



# LOST IN PROCUREMENT:

AN ASSESSMENT OF THE  
DEVELOPMENT IMPACT OF THE  
RENEWABLE ENERGY SECTOR

## CHAPTER 4

### **Lost in Procurement: An Assessment of the Development Impact of the Renewable Energy Procurement Programme**

Fumani Mthembi

*...but is it [Development] that is being understood here or is its identity being evaded in reducing it to a subset of practicable measurements?<sup>1</sup>*

#### **Abstract**

This chapter analyses the socio-economic development impact of the Renewable Energy Independent Power Producers Program (REIPPP) in communities where renewable energy farms are located. A number of limitations were observed and these limitations result from a range of factors such as incomplete development targets, the reluctance of independent power producers to make investments in socio-economic development, an absence of a shared understanding of development and, most critically, a weak monitoring system. Therefore, this chapter argues that the design of the on-grid procurement system, which explicitly and laudably sets out development targets for independent power producers, is undermined by its conflation of compliance with development impact. In other words, the failure to tease out the meaning and full potential of development through this sector is producing results that fall short of and, in some instances, completely subvert the transformation intent behind the state's procurement of on-grid renewable energy. The chapter identifies ten key themes to demonstrate the missed opportunities with respect to development since the sector's inception in 2011. Based on this, solutions are proposed that incorporate an expanded interpretation of development into the existing monitoring system to ensure that the state is measuring the right factors and independent power producers are incentivised to invest in and account for impactful rather than check-box development.

---

<sup>1</sup> Adapted from Luke, T.W (1995): 'On Environmentality: Geo-Power and Eco-Knowledge in the Discourses of Contemporary Environmentalism', *Cultural Critique, No.31, The Politics of Systems and Environments, Part 3*, pp 57-81 'but is it the environment that is being understood here or is its identity being evaded in reducing it to a subset of practicable measurements?'

## Introduction

Development can be defined in multiple ways. Cowen and Shenton argue that ‘one of the confusions, common through development literature is between development as an immanent and unintentional process... and development as intentional activity’<sup>2</sup>. In truth, the alternatives presented by Cowen and Shenton represent the extreme ends of a single spectrum. In other words, this characterisation is almost akin to free market versus state-controlled economics, with mixed economy variations lying somewhere in between. What this paper is assessing – the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) – resides in the ‘mixed economy’ zone, as, although defined by the state, it is in fact an initiative aimed at liberalising South Africa’s energy sector by including private companies in power generation. In other words, our concern is intentional development.

What this chapter seeks to demonstrate is that, in some cases, the Department of Energy has not succeeded in matching development intent with development practice; and that, while in the short run the negative impacts of these shortcomings are not obvious, the long-run social risks stemming from this dissonance are substantial. Indeed, the title phrase of this paper, ‘Lost in Procurement’, is a pun derived from the expression ‘lost in translation’, which indicates an instance in language translation that does not allow for the full meaning of one language to be captured in another. Similarly, it is argued in this chapter that the full meaning of development is lost or compromised when it is translated into the current language of compliance, which is expressed through the REIPPPP’s Economic Development framework.

More fundamentally however, it is important to appreciate that the notion of development is value-laden. Its articulation is a function of how society perceives itself and its related, collective aspirations<sup>3</sup>. To determine the meaning of development, this chapter anchors itself in South Africa’s vision for itself as expressed in the National Development Plan: ‘...by 2030, we seek to eliminate poverty and reduce inequality. We seek a country wherein all citizens have the capabilities to grasp ever broadening opportunities available.’<sup>4</sup> Therefore,

---

<sup>2</sup> Cowen M, & Shenton, R (1998) *Doctrines of Development*. London. Routledge

<sup>3</sup> Chambers, R (1997) *Whose Reality Counts? Putting the First Last*. London. ITDG

<sup>4</sup> National Planning Commission (2011) *National Development Plan*

this chapter's analysis of the DOE's economic development framework, as set out for the on-grid renewable energy sector, seeks to determine whether each target and, crucially, the observed practices linked to the implementation of each target, make our intent, our national vision for development, more or less attainable.

What is patently clear is that 'you cannot manage what you don't measure' and, therefore, it is not compliance as the act of measuring that this paper argues against. Instead, it is the assumption that the current compliance framework as expressed through Economic Development (ED) obligations is a sufficient means for the attainment of development. The chapter therefore assesses ED in terms of poverty reduction, the expansion of capabilities and long-term sustainability of socio-economic investments. In doing this, the chapter seeks to unpack and propose solutions to how best to deliver value for money through the current economic development framework. It is necessary to state upfront that the current ED framework is seen as a sound foundation or starting point. What is thus suggested is augmentation rather than a complete overhaul of what is already in place. This point is supported by other researchers who, having assessed South Africa's procurement legislation, conclude that what is necessary is improvement upon what exists rather than the creation of something entirely new<sup>5</sup>.

What we seek to critically discuss then is state procurement in the context of the Renewable Energy (RE) sector. RE, being newly liberalised in South Africa<sup>6</sup>, presents an opportunity to achieve greater development impact through the design, implementation and monitoring of the sector's procurement system. This system, REIPPPP, which began in 2011, is a competitive bidding process through which the state, as the sole buyer of energy for the national electricity grid, assesses the proposals of Independent Power Producers (IPPs). The state's assessment is based on two factors: price, which is linked to finance and technology, as well as economic development, which is comprised of seven elements (which will be discussed in the background section of the chapter). For the purposes of this chapter, it is economic development (ED) that is placed in the spotlight in order to make evident the nature and urgency of the misalignment between the intentions of the programme and the practices that pervade its implementation. Each element of economic development is dealt

---

<sup>5</sup> Laura Turley, L & Perera, O (2014) 'Implementing Sustainable Public Procurement in South Africa: Where to Start' IISD Report.

<sup>6</sup> South Africa's first Independent Power Producers in the Renewable Energy Sector were decided in November 2011 upon the awarding of preferred bidder status to 28 bidders. Of these, 27 went on to be granted Power Purchase Agreements, licenses for energy production in December of 2012.

with in detail, barring local content. This issue requires dedicated separate attention given its interplay with local manufacturing and thus, the Industrial Policy Action Plan (IPAP 2).

### **Research and Analysis Approach**

Because the sector is new, many assessments have tended towards descriptions of its machinations and its expected outcomes based on bid submissions. For example, Eberhard et al published a paper in 2014 titled ‘South Africa’s Renewable Energy IPP Procurement Program: Success Factors and Lessons’ which provides a comprehensive history of REIPPPP and includes statistical data on the sector’s composition and trends thus far. The economic development impact of the sector, which is linked to a twenty-year outlook (pegged to the length of Power Purchase Agreement (PPA)), has not been dealt with in much detail owing to an absence of data. It is true that there is not sufficient data at this point to comment on whether the right social investments were made towards community development, for example.

However, what is immediately observable are sector *practices* in relation to economic development. It is these practices that are already providing a rich set of clues into how various stakeholders perceive development. They also reveal weaknesses in the DOE’s monitoring mechanisms and, critically, point towards the generation of social risks that cannot be captured or punished using the current measures. As is known, it is the protracted under-appreciation of social risk that results in violent and expensive forms of social upheaval. Certainly, cases such as Marikana<sup>7</sup> reveal that a dogmatic marriage to suboptimal technocracies will, in the long-run, result in total breakdown. Therefore, in proposing changes to the current ED framework, we propose openness in principle to constant adjustment in the ways in which ED is monitored to ensure that social risks don’t lead to costly eruptions.

But how exactly do we come to grips with sector practices in a context where competing private actors are not compelled to share how they execute their plans? This speaks to the data collection challenge at the heart of this chapter.

---

<sup>7</sup> For a summary of initial Marikana Commission outcomes, see: <http://mg.co.za/article/2014-09-16-key-lessons-for-lonmin-as-marikana-commission-wraps-up>

Data was collected by researching communities based in Limpopo, North West, Free State, Northern Cape and the Western Cape and the impact of these programs understood.

The chapter opens with a detailed description of economic development, identifying each element and how the state measures compliance. It follows with an assessment of ten key hurdles to development. These hurdles identify different types of design and implementation failures that undermine the ultimate goal of development. Associated with each hurdle is a proposed solution as well as further research questions that must be pursued to strengthen the scientific understanding of how widespread certain forms of malpractice are as well as the potential veracity of the solutions that the chapter points to.

### **Background: Economic Development in the Renewable Energy Sector**

To start with, it is critical to understand the timetable of renewable energy power plants to gain perspective on when and how the social risks identified in this chapter unfold. There have been four bidding windows each year since the inception of REIPPPP in 2011. The success of a bid is typically announced three to six months after the bid submission, after which another six-month period is granted for Independent Power Producers to reach financial close. At this point they are awarded Power Purchase Agreements (PPA) by the State. Construction typically begins three months after the award of a PPA and lasts, on average, for 18 months, depending on the size of the power plant and the speed at which it reaches Commercial Operation Date (COD), which is a technical milestone determined by the state. In all then, it can take up to three years for a power plant to become fully operational. Therefore, of the first three bidding rounds that have been awarded, only Round 1 (28 awarded) and Round 2 (19 awarded) projects have been granted power purchase agreements. Furthermore, while Round 1 projects have largely reached the operations phase, Round 2 projects are mostly in the final phases of construction. The 17 Round 3 projects that were successful have not yet signed their PPAs with the government.

The key implication of this timetable is that many of the development risks that are identified fall into the realm of missed opportunities. For example, the failure to train workers during construction is not likely to result in a workers' protest because workers do not understand this to be an entitlement, but serves as a missed development opportunity given the unchanged skills profile of the labour force. The longer-term issues, such as the inability to generate a class of Black industrialists or the absence of communities from the

planning process, are issues that will manifest over the course of the twenty-year life cycles of the projects. This chapter is thus about understanding the foundational deficiencies that may compromise development in the long run.

Economic development in the renewable energy sector is 30 points out of a possible 100. This means that, when bidding for a license to supply electricity to the national grid, each bidder, should focus 30 per cent of its energies on matters of ED.

Economic development is disaggregated into seven areas, known as pillars:

- Job Creation;
- Local Content;
- Preferential Procurement;
- Top Management;
- Ownership;
- Enterprise Development, and
- Socio-economic Development.

Upon granting of a license<sup>8</sup>, the IPP is expected to fulfil the ED obligations it committed to in its initial bid and is subsequently monitored on a quarterly basis by the DOE.

Put differently, each element of economic development constitutes a performance commitment to the state. The DOE determines minimum standards, known as 'thresholds', and measures the quality of a bid on the IPP's ability, not only to meet but also exceed, the threshold requirements. The table below is a summary of how each economic development element is measured by the DOE. It does not include actual thresholds or targets as these change with every bidding round. It is thus intended to provide an understanding of what is measured and how it is measured. It is worth stating that this chapter does not interrogate whether the DOE's current thresholds are set at a level that is consistent with national imperatives. Rather, we challenge the issues surrounding these targets to indicate that, regardless of how they have been set, the prospects of using them to approach true development are compromised under the current conditions.

---

<sup>8</sup> The term 'license' is used loosely to mean the signing of multiple agreements between the DOE and IPPs, which grant IPPs permission to construct and operate their planned power plants and bind the state to the purchase of the resultant energy.

### ED Summary Table

The table below provides a summary of each ED element that is measured by the DOE, indicating the calculation method as well as the evidence that the DOE requires to monitor the performance of IPPs.

ED Element	Measure	Phase of Measurement	Evidence of Activity
<b>1. Job Creation</b>		Construction & 20-year Operation	
South African Citizens	Per cent of employees who are South African citizens relative to total employees measured in terms of time worked		- Letter of Appointment - ID - Time Sheet - Salary advice
Black Citizens	Per cent of black citizens relative to total employees measured in terms of time worked		
Skilled Black Citizens	Per cent of skilled black citizens relative to total skilled employees measured in terms of time worked		
Local Community	Per cent of employees from within 50km of project site measured in terms of time worked		
Jobs per megawatt	Total time worked by total workforce divided by the total megawatts of a power plant		
<b>2. Local Content</b>	Per cent of construction costs spent on South African goods & services	Construction	- Invoice - Proof of payment - Local content



ED Element	Measure	Phase of Measurement	Evidence of Activity
			declaration
<b>3. Preferential Procurement</b>	Total expenditure on South African goods and services	Construction & 20-year Operation period	- Invoice - Proof of payment - BBBEE certificate of supplier
BBBEE	Per cent of procurement of goods or services from enterprises that do not qualify as QSE or EME, measured in terms of the total Rand value relative to total procurement spend		
QSE/EME	Sum of expenditure on QSEs & EMEs Per cent of procurement from Qualifying Small Enterprises (enterprises that generate less than R5 million in annual revenue)		
Women Owned Vendor	Per cent of procurement of goods or services from enterprises that are owned by women (51 per cent or more), measured in terms of the total Rand value relative to total procurement spend		
<b>4. Top Management</b>		Construction & 20-year Operation period	
Black Top	Per cent of black South Africans who		- Letter of

ED Element	Measure	Phase of Measurement	Evidence of Activity
Management	constitute part of the top management team		Appointment - ID - Time Sheet - Salary advice
<b>5. Ownership</b>			
Black ownership in the Seller	Per cent of Black ownership in the Independent Power Producer. Benefit realised through IPP dividends, if and when declared.	Construction & 20-year Operation period	- IDs of black owners - Shareholders' agreements - Shareholders' certificates
Local community ownership in the Seller	Per cent of local community ownership in the Independent Power Producer, held through a community trust for the benefit of the community within a 50km radius of the power plant. Benefit realised through IPP dividends, if and when declared.	Construction & 20-year Operation period	- Community trust deed
Black ownership in the construction contractor	Per cent of Black ownership in the company appointed to construct the power plant. Benefit realised through IPP dividends, if and when declared.	Construction	- IDs of black owners - Shareholders agreements
Black ownership in the operations contractor	Per cent of Black ownership in the company appointed to operate the power plant over its 20-year life. Benefit realised through IPP dividends, if and when declared.	Operations	- IDs of black owners - Shareholders agreements
<b>6. Enterprise Development</b>	Per cent of annual revenue spent on the development of enterprises. The same expenditure is recognised	Operations	- Proof of funds disbursement - Identifying

ED Element	Measure	Phase of Measurement	Evidence of Activity
	differently depending on where recipients of the support are from, with the highest reward being for investing in the local community (defined as being within a 50km radius of the power plant) and the lowest for investments outside South Africa.		documents for fund recipients - Evidence of purpose of funds disbursement
<b>7. Socio-Economic Development</b>	Per cent of annual revenue spent on the socio-economic development investments which enhance the economic participation of previously excluded groups. The same expenditure is recognised differently depending on where recipients of the support are from, with the highest reward being for investing in the local community (defined as being within a 50km radius of power plant) and the lowest for investments outside South Africa.	Operations	- Proof of funds disbursement - Identifying documents for fund recipients - Evidence of purpose of funds disbursement

**Note:** The above table is derived from the Renewable Energy Independent Power Producer Request for Proposal, which has been in existence since 2011, with minor adaptation in each subsequent bidding round.

The narrative and table above thus provide a summary of economic development in the renewable energy sector. Each of the seven categories, which the state identifies, is measured to determine compliance with the state's rules in the bidding phase and thereafter, for every quarter starting from the power plant's construction to the conclusion of its twenty-year operations phase. Given that the sector is new in South Africa, it is only a handful of power plants, awarded licenses in 2012, that are now concluding construction and entering the operations phase. Thus, while this chapter identifies oversights and missed

opportunities thus far, it is important to recognise that there is still a great opportunity to adapt the Procurement Programme given that we are still at the sector's infancy.

The next section references the ED framework described above to provide a detailed account of how flaws in the current design, interpretation and monitoring of REIPPPP have led to practices that compromise development.

### **Hurdles to Development: Understanding the Difference between Compliance and Development**

The previous section has detailed the ED compliance framework as it is currently defined and measured. This section demonstrates that this framing is narrow, often resulting in the contradictory outcome of full ED compliance and partial, if not zero, actual development.

It is therefore proposed that development in REIPPPP should be understood in terms of seven 'equations', which link the current ED compliance elements with development outcomes that can and should be measured.

The proposed seven Development Equations are as follows:

- Job Creation **PLUS** Skills Development
- Procurement **PLUS** Supplier Development
- Ownership **PLUS** Operational Involvement
- Management **PLUS** Key Roles for Black/South African Managers
- Socio-economic and Enterprise Development **PLUS** Community Participation
- Development Spend **PLUS** Impact Measurement
- Measuring **PLUS** Management

What is demonstrated in the coming sub-sections, through ten topics that have been titled 'the 10 hurdles', are the current compliance practices, which are at odds with development. This discussion makes evident the conceptual gaps in the design of REIPPPP and demonstrates how these gaps have resulted in practices that in fact undermine national development aims. By doing this, the intention is to make clear the case for 'the seven equations of Development'. The end of this section will suggest a practical way forward,

which clearly shows how to incorporate the proposed 'seven equations of Development' into the existing framework to ensure that development is both measured and managed in the sector.

## **Hurdle 1: Exclusion of Development from the Framing of Risk**

The notion of risk is central to the RE Procurement Programme. Technology and finance are vetted on multiple levels, starting with the owners, to the banks that fund the projects, to the development financiers that fund Community Trusts and, ultimately, by the Department of Energy. Much of this is in aid of balance sheet protection, including the most important balance sheet of all, the national fiscus. And it is only right that this should happen because this programme entails the expenditure of billions of Rand that should be carefully guarded.

The problem, however, is that the risks of bad development are seldom considered in the planning and vetting of RE projects. This has remained the case since the start of the programme because the outcomes of bad development are generally expressed at the level of the communities that host RE power plants. By definition then, the effects of bad development are not fully known by Johannesburg and Cape Town-based managers and the affected, often-remote communities, are unaware of their rights or potential for recourse. Below is a consideration of bad development at community level, which provides an indication of the major risks that currently simmer at the surface of RE projects.

### *The Mechanics of it: Good Compliance, Bad Development*

- Lack of Dedicated Development Expertise

All projects, by virtue of their close links with communities, require a community liaison officer (CLO). However, the inexperience of many IPPs in the South African context has resulted in the complete absence of CLOs or the appointment of incompetent individuals who are deemed to be right for the job because, to many, development is science-less fluff. Therefore, many projects suffer from poor community relations owing to two factors: poor communication and a lack of dedicated attention. These two issues are a function of a greater problem: development professionals are few and far between in the sector, and this lack is felt from within the DOE to DFIs and ultimately, at project level.

Some IPPs stand out for their appointment of development professionals. These IPPs tend to form part of larger corporations with shareholders that require triple bottom line accountability. For the most part however, development professionals are missing in action,

which is why relations with communities are, for the most part, strained and ripe for crippling political interference.

- Politicised Job Opportunities

Who gets to work on the construction of a power plant? This question is most loaded in relation to local community members who often comprise the bulk of the unskilled and semi-skilled labour force on RE construction sites. Recognising the difficulties that come with the task of employing locals, many projects have opted to delegate this responsibility to local politicians or local government. The local individuals in charge then 'supply' a group of labourers, which projects tend to hire without much due diligence testing.

What the ED Compliance framework fails to monitor is:

- Where and how local employment opportunities are advertised?
- What is the selection process for determining who does/does not get work?
- How transparent are the employment processes with respect to the local community?
- What is the process for getting one's name on a local database for unemployed people (in cases where such databases are relied upon)?
  - Is it fair?
- Has the local councillor advertised the work opportunities to all communities within a 50 km radius, including those that do not fall into their ward?
- Has the local councillor positioned the work opportunities as somehow connected to their political party?

These questions are pertinent because these projects are usually situated in communities that are afflicted with high poverty and unemployment. In these contexts, employment is highly politicised, meaning that projects are often drawn into local party politics and are viewed as complicit in local systems of patronage due to their oblivion or outright neglect.

- Exclusion of Local Business Sector

The programme understands 'local procurement' to mean 'of South Africa'. What this means then is that, in some cases, truly local enterprises from communities surrounding the project, are completely excluded from participating as service providers. This outcome, perfectly compliant, misses the opportunity to stimulate the growth of the local economy. This often occurs because: '

The IPP Knows Not What the Engineering Contractor Does'.

The structure of RE projects generally results in a complete delineation of duties that sees the engineering contractor do all the sub-contracting related to the construction and, later on, operations. Therefore, unless the IPP includes a requirement for community-based service providers in their contract with the engineering firm, the obligation does not exist. Another risk related to this separation of functions is that engineering firms do not always collaborate with IPPs in devising strategies around improving local procurement. The result is that the budget for enterprise development, held by the IPP, is not utilised to convert community-based suppliers into 'procurement ready' vendors. This is explored in further detail at a later stage of this section. Suffice to say that community-based suppliers are excluded because the compliance framework does not require their inclusion and because engineering firms usually lack the understanding to leverage funds from IPPs in order to make local vendors procurement ready.

Much like job creation, there exists, at the local level, databases pertaining to the local business community. Therefore, where projects have identified services, which can easily be supplied by local businesses such as the washing of solar panels, they might seek out community-based businesses. However, it is often the case that contractors rely on local politicians or local government to avoid the responsibility of directly interfacing with the communities they are located in. The result is that contracts are then awarded to entities that are connected to the local political power structures.

Socio-economic Development during Construction One of the most critical risk factors inherent to the design of the programme is the timing of social development investments. The programme is designed to enable IPPs to direct funds towards development during the operations phase of power plants. The logic is that, at that point, the plant is generating



income from the supply of power and is therefore able to free up revenue for socio-economic and enterprise development.

What this timetable has not fully understood is that the construction of mega projects, often in very poor communities, indicates from the very first day that there is big money in the air. So, naturally, projects have found themselves under pressure from communities which insist that there be some level of social investment during the construction phase. Why does this happen? It happens because the current design of REIPPPP has at its heart a notion that says it is reasonable to ask of IPPs to risk millions on physical infrastructure, but somehow it is unfair to ask of those same IPPs to invest, at risk, in the communities they are located in. This is rooted in a failure to articulate the return that can be realised from positive social relations. Indeed, experience tells us that, just by completing the development equation with respect to jobs and procurement, that is by investing in skills and supplier development, IPPs would demonstrate high levels of goodwill and avoid pressures that see them sponsoring random social projects under duress.

- Location! Location! Location!

The current framework is designed to incentivise projects to focus their efforts on the communities closest to them. Project sites are typically chosen on the basis of access to land, proximity from and ease of connection to a sub-station, ease of access to national roads and general ease of land use such as minimal interference with natural life. Because of these requirements, projects are typically located in areas with low populations. Therefore, a project that commits to investing its socio-economic and enterprise development contributions within a 50km radius achieves more points than a project investing the same amount beyond the 50km radius. The natural outcome is that all projects commit to investing all their social development revenues within the 50km radius because what they are after are maximum compliance points, which is not the same thing as maximum development impact.

The real nature of the development problem with respect to where investments are made relates to three issues.

The first is that, at times, projects are located in areas so remote that there are less than 5,000 people living within the 50km radius. This means, for example, that over a twenty-year

period, less than 5,000 people will be the recipients of up to R100 million (a conservative estimate of dividend earnings due to a community with a shareholding in power plants), which would imply an over-saturation of investments that could have a higher impact if spread amongst more communities.

The second issue is that, working within the 50km radius to achieve maximum compliance, can also result in the construction of false borders within related communities. This is not unlike the straight lines that cut up Africa into nation states, straight lines that create unnecessary bureaucratic complexity and impose a regime of inclusion and exclusion in the name of compliance points.

The final issue is that complying with the 50km radius is also a recipe for generating high levels of inequality within neighbouring communities. This is compounded by situations where two power plants are built right next to each other making a single community the recipient of benefits from both. This inequality has the potential for a myriad of problems related to falsification of identity, the influx of the excluded group into the suddenly wealthy community and the stirring of tensions and resentment related to what is a highly artificial premise for accessing benefit.

#### *How does this compromise Development?*

The real and ultimate outcome of not appreciating the risks entailed in poor compliance design and the resultant development malpractices are life-threatening community protests that might include the possibility of power plants being set alight by angry communities. The irony is that, while projects are willing to take into account the possibility of the sun not shining for protracted periods despite millennia of experience to the contrary, the possibility of community-level protests as a result of development malpractice is not taken seriously, despite South Africa's history as well as the current trend of violent community protests for improved service delivery.

The implication is that all actors involved are risking these energy assets. Because development is not understood, and few are willing to appoint dedicated professionals to this function, the short-term risk is reputational but, in the long-term, we risk catalysing sustained community development where funds would otherwise not exist. Turley and Perera make a similar point in their assessment of sustainable procurement. They identify

the resourcing of municipalities with sustainable development professionals as a key component of identifying, mitigating and managing the social risks that emerge from such investments<sup>9</sup>.

#### *Future Research Implications*

Part of the reason that the return to social investment is under-valued is because there exists little to no research about social risk, what it is, how to measure it, how to manage it and how to realise returns to investments. This research is necessary to provide both evidence and cases around which to base social investment choices.

#### **Hurdle 2: Treating Communities as the Sole Representative of Black South Africans**

The current design of the procurement programme makes it possible to treat a community, represented through a Community Trust, as the sole representative of Black South Africans in the ownership structure of IPPs. This is not inherently problematic, but can only be an appropriate strategy in cases where individuals who have the fund-raising and deal-making experience to negotiate on behalf of their communities represent the Community Trust in question.

#### *The Mechanics of it: Good Compliance, Bad Development*

In reality,

- Most community trusts are formed for the purpose of a specific bid. In these cases, the representatives of the community are usually new to their roles as board members or trustees and, additionally, bring no personal experience in terms of fund-raising or engineering.
- Those trusts that have been in existence for longer are often products of previous bidding rounds and have not begun to operate because their trusts have not received dividends and, therefore, there have been no decisions to make. This means that, once more, the community members who represent the community on the trust's board generally have limited relevant experience.
- Because IPPs are allowed to elect their own representatives to the trusts' boards, these individuals, representing the IPPs interests, make all key decisions regarding

---

<sup>9</sup> Laura Turley, L & Perera, O (2014) 'Implementing Sustainable Public Procurement in South Africa: Where to start' IISD Report.

how the community is to be funded and what the focus of the Community Trust should be.

- Furthermore, this means that the IPP, as a project company, can in fact be comprised of a single entity, effectively negotiating with itself due to the inability of community trustees to participate.
- Therefore, where South Africans and Black people are intended to participate, it is entirely possible (and has been the case) that foreign-owned companies can construct an entire bid and be deemed successful from a compliance point of view, without any meaningful contribution from local parties.

#### *How does this compromise Development?*

Ownership, as a factor of production, is rewarded through profits. However, the rewards that accrue to ownership, which make it possible to reproduce profits over time, are a function of the capability to organise capital and all other factors of production towards a single purpose. This means that, to convert the element of ownership into a capability that can be reproduced by South Africans, it needs to be approached not just as a question of the outcome, that is, whether or not a Black person receives a dividend when profits are declared. Instead, ownership needs to be approached as a question of capabilities, which are expressed in multiple processes, and life stages of an IPP: from project development to fund-raising to deal making and, crucially, to operational involvement in the core business of the IPP. This means that the DOE should request substantiating information that details the involvement of South Africans in general and Black South African owners in particular, in all phases of the IPP's life.

In particular, where community trusts are concerned, there should be an awareness of the limitations of trustees, with a view to developing their capabilities over time. Instead, the strategy of choice is to give community trusts economic interest without decision-making power, which is viewed as a way of protecting them from the full implications of the fiduciary duties that would accrue to trustees. But this is, at best, a stopgap. It cannot be treated as something that will self-correct over time in the absence of any intervention. Rather, the long-term strategy should be to train trustees so that they may play a meaningful role, not just in community-level issues, but also in the management of the power plants owned by their communities. This is not a requirement of the programme thus far, which explains why some projects find the assignment of Black South African ownership

entirely to communities to be a good strategy because it guarantees that one half of the ownership equation will always be unable to negotiate or vet the decisions of the other. What the DOE and development financiers should be asking is what the strategy is to ensure that currently passive community trusts can grow into genuine shareholders, with the ability to negotiate their interests and, ultimately, to continue the work of the trusts in the absence of these projects. This is a question of empowerment and a question of sustainability. Failure to answer it is inadvertent complicity with a long-term tokenistic role for communities as shareholders represented by Community Trusts.

#### *Future Research Implications*

The key research questions that stem from the capabilities question are related to prioritisation. What skills are most pertinent to the active participation of Black South Africans? What vehicles would be the most effective in imparting those skills? And, in the interim, what services must be availed to participating entities that are still in the early stages of skills development?

#### **Hurdle 3: The Problem of Absent Black South African Owners**

Related to the point above, is the challenge of absenteeism where Black owners are concerned. One unfortunate by-product of Black Economic Empowerment (BBBEE) is that it has created a schism between the Black firms that are created solely for the purpose of investment holding and the firms that are created for the purpose of operating the assets they own. There are, of course, some great examples of firms that have a core operational competency as well as the ability to raise funding for large investments such as are required for RE projects, but these are in the minority. To address this, the current procurement programme recognises ownership on two levels: the level of the IPP and the level of its most immediate contractors responsible for construction and operations. Therefore, in the ideal world, the Black entities with fund-raising experience apply their trade at the level of IPP ownership and the entities with engineering capabilities can apply their trade in the construction and operations of power plants. There is also a view that the requirement to have Black people in top management positions takes care of the skills transfer question at the highest level.

Not so simple.

### *The Mechanics of it: Good Compliance, Bad Development*

- As already indicated, at the level of IPPs, the Black owners who participate are typically skilled financiers. However, they only concern themselves with the financial return profile of the project and do not get involved in the operations.
- Unfortunately, it is also the case that the Black ownership in construction and operations companies is comprised of passive investors who are not actually involved in the management or operations of those firms.
- Therefore, the assumption that Black owners of construction/operations companies can become recipients of the technical capabilities entailed in designing and managing renewable energy power plants is erroneous.
- In effect then, the entrepreneurial capabilities that are required to create and maintain an RE power plant, from fund-raising to engineering, are not being transferred to whole Black South African entities that have that complete set of skills.
- If we are to accept that we do not require a single entity with all the key competencies that comprise an IPP, then we might find comfort in the existence of the requirement for Black top managers. But here too exists a challenge. From a compliance perspective, a project can claim to have only one or two top managers, all Black and female. In this way, the project is awarded full compliance points. That these two individuals may be focused on non-core issues is not something the DOE monitors. Even more concerning is the fact that there may be a host of foreign individuals who actually occupy the key roles in the top management of an IPP which completely invisible to the DOE. This is because the structure of a top management team is completely discretionary and therefore makes it possible to conceal the reality of the limited role of Black top management in the actual running of IPPs. Per the compliance obligations, such a concealment of the reality is not a contravention and, despite agreement that this sort of behaviour goes against the spirit of the DOE's intentions, there is no way to reward or punish IPPs, because the DOE has not explicitly set out to measure whether or not Black top managers are at the heart of executive decision making.

### *How does this compromise Development?*

The above is a problem for development because it means we have so far failed to create a complete entrepreneurial class for this sector. Instead, it is possible to be compliant with a structure that reinforces passive Black involvement, confining this class to the role of dividends collectors or, indeed, highly paid Black top managers whose functions are mostly ceremonial. Rather, what is needed is a level of detail regarding the operational roles of Black owners in IPPs, construction companies and full top management structures that indicate what Black top managers actually do in relation to their counterparts in executive management. This should be interrogated in the assessments of bids and monitored throughout the life of the power plant.

Firstly, this approach will avoid the problem of token Blacks or South Africans. Secondly, it will avoid the problem of foreign IPPs subverting their responsibility to partner in a mutually beneficial way with local entities. Thirdly, and most importantly, it will result in what is actually required: the creation of a class of Black or South African industrialists who can single-handedly create renewable energy IPPs in the future. Indeed, there will be challenges regarding the experience and capital that Black or South African entities with such aspirations can currently bring to the fore, but the benefit of the last twenty years is that, despite the shortcomings of BBBEE, many operational Black entities have emerged who, if unable to bring a cheque, can bring a myriad of capabilities that are required to run an IPP. Where there are gaps in the experience of such entities, these should be identified in the Detailed Economic Development Reports of bidding IPPs, in tandem with a development strategy to overcome them.

#### *Future Research Implications*

'Local ownership may be desirable, but it is not the same thing as capacity building, which involves the development of managerial, technical and operational skills in national firms and the domestic labor force. And to achieve the highest level of industrial capacity building, policymakers must focus in a coordinated way on basic policy deficiencies affecting infrastructure development, trade/industrial policy, and skills development and transfer.'<sup>10</sup>

The current call for Black industrialists indicates the state's awareness of this challenge at the national level. What is of interest is research that explores enterprises that have participated in BBBEE deals, the skills they had going into the deals and the ways in which

---

<sup>10</sup> Eberhard et al (2014) 'South Africa's Renewable Energy IPP Procurement Program: Success Factors and Lessons'. PPIAF

they have subsequently developed. It may be the case that skills do in fact trickle down through a less regulated manner than what is proposed. Of even greater interest is how this process of up-skilling occurs and what incentives drive the parties involved in giving and receiving.

#### **Hurdle 4: Jobs without Skills Development**

The job creation impact of RE projects is monitored very closely. The DOE concerns itself with who is employed, their nationality, race and gender, the employment of local community members and the identities of the skilled workforce. One of the job creation challenges faced by the RE sector is the limited time period in which power plants can actually generate meaningful, mass employment. Typically, an RE power plant is a fully automated generation facility that does not require person-power to convert its energy source into electricity. Therefore, labour is most pertinent to the construction phase, which typically takes 9 to 36 months. Thereafter, the plant does not require a large workforce as the bulk of activities related to its maintenance include activities such as washing solar panels, landscaping and security.

To give an indication, Eberhard et al demonstrate that the last three rounds of REIPPPP have produced 64 successful projects, which will result in the generation of 3,915MW of energy<sup>11</sup>. Of those projects, two are hydro, one is landfill gas and the rest are a combination of the dominant technologies: wind, solar PV and CSP. The jobs created by these projects combined during construction are estimated at 19,108 per the DOE's reporting<sup>12</sup>.

A job, according to REIPPPP, is calculated as 12 months of full-time employment, measured in terms of time worked, rather than the number of people who are engaged.. The REIPPPP Request for Proposals refers: 'A "Job" is accordingly calculated on the basis of total Person Months for the Construction Measurement Period and the Operating Measurement Period, divided by 12.'<sup>13</sup>

To be clear, per the DOE's definitions:

---

<sup>11</sup> Eberhard et al (2014) 'South Africa's Renewable Energy IPP Procurement Program: Success Factors and Lessons'. PPIAF p. 14

<sup>12</sup> Eberhard et al (2014) 'South Africa's Renewable Energy IPP Procurement Program: Success Factors and Lessons'. PPIAF p.27

<sup>13</sup> DOE (2013) 'RFP - Volume 5 – Economic Development Requirements', Part 4.2.7



- A person month is 160 hours of work
- A job is 12 person months

In other words, if one were to work the same job for ten years as a full-time employee, they would accrue 120 person months, meaning the DOE's statistics would reflect ten jobs even though only one person has worked that time. To get a sense of how many *people* are employed then, one has to divide the number of jobs by the duration of employment. Construction periods vary depending on the size of the power plant. It is reasonable to assume an 18-month period as representative of the average period. In that case, we divide 19,108 by 1.5 years in order to get a sense of people employed during construction. This would mean that roughly 12,738 people will have worked on constructing the first three rounds of power plants, which is significant, but severely compromised by the fact that these jobs do not last beyond the two-year mark.

Eberhard et al further report that the dominant technologies will generate 34,954 jobs. Using the same division principle as above to get a sense of how many people will have jobs for the 20-year operations phase of these projects, we divide the total jobs by the number of years. This gives us a total of 1,747.7 people who will enjoy the benefits of working on power plants during operations. This number lacks some lustre relative to the R120 billion that has been invested in the sector over the first three rounds<sup>14</sup>. This is because this sector is not synonymous with creating long-lasting, quality jobs.

So how then can RE projects deepen their employment impact?

#### *The Mechanics of it: Good Compliance, Bad Development*

Currently, the question of employment impact does not feature in the programme's compliance requirements. Therefore, it is the case that people are employed for a short period and are released when their roles are completed without any prospects for future employment. This outcome is completely compliant.

#### *How does this compromise Development?*

---

<sup>14</sup> Eberhard et al (2014) 'South Africa's Renewable Energy IPP Procurement Program: Success Factors and Lessons'. PPIAF p.14

To be fair, it is not the responsibility of IPPs to guarantee the future employment of staff they no longer require. However, a developmental approach to this question would assess employment impact from the perspective of employability. In other words, what IPPs can be measured against is how they improve the future employment prospects of their labour force in the limited time they have with them. The answer is two-fold: power plants must become sites of learning and such learning should be recognised through certification for those who then demonstrate graduation from one skill set to the next. Failure to maximise the limited time with workers simply perpetuates the underlying reasons for their unemployment. It is not unreasonable to request that IPPs design training programmes for workers. The challenge is that the link between job creation and skills development is not an obligation and, therefore, making this investment in workers currently constitutes undue expenditure.

#### **Hurdle 5: Procurement without Supplier Development**

Another common problem relates to entities that provide services for RE projects. The programme sets out rules that require IPPs to procure from BBBEE accredited agencies and the value of their invoices is then recognised in terms of their BBBEE level. In this way, the programme rewards procurement-spend on entities that are highly compliant. Included in the compliance framework are the requirements to procure from small enterprises and women-owned vendors.

#### *The Mechanics of it: Good Compliance, Bad Development*

There is, however, no obligation to procure from local communities and, furthermore, there exists no obligation to develop the small suppliers from which projects procure. The result is a crude, last-minute approach to procurement, which at its worst results in the creation of small enterprises and women-owned vendors that assist with meeting compliance obligations but are not assisted to develop beyond servicing the power plant.

#### *How does this compromise Development?*

This represents a missed opportunity for development because, with the correct level of support, small enterprises should be able to leverage the experience of servicing power plants to grow into the larger, sustainable businesses, which are so badly needed for local and national economic growth.

### *Future Research Questions*

The acceptance of procurement as a tool for enhancing the economic participation of previously excluded enterprises lacks an evidence basis. Indeed, Tait notes that the failure to review enterprise development has led to a poor understanding of how to ensure that obligations result in sustained benefit<sup>15</sup>. This historical impact, then, is the question at the heart of procurement.

### **Hurdle 6: Research! Research! Research!**

Power plants must submit detailed environmental impact assessments for consideration by the DOE. These are scrutinised and, where there are gaps or risks, IPPs are usually requested to submit mitigation strategies. Where communities are concerned, a document relying on census data and dated Integrated Development Plans (IDP) is often deemed sufficient evidence of a socio-economic needs assessment. And if the content is ever to be interrogated, it will not be by a financier or the DOE but most likely a powerless NERSA official whose contribution can only be to raise a flag at a public hearing. This is how unimportant social impact is in the RE sector.

Simply, the recourse is to insist on participatory research prior to the submission of a bid. Once a license is granted, the DOE should insist on participatory development planning – a form of development planning that will occur in collaboration with communities not solely in the plush Cape Town or Johannesburg offices of IPPs. Furthermore, the DOE should insist on the monitoring and impact evaluation of social investments, which goes beyond evidence of a money trail and assesses the effectiveness of development interventions.

The problem of poor development planning has been identified by many who have followed the sector closely. Wlokas et al identify the absence of community development guidelines as central to the challenge, noting that IPPs are not experts in development and, therefore, that their limited understanding and resultant negligence are to be expected<sup>16</sup>.

---

<sup>15</sup> Tait, L (2014) 'The Potential For Local Community Benefits From Wind Farms In South Africa'. Energy Research Centre University of Cape Town.

<sup>16</sup> Wlokas, H et al (2012), 'Challenges for local community development in private sector-led renewable energy projects in South Africa: an evolving approach' *Journal of Energy in Southern Africa*, Vol 23 No 4.

The bottom line is that conducting detailed and inclusive research in communities impacted by RE power plants should be a minimum standard for demonstrating seriousness about achieving the development aims of REIPPPP.

### **Hurdle 7: Community Participation**

Here is a proposed definition of a community: a grouping of highly under-estimated individuals. Why? Because most actors in the RE sector think it perfectly reasonable to remove the function of thought from community members. After all, poor people are by definition uneducated and therefore unable to articulate their needs and aspirations, right? Wrong.

And yet there is nothing in the compliance framework that explicitly requires evidence that communities have been consulted about how their collective identities are to be used to acquire electricity generation licences. Certainly, in the bidding process, the environment's interests are even more important than those of the communities. And post the bidding process, a largely ceremonial process run by NERSA is embarked upon to publicise the projects that are likely to be built in communities. These hearings are generally held in towns that, although in the same province as the projects in question, may be over 100km away from the communities impacted by them. In other words, NERSA hearings cannot be relied upon to get the word out to communities nor to listen to the views of community members.

There is a deeper problem that underlies the convenient distancing of communities from projects: the fear of raising expectations, which is actually an expression of the inability to manage expectations. The sector is replete with actors who harbour cynicism about communities, lack the flair to manage local community politics and undervalue constant, transparent communication with ordinary members of communities. This issue is certainly not limited to the sector but it acts as a barrier to development relative to the spirit of REIPPPP and the national transformation agenda.

But if communities knew more, they would demand, at the very least:

---

- To be notified that they are beneficiaries of community trusts;
- To be consulted about the social needs that many IPPs claim to respond to;
- To be notified of the individuals who are elected to represent their interests on community trust boards;
- To be made aware of the job opportunities and selection processes for the construction and maintenance of power plants;
- Accountability with respect to the plans that IPPs submit to the DOE regarding community development.

The unintended effect of the generalised silence where communities are concerned is politicisation of access to information. Those in the know form part of a connected minority who can use the power of their knowledge to become unofficial gatekeepers. It also becomes an instrument for avoiding accountability because the standards by which IPPs are to be judged are conveniently concealed. Some erroneously link this form of gate-keeping to the heritage of traditional leadership. However, the complicity (and sometimes active agency of foreign IPPs in limiting access to information and working with a chosen few in communities) indicates that this behaviour is less inherent and more opportunistic.

#### *Further Research Questions*

What is necessary to help bridge the development training divide are short courses in development studies and related disciplines, development for non-development professionals as it were, to heighten awareness of the issues. Furthermore, research demonstrating which tools are best suited to managing community participation should be conducted and disseminated to create a shared set of minimum standards across the sector.

#### **Hurdle 8: Limited Time as a Guise for Limited Will/Capacity**

The standard response to many of the above issues is that there is simply no time to address development in a thorough manner. The power crisis is so urgent that some development concerns must be dealt with at a later stage, would say a DOE official, a well-intentioned IPP or a DFI. However, if we consider the complexity of the technical requirements to build a power plant, the long hard process of raising debt and equity for such an endeavour and all

the legal work that currently underpins REIPPPP, it would seem *will*, not time, is the real issue.

Will is governed by depth of understanding and incentives. As it stands, development is not fully understood by the people who hold the power. Some hold the view that development practitioners are naive tree-huggers with no claim to science or professionalism; other IPPs are cynical about communities and prefer to present their development obligations as non-negotiable acts of charity rather than the entitlement that it is; many, afraid to confront the power dynamics that exist within communities, choose to avoid responsibility by working through local politicians or community workers whose pasts or intentions are not vetted. More often than not, however, it is a lack of understanding that leads IPPs to behave in this manner.

#### **Hurdle 9: Doing is not Impacting/No Impact without Investment**

There is a common view that, by doing something perceived to be positive for a community, development is achieved. This is the view of those who paint old age homes and place computer labs in schools with intermittent electricity supply. 'We've done it, branded it and have the glossy picture to show for it'. Therefore, development has taken place? Not. This understanding of development is probably why decades of CSI have, in the majority of instances, not translated into the comprehensive upliftment of communities. It is also the reason why one of the most influential development thinkers of our times is Professor Esther Duflo, whose work is premised on questioning the impact of development projects and investments. Doing what we perceive to be good is simply not correlated with achieving development impact. This is why development requires expertise.

Despite this, the expertise of compliance, essentially auditing project activities, is ranked more highly than development impact evaluation in the RE sector. In fact, impact evaluation is not a requirement of the sector, meaning that, for the time being at least, doing is erroneously assumed to be the same thing as Impacting.

The additional assumption that pervades the RE sector is that all social development investments can be directed to a capable community trust, whose sole function will be to identify existing, community-based organisations and enterprises to which funding is

directed. Firstly, as discussed above, most community trusts that represent communities in the shareholding of RE power plants are completely new structures, with very limited experience in the functions they are expected to carry out. Secondly, many power plants are located in areas that are extremely under-developed which, by definition, implies weak or limited community structures. As evidence of how limited the understanding of communities is, it is commonplace for projects to submit ED Reports that claim their newly-established community trusts in communities with few identifiable community-based organisations will handle the investment of millions of Rands. This is deemed compliant, despite its complete lack of development logic. Rather, what is required, despite the effort it entails, is the creation of robust local organisations that can implement all development functions at the community level from research to planning, implementation, monitoring and reporting.

As with all the other hurdles explored, in the absence of definition and measures, development impact cannot be guaranteed through the programme as it currently stands.

#### **Hurdle 10: 'You Cannot Manage What You Do Not Measure'**

To compound what we have shown to be a limited understanding of development across the sector is the very real issue of the DOE's inability to monitor the development efforts of IPPs. This has led many IPPs to view any investment in development as wasted expenditure because financiers and the DOE do not provide incentives related to the quality of development work. Rationally then, unless the threat of a community uprising looms, many IPPs practice minimum or bad development because, to begin with, they lack a full understanding or appreciation of the returns on good development and, more importantly, their efforts are not recognised or rewarded in any way under the current compliance framework. Indeed, 'you cannot manage what you don't measure.'

In the proposed seven equations of development, what we contend is that the latter part of each equation must be included in the ED framework. This means that it must be assessed as a composite part of the bid; there must be minimum performance levels associated with development and clear consequences for risking the national fiscus through the active subversion of development.

Rather than further detailing the implications of the failure to measure, we complete this section with a high-level proposal for how development can possibly be measured within the context of the proposed Seven Equations of Development.

### Measuring and Managing Development

Development Element	Measure	Phase of Measurement	Evidence of Activity
Fair Job Creation <b>PLUS</b> Skills Development	<ul style="list-style-type: none"> <li>- Number of employees trained</li> <li>- Relevance of newly acquired skills for further employment</li> </ul>	Construction & Operations	<ul style="list-style-type: none"> <li>- Training attendance registers</li> <li>- Awarded certification</li> <li>- Democratic access to work &amp; training opportunity</li> </ul>
Procurement <b>PLUS</b> Supplier Development	<ul style="list-style-type: none"> <li>- Number of local suppliers procured from</li> <li>- Value of procurement spend</li> </ul>	Construction & Operations	<ul style="list-style-type: none"> <li>- Investment in procurement readiness programmes</li> <li>- Democratic access to opportunity</li> </ul>
Ownership <b>PLUS</b> Operational Involvement	- Defined operational roles for Black/South African owners measured in terms of type of work and time worked	Construction & Operations	<ul style="list-style-type: none"> <li>- Letter of Appointment</li> <li>- ID</li> <li>- Time Sheet</li> <li>- Salary advice</li> </ul>
Management <b>PLUS</b> Key Roles for Black/South African Managers	Black/South African managers' roles measured in terms of type of work and time worked relative to the full executive team	Construction & Operations	<ul style="list-style-type: none"> <li>- Letter of Appointment</li> <li>- ID</li> <li>- Time Sheet</li> <li>- Salary advice</li> </ul>



Development Element	Measure	Phase of Measurement	Evidence of Activity
Socio-economic and Enterprise Development <b>PLUS</b> Community Participation	<ul style="list-style-type: none"> <li>- Participatory research</li> <li>- Participatory project design</li> <li>- Training &amp; Development plan for Trustees</li> <li>- Case for beneficiary community selection</li> <li>- Case for Trustee selection</li> <li>- Communication strategy</li> </ul>	Construction & Operations	<ul style="list-style-type: none"> <li>- Detailed reports</li> <li>- Imbizo minutes</li> <li>- Financial investment records</li> <li>- Development practitioner CV</li> <li>- Communication strategy fulfilment</li> <li>- Alignment of development strategy with community desires</li> </ul>
Development Spend <b>PLUS</b> Impact Measurement	<ul style="list-style-type: none"> <li>- Regular monitoring and evaluation</li> <li>- Regular impact evaluation</li> </ul>	Construction & Operations	<ul style="list-style-type: none"> <li>- M&amp;E reports</li> <li>- Impact reports</li> <li>- Mitigation strategies</li> </ul>
Measuring <b>PLUS</b> Management	<ul style="list-style-type: none"> <li>- Inclusion of development measures in bid requirements and funding requirements</li> <li>- Articulation of development risk in every project including mitigation strategies</li> <li>- Link development obligations to Power Purchase Agreement</li> </ul>	Construction & Operations	<ul style="list-style-type: none"> <li>- Inclusion of development considerations in DOE clarification questions</li> <li>- Quarterly assessment of development elements by DOE</li> <li>- Annual response to development failures through termination points</li> </ul>

The above recommendations are proposed as a starting point for the sector, to assist all actors – project developers, IPPs, financiers and the DOE – to assess and monitor the quality of a project with respect to development. In each instance, there should be a clear identification of the implementation agent. While the responsibility lies primarily with the IPPs, financiers and the DOE, these undertakings should be dealt with as a collaborative effort, involving such state agencies as sector education and training agencies and departments such the trade and industry, small business development and higher education.

### **Conclusion: The Time is Now**

This chapter has deliberately confined its critique and suggestions to the current REIPPPP framework because, in spite of its design flaws, research and experience have shown that a more sustainable and inclusive form of development is possible through a reconfiguration (rather than a total overhaul) of the existing ED framework. Secondly, we seek to provide actors in this sector with practical ways of thinking about, measuring and implementing development in relation to compliance, hence the table presented in the conclusion to the previous section. A clear choice was made to avoid naming and shaming individual projects because the malpractices that have emerged in the sector are largely owing to the programme's design rather than explicit malicious intent. We believe that practices can and will improve if the correct incentives are put in place. Therefore, it is less the story of individual perpetrators that makes the case and more an understanding of generalised trends that must be internalised in order for genuine change to come about.

Indeed, we believe that the ten hurdles that currently hinder development in the sector can be overcome by measuring and managing the proposed '7 Equations of Development.' By applying this thinking to development, the programme can contribute the following to the national development agenda:

1. The creation of Black-owned and run energy companies, which also implies
  - a. The establishment of genuine Black/South African industrialists
2. The transfer of skills from foreigners to locals in the most senior executive functions as well as the most junior roles entailed in constructing and operating RE power plants.

3. The creation or growth of small enterprises that can leverage the experience of servicing power plants to participate in other sectors with similar needs.
4. The development of communities into active agents in their own story of 'good change'<sup>17</sup>.
5. Impactful social investments owing to the participation of local communities in the articulation of development strategies and their resultant stewardship in managing the investments made in their communities.

However, this is not a nice-to-have that is secondary to the work of financing projects and identifying the correct technologies. What this chapter has demonstrated is that failure to apply good development thinking has already resulted in fractured community relations, unsustainable job and enterprise creation and ineffectual social investments made to appease rather than advance communities.

It is thus our recommendation that financiers, the DOE and IPPs should immediately introduce changes that will result in the management of the very real social risks that are currently being allowed to persist. Communities are gradually waking up to what they are truly entitled to and bad development is not it. There is certainly a role for communities to put pressure on IPPs and the DOE and the hope is that it takes on a constructive form rather than the exacerbated infrastructure destruction that has come to typify community protests. Indeed, the House of Traditional Leaders in the Eastern Cape has shown signs of positive engagement on the question of land use by challenging the DOE's rules with respect to traditionally-owned land. Their argument is that the rules of REIPPPP exclude their participation by requiring that power plants be built on privately owned land, which naturally excludes the communally held, untitled land of Black communities<sup>18</sup>. Such engagement which, in the case of communal land areas, should also genuinely involve communities is critical for revealing and addressing the development shortcomings of REIPPPP. All this to say that, since it is not the intention of the programme to compromise its own development objectives, let all social risks that result from it be understood, managed and resolved to ensure that real development is attained and sustained.

---

<sup>17</sup> The term 'good change' is borrowed from Robert Chambers (2004:iii, 1-2), who argues that development is 'good change' thus making the two concepts synonymous.

<sup>18</sup> <http://www.iol.co.za/business/news/leaders-fight-for-wind-farms-1.1729636#.VQPJ6BCUdfw> accessed on 05 March 2015.

