Synthesis Report on the "Roundtable Initiative on Strategic Energy Planning"

7th June 2018

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1   Introduction

Strategic energy planning has been identified as an essential part of policy and decision-making in the energy sector, and is crucial to enabling the scale-up in investment needed to meet economic and social development goals. Current policy and planning decisions can too often be externally driven, and support too fragmented to lead to lasting technical capacity for energy planning within developing country governments and technical institutions.

In November 2017, the UK Department for International Development (DFID) convened a roundtable discussion to improve the way in which Development Partners (DPs) support strategic energy planning in developing countries. In attendance were representatives from a number of major donors and technical institutions that have experience or are engaged in this space (see Annex B for a full list of participants). The starting point of this roundtable discussion was with the recognition that DP-funded models and decision-support tools are frequently ineffective at improving decisions-making . Through participants sharing of experiences of some of the obstacles and challenges they face in improving strategic energy planning, the overall vision of this initiative emerging from the discussion was "**to improve coherence of long-term strategic decision-making by increasing the effective use of evidence and analysis**".

Following on from this Roundtable Initiative on Strategic Energy Planning (hereafter simply referred to as the Roundtable Initiative), two further sessions on the theme were held in Lisbon in May 2018[1], once again convened by DFID, with support from the Energy and Economic Growth (EEG) programme. The first was a Partner Working Session on the second day of the Sustainable Energy for All (SE4ALL) Forum; the second, on the next day, was a roundtable event held with representatives from major donors and technical institutions. Feeding into these sessions, two background papers were produced: an Energy Planning 'White Paper' and an Energy Planning Technical Concept Paper.

The remainder of this synthesis paper is structured as follows: Section 2 is a general diagnosis of the problem of providing efficient and effective support for strategic energy planning, including an overview of what was discussed during the Partner Working Session at the SE4ALL event, the morning session of the second roundtable event, and the two aforementioned papers produced, which were presented at the same roundtable.

Section 3 is an overview of the four separate workstreams that have emerged during this Roundtable Initiative that were unpacked during the working group sessions. Steps moving forward for each workstream are then discussed.

Lastly, Section 4 provides an overview the next steps proposed to bring forward the Roundtable Initiative in the shorter and longer term.

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[1] See Annex B for a full list of participants at both sessions.

2 Summary of Lisbon's Sessions

2.1 Day 1: SE4ALL Partner Working Session

This partner working session began with an overview from Eng. Robert Nyamvumba, Rwanda's Energy Division Manager, on his country's experience on energy planning and some of the key considerations and challenges they had been facing. This was followed by a presentation by Eng. Faruk Yusuf Yabo, Nigeria's Acting Director for Renewable Energy & Rural Power Access, on their countries approach and experience with energy planning. One of the key points that they both emphasised was the need to appreciate **energy planning is a dynamic process rather than a one-off exercise**, given that the realities on the ground are constantly shifting. As pointed out by Mr. Nyamvumba, energy planning needs to have an appreciation for the energy requirements of both households and other national sectors, such as industry, agriculture, and transport. Given that these sectors themselves are dynamic, in terms of their purpose and priorities, it is illogical for energy planning processes not to mirror these. Another valid point they both raised was the **need to balance supply and demand** in order to avoid stranded assets and to ensure financial viabilities of utilities. In the context of the SE4ALL forum and achieving energy access for underserved populations, ensuring this balance is achieved is vital given that unprofitable utilities often lead to high energy prices, which are unaffordable by the poorest people.

The presentations were followed by a panel discussion and Q&A with the audience on innovations in energy planning, and the importance of building capacity around energy planning, and improving the way decision-support tools are created, accessed and maintained. The panel was chaired by Dr. Will Blyth, DFID, who was joined by Prof. Vijay Modi, Columbia University, Dr. Deb Chattopadhyay, World Bank, Ms. Elizabeth Press, International Renewable Energy Agency (IRENA), and Dr. Daniel Schroth, African Development Bank (AfDB), each of whom shared their experiences. They echoed the points raised by two previous speakers, with some additional considerations, such as:

- The difficulty in reconciling new energy technologies, particularly with renewables and off-grid, with out-dated models and planning approaches;
- The undeniable fact that users are often faced with issues of **data paucity and/or unreliability**, making the assumptions driving an energy planning process potentially severely flawed;
- The need for actors (both in-country and external) to move beyond a focus of planning processes *alone*, and to ensure there is an appreciation of the implementation capacity and sufficient financing to deliver a plan;
- The necessity by donors to ensure that we **increase the accessibility of tools and models so that in-country users can own these planning processes**.

A last interesting thought shared by Dr. Schroth was that governments, in some countries, must step-up into leadership roles and be more demanding of what specifically they need to satisfy their strategic plans, as they will always have a better understanding of this than external actors. Whether or not this lack of ownership of the process stems from the manner in which external actors approach governments was not explored in depth. However, Ms. Elizabeth Press, International Renewable Energy Agency (IRENA), called for a more partnership-oriented approach to capacity building, rather than the traditional top-down "teacher-student" approach of donors.

The thoughts shared within the partner working session fed into the Roundtable Discussion on Energy Planning held on the next day after the SE4All forum.

2.2   Day 2: Second Roundtable

Dr. William Blyth began the session by introducing the Roundtable Initiative and the progress to date. He emphasised that this session was about **building coordination that is driven by *all* organisations working in this space**, rather than with DFID leading. To that end, the outcome of the session could have been that the initiative was dropped, if not enough people thought it was worthwhile or cost-effective; doing nothing was still a viable option. He stated that enough people seemed to think the lack of coordination in strategic energy planning was an issue, but we needed a realistic and fairly concrete roadmap of what this community of interested and engaged actors was going to do. An interesting point in this regard had been raised by Dr. Chattopadhyay of the World Bank during the Partner Working Session the previous day, in that something we often forget is donors themselves lack the capacity to collaborate on multi-actor initiatives such as this one; so while something might have high-value, the Initiative still has to prioritise according to resources we have available as a community.

One limitation of the session was that none of the participants in attendance were those responsible for in-country analysis, decision-making, or implementation (see below model) and therefore it was acknowledged that they would need to be brought into the process in the next stage of the roundtable initiative.

Strategic Energy planning

Dr. Blyth presented his mental model in regard to how he thinks strategic energy planning works (or *should* work):

Figure 1 – Model for strategic energy planning
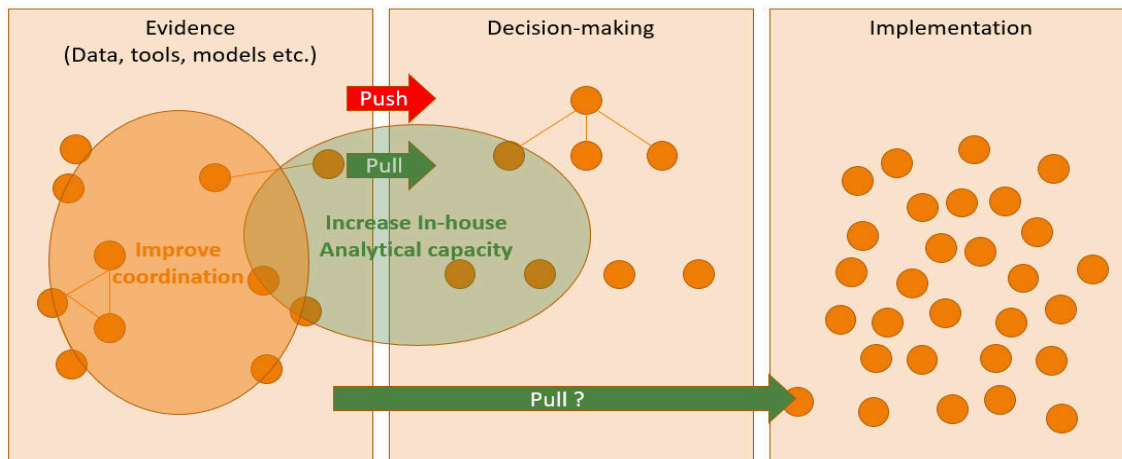
Dr. Blyth argued that the purpose of what we should be trying to do with **energy planning is having better quality evidence feed into decision-making**, which in turn we would expect to positively influence on-the-ground outcomes in the energy sector. He raised a few important points here:

- *Pushing* evidence into the decision-making is problematic due to the need for **in-country ownership** of this process. What it is needed is for evidence to be *pulled* by decision-makers themselves.
- It is anticipated that **building 'in-house capacity'** may be part of the solution, as that should increase the pull of evidence.
- But the missing link, potentially, is the ability by regulators, financiers, project developers and others from the implementation side of this model to pull through for evidence based policy-making, in order to make the decision-making and implementation processes more joined up, raise adequate finance and line up behind sound evidence.

The 'White Paper'

Dr. Chattopadhyay presented on a White Paper for 'Improving coordination and effectiveness of strategic energy planning in developing and emerging economies'. The key points of the paper are:

- Following on from the first Roundtable Initiaitve's discussion in 2017, the overall vision of strategic planning is to improve coherence of long-term strategic decision-making by increasing effective use of evidence and analysis.

- The aim is to build consensus across all groups (government decision-makers, technical institutions, donors and DFIs) **regarding the key principles to be applied when undertaking strategic energy planning activities.**

- But the current status quo in this space has numerous problems, such as**:**

  o Current decision-support tools are ineffective at improving decision-making because they lack buy-in from those with authority;
  o Donor support is fragmented;
  o An overemphasis on supply-side issues;
  o Platforms and attempts to share data, tools, and models have gaps and are hard to navigate.

Dr. Chattopadhyay went on to propose some **key guiding principles** that *could* underpin actor engagement in this energy space, **which would be a key focus of this Roundtable Initiative**. These principles are:

1. **Coherence of strategic decisions:** Use the planning process to prioritise and align energy sector's objectives.

2. **Ownership:** Ensure country's ownership and *high-level* political buy-in of sector's strategic objectives and plans.

3. **Capacity building:** Support countries to build their capacity to foster leadership in strategic planning, and the incorporation of plans and evidence into the decision-making and implementation processes.

4. **Transparency and robustness:** Ensure planning tools and models have a strong technical and economic foundation, promote transparency in their inputs and assumptions, and produce planning outputs that are accessible to stakeholders.

5. **Accessibility:** Promote the use and sharing of data and assumptions on open or easily accessible platforms wherever possible.

Strengthening Coordination and Delivery of Energy Planning Services

Finally, Sam Booth from the National Renewable Energy Laboratory presented on a background paper written on what steps would be needed to put the White Paper's five principles into practice. **A key goal of the Second Roundtable was to refine some of these steps.**

Mr. Booth clarified on the meaning of 'Energy Planning' in order for a coherent thinking across the participants. He explained that there are four major types of energy planning assistance:

1. **Project Level Analysis Support:** Support to specific projects or regions to develop plans, deliver projects, Technical Assistance (TA) to overcome technical issues etc.

2. **System Level TA:** Systematic planning to achieve wider goals such as achieving national electricity access goals. This can range from multi-year analytic and expert support for planning processes to shorter term advisory support and sharing of good practices.

3. **Resources and Data Development:** Such as data sets, analysis methods, computer based tools, strategy-development techniques and other technical resources.

4. **Training Programs and Peer-to-Peer Knowledge Sharing:** These would aim to foster a standardised approach to planning.

Following on from this notion already discussed of an 'ecosystem', a key question is then *how* we build an energy planning ecosystem.

Figure 2 – Building an Energy Planning Ecosystem

Assuming the Roundtable Initiative's aim was to build such supporting ecosystem for strategic energy planning, Mr. Booth proposed some ideas on the potential next steps:

1. **Establish a global energy planning community of practice**, which could include a virtual network and forums, as well as an annual meeting.

2. **Launch an integrated energy planning resource platform**, which could be a repository of data and tools and good practice examples. Furthermore, it could provide tracking of country-level energy planning activities, gaps/needs, and mapping of donor support.

3. **Initiate coordinated expert advisory support on energy planning**

4. **Develop priority energy planning support tools** e.g. open source power planning, Renewable Energy Data Explorer

In addition to the discussion above, focused on the key priorities and shape of the Roundtable Initiative, throughout the morning plenary some other questions and reflections were posed by participants that are worth noting. Most of them have been inserted within the illustration of the working group sessions in Section 3. The remaining ones are briefly presented below:

- Selena Wang-Thomas from the Rocky Mountain Institute pointed out that one of the major reasons plans collapse is due to a failure to ensure there are sufficient investments available when designing a plan, i.e. if your plan calls for $200 million of investment, there is a need to clearly outline where that financing will come from.

- Charlie Heaps from the Stockholm Environment Institute (SEI) pointed out that a duplication of efforts isn't necessarily a bad thing, we just need to bring it all together as a community. Duplication at least indicates a rich ecosystem in the realm of strategic energy planning.

- Lucy Stevens from Practical Action underlined the need for discussing ways of going beyond data supporting mere quantitative answers (such as to a geo-spatial survey) to produce data providing also qualitative considerations on target communities that energy planners need to be aware of. If this is considered in our approach, then we can allow the voices of communities (their needs, priorities etc.) to come through in energy planning.

- Kathleen Auth from Power Africa wanted to reemphasise the importance of actors taking a systems approach to avoid being fragmented. Furthermore, even when actors want to collaborate there is always a need to go door-to-door to obtain information; some sort of platform as we have discussed would be crucial.

3 Energy Planning Workstreams

During the Lisbon roundtable, participants were split into four working groups for approximately 90 minutes in order to discuss the following topics:

- **Capacity building**
- **Data, models and standards**
- **Community platforms**
- **Key principles**

These four different themes were not pre-determined by the roundtable organisers, rather they were recurrent themes/challenges within strategic energy planning that had been repeatedly raised and discussed during that morning session. The purpose of the working groups was to brainstorm and unpack these topics and to see if they could come up with suggestions for how Roundtable Initiative would advance the coordinated efforts within these areas, and to present back to the rest of the participants. The rest of this section outlines some of the key considerations and challenges for each of these areas, and the agreed steps to take these forward.

3.1 Capacity Building

The working group defined 'capacity building' as the development of national competence, from which a country could conduct its own energy planning analysis – using the tools of their own choice and building on their already existing capacity – and deliver the subsequent action independently from an external influence, such as a consultant trying to push forward a particular tool, pathway or technology. The importance of capacity building begins with the assumption that, for strategic energy planning to be a productive and effective exercise, two things are necessary:

1. The ability within mandated institutions (whether that be a ministry or a utility) to develop, run, and update their own tailored energy models and tools;[2]
2. The ability – or perhaps a mechanism – to understand and translate data and modelling outputs, that is often developed by analysts or technocrats, into planning decisions made by those with authority, in line with other sectoral plans and built towards wider social and economic goals.

During the second roundtable, this was echoed by Henri Waisman, Institute for Sustainable Development and International Relations (IDDRI), who outlined a two tier approach for capacity building[3]:

- Modelling capacity indeed needs to sit within a particular institution e.g. a mandated utility;
- *But* a political counterpart is also required to understand what the modelling outcomes are telling *and* what to do with that information.

Mr. Waisman argued that what is needed for energy planning to be effective is the **ability to communicate between those two tiers in an active and iterative fashion**, i.e. not only with the

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[2] By tailored, we speak to contextual idiosyncrasies and how no model will fit the same two countries. As Dana Rysankova from ESMAP highlighted during the session, a tool or model will likely only ever cover a portion of what an in-country user requires them for.

[3] It is important to mention the crucial independent role played by national universities and think-tanks, able to develop analytical studies relevant to the national context, that would ensure a foundation for domestic knowledge, freed from political variabilities.

delivery of a final product from one group to the other. It is then for external actors, such as the ones present to the session, to conduct a gap analysis of those two tiers.

What we often find is that these two distinct but closely related types of capacity are lacking in partner countries, the causes for which are likely numerous. The main recurrent reasons raised during the session are that:

- The nature of donor/technical institution **engagement with developing countries is ineffective**, with planning exercises that are often externally driven, and capacity building attempts that are one-off, short-term or poorly coordinated between various actors;
- A **lack of in-country ownership** of the planning process means there is little/no incentive to develop the requisite capacity;
- **Capacity that is developed is often not sustained and institutionally embedded**, for example knowledge is lost with technical staff departing for jobs in the private sector.

The extent to which each of these three reasons come into play will naturally vary according to the context, while the relationship between the three is unclear, but potentially mutually reinforcing. For example, it could be that in a country ineffective capacity building exercises driven by external consultants is a reason for a lack of ownership of the process by decision-makers. Conversely, the absence of ownership means there is limited appreciation of the potential for strategic energy planning to assist in achieving energy sector outcomes, and therefore prevents external actors from being able to provide the sustained support needed to build capacity.

Given the complexity of the capacity building problem – but with consensus in both roundtable events regarding its importance in achieving the vision of this Initiative – it was agreed during the second roundtable that what is needed is to **scale up support for capacity building in energy systems modelling and planning.** The group agreed that support should be targeted at **existing initiatives**, rather than new ones, as it would be a waste of significant efforts already made in this space. As a starting point, Mekalia Paulos, United Nations Economic Commission for Africa (UNECA), agreed that they will share the outcome of a capacity mapping exercise they are currently undertaking of their member countries. This will allow for a more nuanced understanding of where capacity exists, both in terms of in which countries and at what levels (technocrats vs decision-makers). The cooperation model established between the International Atomic Energy Agency (IAEA) and IRENA, which share common principles towards energy planning capacity building, was mentioned as an example of good practice.

Some of the other suggested approaches put forward that are worth noting for future consideration were:

- **Setting up a wiki or a similar platform** to upload ongoing activities in each country. This would allow better in-country coordination to avoid duplication and it would also allow cross-country learning. There is the potential for this to be combined with the high-level website / online platform discussed in Section 3.3.
- **Donors pooling resources behind in-country Centres of Excellence**, something which UNECA are currently engaged in through their Energy Modelling Platform for Africa (EMP-A) initiative. During the morning session of the second roundtable, Mark Howells from KTH pointed out that in developed countries there is an entire energy planning ecosystem with universities and researchers linked with the policy process. Holger Rogner from the International Institute for Applied Systems Analysis (IIASA) reinforced the point and stated that much of the capacity building he has seen fails to last even one or two budget cycles.

Knowledge disappears with individuals for a number of reasons, but the only place it generally lasts is in research institutions or academia. He explained that what is also needed is a sustained relationship between these research institutions and the government to build trust and to constantly nurture the link necessary to ensure capacity building is high on the agenda. **In order to achieve long-term sustainability, you need country-led demand of evidence underpinned by in-country generated capacity**.

3.2   Data, models and standards

The starting point for the first roundtable event was discussing **how decision-support tools, models and data are created, accessed and maintained**, in order to understand how to maximise their accessibility and usability in different contexts and by different types of users globally. Mark Howells, KTH, argued that rather than coordinate one meta-approach, the solution is to **set common standards** in terms of tools and data, so that useful comparisons can be made, and users have a clear way to understand what they need, what data is available and then what model to use.

The working group during the second roundtable outlined some of the key outputs needed in this area:

- Ensuring **interoperability between systems,** when data is created and uploaded to databases and platforms;
- Focusing on **modularity in the design**, especially when looking to shift data in-and-out of platforms;
- **Standardising interfaces in a sensible and collaborative way**, as this is a fast-moving space;
- **Ensuring user friendliness**, while realising there are **different levels of users** (analysts/technocrats vs decision-makers).

The group instead outlined some of the challenging considerations that we need to keep in mind, and which will be elaborated upon:

- **Data types**:

    o These are not the same between models; e.g. rural electrification data is very different from climate data;
    o When describing data, there are very different types of users: input data (for groups like technicians) and output data (for decision-makers, non-technical stakeholders etc.)

- **Data collection processes differ depending on the data required**, with some processes being more labour intensive or complex than others. Therefore, it is important to consider what partnerships are required to undertake these processes to collect those data, and how we nurture these relationships in a collaborative manner (whether it is with utilities, different government departments, or various private sector actors). Thus a key question to address is: "How do we incentivise those with access to data to share it with us, and what support do we offer them to do so?".

Given the various issues related to the standardising of data that were presented at the Lisbon roundtable, it was decided that the most prudent next step would be for **a discussion paper on**

'Data and tools for energy planning' to be produced, which will examine how to improve the interoperability of data sets and analytical tools by developing standards and protocols.

3.3   Community Platforms

Closely following on from the above section, and linked to principle 5 from the White Paper, the starting point of this working group was to acknowledge the need to increase the **accessibility of products that support energy planning.** Having an ecosystem where data can be accessed and classified against different activities is the precondition for the desired outcome of the Roundtable Initiative of having capacitated policy-makers who understand the implications of their decisions in energy planning. As Mark Howells pointed out during the second roundtable, what is needed is a marketplace of solutions that provides accessibility to the *right products* and related knowledge to those who are demanding them.

There was appreciation for the fact that we are at a good starting point given that there is lots of different data, models and tools available for planners. As noted by Dana Rysankova during the morning of the second roundtable event, what we need to provide for those in-country is a summary of the platforms where they can go for data; in fact, there is actually a lot of data they are not leveraging. This was also noted in the background technical paper on 'Strengthening coordination and delivery of energy planning services to developing countries', where a proposed potential next step of this initiative could be "to further integrate, strengthen, and promote use of existing resource platforms that compile resources, tools, and services across these programs."

The working group outlined some of their key questions when it comes to developing some kind of community platform or data repository. Firstly, as a community, we need to answer some important questions: What are the priority areas that we want to focus on? What are the mechanisms to encourage sharing? What are the goals of the platform? Who are the anticipated users? What does success look like? Until we answer these then we are unlikely to be able to develop anything of use. They highlighted that there are existing platforms out there already, so it is best to establish what exists and how we can tap into these in order to avoid duplication, to be cost-effective, and to ensure we learn from other existing work.

It was agreed by participants in the concluding discussion that **one of the main outputs of the Roundatble Initiative needed to be a high level website / online platform. Such a website would begin by signposting to other sources of data and models**, but could be developed (as needed) to provide more complete guidance on modelling approaches, and hosting new tools as required. The platform should have audience specific entry points, e.g. donors will want to access certain types of data or information, whereas analysts will need something different.

A suggestion from the group was that, rather than developing a new website, it would be preferable to use an existing one. Further investigations of potential options for hosting the community platform are required.

3.4   Key Principles

This working group began by agreeing that the White Paper's principles were logical and sound to become the key principles of this Initiative. This sentiment was echoed by participants throughout the second roundtable. The question then was what these principles look like in practice and whether the group could come up with ideas on how the Initiative can enforce and support each of

them within the wider community. Anna Lerner from Facebook pointed to the 'Principles for Digital Develoment'[4], which offer an example of a potential light-touch starting point for how we approach this.

The working group went on to unpack some of the principles as proposed in the White Paper:

1. **Coherence of strategic decisions:** There was uncertainty on this one given current incentives between actors are not aligned, and, as Dana Rysankova had already outlined earlier in the day, the transaction costs for collaboration are often too high. Therefore, as a *starting point*, it may have to be something as simple as a **commitment to increased informal communications between major actors in order to gauge what work others are doing to avoid duplication**. Participation to Roundtable Events like this one would be a concrete step in this direction. After time, there might be a normalisation of such collaborative behaviour to the extent that more advanced measures could be implemented, e.g. by coordinating each donor's work in a certain country to be complementary. Furthermore, if we are able to create a community platform as previously discussed, then this could serve as a means for communication and joined up strategic decisions.

2. **Ownership:** We need to recognise the linkage between ownership and capacity building, and the unfortunate fact is that without capacity and awareness, there is often no/little demand from those in-country to develop their own energy planning capabilities. So in terms of the Initiative's approach, rather than lead as the supplier, **our entry point needs to be as a partner**. As Charlie Heaps from the LEAP Community highlighted during the morning introductions, we're still using this language of 'clients' and 'donors' and one of the key reasons there isn't in-country ownership – and therefore learning or capacity building – is due to this dichotomy. By drawing a line between the two, what often results is one-off donor-led events and no capacity in-country. Unless you have **long-term, sustained partnership**, you are unlikely to make much progress in building in-country capacity. Things are getting a bit better due to the climate agenda and realisation from governments they need planning to meet those goals they have signed up to.

   This process is not about obtaining in-country buy-in of external plans and processes, rather about *co-creation*. Furthermore, we need to engender *multi-stakeholder ownership* of the process, through engaging with civil society, communities, private sector etc. as different actors who need to have inputs into different processes. Again, this is another process that could be facilitated by the community platform mentioned above.

3. **Capacity building:** The group emphasised a point that had already been echoed in the morning session, which is that we must move beyond capacity building as primarily short-term or one-off exercises, to more sustained engagement. One of the ideas for moving forward here was to look to capacity building platforms at the regional level as a mechanism for encouraging national planners to engage with each other, catalyse peer-to-peer knowledge sharing etc. The question was also posed as to whether we needed to coordinate efforts between ourselves (donors and practitioners) in order to ensure there is no duplication, that gaps are filled etc.

In terms of next steps, it was decided that donors will need **to continue to communicate and work towards agreement on how the group operationalises the five principles outlined in**

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[4] https://digitalprinciples.org/.

the White Paper on Energy Planning. It is envisioned that eventually donors will adopt a clause in all terms of reference for energy planning support requiring consultants to follow these processes.

4 The Roundtable Initiative – Moving forward

Since November 2017, the Roundtable Initiative has produced fruitful discussions and some key outputs on ways to improve the efficiency and effectiveness of the strategic energy planning support provided by Development Partners and technical organisations. What clearly emerged from the second Roundtable in Lisbon was a general consensus among participants that the Initiative is valuable enough to continue investing time and effort towards it.

This section puts together the different outcomes of the discussions so far to provide a coherent framework for rationalising the Roundtable Initiative's work and define some medium/long-term objectives as well as some short-term next steps.

Roundtable's conceptual framework

Linking up the common threads from the discussions and outputs produced, it is possible to identify some key elements of the Roundtable Initiative to produce a Theory of Change (Figure 3).

The ultimate impact the Initiative is aiming to contribute to is to reach an "**improved coherence of strategic energy systems planning by increasing the effective use of evidence and analysis by decision-makers in developing countries"**. In order to achieve their purpose, the Roundtable's promoters have identified four main Outcomes that correspond to respective workstreams:

1. **Harmonised engagement:** aiming to an improved knowledge-sharing and coordination among DPs and practitioners on energy system modelling and planning. Under this workstream, fall those activities (e.g. the White Paper, the Roundtable Events, the inclusion of the Principles in ToRs) that seek to obtain the application of common principles for the engagement in energy system modelling and planning. Engagement with in-country planners will also be crucial to ensure the key principles and the outputs of the Initiative are demand-driven and owned by them.

2. **Capacity building through co-creation:** the aim here is to reach improved strategic energy planning and modelling capacity of key national institutions (both technical and political). This should involve close engagement of the national institutions in the identification of the needs and the design of the capacity building in order to promote its co-creation and improvement through regular feedback loops. The end goal would be to foster an energy planning ecosystem that would see capacity built into (and ultimately delivered by) self-sustaining national Centres of Excellence that would effectively interface with 'energy planning educated' government users. The Activities within this workstream such as assessing capacity needs, funding existing capacity building initiatives, and creating/supporting national and regional Centres of Excellence, all seek to sustain and ideally scale-up the DP's support for capacity building in energy systems modelling and planning.

3. **Data, models & standards:** the Roundtable is also aiming to get to an improved quality of the evidence behind strategic energy modelling and planning. Under this workstream, the Initiative will work on providing assistance to technical organisations to develop improved data, models, and standards – for instance by preparing relevant discussion and technical papers.

4. **Community platforms:** the specific sought outcome is to achieve improved awareness of and accessibility to decision-support tools and data by all different users, national and international. The key output for this workstream would be to have a one-stop-shop online platform with opensource and open access data, tools, and knowledge on energy systems modelling and planning hosted or at least signposted in one place. The activities under this workstream will aim to define the key features for such platform, identify existing platforms to be enhanced and/or signposted to, and finally communicate to the energy planning community about the new platform.

If we add the key actors and resources to the vision for the Roundtable Initiative illustrated above, we can create a conceptual framework like the one in Figure 4 that helps visualise the key interactions of the different outputs towards a coherent goal. Operationally speaking, ideally, there would be working groups within the Roundtable Initiative for each of the four workstreams identified, which would then be sustained and coordinated by a 'Management Body' or 'Secretariat'. Moreover, part of the Roundtable Events could function as periodical Steering Committee meetings that would discuss the activity, outputs, and outcomes achieved and provide guidance for the next implementing period.

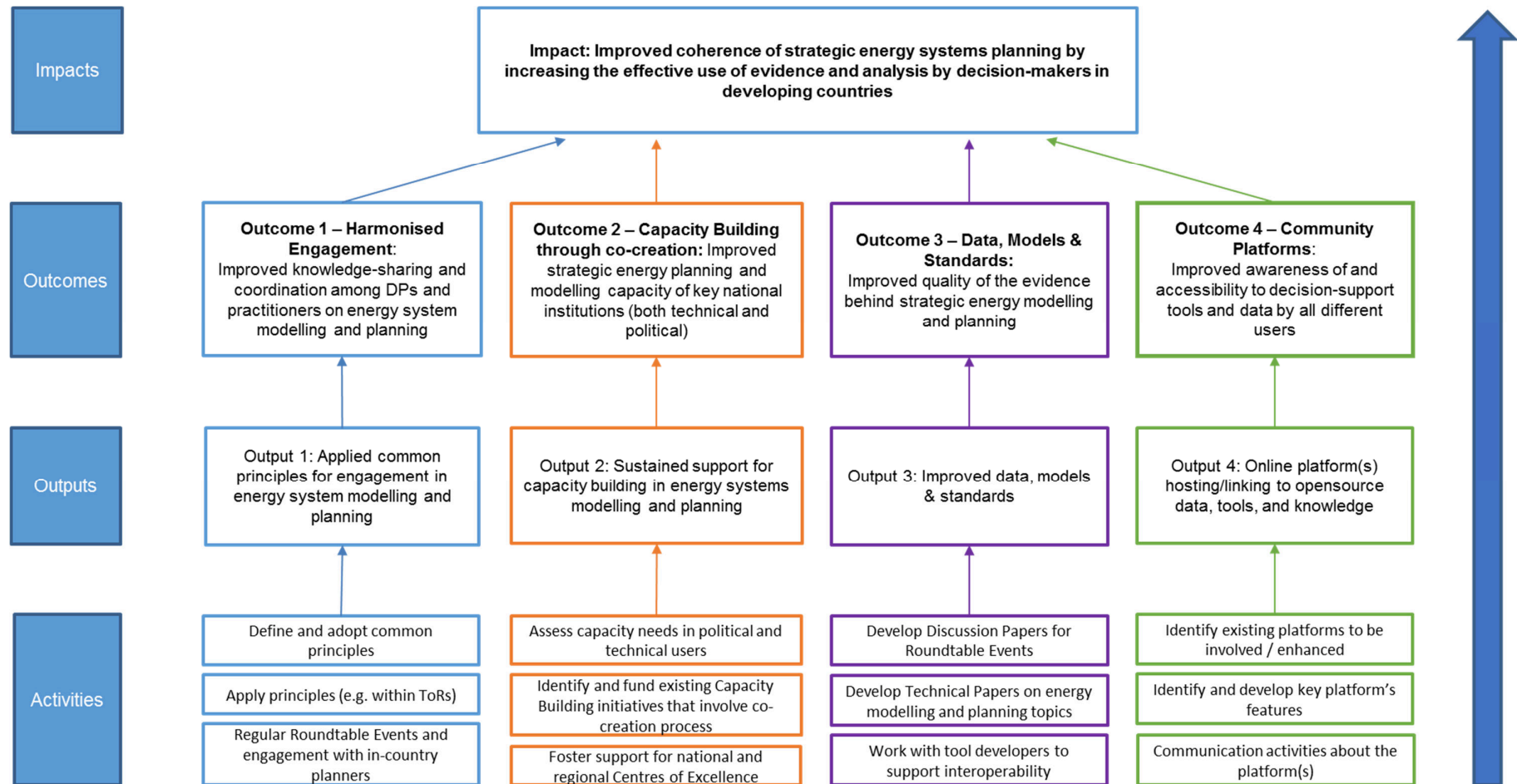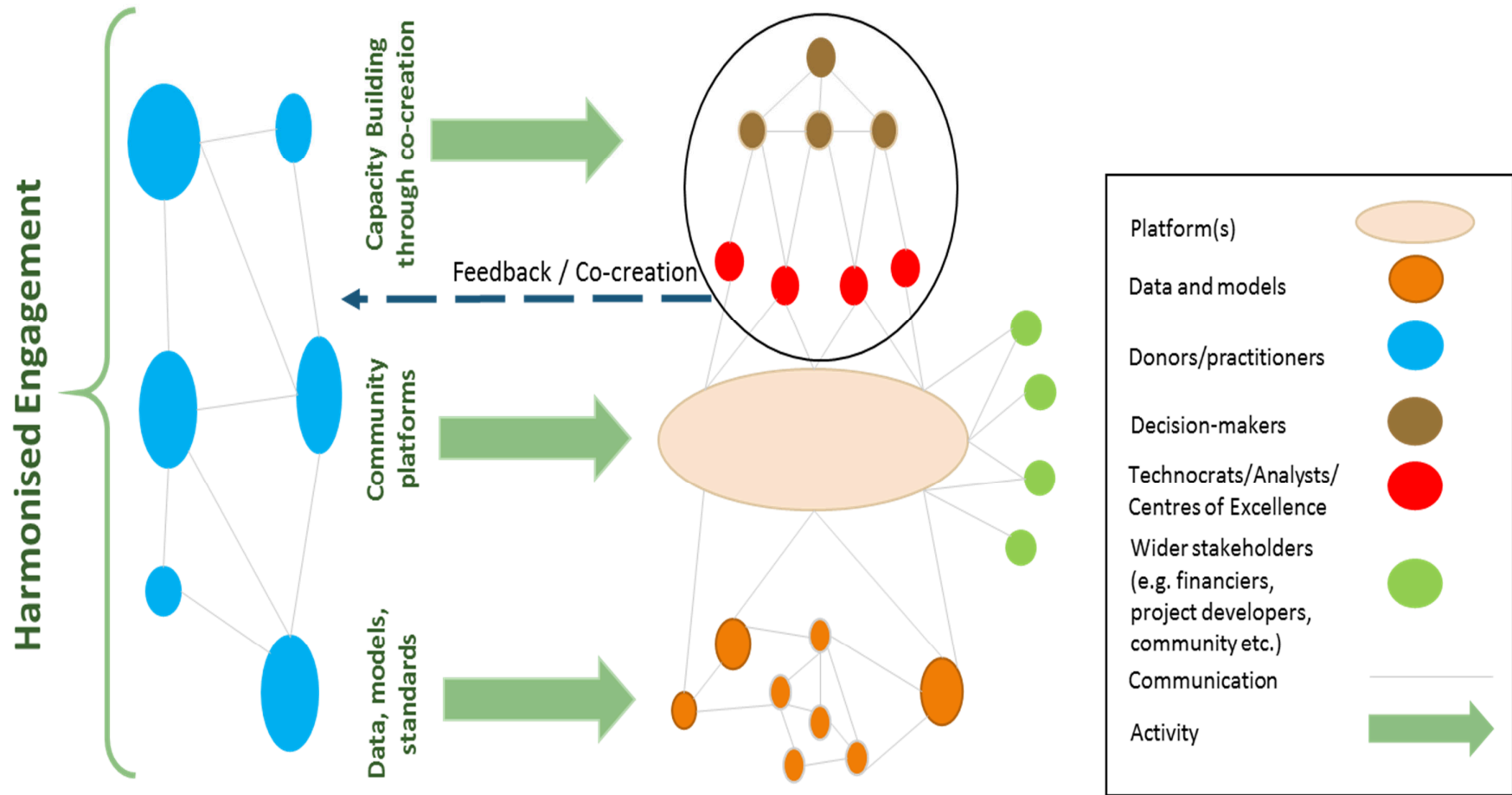**Figure 3. Roundtable's Theory of Change**

Figure 4. Roundtable Initiative's Conceptual Framework

Short-term next steps

This section summarises the next steps already agreed during the second Roundtable Event in Lisbon. **The next steps will all be implemented between now and February 2019, when the Roundtable Initiative will reconvene at the Energy Modelling Platform for Africa in Cape Town.** Please note that the following is not an exhaustive list of all the activities needed to be completed by the Roundtable Initiative in the short-term. A more detailed workplan will be worked up in consultation with the Roundtable Initiative's participants in the coming weeks / months.

Table 1. Short-term next steps

#	Responsible actor	Workstream	Action
1.1	OPM / EEG – Luca Petrarulo	Harmonised engagement	Produce Lisbon event's report
1.2	DFID - William Blyth		Circulate the finalised White Paper and the Roundtable's ToC / Conceptual Framework with DPs
1.3	OPM / EEG – Luca Petrarulo EMP-A – Mark Howells		Organise 3rd Roundtable Event
2.1	OPM / EEG – Luca Petrarulo	Capacity Building	Fund Energy Modelling Summer School and understand the funding's impact
2.2	UNECA – Mekalia Paulos		UNECA will share the outcome of its capacity mapping exercise
2.3	OPM / EEG – Luca Petrarulo EMP-A – Mark Howells		Identify other CB initiatives to support
3.1	OPM / EEG – Luca Petrarulo Columbia University – Vijay Modi KTH – Mark Howells WRI – Dimitrios Mentis IRENA – Asami Miketa REN21 – Laura Williamson	Data, models & standards	Produce discussion paper on 'Data and tools for energy planning' (focus on interoperability)

#	Responsible actor	Workstream	Action
3.2	OPM / EEG – Luca Petrarulo		Refine and publish the NREL's Technical Paper
4.1	OPM / EEG – Luca Petrarulo DFID – William Blyth	Community platforms	Define key features of the platform
4.2	OPM / EEG – Luca Petrarulo DFID – William Blyth		Identify and engage with existing platforms

Annex A Roundtable programmes

Final Agenda: First Roundtable Discussion on Strategic Energy Planning

Date & Time: 29th November 9am – 12 noon
Location: The Abbey Community Centre & Association, 34 Great Smith St, London SW1P 3BU

9.00-9.20   Framing the discussion (DFID)
      a. Introductions
      b. Aims and objectives of the roundtable
      c. Role of energy planning and decision-support

9.20-10.15   Sharing experience (All)
      a. Current experiences
      b. Diagnosis of problems
      c. Example of linkages between energy & climate policies and NDCs (ICED)

10.15-11.30   Pathways to improvement
      a. Key principles (ESMAP)
         i. What are the key principles for good practice
        ii. Should we try to 'adopt' these as a group? (All)
        iii. How will this change our practice? (All)
      b. Modelling platforms
        i. Example of OPTIMUS (KTH/UNECA)
        ii. Role of platforms (All)
      c. Stakeholders – who needs to engage and how? (All)
      d. Process (All)
        i. Does this need a formal 'process'
        ii. Who should drive it, and how can it be initiated?
      e. Defining boundaries of what we want to achieve (All)

11.30-12.00   Next steps
      a. Coordination needs
      b. Research needs
      c. Actions and immediate next steps

Final Agenda: Second Roundtable Discussion on Strategic Energy Planning

Date & Time: 4th May 2018 9am – 3pm
Location: The Marriott Hotel, Av. dos Combatentes 45, 1600-042 Lisboa, Portugal

9.00 – 9.15   **Registration and coffee**

9.15 – 10.30   **Opening Plenary Session**

Welcome and objectives of the day – Will Blyth

Round of introductions

Review overall objectives of Energy Planning Roundtable process – Will Blyth

Brief presentation of background papers:

1. Energy Planning White Paper / 'Key Principles' document – Deb Chattopadhyay

2. Presentation of Technical Paper on Strengthening Coordination and Delivery of Energy Planning Services – Samuel Booth

10.30 – 11.00   **Coffee**
11.00 – 12.30   **Parallel Working Sessions**
12.30 – 13.30   **Lunch**
13.30 – 15.00   **Closing Plenary**

Feedback presentation and questions – 5-10 minutes per group

Plenary discussion:
1. Vision of how to improve our collective offering to developing countries

2. Scope & ambition of cooperation

3. Potential mechanisms for cooperation

4. How do we include other stakeholders?

5. Review of joint next steps and milestones

Annex B   List of roundtable attendees

List of participants: **First Roundtable Discussion on Strategic Energy Planning**

Date & Time: 29th November 9am – 12 noon
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No.	Name	Organisation
1	**William Blyth**	DFID
2	**Colin Gourley**	DFID
3	**Philip Mann**	DFID
4	**Dan Haglund**	DFID
7	**Yann Loic Tanvez**	World Bank/ESMAP
8	**Dana Rysankova**	World Bank/ESMAP
9	**Deb Chattopadhyay**	World Bank/ESMAP
10	**Oliver Knight**	World Bank/ESMAP
11	**Linus Mofor**	UNECA
13	**Ian Crosby**	SE4All
14	**Christina Hood**	IEA
15	**Mark Howells**	KTH - Sweden
16	**Damien Frame**	ERC
17	**Joao Duarte**	AFDB
18	**Batchi Baldeh**	AFDB
19	**Marcela Tarazona**	OPM
20	**Mark Beare**	OPM
21	**Ryan Hogarth**	OPM
23	**Thomas Roulleau**	Agence Francaise de Developpement
24	**Adam Molleson**	ICED
25	**David Parish**	ICED
26	**Sohasini Sudtharalingam**	ICED

List of participants: **Second Roundtable Discussion on Strategic Energy Planning**

Date & Time: 4th May 2018 9am – 3pm
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No.	Name	Organisation
1	**Ryan Hogarth**	OPM/EEG
2	**Marcela Tarazona**	OPM/EEG
3	**Alistair Grattidge**	OPM/EEG
4	**William Blyth**	DFID
5	**Pep Bardouille**	IFC
6	**Rebekah Shirley**	Power for All
7	**Rianne Teule**	SNV
8	**Vijay Modi**	Columbia University
9	**Mark Howells**	KTH

10	**Asami Miketa**	IRENA
11	**Dimitrios Mentis**	WRI
12	**Charlie Heaps**	SEI
13	**Selena Wang-Thomas**	Rocky Mountain Institute
14	**Jose Ignacio Perez-Arriaga**	MIT Energy Initiative and Center for Energy and Environmental Policy Research (CEEPR)
15	**Henri Waisman**	IDDRI
16	**Holger Rogner**	IIASA
17	**Ilse Berdellans-Escobar**	IAEA
18	**Victoria Healey**	NREL
19	**Anna Lerner**	Facebook
20	**Paolo Mele**	Practical Action
21	**Lucy Stevens**	Practical Action
22	**Bertrand Magne**	SEFORALL
23	**Sam Booth**	NREL
24	**Dana Rysankova**	World Bank/ESMAP
25	**Deb Chattopadhyay**	World Bank/ESMAP
26	**Mario Merchán Andrés**	GET.transform / GIZ
27	**Benjamin Attigah**	GET.transform / GIZ
28	**Kathleen Auth**	USAID / Power Africa
29	**Mekalia Paulos**	UNECA
30	**Thomas Alfstad**	UN DESA
31	**Anna Stephenson**	DFID
32	**Magdalena Leisten Johansson**	DFID
33	**Leora Falk**	US Department of State
34	**Laura Williamson**	REN21
35	**Yann Tavez**	IFC