy for a green economy which includes the Green Economy Accord²² with several government departments, organised labour and businesses as signatories. The accord also establishes the South African Renewable Energy Council (SAREC), which oversees the development of green economy initiatives to boost South Africa’s climate change mitigation commitments as well as promote investment in green solutions.

In addition, the 2014 Industrial Policy Action Plan (IPAP)²³, developed by the Department of Trade and Industry, identifies the renewable energy sector (solar and wind energy) as a priority for South Africa’s industrial policy.

¹⁶ National Energy Act (n 15) s 6.

¹⁷ Department of Energy (n 2) 97.

¹⁸ Ibid 94.


¹⁹ The Department of Trade and Industry, Industrial Policy Action Plan (IPAP) (2013-2016) <http://www.thedti.gov.za/news2013/ipap_2013-2016.pdf> accessed on 13 October 2016.

²⁰ Department of Energy (n 2) 6.

²¹ Economic Development Department, The New Growth Path (hereinafter the NGP) <<http://www.economic.gov.za/communications/publications/new-growth-path-series>> accessed 18 February 2016.

²² Economic Development Department, Green Economy Accord <<http://www.economic.gov.za/communications/publications/green-economy-accord>> accessed 18 February 2016.

²³ The Department of Trade and Industry, Industrial Policy Action Plan (IPAP) (2014-2017) <<http://www.gov.za/sites/www.gov.za/files/IPAP2014.pdf>> accessed 13 October 2016.



South Africa's Preferential Procurement Policy Framework Act²⁴ and the Broad-Based Black Economic Empowerment Act²⁵ strongly informed the decision that Independent Power Producers (IPPs) be awarded tenders to develop renewable energy projects based on a 70/30 allocation of points to price factors and non-price factors.²⁶ The Department of Energy insists that the IPPs identify socio-economic needs of the communities within which they will be implementing renewable energy projects. However, there is some lack of clarity in terms of price factors (which accounts for 70% during bid evaluation) and some confusion with regard to the economic development factors (that accounts for 30%). The confusion stems from the following:

- Lack of guidance on how local community empowerment targets should be prepared and evaluated;
- Incorporation of local stakeholders' concerns which are not based on economic analysis; and
- Short time frames to prepare proposals between bid periods (windows 1, 2, 3 and 4).²⁷
- Despite this confusion, IPPs forged ahead and delivered successfully with some IPPs exceeding their targets on most of these local community empowerment targets (job creation and socio-economic development). The Department of Energy appoints 'economic development [independent] monitors' to ensure compliance with and to evaluate IPPs' reporting and confirm compliance with local economic development targets.²⁸ Economic development factors are designed to give IPPs incentives to promote job growth, domestic industrialisation, community development, and black economic empowerment through job creation, local content, ownership, management control, preferential procurement, enterprise development, and socio-economic development. The term 'local community empowerment targets' refers to specific community-based initiatives that directly benefit the community instead of 'economic development' that may include domestic industrialisation, local content, and preferential procurement.²⁹ Renewable energy projects are often in rural areas and meeting local community empowerment targets is crucial in realising the socio-economic rights of the communities.

This research project therefore focuses on addressing the question, what is the potential of the REIPPPP to achieve national developmental objectives that benefit communities as well as to assist the government to meet its international commitments on climate change mitigation?

²⁴ Act 5 of 2000.

²⁵ Act 53 of 2003.

²⁶ The non-price factors focus on economic development elements such as socio-economic development, job creation, local content, ownership, management control, preferential procurement and enterprise development.

²⁷ A Eberhard, J Kolker, and J Leigland 'South Africa's Renewable Energy IPP Procurement Program: Success Factors and Lessons' (PPIAF and World Bank Report) (2014).

²⁸ A Eberhard, J Kolker, and J Leigland (n 27) 25.

²⁹ Ibid.

2.2. Developmental Context

The Department of Energy estimates that the REIPPPP has contributed to more than 100,000 employment opportunities during both the construction and operational phases.³⁰ The Department of Economic Development estimates the creation of 400 000 jobs by 2030 if the green economy plan is successful.³¹ However, it has been argued that the change in approach will also result in the loss of 35 000 jobs per year as the employment dynamics shift to highly skilled people and fails to address the social dynamics of South Africa.³²

The Department of Energy and the National Treasury entered into a Memorandum of Agreement with the Development Bank of Southern Africa (DBSA) to facilitate the implementation of the REIPPPP, and to establish an IPP Office as supplementary capacity to the Department of Energy in its role as designated procurer of renewable energy from IPPs.³³ According to the Department of Energy, 'the most important arrangement under the REIPPPP was the directive for Eskom to enter into Power Purchase Agreements (PPAs) with the IPPs selected as preferred bidders.'³⁴ The PPA provides for 'firm revenue projections, which, in turn, comprise the single most important criterion to render a power generation project bankable and appealing to investors.'³⁵

It has been suggested that 'the current regulations are not clear on the co-existence of the public utility company and the IPPs and this has the potential to frustrate investments into renewable energy.'³⁶ However, Eskom remains the single buyer of electricity until a wholesale model envisioned in terms of the Independent System and Market Operator Establishment (ISMO) Bill,³⁷ which is currently in limbo, is implemented.

The REIPPPP has not only been successful in providing energy security to the country but has also 'contributed to industrialisation, skills development and broad-based black economic empowerment objectives.'³⁸ Part of this success can be attributed to IPPs commitment to 'enterprise, economic and socio-economic development goals over the contracted 20-year operations period.'³⁹

Bid obligations and minimum thresholds for preferential procurement, employment equity and socio-economic development contributions are utilised as mechanisms to capture a share of the value from the

³⁰ Department of Energy (n 2) 97.

³¹ M Kaggwa, S S Mutanga, G Nhamo & T Simelane 'South Africa's Green Economy Transition: Implications for Reorienting the Economy Towards a Low-Carbon Growth Trajectory' (South African Institute of International Affairs (SAIIA) Occasional Paper No 168) (December 2013) 13.

³² Ibid.

³³ Department of Energy (n 2) 67.

³⁴ Ibid.


³⁵ Ibid.

³⁶ N Shaun, 'Transforming the Energy Supply Industry' in Antoine Francis (ed) Keeping the lights on' 64 The Journal of the Helen Suzman Foundation (2012) 21.

³⁷ Independent System and Market Operator Establishment (ISMO) Bill 2011, General Notice 290 in Government Gazette 34289 of 13 May 2011.

³⁸ Department of Energy (n 2) 70.

³⁹ Ibid.



programme for South Africans and local communities.⁴⁰ The Department of Energy expects the value of goods and services to be procured from broad-based black economic empowerment (BBBEE) suppliers to the amount to R100 billion, which is more than 50 per cent of the total REIPPPP investment of R193 billion.⁴¹ According to the Department of Energy, over R20 billion had reportedly already been invested and over 19,000 jobs created during the construction and operational phases.⁴²

For the socio-economic development target of IPPs, the minimum compliance threshold is one per cent of generated revenue and for the enterprise development target, the targeted level of contributions is 0.6 per cent of revenue.⁴³ These obligations become effective only when operations commence and revenue is generated 'as a percentage of revenue generated.'⁴⁴

A monitoring and evaluation process and contract management function has been established within the IPP Office. This function monitors the progress made by IPPs in meeting their contractual obligations and ensures that the full benefits of the REIPPPP are realised and accrue to the relevant beneficiaries.⁴⁵ The Department of Energy also recognises that within the respective provinces, 'alignment with provincial government energy strategies, spatial planning and development plans have been recognised as optimising the benefits of the REIPPPP to the province.'⁴⁶

3. ASSUMPTIONS

The primary assumption this study makes is that South Africa has an urgent need for new power generation capacity to alleviate critical energy supply constraints and that renewable sources are the primary focus of investment in renewable energy in South Africa.

The study also assumes that there is significant political will and desire to promote a sustainable renewable energy industry, which would deliver cost-effective energy and socio-economic benefits. The regulatory oversight to ensure implementation is, however, very weak.

The study acknowledges that the primary purpose for initiating the REIPPPP was to address the current energy crisis, and not access to renewable energy by rural communities per se. Secondly, it acknowledges that

⁴⁰ Ibid 97.

⁴¹ Ibid.


⁴² Ibid 97, 99. The job years estimated to be created per province: North West Province 7405, Limpopo 2917, Mpumalanga 2709, Gauteng 246, Eastern Cape 18132, Kwa Zulu Natal 336, Western Cape 10273, Northern Cape 65220, Free State 2818.

⁴³ Department of Energy (n 2) 98.

⁴⁴ Ibid.

⁴⁵ Ibid 99.

⁴⁶ Ibid.



although many IPPs have expressed their lack of preparedness to address economic development issues, economic development structures can be developed to benefit local communities.

The study therefore assumes that the contractual commitments of IPPs for enterprise development and socio-economic development have not led to optimal sustainable outcomes. A collaborative effort between the Department of Energy and IPPs will be proposed to facilitate community benefits.

These assumptions are tested in the research presented in this report. In order to get more accurate data, the research focused on IPP projects that were awarded tenders in Bids 1 and 2 of REIPPPP and are already in their operational stage.


4. OUTPUT ONE: SCOPING WORKSHOP AND LITERATURE REVIEW

On 24 November 2014, the Mandela Institute hosted a scoping workshop as a first in a series of activities envisaged in a two-year research project in partnership with KAS. The project was inspired by the on-going discussions on South Africa's climate change response strategy and renewable energy, which in turn drew on the increasing international and local pressure, which necessitated discourse in the area. The need for undertaking this research is premised on the fact that research, dialogue and engagement at the intersection of climate change, energy and the environment has been minimal. Further, there is also a dearth of research on socio-economic and environmental rights implications of the climate change response strategy in South Africa.

In addition to informing participants of the concept of our proposed research, the workshop was convened to collate views, insights and recommendations from various stakeholders in order to confirm the research scope and to identify any potential research gaps that the Mandela Institute, in partnership with KAS, could explore that would contribute to the development of law and policy, in alignment with the National Development Plan.

5. OUTPUT TWO: IMPLEMENTATION ROUNDTABLE MEETING

The Mandela Institute, in partnership with KAS, held an implementation roundtable meeting on the 22nd of May 2015, to assess the research scope and methodology of the proposed research project. The objective of the workshop was to obtain input from the stakeholders that enabled the research team to improve the research scope and design. The original scope of the research included access to renewable energy by rural communities, the impact on South Africa's commitments on climate change mitigation and adaptation and the



implementation of the REIPPPP. At the roundtable, it was suggested that only one of these three aspects should be addressed. This suggestion was accepted and as a result, the focus of this research is on the implementation of the REIPPPP, with emphasis on economic development in local communities surrounding IPP renewable energy projects.

The workshop participants included experts from Wits University, KAS, Council for Scientific and Industrial Research (CSIR), Edward Nathan Sonnenbergs law firm, NGOs such as WWF, GroundWork and Conservation South Africa, as well as a representative from the Spanish Embassy in South Africa.

6. FIELD RESEARCH: OVERVIEW OF PROCESS

6.1 Objectives

The main goal of this project based on our revised research scope was to:

* Investigate and report on how the REIPPPP can contribute towards realising economic developmental outcomes.

6.2. Methodology


This was an empirical study, with primary data collected from key informants using questionnaires administered in semi-structured interviews.

6.3. Preparation

The Mandela Institute embarked on a number of research compliance activities that involved developing research questionnaires, consent forms and information sheets for the approval of the Research and Ethics Committee of the University of the Witwatersrand before the research instruments were administered to the participants in the research project.

In the development of these research instruments and the scope of the research, the Mandela Institute embarked on two research visits in May 2015 to the Middelburg community to assess the viability of the communities in the area to form part of the research study as well as understand the needs of community groups hosting energy projects.

Following the approval of the research instruments by Research and Ethics Committee, the Mandela Institute appointed two part-time researchers with expertise in renewable energy and field research to implement the



study. The brief of the part-time researchers was to identify the relevant communities across the country where the project could be implemented, narrow the scope of the research as advised by our partners in the implementation workshop, and administer the research instruments with a view to implementing a work plan. The intention was to produce a draft report by February 2016.

The researchers identified communities in the Limpopo and Northern Cape provinces for data collection. The research study visits to both provinces took place between July and November 2015.

7. FIELD RESEARCH METHOD: SEMI-STRUCTURED INDIVIDUAL INTERVIEWS

Each participant was asked the same standardised questions which were developed as part of the project. The aim was to include 20 to 25 participants, with the understanding that all information and data collected during this process would be anonymous and confidential. Identities would be withheld and demographic information would be used for statistical and research purposes only. Each interview took between 30 to 60 minutes.

The semi-structured nature of the interviews provided a degree of flexibility to cover those issues not included in the structured interview questions. It also allowed for probing of responses to address issues that emerged during the interviews.

8. IMPLEMENTATION OF THE RESEARCH METHODOLOGY

The first Limpopo research visit took place in August 2015 and the second one took place in September 2015. Cumulatively, both research trips yielded access to community leaders, community groups and the IPPs operating within the Limpopo province.

The Northern Cape research activity took place in November 2015 and yielded access to senior officials in the provincial government, municipality officials and small and medium-sized association business leaders.

Further research interviews were also conducted between July and October 2015 with the National Department of Energy as well as the Local and Economic Development managers of some of the IPPs.

8.1. Individual Interviews

The Mandela Institute conducted 15 one-on-one interviews with individuals across the spectrum of various stakeholders including IPP officials, government employees, community members, small business owners, community liaison officers and traditional leaders.

8.2 Limitations

The findings of this study are limited to a small sample from two provinces and information from various stakeholders who participated in various workshops held in relation to this study. Although the sample is small, it reflects as accurately as possible common challenges faced by IPPs in relation to the economic development aspect of REIPPPP.

8.3 Challenges

Several factors have affected the implementation of this project. The important factors include the following:

1. Lack of access to information: the centrality of the commitments and contractual obligations of IPPs on community development are in contracts signed with government and are governed by confidentiality. Only the national government and consultants who have signed non-disclosure agreements have access to these documents. Reviewing the extent of the scope of obligations as well as the level of implementation cannot be achieved without access to these contracts.
2. Lack of access to conduct research: the researchers discovered a significant gap in knowledge in relation to renewable energy in communities. As a result, the number of people who were able to offer relevant information for the objectives of the study within the community category was quite narrow. Primary information was therefore drawn from government, funders and IPPs.



9. PROJECT FINDINGS

- There are certain constraints with the projected socio-economic benefits of renewable energy. These are:

9.1 Lack of transparency

i. Description of the finding

There is some lack of transparency of the contractual terms and conditions between government and IPPs.

ii. Research leading to finding

Senior officials in the provincial governments expressed dismay at the lack of access to information from the Department of Energy and the Industrial Development Corporation (IDC). As a result, the province felt isolated from existing projects in the province and unable to play its coordination and oversight role.

9.2 Information deficit is prevalent among the three levels of government

i. Description of finding

The Intergovernmental Relations Framework Act⁴⁷ provides that there should be harmonisation and alignment of efforts across all spheres of government to give effect to development. As a result, greater consultations with municipalities, the planning of Integrated Development Plans (IDPs), and monitoring and evaluation were envisaged but it is not clear whether this is carried out.

ii. Research leading to finding

Senior officials in the provincial governments expressed discontent with the lack of consultation and involvement in the agreements signed by the Department of Energy with IPPs and are therefore excluded from the decision making process.

9.3 Regulatory gaps in management oversight

i. Description of finding

The contractual commitments of IPP contracts do not have an effective oversight mechanism and as a result, implementation of the commitments are not well accounted for.

⁴⁷ Act 13 of 2005.



ii. Research leading to finding

In an interview conducted with one of the IPPs, it was indicated that the Department of Energy has assigned a custodian for each renewable energy project. The general perception however by the IPP interviewees and the municipality officials is that although monitoring and evaluation frameworks were in place, they failed to do the actual monitoring. It was felt that government relies solely on the IPPs reporting on their economic development compliance.

Currently, to an extent, financiers have exercised an oversight role. The DBSA, for instance, has been instrumental in financing several projects with community trusts in bidding windows 1 and 2.⁴⁸ Before financing, the financier requires IPPs to present their project plans and ensures that proper governance structures have been put in place by the IPPs. The oversight role is extended to other economic development commitments by IPPs, as long as the financing facility is in existence. This oversight role is however not sustainable in the long run, as the IPP may settle its facility during the tenure of the 20-year-PPA and the financier will no longer be able to play the oversight role.

A monitoring and evaluation framework can also offer solutions to challenges faced by IPPs to ensure smooth implementation of economic development obligations. IPPs have vocalised some of their challenges with no solutions being suggested or assistance being offered by the existing monitoring and evaluation frameworks.

Some IPPs have expressed the need for the centralisation of Social Economic Development (SED) projects to avoid duplication. The interviewed IPPs identified various unintended consequences in relation to the design of projects, community ownership and trusts, the identification of communities for SED projects, as well as the question of quarterly spending versus planning for a full year. Currently, there are different community trusts that have been established for the same community. IPPs have also expressed frustration with the requirement for a two-year economic development implementation plan.

At the various meetings held with local business fora, concerns were expressed in relation to engagement on enterprise development and the need for government to intervene to enforce compliance.

In addition, the flow of information to the municipal level was raised, with assertions being made that government effectively stops at the provincial level.

⁴⁸ See < <http://www.dbsa.org/EN/DBSA-in-the-News/NEWS/Pages/DBSA-announces-financing-of-21-.aspx> > accessed 13 October 2016

9.4 Project sustainability patterns are unmanaged

i. Description of finding

In terms of enterprise development initiatives that had been established in some of the surrounding communities, sustainability was raised as a concern due to the strategy employed. Most projects did not source goods and/or services from local small or medium- sized businesses.

The IDC has made a number of representations to the Department of Energy in this respect. The IDC has taken on the responsibility for the constitution and realisation of trusts set up by its clients. The primary aim of the IDC is to oversee socio-economic transformation for communities to have shareholding. As a result, the IDC has a community investment policy that focuses on the generation of additional revenue for communities. Ultimately, IDC looks for local ownership, job creation and local economic development in its partnerships.

ii. Research leading to findings

With regard to socio-economic development within the Northern Cape, it was indicated that there was some consultation with the mayor's office. This consultation resulted in the establishment of an employment desk and the installation of solar lights in the surrounding community.

In one instance, the local economic development strategy for the municipality was funded by an IPP. While a local economic development forum has been established, participation in the forum has been limited.

Economic development is at the discretion of IPPs and they are required to invest funds in economic development quarterly after coming into operation. Therefore, some may opt to invest in short-term projects that help them to meet this requirement instead of promoting longer-term projects that are sustainable and beneficial to the community in the long run.⁴⁹

9.5 Pay back benefit arrangements prolong community benefits

i. Description of finding

The DBSA, Public Investment Corporation (PIC), IDC and foreign investment are the major funders of renewable energy projects. In terms of most funding models, communities only benefit from the trust after the debt has been paid back to the funders, which delays the financing of benefits for the communities.

⁴⁹ Tait and others, 'Making communities count: Maximising local benefit potential in South Africa's Renewable Energy Independent Power Producers Procurement Programme (RE IPPP)' (2013) 5. <<http://pubs.iied.org/pdfs/16043IIED.pdf>> accessed 13 February 2016.

ii. Research leading to finding

In the IDC funding model, communities are already receiving their dividends. Monies paid back by IDC clients are allocated in terms of a sharing formula where 80 per cent goes to servicing the debt while 20 per cent goes to the community trust.

The IDC currently has 22 clients but with the increasing emphasis on local content, it was suggested that the DBSA and PIC might soon take over the majority funding of IPPs. The IDC sits on a community trust for as long as the project holds, for the sustainability of projects. The IDC has raised concerns about the absence of the Department of Rural Development, which should be purchasing a shareholding for communities.

There still remains a lack of awareness at a community level on the operation of renewable energy community trusts: for example what the pay-back benefit arrangements will be, as well as the nature of the community debts to the funders. Senior officials in the provincial governments indicated that this is an area that needs more attention.

9.6 Community trust modelling creates overlapping objectives which ultimately hamper community development

i. Description of finding

There is currently no community trust model provided for the REIPPPP. The community trust models adopted by the IPPs are designed by the IPPs and their legal advisers. The financiers are involved in financing the setup of the trusts. IPPs have therefore set up community trusts for their individual projects.

ii. Research leading to finding

In setting up a community trust, one of the IPPs had advertised for trustees in a local newspaper and the shortlisted candidates were put to a vote at a community gathering. The IDC has expressed that it will take a more proactive role in the selection of trustees and has consequently developed a guideline for appointment which includes the possession of university degrees. The premise for this minimum requirement is the assumption that advanced educational qualifications will improve the level of understanding and management of the trust. One of the IDC's recent initiatives also includes the creation of development fora which includes agricultural entity representation.

The DBSA is also involved in the establishment of community trusts for the projects it finances and ensures that the trust deed defines the roles and functions of the trustees. The financier is also involved in the appointment of community trust representatives and independent trustees who are credible and competent to run the affairs of the trust for the benefit of the community. Criteria for the qualifications required of each trustee, is set



out in the tender documents calling for applications for trustee positions in community trusts.

The IDC has championed the case for single trusts for a community, rather than duplicating trusts for a single community. In terms of the benchmarks established for trusts by IDC clients, the trusts are to have annual general meetings and hold the responsibility for community consultations. The IDC has also raised concerns around the establishment of community trusts before a successful bidding. Some of the concerns were that setting up a trust before a bid is awarded, may unnecessarily raise community expectations of the impact of IPP projects on surrounding communities, and result in trust deregistration if the bid is lost.

Some of the IPPs interviewed indicated that they were willing to work together and they were receptive to the idea of a common fund/trust where IPPs contribute funds to a common pool to meet their economic development obligations. This reduces the administrative costs and duplication of efforts. The interviewed IPPs suggested that a government body could be established to manage the trust. As a result, it was suggested that a municipal or provincial super-trust should be created. Senior officials at the provincial government shared a similar view and suggested that a municipal or provincial super-trust should be created. If a super trust approach is ever adopted, the trustees should be independent from government, to avoid conflict of interest. This will ensure that the trustees are impartial when deciding which projects the trust should invest in.

The IDC, however, does not favour the super-trust approach as it is of the opinion that the dividends accruing from the trust become the revenue of the municipality and, as a result, accountability problems arise and communities no longer have control and ownership of their own economic development. For the trusts, the stakeholders are the community, the project company, the IDC as the funder, and the independent trustee.

For the IDC, there is a requirement for community trusts to develop their own community development plans and not to rely on the municipal IDPs. In the IDC community trust model, aside from the community trustee, other trustees are not endorsed directly by the community.

However, there is limited data on community trusts in REIPPPP projects due to the fact that most trusts are not yet operational. According to one of the financiers interviewed, it would be premature to give recommendations on best practise in implementation of trusts. Formulation of best practises would also be limited due to the fact that the communities where IPP projects are situated are different and no single trust model can be applied across the board. From our findings, there is a need for further research in this area to address the various concerns raised.

9.7 Lack of coordination between government and industry

i. Description of finding

The lack of contract monitoring processes, lack of transparency in relation to socio-economic development spending, and the inability of the local and provincial government to exercise oversight, were highlighted as problematic trends by some of the local business owners in the Northern Cape.

ii. Research leading to finding


An example of a breakdown in communication that was given by an IPP is the training of 300 people in the Northern Cape without consultation with IPPs on their skills needs and requirements. Senior officials of the provincial government trained 300 students on renewable energy. None of these students were hired by the IPPs located in the province and blame was traded about the failure of communication between government and industry.

In the Northern Cape Province, the absorption of the trained students through internships or employment in order to continue their upskilling was described as problematic. It was alleged that IPPs continue to outsource and claim that there is a skills gap within the province. The nature of the industry, however, does not demand extensive labour after the construction phase and creates minimal opportunities for job creation.

There is also concern by IPPs that the municipalities may push for development plans, which are in the Integrated Development Plan (IDP) and Local Economic Development (LED) strategies, which are already allocated for in the provincial government budget. Ways of co-operating and co-ordinating development plans within the municipality, however, can be looked at, where IPPs can supplement the budget of the province to expand the benefits of a project on a greater scale or ensure sustainability of some projects.

The skills-set of IPPs traditionally has been mainly in the construction and development of renewable energy technology, not in economic development. Many IPPs have, however, engaged economic development experts in their teams. Several of the IPPs interviewed were of the view that administering the economic development aspect of the project diverts from the core focus of IPPs to an area in which they lack expertise. Research done in 2014 by Baker and Wlokas captured similar views from IPPs - that they had no expertise in management of the economic development aspect.⁵⁰ Suggestions have been made that perhaps this task needs a governing body established under the IPP Office, whereby a fund can be created from contributions from IPPs. The Department of Energy IPP Office can then plan, co-ordinate and administer social economic development projects that are sustainable and benefit the communities. The Department of Energy IPP Office currently does not have the capacity and resources to embrace such a function.

⁵⁰ L. Baker & H.L. Wlokas, 'South Africa's Renewable Energy Procurement: A New Frontier' (Tyndall Centre for Climate Change Research Working Paper 159 2014) 34. < http://www.tyndall.ac.uk/sites/default/files/twp159_0.pdf > accessed 13 February 2016.



One of the economic development managers interviewed, however, was of the opinion that IPPs with social economic development managers have sufficient capacity to implement the obligations of the IPPs. The economic development manager felt that suggestions made to have a centralised unit within government for co-ordinated economic development projects, posed an imminent risk to the host communities' surrounding IPP projects. The concern raised was that the communities could easily be side-lined if the right structures were not put in place, to keep politics out of the implementation strategy. There is scope for more research and collaboration in this area; particularly into what structure could possibly work well without making economic development initiatives political.

9.8 Lack of understanding of outcomes of enterprise and economic development between industry and communities

i. Description of finding

Senior officials in the provincial governments suggested that a framework for strategic SED needs to be developed, and roles and responsibilities should be delineated across all three levels of government to ensure smooth implementation. It was also suggested that for community involvement, access to SED plans and training of local communities on the REIPPPP process is needed.

ii. Research leading to finding

There was an acknowledgment that historical problems that are well known created the gap of skills development in our research areas. As a result, the participation of local businesses is limited due to skills shortages, finance and compliance with safety standards which creates uneven competition. Enterprise development creates an opportunity to make these businesses more competitive.

IPPs have adopted their own structures in implementing enterprise development due to lack of structures in the REIPPPP. From our interviews, one IPP indicated that their selection criteria of SMEs to develop has been those with skilled capacity, viable business structures and the ability to create further employment to improve the welfare of surrounding communities. The above mentioned structure seems logical and promotes sustainable development as it creates more employment. The enterprise development focus by the IPPs interviewed in the Northern Cape has been mainly on capacity building and providing equipment to local SMEs. Business hubs have been created and efforts are in place to improve the skills of the local residents. In the Limpopo province, the few local businesses supported by IPPs are in the health care sector and in agriculture.

9.9 Fifty km radius rule is arbitrary and creates community divisions and affects sustainability

i. Description of finding

Senior officials in the provincial governments objected to the 50 km radius rule for SED projects because of, among other things, it created artificial boundaries, division of municipal areas and communities.

ii. Research leading to finding

Within the Northern Cape province, the 50km radius rule is applied with flexibility. The 50km radius is extended to cover whole districts because of sparse populations in the province. Clients were required to profile communities and conduct a socio-economic needs assessment before a strategy was developed.

The IDC arrangement also provides that where there is an overflow, additional beneficiaries beyond intended communities can be identified for developmental projects.

Furthermore, the 50km radius provision may restrict economic development. Some municipalities within the Northern Cape, for instance, have projects concentrated in one area and the 50km radius criteria will result in overlapping efforts by IPPs to develop a small area within the municipality. This 50km criterion may also lead to the exclusion of surrounding communities that would benefit greatly from investment by IPPs.

There was a concern expressed by one of the IPPs that, where there is a concentration of IPP projects and economic development plans overlap, the continuous channelling of funds for socio-economic development during the 20 year PPA tenure may result in dependence by the communities. Such communities may be disinclined to take initiatives for their own development.

The IPP projects within the Northern Cape and Limpopo provinces are set up in sparsely populated areas. This has led to economic development being limited to some areas despite the sparse population, whereas there are other areas outside the 50km radius with a more dense population and economic development would derive more benefit there. Coordination of development could be investigated further if it would be best administered at government level to discourage competition between IPPs in economic development projects within the 50km radius and investing in projects that will be more sustainable and beneficial to the municipality.

9.10 Community participation remains central to the realisation of IPP contractual commitments

i. Description of finding

Some IPPs outsource their roles and functions to community development experts which creates a potential for unintended consequences.

ii. Research leading to finding

Economic development planning by IPPs begins at the bidding stage, as the bid requirements dictate that the 30 percent criterion in economic development has to be met in order to qualify for the evaluation process. From our research, it emerged that there were several approaches taken by IPPs in developing their economic development plans. Some IPPs outsourced a community liaison officer who went out to a community, to conduct individual evaluations, before drafting the economic development plan. Others made some contact with the municipalities where they proposed to set up the projects if awarded the tender, and consulted with the mayor and the local economic development officer. However, quite often, the confidential nature of REIPPP were found to isolate municipalities and were often unaware of the companies interested in setting up projects within their locality.

This exclusion of the community has an impact on future interactions with the other tiers of government and the communities where the projects will be located. For economic development to be meaningful and well received, some engagement with the community is paramount, whether through the municipality mechanism or via the provincial government. It is within the municipalities and provincial governments that the needs of the community can be highlighted, and the economic development projects can be made equitable, through participation by the communities.

The REIPPPP bidding requirements should however be adjusted to enable extensive economic development plans to be developed after the tender is awarded. This will avoid situations where potential project managers have engaged with communities and created expectations of the benefits that an IPP project will bring to surrounding communities.

Community awareness can complement and enhance community engagement which can be beneficial in implementing the economic development aspects of IPP projects. Informed communities will facilitate fruitful engagement. Opportunities to create awareness of the benefits of renewable energy and any proposed projects should be seized by IPPs. One of the IPPs interviewed indicated that they create community awareness through road shows at schools. Other frameworks that can create awareness should be explored and utilised by IPPs.

9.11 Energy effectiveness, accessibility and affordability

i. Description of finding

In the absence of connection to the national grid, community households in the vicinity of IPP solar plants have limited access to energy.

ii. Research leading to finding

Respondents who were interviewed within Limpopo province indicated that large numbers of households in their communities are connected to the Eskom electricity grid. However, many households resorted to harvesting firewood in the surrounding bushveld to supplement their energy needs. Respondents pointed to the unaffordable and unreliable access to electricity (due to lengthy and regular load-shedding) as reasons for harvesting firewood. Local residents raised concerns about the exploitation of firewood. However, other local residents applauded the use of firewood as a reliable and cheap energy source despite the labour intensity in harvesting firewood and health complications that arise from the use of this source of energy.

Although IPPs in the REIPPPP generate energy to connect to the national grid, there is additional potential for IPPs to ensure access to energy to the surrounding communities. During our research in both Limpopo and Northern Cape provinces, we were informed of initiatives by IPPs in the installation of solar panels. The installations were in some households within surrounding communities as well as solar street lighting and solar powered boreholes. There is potential for off-grid solutions offered by IPPs.

As part of South Africa's universal access to electricity drive, over 90 000 solar home systems to date have been introduced primarily in the Limpopo, Eastern Cape and KwaZulu-Natal provinces.⁵¹ In addition, the new household electrification strategy has identified a target of 300 000 households for electrification with quality, non-grid solutions by 2025.⁵² Other off-grid solutions in South Africa include a commitment to roll out 5 million solar water heaters by 2030.⁵³ Although the REIPPPP and the household electrification strategy are entirely different programmes with different objectives, there is room for unifying some synergies. This is an area that needs to be further researched on, particularly how REIPPPP can complement off-grid connections and enable access to energy to those without electricity.

⁵¹ Department of Energy (n 2) 7.

⁵² Ibid.

⁵³ Ibid.

9.12 Local job creation

i. Description of finding

The Department of Energy stated that over 19 000 job years have been created so far through the REIPPPP.⁵⁴ Narrated experiences in the Northern Cape and Limpopo provinces however suggest that at a local level, the jobs created are few.

ii. Research leading to finding

The renewable energy industry and in particular solar technologies have been fast growing within the Northern Cape. Finding local skilled human resources was perceived to be a major challenge for developers during bidding window 1. One of the arguments advanced was that IPPs projects were located in remote areas, therefore they did not attract professional residents. The lack of skills both provincially and nationally has been argued by IPPs to be the reason for sourcing international skills for the construction of renewable energy projects, particularly, the first REIPPPP projects.

Utility scale renewable energy is a fairly skilled profession and for locals to acquire employment opportunities in renewable energy projects, they need to be competitive in skills and knowledge. At one of the local municipalities visited in the Northern Cape, it was established that due to lack of skills and capacity, most local small businesses were not engaged in renewable energy projects. The small businesses also lack the risk appetite for the scale of the REIPPPP projects. Very few employment opportunities were available in construction, maintenance, painting and low-skilled jobs such as security and cleaning services.

The Northern Cape Province has taken the initiative in ensuring that the province has the necessary skills and knowledge in renewable energy. On 5 August 2014, the province launched the Renewable Energy Centre of Excellence (RECE).⁵⁵ RECE is a partnership of the Northern Cape provincial and local governments, and urban and rural technical and vocational education training (TVET) colleges of the Northern Cape.⁵⁶ The centre was established and funded by the Energy and Water Sector Education and Training Authority (EWSETA) and has established partnerships with national universities.⁵⁷

The centre's agenda focuses on research, development and innovation in renewable energy with the objective of influencing policies and human capital development within the province on renewable energy.⁵⁸ Training and skills development by RECE will play an important role in empowering local people and will support the


⁵⁴ Department of Energy (n 2) 7.

⁵⁵ See <<http://www.gov.za/remarks-premier-northern-cape-ms-sylvia-lucas-occasion-launch-renewable-energy-centre-excellence>> accessed 13 October 2016.

⁵⁶ Renewable Energy Centre of Excellence <<http://www.sapvia.co.za/wp-content/uploads/2014/11/RECE-Training-Exec-Summary.SAPVIA.pdf>> accessed 18 February 2016.

⁵⁷ Renewable Energy Centre of Excellence (n 56).

⁵⁸ Ibid.



green economy accord objectives by ensuring that the province has the necessary skills to benefit from employment opportunities in renewable energy projects within the province.

The RECE also intends to support development in the local manufacturing industry and SMEs within the industry.⁵⁹ In its mission, it intends to establish local testing of locally available components to assure the developers and IPPs of their quality.⁶⁰ Localisation can only be boosted where local products are reliable and competitive with imported products/components from jurisdictions with well-established renewable energy technology.

The RECE has highly ambitious objectives, which could enable the province to benefit from the employment opportunities available in the renewable energy projects. The challenge remains that despite the centre's establishment in 2014, its impact and creating of awareness about renewable energy within the province remains low.

One challenge in job creation within the renewable energy industry is that, in the operational phase of IPP projects, minimal labour is demanded in areas where communities lack technical skills. Localisation can be explored within the province to reduce the levels of unemployment. The Northern Cape province has a high level of unemployment and has an influx of people migrating from other provinces to look for employment in the mines located within the province. Localisation creates an opportunity to increase employment opportunities within the province. Localisation is, however, limited by an insufficient demand to boost the manufacturing of renewable energy technologies, hence, the industry is not growing at a fast pace.

Competition with other already established renewable energy technology manufacturers from Europe and China threatens the expansion of the manufacturing capacity in South Africa. Europe and China have cheaper components, enjoy economies of scale and have invested in research and development which has contributed to their growth. China enjoys cheaper labour costs in production; hence, its output costs are cheaper.

There is a potential market for renewable energy technologies in Africa with other countries exploring renewable energy as an energy solution. In the African energy markets, hydro energy dominates the continent and a huge percentage of the African population is still not connected to the electricity grid. This can be an opportunity to connect people without access to electricity with renewable energy. Although renewable energy technologies manufacturing may create jobs, the main question we should be addressing is whether we have a comparative advantage and an adequate domestic market to foster the industry. This is an area for the Department of Trade and Industry to investigate.

⁵⁹ Ibid.

⁶⁰ Ibid.

9.13 Preferential procurement and local content

i. Description of finding

Most IPP projects are located in remote areas with limited industry capacity and, as a result, there are limited service providers from whom the IPPs can source locally.

ii. Research leading to finding

The design of REIPPPP, in requiring most procurement plans to be disclosed at the bidding process, pushes the developers to evaluate their risks and implementation, and in many cases they pre-contract most of the components to hedge the costs when the actual construction takes place.

This reduces local procurement in an underdeveloped renewable energy technology manufacturing sector. Procurement of goods and services by IPPs in bidding window one and two has been criticised and it is felt that the IPPs could have procured more local products and services.⁶¹


IPP's have attempted to develop some local content in their operations through the purchase of relevant materials from communities when possible and where necessary. Steel, cement and other materials used in construction have been sourced locally by the IPPs interviewed in both the Limpopo and Northern Cape provinces. However, RE technology components such as Photo Voltaic (PV) panels are imported because they were not being manufactured locally during the construction phase for Window 1 and 2 projects. However, a few solar PV manufacturing plants and wind tower manufacturing industries have since been established.⁶²

When it comes to procurement from women-owned businesses, it was also highlighted that there was an oversight in the design of REIPPPP due to historical and cultural reasons that inhibit the development of women-owned businesses in South Africa. Very few IPPs are able to meet this requirement. The IPP projects interviewed however have employed women at various stages of their projects.

Since the Mandela Institute carried out this research, several changes have been made by the Department of Energy IPP Unit, based on lessons learnt from bidding window 1 and 2. For instance, IPPs are no longer required to submit two-year economic development plans but are to submit an annual plan. Some of the documentation required during the bid submission stage is no longer required at that stage. The Mandela Institute takes cognisance that certain changes are currently being made by the Department of Energy IPP Office based on

⁶¹ L. Baker & H.L Wlokas (n 50) 35.

⁶² <<http://www.engineeringnews.co.za/article/arcelormittal-south-africa-upgrades-plate-mill-to-supply-rising-wind-tower-demand-2014-07-22/searchString:wind+tower+manufacturing>> accessed 18 February 2016. See also B Rennkamp and F.F. Westyin, 'Feito no Brasil? Made in South Africa?: Boosting technological development through local content policies in the wind industry' (2013) Energy Research Centre, University of Cape Town.



lessons learnt from bidding windows 1 and 2. The ongoing changes in the REIPPPP are however beyond the scope of this research.

The recommendations made by the Mandela Institute in this report are made on the basis that some of the findings from this study are yet to be addressed in bidding window 3 and 4 and there is an urgent need to find solutions.

10. RECOMMENDATIONS

There is ample opportunity to improve the implementation of the socio-economic development commitments by IPPs under REIPPPP as the Power Purchase Agreements signed between the IPPs and the Department of Energy have a 20-year tenure. The success of REIPPPP, the increase in demand for energy, and international pressure to decarbonise, creates the potential for the future extension of the programme beyond bidding window five. There is scope therefore to improve on the bidding requirements should this happen. It is for this reason we propose the following recommendations:

10.1. TO GOVERNMENT


10.1.1. Introduce a coordination role for the Department of Energy IPP office

Senior officials in provincial governments, who coordinate renewable energy projects in the one of the provinces, expressed a number of concerns about the management and oversight of IPPs by the Department of Energy. As a result, one of the provincial governments proposed the establishment of implementation protocol agreements among all three levels of government. This protocol would determine the roles and responsibilities of each tier, including local content requirements applicable to each province. There was also a proposal from one of the provincial governments for the establishment of a consultative body representing all three levels of government.

This proposal is supported and it is further recommended that the IPP office should be strengthened to also coordinate with IPPs in the implementation of their SED and ED plans.

It will be useful if a REIPPPP forum committee within the Department of Energy IPP office is established, to fast-track dialogue between government and industry. The committee will streamline processes, give oversight, and facilitate collaboration between projects in the same region. SAREC⁶³ has currently been a forum through

⁶³ SAREC is the umbrella body of the South African Photovoltaic Industry Association (SAPVIA) and the South African Wind Energy Association (SAWEA), Sustainable Energy Society of Southern Africa (SESSA) and the South African Solar Thermal Industry Association (SASTELA). See <<http://www.sarec.org.za/>>



which IPPs have been communicating and engaging with government.

10.1.2 Monitoring and Evaluation

The presence of a monitoring and evaluation function within the Department of Energy IPP office should be more visible and the structures of the team more transparent. The monitoring and evaluation process will ensure compliance by IPPs of their contractual requirements and enable the identification of challenges and successes of IPPs. The information obtained from this monitoring channel can give guidance to other IPPs, on best practices to implement SED and ED plans. The monitoring and evaluation process should be conceived as an oversight mechanism with powers to sanction non-compliance with SED and ED plans by IPPs.

One of the provincial governments also suggested the introduction of monitoring and evaluation criteria that measures of employment benefits, local procurement benefits and skills development benefits.

10.1.3 Need for information sharing and transparency

The lack of information sharing among the levels of government and the inability of non-contracting parties to hold government and industry accountable is of great concern. It is important that third party oversight can be exercised over these contracts for accountability purposes.

There is a clear disjuncture between the local, provincial and national government on IPPs project development. Some of the bidding documents that are received by the Department of Energy should be shared with the provincial and local governments to create awareness about projects to be deployed within their region and to ensure multiple levels of oversight.

Access to information sharing across all government departments is crucial to ensure the coordination of consultation with all relevant government departments.

10.1.4. Promote consultation within government

There is a lack of representation of provincial and municipal governments in the regulation of IPPs. However, these governments are at the coalface of local development. In order to ensure that IPP socio economic development activities meet the relevant needs of local communities and to coordinate the consultation between IPPs and communities, the Department of Energy should create a role for provincial and local governments to influence the development of policy related to the oversight management of IPPs.

10.1.5. Revise regulatory standards on LED commitments

Currently, IPPs exercise discretion on the various projects to be implemented for the benefit of communities. It is recommended that the state should play a more regulatory role to approve the spending on LED projects by



IPPs, to ensure the development of sustainable projects that uplift communities economically.

Furthermore, the Department of Energy should revisit the artificial boundaries that have been invariably created through the creation of the 50km radius. While the radius is a useful indicative range for IPPs to determine the scope of their project, the boundaries should be flexible and fluid to allow unique situations in associated communities in the project area to be taken into account to ensure all relevant communities benefit.

10.1.6 Development of sustainability plan

The Department of Energy should play a facilitative role in the development of a sustainability plan for SED and ED projects by coordinating with IPPs, financing institutions and municipalities to test the viability of projects and the projected impacts of such projects on the collective development of communities.

10.2. TO IPPs

10.2.1. Coordination of efforts in community trust implementation

IPPs need to work together to develop sustainable projects and to consider establishing single trusts in communities so that the funds provided can be maximised by minimising administration costs of various trusts. Coordination by IPPs will also maintain cohesion within the communities where their projects are located.

10.2.2. Prioritise community engagement and education


IPPs need to have a more informed engagement with their host communities. Community expectations tend to be raised when renewable energy plants are constructed in their communities. The failure by IPPs to conduct awareness raising and capacity-building on renewable energy has created unfortunate perceptions that renewable energy projects are exploitative and offer no benefits to communities. The realities of the job creation potential of IPP projects, the time frames for community trust benefits to be enjoyed and when IPP revenues can be invested in socio-economic development projects is information that needs to be disseminated to local communities. Community education on enterprise development is therefore crucial.

10.2.3. Prioritise access to energy as part of local development

It is important for IPPs to work with government to identify ways of providing access to affordable energy to communities that are currently not connected. It is understood that IPPs supply electricity directly to the national grid and the government subsidises access to electricity to poor communities. However, communities highlighted the provision of solar panels to homes as a need that might aid access to electricity.

10.2.4. Reskilling for job creation relevant to IPPs

IPPs expressed the challenge of having access to people and skills that are able to offer technical services



relevant to IPPs. IPPs need to take on the responsibility of addressing this challenge by investing in skills development for people in communities that will be valuable in the management of solar farms.

10.2.5. Prioritise community businesses as preferential bidders

In certain instances, IPPs have prioritised local businesses in delivering services to solar farms. However, small enterprises have expressed their dismay about the big businesses in communities being prioritised over smaller enterprises. It is necessary for IPPs to recognise the importance of extending opportunities to small enterprises and working with such enterprises to deliver services that meet the quality assurance standards that the IPPs may demand. It is only through access to opportunities that small enterprises can grow and deliver competitive services to IPPs.

10.3. TO FINANCIERS

10.3.1. Pay back benefit arrangements should be prioritised

The funding model similar to that of the IDC should be preferred. A percentage of the debt repayments to financiers should go into the community trust for immediate access for the establishment of developmental projects.

10.3.2. Introduce requirements that ensure the implementation of ED and SED plans

Financial institutions should ensure that ED and SED plans are not treated as secondary requirements by IPPs. By working with IPPs, financial institutions should be actively involved in providing oversight on the sustainability of projects and ensuring that IPPs provide a lasting positive legacy to host communities.



12. CONCLUSION

Amidst the continuous call for countries to mitigate climate change impacts, by reducing heavy reliance on fossil fuels and moving to renewable energy sources, South Africa and other developing countries have to contend with domestic priorities. These priorities depend, to a large extent, on the availability of reliable and affordable electricity. The Constitutional right to an environment not harmful to health and well-being, mandates the government to, among other things, take measures to prevent pollution, while concurrently promoting justifiably ecologically sustainable development. The creation of an enabling environment for the roll-out of renewable energy into South Africa's energy mix is seen as a big step towards promoting sustainable energy and reducing South Africa's carbon footprint.

This study has demonstrated that the government is learning from its experience in implementing the REIPPPP, and continuously improving in terms of removing the barriers to renewable energy in the electricity sector. The government is also attempting to ensure that the REIPPPP not only increases the share of renewable energy in the energy mix, but also achieves socio-economic developmental objectives.

South Africa occupies a unique position in its ability to lead developing countries in developing legal and policy frameworks to enable the transition to renewable energy; and to use that transition to advance socio-economic development objectives. However, challenges remain that can be addressed as the regulators and procurement agencies continue to improve the legal and policy framework. Key issues around vertical coordination from national to provincial government and sharing of information should be addressed and shared visions developed among IPPs, local communities and the government. These are key to preventing unrealistic expectations from local communities that could inadvertently present challenges to IPP projects. In order to achieve the balance that underlies the idea of sustainable development (sustainable energy) in this case, it is necessary for all interested stakeholders to harmonise their various functions and roles to protect South Africa's future and work towards a common objective of an energy mix with the least carbon footprint.

REFERENCES

Baker L. & Wlokas H.L. , 'South Africa's Renewable Energy Procurement: A New Frontier' (Tyndall Centre for Climate Change Research Working Paper 159 2014) 34.

Broad-Based Black Economic Empowerment Act 53 of 2003.

Department of Energy, 'State of Renewable Energy in South Africa' (2015).

Department of Economic Development 'The New Growth Path: Framework' 2011.

Department of Economic Development 'Green Economy Accord' 2011.

Draft Integrated Energy Planning Report, General Notice 513, Government Gazette 36690 of 24 July 2013.

Eberhard A., Kolker J., and Leigland J. 'South Africa's Renewable Energy IPP Procurement Program: Success Factors and Lessons' (PPIAF and World Bank Report) (2014).

Electricity Regulation Act 4 of 2006.

Electricity Regulations on New Generation Capacity General Notice R721, Government Gazette 32378 of 5 August 2009.

Electricity Regulations on the Integrated Resource Plan for Electricity 2010–2030 General Notice R 400, Government Gazette 34263 of 6 May 2011.

Intergovernmental Relations Framework Act 13 of 2005.

Independent System and Market Operator Establishment (ISMO) Bill 2011, General Notice 290, Government Gazette 34289 of 13 May 2011.

Industrial Policy Action Plan (IPAP) (2013-2016).

Industrial Policy Action Plan (IPAP) (2014-2017).

Kaggwa M., Mutanga S. S., Nhamo G. & Simelane T., 'South Africa's Green Economy Transition: Implications for Reorienting the Economy Towards a Low-Carbon Growth Trajectory' (South African Institute of International Affairs (SAIIA) Occasional Paper No 168) (December 2013).

National Energy Act 34 of 2008.

National Climate Change Response White Paper General Notice 757, Government Gazette 34695 of 19 October 2011.

Rennkamp B. and Westyin F.F., 'Feito no Brasil? Made in South Africa?: Boosting technological development through local content policies in the wind industry' (2013) Energy Research Centre, University of Cape Town.

Regulations on New Generation Capacity, Government Gazette 34262 of May 4 2011.

Renewable Energy Policy of the Republic of South Africa General Notice 513, Government Gazette 26169 of 14 May 2004.

Roussos M., 'Energy Planning and Sustainability' in Antoine Francis (ed) 'Keeping the lights on' 64 The Journal of the Helen Suzman Foundation (2012).

Preferential Procurement Policy Framework Act 5 of 2000.

Shaun N., 'Transforming the Energy Supply Industry' in Antoine Francis (ed) Keeping the lights on' 64 The Journal of the Helen Suzman Foundation (2012).

Tait and others, 'Making communities count: Maximising local benefit potential in South Africa's Renewable Energy Independent Power Producers Procurement Programme (RE IPPP)' (2013) 5.

United Nations Framework Convention on Climate Change (UNFCCC) 1992.

White Paper on Renewable Energy (2003).

White Paper on the Energy Policy of the Republic of South Africa General Notice 3007, Government Gazette 19606 of 17 December 1998.

Internet sources

<http://www.gov.za/remarks-premier-northern-cape-ms-sylvia-lucas-occasion-launch-renewable-energy-centre-excellence>.

<http://www.sapvia.co.za/wp-content/uploads/2014/11/RECE-Training-Exec-Summary.SAPVIA.pdf>.

<http://www.engineeringnews.co.za/article/arcelormittal-south-africa-upgrades-plate-mill-to-supply-rising-wind-tower-demand-2014-07-22/searchString:wind+tower+manufacturing>.

<http://www.ipprenewables.co.za>

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The Mandela Institute is a centre in the School of Law of the University of the Witwatersrand. It comprises a small full-time staff and affiliated experts in the Wits School of Law, as well as visiting and adjunct academics with high standing and extensive experience from the legal profession, civil society, industry or the community. The Institute has set itself an agenda to grow the capacity of South African and African policy thinkers, academics and decision-makers with regard to positioning Africa to take claim its space in a globalized world economy, while protecting its natural resource base, alleviating poverty and promoting development that is sustainable. The Institute encourages research that addresses contemporary crosscutting human rights, public interest, developmental and sustainability law and policy issues leaning towards the following broad research areas:

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