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The Social Performance Approach

Fostering community well-being through energy-sector investments

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Summary

While the positive impacts of renewable energy development, the implementation and use of renewable energy for people and the planet are widely recognised, the direct contribution of local renewable energy projects to local community well-being has received limited attention. And while the Paris Climate Agreement and the 2030 Agenda for Sustainable Development, with its Sustainable Development Goals (SDGs), have been rightfully celebrated as global milestones towards securing livelihoods and opportunities now and in the future, they lack societal ownership and traction among communities, who are decisive in supporting and driving the necessary sustainability transformation.

However, aside from energy access, the opportunities for local energy projects to provide broader positive effects (such as community revenues) through co-investments are largely regarded as secondary co-benefits, if not entirely ignored by development policies and practices. Tapping into these opportunities for effective policies and practices in climate action and international development calls for a different approach to sustainable energy development (energy transitions in some countries): a social performance approach to energy development and investment, which we outline in this paper.

In the context of this paper, the social performance of energy sector investments refers to direct and positive social impacts on the well-being of individuals and communities during the development and implementation of energy projects and the usage of locally generated energy, in both monetary and non-monetary ways. In essence, the social performance approach in energy-sector investments and energy-project development puts the needs and well-being of people – both current and future generations – at the centre of energy development and related investments and activities. The social performance approach that we propose builds on the conceptual foundations of the capability approach, the co-benefits approach, the Need–Opportunity–Ability (NOA) model, and important groundwork on community development in South Africa's Renewable Energy Independent Power Producer Procurement Programme (REIPPPP).

An important aspect of the social performance approach is its focus on the direct contribution of these investments in fostering the well-being of individuals in a manner that reflects their aspirations for good quality of life. This approach can facilitate regular evaluation of progress and ensures accountability and adjustment of implementation strategies so that future investments, design, and implementation strategies perform both for people and the planet. Social performance can be used to compare how different energy options (e.g., a coal-mining site, a renewable wind park, or decentralised energy services such as solar mini-grids) may effectively and comprehensibly improve the lives of people and local communities.

The social performance approach helps to identify concrete intervention points or enablers, to ensure and increase the positive contributions of energy-sector investments to the well-being of individuals and communities, either in monetary ways such as local economic value creation and employment, or in non-monetary ways such as community cohesion and social inclusion. In this paper we suggest that, consequently, policy interventions and investments aimed at decarbonising energy systems should not simply be monitored in view of how they perform for communities and people on the ground; rather, these interventions and investments should be intentionally designed to maximise their social performance for individuals and communities.

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Preface

This paper has evolved from collaborative research and knowledge-creation activities on the social dimensions of energy transitions, led by the IASS Potsdam with worldwide partners in expert organisations, governments, civil society organisations, and industry associations. More specifically, the concepts and application options that we propose in this paper emanate from and feed back into the COBENEFITS project, led by IASS Potsdam under Germany's International Climate Initiative (IKI) in a consortium involving the Renewables Academy (RENAC), the Independent Institute for Environmental Issues (UFU), and International Energy Transition (IET). The paper also connects to ongoing empirical research by IASS Potsdam on the social sustainability of the energy transition in Germany.

The COBENEFITS project supports governments in countries including India, Kenya, Mexico, South Africa, Turkey, and Vietnam to quantify the social and economic opportunities of climate action through decarbonising the power sector, as a basis for developing enhanced NDCs with the ambition to deliver on the Paris Agreement and the 2030 Agenda on Sustainable Development (SDGs). COBENEFITS facilitates knowledge co-creation, international mutual learning, and capacity building among policy makers, expert organisations, and multipliers through country-specific co-benefit assessments, stakeholder dialogues, and an international training programme. In close collaboration with our COBENEFITS country focal points such as TERI (India), CSIR (South Africa), IPC (Turkey), and GreenID (Vietnam) we published the 2019/2020 series of COBENEFITS country studies, which is accessible online on at: www.cobenefits.info

Drawing on lessons learned from these processes, the identified social performance targets and indicators will serve as a basis for empirical studies and political consultation processes in the COBENEFITS partner countries to assess and increase the social performance of renewable energy projects, mitigate social conflicts, and identify untapped social opportunities in the endeavour to make the Paris Climate Agreement a success for the planet and local communities.

While we truly acknowledge the outstanding importance and achievement of the Paris Climate Agreement, as well as the 2030 Agenda on Sustainable Development the SDGs, their success will be judged by progress in quality of life and general well-being improvements, especially among already disadvantaged, underserved, and marginalised communities. To achieve these objectives, the design and implementation processes – especially in the context of energy development – must take a social performance approach and be centred on the well-being of people and collective societal, social, and economic development. To a greater extent, this success and its sustainability will depend on the broad and diverse ownership and the empowerment of communities to take action and seize opportunities presented by renewable energy development processes and uses of renewable energy services. The connection of environmental policy and implementation strategies and processes to individuals' and communities' well-being has the potential to motivate interest in renewable energy development and climate action activities, in turn activating and strengthening the implementation of the Paris Agreement and the SDGs and illustrating the on-the-ground relevance of these planetary commitments.

1. The need for a social performance approach to energy development

While the positive impacts of renewable energy development, the implementation and use of renewable energy to people and the planet are widely recognised, the direct contribution of local renewable energy projects to local community well-being has received limited attention. And while the Paris Climate Agreement and the 2030 Agenda for Sustainable Development, with its Sustainable Development Goals (SDGs), have been rightfully celebrated as global milestones towards securing livelihoods and opportunities now and in the future, they lack societal ownership and traction among communities, who are decisive in supporting and driving the necessary sustainability transformation.

International development policies and practices, on the other hand, have made rural electrification and the pursuit of energy access for all a central pillar for many years. Today, renewable energy sources are considered fundamental to achieving these goals, particularly for their climate benefits, in contrast to fossil energy services. However, aside from energy access, the opportunities for local energy projects to provide broader positive effects (such as community revenues) through co-investments are largely regarded as secondary co-benefits, if not entirely ignored by development policies and practices.

This paper addresses the ignored opportunities of the Paris Agreement and the 2030 Agenda for necessary and strong societal ownership and traction, as well as the failure of international development efforts to capitalise on the full social potential of renewable energy sources for communities. We argue that, in view of the SDGs, energy development practices can and should move from unintended social co-benefits toward intentionally fostering the social performance of local energy projects. Social performance in the context of this paper, in a broader sense, means that certain interventions and investments result in a positive and desired impact for people and local communities where the intervention / investment take place. This involves specified and agreed goals, with indicators that can be measured to assess progress.

Tapping into these opportunities for effective policies and practices in climate action and international development calls for a different approach to sustainable energy development (energy transitions in some countries): a social performance approach to energy development and investments, which we outline in this paper.

1.1 Addressing the blind spots of the Paris Agreement and the 2030 Agenda: Societal ownership and traction

Recent decades have been marked by the gradual development of international support for climate and environmental protection. In this context, policy makers have recognised the important role of renewable energy in decarbonising energy systems to prevent a global climate crisis and also its important potential to secure the livelihoods of future generations. The current discourse on the need for low-carbon, renewables-based systems of energy generation and supply focusses on a mostly global perspective on sustainable development and the needs of future distant generations, with particular focus on preventing a runaway climate crisis, which indeed can be considered as the most significant existential threat to modern humanity. Consequently, the past decade has seen heightened focus on decarbonising energy systems and support for a transition towards cleaner and more environmentally sustainable energy systems.

The recognition of the fundamental threat of global warming as well as the overwhelming support of international treaties such as the Paris Agreement on Climate Action, including their nationally determined commitments, and the 2030 Agenda on Sustainable Development are essential milestones in addressing this imminent crisis. However, we argue that low societal ownership embedded within the treaties, and resulting limited traction among local communities, remain blind spots that need to be addressed in order to unleash the transformative power of these treaties.

The strong focus on global responsibilities and international commitments makes people and communities mere and passive followers of these endeavours, instead of making them part of it and facilitating societal ownership in climate action. Necessary societal and economic transformations of agriculture, production, and transport systems – and, importantly, the energy system – depend on the broader societal support and ownership in these transformations:

> "The fundamental transformations in our energy system can only count on broad support if this project of the century is understood not as a directive but instead facilitates ownership and diversity." (IASS 2013, own translation)

The global climate policy and global and sustainability perspectives not only tend to neglect how sustainable modes of production and consumption can immediately and locally perform to meet the needs and enhance well-being; They also risk ignoring the transformative power of people and communities, which is required to speed up climate action and meet the defined Sustainable Development Goals (SDG). In the case of Germany, citizens and municipalities have been front and centre of the transition to renewables, which only really took off once these new players and investors entered the scene (cf. Helgenberger 2016; cf. Süsser & Kannen 2017).

With regard to necessary climate-friendly transformation in the energy sector, the success and sustainability of renewable energy development, and consequently of environmental and climate protection policy, involves convincing large numbers of people to adapt and use renewable energy appliances and services across a wide range of sectors and levels of society (Helgenberger & Jänicke 2017; Lucas et al. 2008; Wüstenhagen et al. 2007). Lack of support and ownership will inhibit the progress of renewable energy systems and hence diminish their full potential to protect the environment and minimise climate change. Unless communities and people are receptive to – and actively involved in – decarbonising energy systems through the development, implementation, and use of renewable energy, the goals set out in the SDGs and Paris Agreement may remain elusive.

In contrast, by exploring how renewable energy can perform for local communities to meet social and economic aspirations, and offering communities a driving seat in energy transitions, both the 2030 Agenda and the Paris Agreement can evolve towards globally connected agendas owned and advanced by local communities. Reviewing existing energy development policies and practices helps to better understand the need for a social performance approach, as we will see in the next section.

1.2 The missing social links in energy development

Access to different forms of energy, particularly electricity, has been a backbone of development policies and development practices. Electrification has been considered fundamental, and served as a benchmark of socio-economic development and opportunity for societies worldwide (Manso & Behmiri 2020; Mulugetta et al. 2019; Popa et al. 2012; The World Bank 2017). In that regard, the affordability of energy services for communities and families has been central to achieving comprehensive access to energy.

With the launch of the Sustainable Energy for All (SE4All) initiative in 2011, the United Nations extended the energy development agenda through the goal of increasing the share of renewable energy and energy-saving measures (energy efficiency), pushing development agendas (e.g., by the World Bank) to be compatible with global climate action and sustainability efforts (cf. World Bank 2013; World Bank 2020a). Consequently, renewable energy technologies now feature prominently within the development discourse as options for meeting energy access objectives and targets for reducing greenhouse gas emissions.

Also within the development discourse, related to energy generation and supply, trade-offs between different development objectives have been repeatedly addressed, e.g., the negative impacts of large-scale hydropower projects on local communities and ecosystems (cf. World Bank 2009). Lately, development trade-offs are being addressed through the discourse on a "Just Transition" from the old fossil-based energy industry to a renewable-based energy industry, particularly in view of present workers and employees. Calls for Just Transitions by cushioning negative employment impacts, and by providing economic prospects for current workers and employees, have already been taken up by institutions such as the World Bank and its Sector Management Assistance Program (ESMAP, cf. World Bank 2020b).

While uptake of renewable energy sources has expanded rapidly over the last decade, they are considered in development policies and practices mainly as climate-friendly ways to increase energy access – in many cases for minor household appliances, such as lightning or phone-charging. However, due to their different technological characteristics, renewable energy technologies – in comparison to established fossil energy generation – offer additional social benefits, which can help meet the development objectives of the 2030 Agenda. For instance, advances in mini-grid/grid-connected distributed renewable generation allow for co-investment and therefore revenue creation by communities. Moreover, energy-intensive consumers above the household level, such as manufacturers, retailers, or medical centres, can be supplied with electricity through local and distributed generation.

So far, these new possibilities for local energy projects to perform for societies – and communities in particular – if not entirely ignored, are considered as unintended co-benefits. In view of the Sustainable Development Goals (SDGs) of the 2030 Agenda, energy development practices can move from unintended social co-benefits toward intentionally fostering the social performance of local energy projects. Therefore, explicit consideration of the well-being of individuals and communities should form the core of the design, development, and implementation of renewable development policies and projects.

The stronger individuals and communities are impacted by decarbonising energy systems and the higher the number of potential losers of this transition gets (e.g. through job losses in the fossil energy sector), the greater the imperative to assess how renewable energy projects perform [positively] for individuals and communities. Questions of corporate social responsibility (CSR) have been raised concerning large-scale renewable energy projects in sub- Saharan Africa[1] but, beyond CSR, the

[1] See for example: A Different Wind of Change: Harnessing Africa's Largest Wind Project for Climate Action. Available at: https://www.resilience.org/stories/2020-02-13/a-different-wind-of-change-harnessing-africas-largest-wind-project-for-climate-action/ and

question of whether renewable energy technologies and infrastructure are designed and implemented in a manner that can foster social performance for individuals and communities is often neglected. Against this background, the new possibilities of renewable energy can evolve from the current defensive paradigm to support the Just Transition discourse, involving reducing negative impacts on 'affected' communities, towards a paradigm of unleashing new opportunities, particularly in disadvantaged, marginalised, and underserved communities.

Finally, while the installed capacity of renewables has increased considerably over the last decade, the necessary acceleration of climate action, including the expansion of renewable energy, requires broad political support and ownership and co-investments by a multitude of stakeholders, including local communities. To ensure the significant and lasting progress needed to address the growing disparities in energy access, as well as environmental and climate protection challenges, renewable energy needs to perform for local people, based on their needs and aspirations for a good quality of life and general well-being, in addition to protecting the environment and securing the livelihoods of future generations.

1.3 Aim of this paper

In this paper we develop a social performance approach for energy-sector investments and energy-project development. In essence, this puts the needs and well-being of people – including current and future generations – at the centre of energy development and related investments and activities. The approach can help determine whether (or not) the development and implementation of energy projects (e.g., a renewable wind park, decentralised energy services such as solar mini-grids, or a coal-mining site) and the usage of locally generated energy directly contributes to the livelihoods and prospects of local communities.

The social performance approach helps to identify concrete intervention points or enablers to ensure and increase the positive contributions of energy-sector investments to the well-being of individuals and communities, either in monetary (such as local economic value creation and employment) or non-monetary ways (such as community cohesion and social inclusion). Consequently, policy interventions and investments in decarbonising energy systems should not simply be monitored in view of how they perform for communities and people on the ground; rather, these interventions and investments should be intentionally designed to maximise their social performance.

The social performance approach underscores the importance of integrating the well-being of individuals and communities into environmental protection policies, especially in the context of renewable energy development. This approach recognises that renewable energy is valued for its multiple functions. To this end, the focus on the social performance of renewable energy makes it clear that the role of renewable energy in enhancing the lives, livelihoods, and well-being of individuals is not a secondary co-benefit but rather an essential and deliberate function that must be accounted for at all stages of renewable energy policy development and implementation process. This purpose bids us to reflect on the contribution of renewable energy development in the context of climate and environmental protection, and also to ensure that associated investments take into account the needs and well-being of individuals and local communities, both at the policy onset and throughout the planning, design, and implementation processes, as follows:

The Socio-economic Impact of Lake Turkana Wind Power in Marsabit. Available at: https://ltwp.co.ke/newsite/wp-content/uploads/Finnfund-Social-Impact-Report-2019.pdf

In endeavouring to decarbonise energy systems by a shift to renewables, four important questions may arise for policy makers:

1. How does a (existing / planned) renewable energy project perform socially in comparison to an existing or planned fossil energy project, in contributing to the well-being of individuals and local host communities[2]?
2. How can we monitor / assess the social performance of energy project alternatives in relation to the well-being of individuals and the sustainable development of local host communities?
3. How can we ensure and increase the social performance of renewable energy projects to improve and sustain the well-being of individuals and local host communities?
4. How can the social performance of renewable energy development be incorporated into the overall transition strategy?

Addressing these questions calls for reflection on what renewable energy projects are really for, and how this affects individuals and communities. This is important because the ways in which individuals, communities, and policy makers respond to the presence of renewable energy resources, their development, implementation, and use ultimately influences the climate protection goals. Importantly, it also provides a framework to hold governments and investors accountable.

In this concept paper we argue that the answer to these questions lies partly in the explicit inclusion of individual and societal well-being objectives in the design, development, and implementation of renewable energy projects – and any other environmental policy, for that matter – accompanied by monitoring and evaluation mechanisms and measurement tools to facilitate the systematic assessment of renewable energy contributions towards the well-being of individuals and communities in diverse contexts and on an on-going basis.

[2] In the context of this paper: A local host community is one that plays host to an energy project; the terms local host community and community are used interchangeably.

2. Conceptual foundations of the social performance approach

In order to understand whether policy interventions and investments in decarbonising energy systems are meeting the intended objectives, especially in the context of enhancing individual and community well-being, it is necessary to identify the facilitators and determinants of well-being for diverse groups of people in different locations and communities.

The social performance approach that we propose builds on the conceptual foundations of the capability approach, developed by the welfare economists Martha Nussbaum and Amartya Sen (Nussbaum & Sen 1993), as well as more recent work by the IASS Potsdam on the co-benefits approach (Helgenberger & Jänicke 2017), and the individual and societal-centred energy development and implementation approach (Mbungu 2020), which builds on the Need–Opportunity–Ability (NOA) model by Gatersleben and Vlek (1998). We also draw on the important groundwork of community development scholar Holle Wlokas and recent work on South Africa's Independent Power Producers (IPP) (Wlokas 2015; IASS & CSIR 2019).

Below, we provide an overview of each of these approaches and identify the areas that underpin the development of the social performance approach.

2.1 Capability approach: understanding the functionings of individual well-being

First, we draw on the concepts brought forward by the welfare economists Martha Nussbaum and Amartya Sen in the capability approach. The capability approach is concerned with grasping the dimensions of human well-being and the extent to which policy interventions and implementation processes contribute to human functioning (Wells 2012). Nussbaum (2011) adds that the capability approach focuses on identifying capabilities "as the most pertinent space of comparison for the purposes of quality of life assessment" (Nussbaum 2011: 19).

The capability approach is built on two major concepts: functionings of well-being, and capabilities to achieve these functionings (Sen 1999: 75). Functionings are "the things a person may value or have reason to value doing and being", such as good health, livelihood, and social appreciation. Functionings represent parts of the state of a person – in particular, the various things that he or she manages to do or be in life and how those doings improve their quality of life and general well-being (the ends). Possible other functionings include individual and societal social and economic development, general well-being, fulfilment of basic needs, or community cohesion. Capabilities are a set of freedoms, described as "the real opportunity that we have to accomplish what we value (Sen 2003b: 48). Capabilities can be understood as facilitators to meet the functionings of well-being that are important to an individual or community.

In view of the social performance of sustainable energy development, we draw two essential insights from the capability approach:

- **Social performance criteria should be context-specific, not derived from generic indexes**, i.e., in order to perform a social performance analysis, the functionings have to be identified and defined based on local needs and aspirations of communities, i.e., that are relevant to the given context (cf. ibid.).
- If we want to not only understand but also improve social performance, we need to identify both the **context-specific functionings** of individuals' and communities' well-being, and also the **facilitators** that determine the capability to achieve these functionings.

2.2 Co-benefits approach: connecting tangible, near-term social and economic opportunities with needs and interests on the ground

At IASS Potsdam we have worked for several years on assessing and connecting the socio-economic co-benefits of climate action, such as employment opportunities and community welfare, with political interests in several countries, including Germany, India, Kenya, Mexico, South Africa, and Vietnam.

In our work and in a multitude of interactions we came to learn that "focusing co-benefit assessments towards tangible, near-term benefits for known actors and interest groups contributes to building strong alliances for ambitious and progressive climate and renewable energy policy and action" (IASS 2017).

> The term 'co-benefits' refers to simultaneously meeting several interests or objectives resulting from a political intervention, private-sector investment, or a mix thereof. (Sebastian Helgenberger, Martin Jänicke, & Konrad Gürtler (2019): Co-benefits of Climate Change Mitigation. Encyclopedia of the UN Sustainable Development Goals. Springer.)

We also experienced how addressing social and economic opportunities (rather than taking the climate crisis as starting point) and acknowledging context- and institution-specific needs and interests can facilitate engagement in conversations about sustainable energy transitions and climate action (cf. Sperfeld & Helgenberger 2020).

As experiences from South Africa and Germany (cf. Helgenberger 2016) show, national and sub-national governments can create or hinder an enabling environment for societal ownership in sustainable energy transitions and climate action; consequently, we came to understand the importance of identifying social and economic co-benefits together with enabling policies, to ensure that these opportunities materialise for communities and individuals in a tangible, timely, and traceable manner.

With regard to the social performance of sustainable energy transitions, we draw three essential insights from the co-benefits approach:

- **Social performance should refer to the needs, interests, and aspirations** of the target group or community in focus.
- **Social performance monitoring criteria should be tangible (quantifiable), timely, and traceable** in view of an investment / intervention.
- **Social performance monitoring should go hand-in-hand with developing enabling policies** to ensure that these opportunities materialise for communities and individuals.

2.3 Need–Opportunity–Ability-focused assessment of energy services

Recent groundwork (Mbungu 2020) on factors enabling or hindering individuals to participate in energy services within local communities in Kenya, building on an adjusted NOA model, reveals the role of different facilitators of well-being; as well the different levels of a facilitating environment, which determine the extent to which political interventions or investments can actually impact the facilitators of well-being.

> Needs are defined […] as underlying forces that drive consumer behavior and actions. While needs drive […] desires for certain […] energy services, the kinds of choices made depend on the opportunities available to the user. […] Opportunities are referred to as a set of external facilitating conditions that motivate and enable consumer action. Abilities are defined […] as internal capabilities that enable consumers to purchase and use certain consumer goods and services. (Mbungu 2020: 145, 154, 164)

According to Mbungu (2020), the achievement of needs and well-being is facilitated by personal abilities, which can be monetary or non-monetary, as well as by external facilitating conditions ("opportunities"). These external facilitators represent technological and non-technological infrastructures and support services (cf. Figure 1). Examples include available energy service appliances and the availability of repair and maintenance services.

The empirically adjusted NOA model also reflects different levels of a facilitating environment (social, economic, political, ecological) around the individuals' and communities' needs, opportunities, and abilities: the macro level representing conditions such as national policy and natural resources; the meso level representing conditions such as local value chains and support organisations; and the micro level representing conditions such as household characteristics and internal household relations (cf. Figure 1).

While two levels – macro and micro – show little direct influence of local political interventions or investments, the identified meso-level conditions appear to be of specific relevance when analysing and facilitating the local social performance of sustainable energy transitions, as they represent the locus of control[3] of local energy projects, i.e., they can be directly altered by these projects.

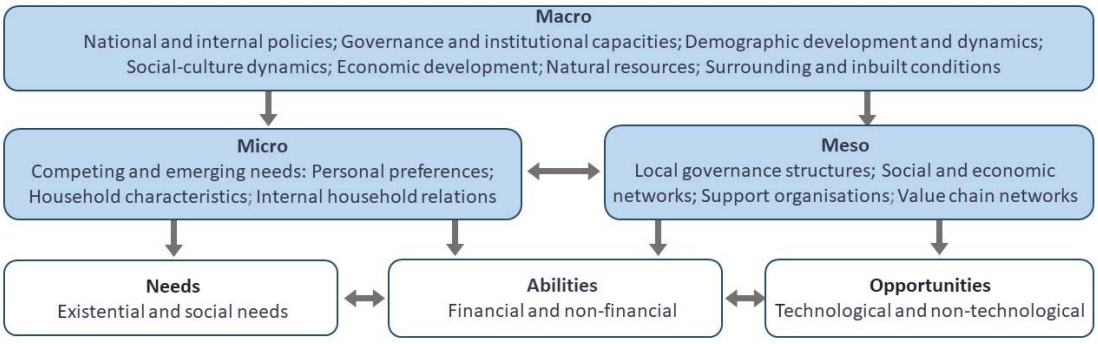

Figure 1: Facilitating environment for participation in energy services according to the adjusted NOA model (adapted from Mbungu 2020)

[3] The 'locus of control' concept is derived from personality psychology and describes the degree to which a subject is able to alter certain factors of relevance to their environment, or whether such factors are altered by an external locus of control.

In view of the social performance of sustainable energy transitions, we draw on two essential insights from the adjusted NOA approach:

1. Achievement of needs and well-being is facilitated by **personal abilities, which can be monetary or non-monetary**, as well as **external facilitators, which can be technological and non-technological infrastructures and support services**.
2. **Meso-level facilitating conditions, such as local value chains and support organisations, should be of specific relevance** for analysing and facilitating the local social performance, while micro- and macro level conditions are likely to be outside the local sphere of influence.

2.4 Social Performance of South Africa's IPPs

The political emphasis placed by South Africa's government on aligning energy policy and infrastructure development with socio-economic development is also reflected in the country's renewable energy procurement policy, which is accompanied by a strong interest in socio-economic benefits in renewable energy projects.

> Whilst the growth of […] this sector is already stimulating important economic impacts nationally, there is also considerable interest in the benefits that renewable energy will engender for remote, low-income, and marginalised communities. South Africa's renewable energy procurement policy is unique in its emphasis on stimulating socio-economic benefits at the local level for communities in the vicinity of renewable energy (renewable energy) projects. (IASS & CSIR 2019: 8)

This has yielded a policy- and practice-oriented school of thought concerning the social performance of local energy projects, centred around community development scholar Holle Wlokas and colleagues (cf. Wlokas 2015; Wlokas et al. 2017; Lochner et al. 2017). In view of growing political support for renewable energy in South Africa, they argue that "depending on technology type, scale and location, renewable energy projects can have a range of positive and negative economic, environmental and social impacts", and that *social performance* should be part of managing any professional relationship among government, communities, and companies (Wlokas & Kapelus 2018).

Wlokas and colleagues also emphasise how neglecting social performance and equity aspects of local energy project development can prompt community unrest and conflict, which can delay or impede such projects (Wlokas & Soal 2016; Lochner et al. 2017). They report on the sensitivity of community members against *parachuting values and projects* into an area, instead emphasising the need to understand the specific community needs and connecting them with local facilitating conditions. With regard to private-sector investment, they conclude that:

> …Social performance essentially deals with all the different ways a company and its operations contribute positively or negatively to the communities and societies in which they operate, and how these contributions and impacts are managed or optimised. Within this context, social performance is a critically important business tool to ensure a company's positioning in the local economy is sound, which directly relates to an effective risk mitigation and reputation management. (Wlokas & Kapelus 2018)

With respect to the social performance of sustainable energy transitions, we draw on three essential insights from deliberations around the social performance of renewable energy projects in South Africa:

1. Specific community needs are to be connected with local facilitating conditions to understand and assess social performance of local energy projects.
2. Neglecting social performance of local energy projects can cause community unrest and conflicts, which can delay or impede these projects: Monitoring and planning for social performance of energy projects should be used to reconcile political and company interests with community needs and well-being.
3. The consideration of social performance should be part of managing any professional relationship among government, communities, and companies and be incorporated into a standard management tool.

3. Social performance approach to energy sector investments

The "Social Performance" approach, which we introduce in this section, builds on a list of ten lessons (cf. Box 1) learned from exerting the conceptual foundations of the capability approach, the co-benefits approach, the adjusted NOA approach as well as recent groundwork on renewable energy projects in South Africa (cf. section 2).

In essence, social performance puts the needs and well-being of people – both current and future generations – at the centre of energy-related investments. It thereby contributes to fostering the well-being of local communities in terms of social and economic prosperity and their capabilities to generate and participate in social and economic value and services. With regard to sustainable development, social performance can be additionally defined in terms of communities meeting their own needs without compromising the ability of other current and future members of the community to do so. The social performance approach underscores that social impacts on the livelihoods and well-being of individuals and communities cannot be only a side effect – either intended or unintended – of energy sector investments, but must instead form an essential, deliberate function that should be accounted for in project development and implementation phases.

An important aspect of the social performance approach is its focus on the direct contribution of these investments in fostering individual well-being, in a manner that reflects individuals' aspirations for a good life. This approach can facilitate regular evaluation of progress, and ensures accountability and adjustment of implementation strategies to ensure that future investments, design, and implementation strategies perform for both people and planet. With a view to developing a Social Performance Index as a tool to monitor and foster community well-being through energy-sector investments, the following definitions are introduced:

> **The social performance of energy sector investments refers to direct and positive social impacts (both monetary and non-monetary) on the well-being of individuals and communities during the development and implementation of energy projects and the access to locally generated energy.** Social performance can be used to compare how different energy options (e.g., a renewable wind park or coal-mining site) effectively and comprehensibly improve the lives of people and local communities.
> Social performance can be measured by assessing the contributions – of energy project development, implementation, and use – toward monetary and non-monetary **functionings of well-being** (e.g., employment or a healthy environment). In addition, energy projects also can contribute to an enabling local environment (e.g., through community funds), which can have positive or negative effects on these functionings and may be measured as **facilitators of well-being**.

Box 1: Conceptual lessons learned for building the Social Performance approach

1. Social performance characteristics are to be defined as context-specific, i.e., in order to perform a social performance analysis, functionings must be identified that are relevant to the context.

2. If we want to not only understand but also improve social performance, we must identify context-specific functionings of individuals' and communities' well-being; and also the facilitators that determine the capability to achieve these functionings.

3. Social performance should refer to the needs, aspirations, and interests of the target group or community in focus.

4. Social performance monitoring criteria should be tangible (quantifiable), timely, and traceable with regard to investment / intervention.

5. Social performance monitoring should go hand-in-hand with developing enabling policies to ensure that these opportunities materialise for communities and individuals.

6. Achievement of needs and well-being is facilitated by personal abilities, which can be monetary or non-monetary, as well as external facilitators, which can be technological and non-technological infrastructures and support services.

7. Meso-level facilitating conditions, such as local value chains and support organisations, should be of specific relevance for analysing and facilitating local social performance, while micro- and macro-level conditions are likely to be outside the local sphere of influence.

8. Specific community needs are to be connected with local facilitating conditions to understand and assess the social performance of local energy projects.

9. Neglecting the social performance of local energy projects can prompt community unrest and conflict, which can delay or impede such projects: Monitoring and planning for social performance of energy projects should be used to reconcile political and company interests with community needs and well-being.

10. The consideration of social performance should be part of any approach to managing professional relationships among government, communities, and companies and be incorporated into a standard management tool.

While climate protection policies primarily target the impacts of energy production and use on the environment, the social performance approach considers the individual and social aspects driving the production and use of energy services as well as how such forces interact to influence the climate protection and well-being of individuals and communities.

Social performance can be used to compare how different energy options (e.g., a renewable wind park, decentralised energy services such as solar mini-grids, or a coal-mining site) effectively and comprehensibly improve the lives of people and local communities. This includes fostering the well-being of local communities both in terms of social and economic prosperity and also their capabilities to generate and participate in social and economic value, services-creation, and delivery. In this regard social performance is not only a mechanism for monitoring energy-related policy interventions and investments (both fossil and renewable), but also a design measure to maximise the social performance of measures that are ostensibly intended to decarbonise energy systems (Figure 2).

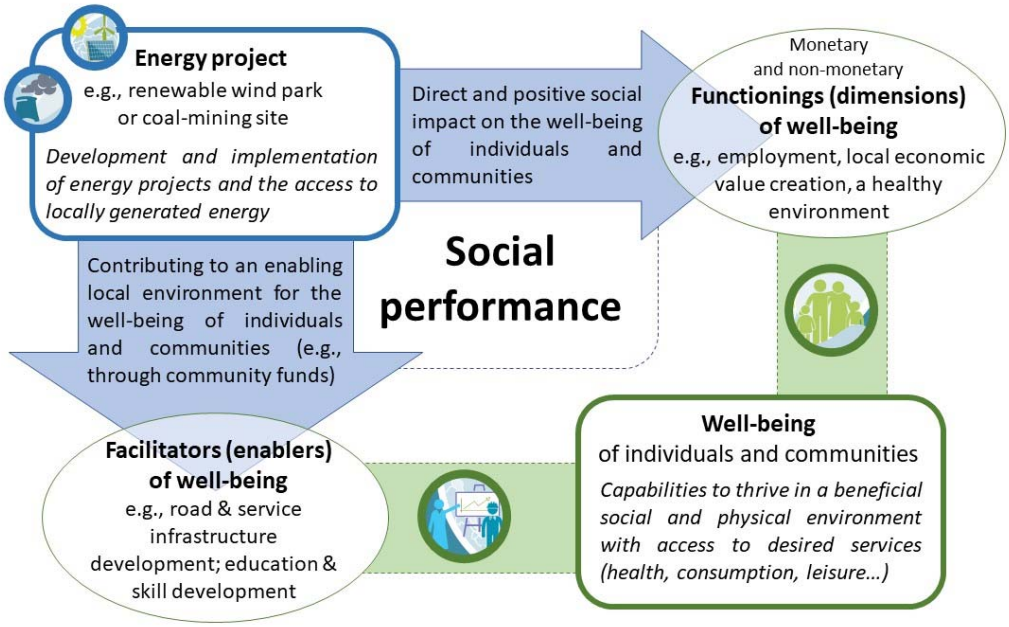

Figure 2: Social performance approach to energy sector investments

4. Social performance and sustainable development in times of climate crisis

> There is no one best way to realise a climate-friendly, sustainable, and just society. Policymakers might be able to formulate better aims and strategies if they had better knowledge of the explicit and implicit ontological assumptions about problems, of the drivers of non-sustainable change, of visions and pathways, of progress and barriers, and of actors and practices.
> Brand et al. (2013) "Debating transformation in multiple crises", in ISSC/UNESCO, *World Social Science Report 2013: Changing Global Environments.*

At the global level, the question is no longer whether climate protection or transition to clean and low-carbon energy systems are needed, but how these processes can be designed and implemented to ensure that no-one is left behind. Yet, individuals and local communities are often not given the opportunity to participate in these processes and are often left behind either in the development process or else excluded from the potential social and economic benefits of such process.

In this concluding section we seek to highlight the strong connection of the social performance concept to the context of the sustainable development approach (Sovacool & Hess 2017). We argue that the social performance perspective can be a transformational driver to activate the 2030 Agenda on Sustainable Development and the SDGs (UN 2015) and to successfully achieve the targets set out by the Paris Agreement (United Nations 2015).

The term sustainable development was popularised in the United Nations report, 'Our Common Future' (World Commission on Environment and Development (WCED) 1987). The principles, processes, and concepts associated with sustainable development are widely used to measure societal progress, to ensure that the current generation meet its needs without compromising the ability of future generations to do so, and while ensuring the well-being of the planet. According to Sovacool and Hess, the strength of the sustainable development approach lies in its different criteria for measuring progress, which "demands that analysts evaluate the actual contribution that different technical systems make as they diffuse or could diffuse" (Sovacool & Hess 2017: 725).

Recent decades have been marked by the gradual development of international support for sustainable development. At the core of this ongoing effort is the need to protect the climate and environment, as well as to improve people's quality of life and general well-being. The most recent international agreements, the 2015 Paris Climate Agreement, and the United Nations 2030 Agenda on Sustainable Development and the Sustainable Development Goals are a culmination of these efforts.

> The United Nations' Sustainable Development Goals (SDGs) framework and the Paris Agreement on climate change have become the most recent international frameworks to bring attention to the challenges that the world faces as a result of the growing number of people without clean, safe, and sustainable energy access, and hence the need for increased efforts to address and mitigate associated risks and burdens. (Mbungu 2020: 42)

The near-universal support for both agreements underscores the global commitment to addressing the growing sustainable development and environmental challenges. Sustainable development and climate change policy and implementation strategies have an explicit aim of enabling the current generation to meet its needs without depleting Earth's natural resources or damaging the ecological balance, in order to ensure that the ability and opportunities for future generations to meet their needs is not compromised.

The SDG framework underlines 17 policy goals4 to ensure sustainable development. At the core of our thematic focus of renewable energy is SDG7, to: ensure access to affordable, reliable, sustainable, and modern energy for all. As Mbungu (2020: 24) states:

> […] the benefits of achieving SDG 7 are not limited to ensuring access to affordable, reliable, sustainable, and modern energy for all. Given the systemic and interconnected nature of energy production and consumptions practices, with humanity and the environment, the attainment (or not) of SDG 7 will impact the short and long-term state and well-being of humans, entire ecosystems and, indeed, the planet.

Consequently, the attainment (or not) of SDG 7 has broad implications for the progress and attainment of other important goals of relevance to climate protection and the well-being of current and future generations, namely:

(SDG 1) End poverty in all its forms everywhere.
(SDG 3) Ensure healthy lives and promote well-being for all at all ages.
(SDG 4) Ensure inclusive and equitable and quality education and promote lifelong learning opportunities for all.
(SDG 5) Achieve gender equality and empower all women and girls.
(SDG 8) Decent work and economic growth.
(SDG 11) Sustainable cities and communities.
(SDG 12) Ensure sustainable consumption and production patterns.
(SDG 13) Take immediate action to combat climate change and its impacts.

The rest of the SDGs either require energy for their success, or else their outcomes are dependent on processes of energy production and consumption. While countries are encouraged to report national and regional progress of their implementation commitments by means of voluntary national reviews (VNRs)5 (for the SDGs) and nationally determined contributions (NDCs)6 (for the Paris Agreement), no efforts have been made to assess the actual contributions of different energy projects toward the well-being of individuals and local communities, especially in areas where these projects have been implemented.

[4] A list of the Sustainable Development Goals is available at:
https://sustainabledevelopment.un.org/topics/sustainabledevelopmentgoals

[5] "The voluntary national reviews (VNRs) aim to facilitate the sharing of experiences, including successes, challenges and lessons learned, with a view to accelerating the implementation of the 2030 Agenda. The VNRs also seek to strengthen policies and institutions of governments and to mobilize multi-stakeholder support and partnerships for the implementation of the Sustainable Development Goals." For more information about the VNRs see: https://sustainabledevelopment.un.org/hlpf/2019#vnrs

[6] Nationally determined contributions (NDCs) are central to the enforcement mechanism of the Paris Agreement. Under Article 4, countries are required to: "prepare, communicate and maintain successive nationally determined contributions that it intends to achieve". More information about NDCs is available at the United Nation Climate Change website: https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement/nationally-determined-contributions-ndcs

Efforts to decarbonise energy systems by means of a transition to renewable energy are mostly being considered from a climate action perspective and hence with a focus on environmental sustainability. In order to complement the environmental sustainability perspective in energy transitions, it is important to also consider the social sustainability of energy transitions and beyond (cf. Setton 2020), which we understand as follows:

> The **Social Sustainability** of a policy intervention, project development, or investment allows for continuity and long-term perspective by identifying and harnessing social opportunities, and by preventing and mitigating social conflicts and community unrest. Social sustainability is facilitated through prioritising the well-being of people and communities for current and future generations, and by pursuing inclusivity and broad political and economic ownership in the development process and its results.

By emphasising the social sustainability pillar of sustainable development, we intend not only to highlight the importance of the social performance dimension of energy transitions, but – most importantly – to also activate and strengthen the implementation of the Paris Agreement and the SDGs, and illustrate the on-the-ground relevance of these planetary commitments.

At the time of publishing this paper, societies and communities around the world are being severely affected by the spread and impacts of the global COVID-19 pandemic. The broader consequences have already been devastating for millions of families, workers, and businesses, as well as for local economies and national health systems. Substantial political efforts will be needed to rebuild national and local economies and job markets, as well as to increase the resilience of health systems. To ensure sustainable policy interventions, it is important to note that recovering from the economic and social shocks of the COVID-19 pandemic, and avoiding severe future shocks triggered through the climate crisis, do not represent conflicting interests but rather a mutually reinforcing coping strategy (IASS 2020).

> The importance of social sustainability in moving towards sustainable development is undeniable. [...] Now, more than ever, social sustainability, social inclusion and leaving no one behind must be critical parts of our thinking and efforts to build back better and greener. (United Nations Environmental Programme 2020: Guidelines for a Social Life Cycle Assessment of Products and Organizations.)

Building on the reflections in this paper, we propose that by ensuring the social performance of political interventions and allowing for broad and diverse ownership and the empowerment of communities to take action and seize opportunities, the Paris Climate Agreement and the United Nations 2030 Agenda for Sustainable Development can offer important, internationally agreed frameworks for a green, inclusive, and therefore sustainable recovery.

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