Synthesis Report on the "Third Roundtable Discussion on Strategic Energy Planning"
(Cape Town, 1st February 2019)

March 2019

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1   Introduction

This synthesis report aims to provide an overview of the discussion and outcomes of the **Third Roundtable Discussion on Strategic Energy Planning**, convened by the UK Department for International Development (DFID) on 1st February 2019**.** Hosted at the University of Cape Town, the workshop aimed to **define and agree on the preferred delivery model for a 'Roundtable Initiative on Strategic Energy Planning'** to support more effective use of evidence and analysis in strategic energy systems planning in developing countries.

Strategic energy planning is an essential part of policy and decision-making in the energy sector. Good planning can enable the scale-up in investment needed to meet economic and social development goals. However, strategic energy planning is also a complex process requiring the coordination of multiple sectors and governance levels, numerous stakeholders, and often complex models and decision support tools.

In November 2017, DFID convened a Roundtable Discussion focused on improving the way in which development partners (DPs) support strategic energy planning in developing countries. A second Roundtable Discussion was hosted during the Sustainable Energy for All Forum held in Lisbon in May 2018. In attendance were representatives from major donors and technical institutions engaged in this space. These events identified challenges to and solutions for improving the coherence of long-term strategic decision-making by increasing the effective use of evidence and analysis. This third workshop continued to build synergies with key stakeholders, being held in conjunction with the High-Level Meeting of the Energy Modelling Platform for Africa (EMP-A), a multi-donor capacity building initiative to empower African energy modellers.

Initial outputs from the Roundtable process to date have included a joint paper setting out the shared vision and approach agreed by Roundtable stakeholders entitled '**Key principles for improving the effectiveness of strategic energy planning in developing and emerging economies**'. Several organisations have already endorsed or are in the process of endorsing these principles, helping to move the Roundtable process towards a more formalised footing. In addition, a **discussion paper on 'Developing an energy planning ecosystem'** for improving the accessibility, transparency, and interoperability of models and datasets through the use of standards was produced.

The Third Roundtable Discussion on Strategic Energy Planning brought together representatives from donors, international organisations, and academia to further define concrete delivery models and actions for the Roundtable Initiative, including: the adoption of the key principles and next steps for their implementation; the development of technical products and research (e.g. data management standards); the support of long-term energy modelling and planning capacity in developing countries; and the identification of case studies / initiatives / investments that could be influenced by the Roundtable process to demonstrate concrete impact.

The remainder of this synthesis report is structured as follows: Section 2 provides a summary of the discussion during the workshop, including two plenary and one groupwork sessions. Section 3 tries to synthesise the outcomes of the discussion and their implications for the four focus areas of the Roundtable Initiative: 1) harmonised engagement; 2) capacity building through co-development; 3) data, models, and standards; and 4) community platforms. Section 4 presents a list of key follow up actions identified during the day.

2   Summary of Cape Town Roundtable Discussion

2.1   Plenary Session 1 – defining the scope and objectives of the Roundtable Initiative

The event began with Will Blyth (DFID) welcoming the participants and presenting the agenda and objectives of the day, namely to:

- Agree on the endorsement and launch of 'Key principles for improving the effectiveness of strategic energy planning in developing and emerging economies' (hereafter simply the 'Principles')

- Discuss how the Roundtable Initiative should work (governance)

- Define concrete products / actions and delivery models

- Identify some quick wins for the next few months to gain traction in the Roundtable's implementation.

The plenary discussion opened by Will Blyth providing an **update on the endorsement of the Principles by key organisations within the Roundtable and getting a sense from the room on the best path to have them more widely endorsed**. As at the date of the workshop, nine organisations had officially endorsed the Principles' document: the African Development Bank (AfDB), the UN Economic Commission for Africa (UNECA), OpTIMUS, the Royal Institute of Technology of Sweden (KTH), Federazione Eni Enrico Mattei (FEEM), Politecnico di Milano, the Stockholm Environment Institute (SEI), Institut du Développement Durable et des Relations Internationales (IDDRI), and the World Resources Institute (WRI). Will explained that DFID was coordinating internally to seek a cross-UK Governmen ministerial endorsement.

Before going round the table to get feedback on the possibilities regarding endorsement of the Principles by attendees' organisations, Will clarified that **endorsement of the Principles is just a first step and not an aim in itself**; the aim is to use the Principles as guidelines for organisations supporting energy planning to better work together collectively and to have a concrete impact. The endorsement may take different forms and paths, depending on each organisation's size, structure and mandate.

The floor than moved to key Roundtable representatives to give their **view on the Principles and their endorsement within their organisations**. The consistent general feedback in the room was very positive in stressing the importance of the Principles. For instance, Chiara Rogate (World Bank / ESMAP) expressed strong appreciation for the Principles as she feels the lack of coordination among DPs and the inability to appropriately involve and build the capacity of local experts (e.g. universities) have greatly affected developing countries. She feels that the Principles are relevant and broad enough to be integrated into organisations' own principles, rather than clashing with them. Olivia Chen (IEA) agreed on the importance of the Principles, especially now that the IEA is moving from a global to a more regional level, and she stated that the IEA is committed to working together through the Roundtable process.

However, the topic of practical **challenges in the endorsement process** was brought up in the discussion and can be summarised as follows:

- **Challenges in defining the 'owners' of the Principles**: are the Principles directed to Member States / country governments or are they merely for DPs? If the former, their

endorsement should be primarily carried out by governments and international organisations should request the approval by their Member States. If the latter, how much involvement should national governments have in their definition? During the discussion, some argued that in order to create change, Member States have to be the ones signing up to the Principles; others felt that Roundtable DPs should be able to endorse the Principles directly as these are primarily directed to DPs, rather than Member States. Although there was no concrete answer in the workshop, the general message from the floor was the following: **while it is probably not necessary and definitely not practical to seek a formal endorsement of the Principles by individual countries, the governments should be informed and consulted about the Principles through the regional and international organisations that are part of the Roundtable**.

- **Challenges in securing internal approval**: While emphasising her personal backing of the Principles and expressing that everyone in the room agreed on the importance of them, Asami Miketa (IRENA) stressed how organisations' internal endorsement process is frequently not straightforward. Other teams within the same organisation may have different focuses and raise concern that their priorities were not included in the Principles. In response, **participants agreed that the document needed to be even sleeker (ideally a one pager with the detailed description of the Principles in an appendix) and that it would be reopened to accommodate minor comments received during internal discussions.** Another related point raised by Luca Petrarulo (OPM / EEG) was that, in his conversations with Roundtable participants, it emerged that some of the organisations were hesitant about being the first ones to sign up to the Principles. He suggested a joint launch of the Principles would have addressed the 'ice breaking' issue. The idea was briefly discussed, but it was deemed to be too premature to think about the official launch.

The session moved to the presentation by Holger Rogner (OpTIMUS) and Mark Howells (KTH) on their discussion paper 'Developing an "energy planning ecosystem"'. The full paper is provided as a separate appendix to this report. The paper is a first attempt to establish a set of guidelines for data and model standards to implement Principle 5, i.e. "Promote open access to and review of planning inputs (data, design and assumptions), and encourage the accessibility of planning outputs to stakeholders". The guidelines aim to make all steps in the analysis process Reconstructible, Reproducible, Interoperable and Auditable-Retrievable (R2IAR).

- **Reconstructible:** There is the need for modellers from donors, academia, and recipients of energy planning services to develop minimum reporting standards for each element of the energy planning ecosystem. These standards will ensure that data (including metadata, assumptions, methodology, and outputs/results) behind energy planning analysis can be as far as possible subsequently reconstructed.

- **Reproducible:** Once the reporting of model results is completed, a study is often published and archived. However, as models change – for example because of new software platforms, updates and bug fixes, or changes in formulation – and/or data change, re-running old analysis might not be possible. The definition and application of best practices in data management and storage are therefore an important requirement of a sustainable energy planning ecosystem.

- **Interoperable:** The data available from statistical bureaus, administrations, industries, or other stakeholder are rarely in the format needed by the energy planner. At the same time, models themselves often require data that are similar in substance, but different in form, and/or specific computing requirements (e.g. a specific operating system). The consequence is that models often require extensive data manipulation that is not only lengthy and inefficient, but also multiplies the chances of errors and often makes it easier to

start from scratch. What is needed to begin with is a guide or manual on 'best practices' to facilitate the interoperability of datasets and models, including the definition of interchange policies with open standards, and interoperable and vendor neutral software.

- **Auditable & Retrievable:** Accountability to the public is essential for every government entity – including funders and bilateral partners. Thus, data should be easily retrievable, with good metadata, clear archiving and formats that allow for interoperability. However, currently data are often not easily retrievable. For instance, even widely cited datasets like the IEA-developed "Projected Cost of Generating Electricity" are not in a format that is retrievable by data search engines such as Google Data Set Search. Without systematic access to the data and other elements of the energy planning ecosystem, public transparency is greatly reduced. Poor retrievability and inability to test and audit outputs can easily result in a lack of trust in modelling. Therefore, clear standards for enhancing the retrievability of/easy access to datasets is required.

The authors see the Roundtable Initiative's effort to harmonise global efforts for supporting energy systems planning and modelling as a crucial step towards R2IAR goals. According to them, as a concrete action, Roundtable participants could ensure that current and future projects would adhere to R2IAR goals. For instance, where projects include data collection, manipulation and production, their Terms of References (ToRs) should include the adoption of standards for the reporting and description of the data. Where projects employ a specific piece of software to generate and calibrate a model, ToRs should describe key software details and the environment in which the software is run. Also, ToRs should include standards for the description of scenarios and uncertainty analysis undertaken as well as links to teaching materials needed to ensure that the knowledge required to conduct the modelling effort is available. ToRs might include some guidelines on standards for the process of energy planning, including describing patterns for the 'engagement process' with stakeholders while the data, assumptions and model were constructed and reviewed. That should also cover a description of archiving processes needed to ensure data 'retrievability'. Finally, project ToRs might also include a mandatory scanning of similar or related activities undertaken by other donors.

In the presentation and following discussion, the two authors explained that the paper attempts to set out the necessary guidelines and standards to foster transparency and accessibility, i.e. *what* is needed. They were now looking to the Roundtable participants to work together on the *how* – that is, the contents of the standards. To respond to this call, the floor mentioned the **possibility of forming one or more working groups**, a suggestion that was further detailed during the group session.

Another relevant comment came from Asami Miketa (IRENA), who pointed out that accessibility and transparency of data are sometimes dependant on governments' willingness to share data, which might contrast with the 'full-access' goal enunciated in the paper. Mark Howells agreed that that was indeed sometimes the reality and that some data may be confidential. He clarified that the **R2IAR goals had to be seen as best case guidelines and not applicable to all situations**.

Subsequently, Chiara Rogate (ESMAP) asked Mark to talk about the work that KTH had been doing in collaboration with ESMAP, on developing an interoperable platform, namely the **Global Electrification Platform (GEP)**. Mark explained that the GEP will be a platform with a large number of pre-installed results/scenarios that users will be able to visualise by changing a number of key variables. The platform will be set up so that there is complete interoperability: the idea is to have it structured around specific metadata – hence the importance and relevance of working out together the R2IAR standards – so that data from different sources can be easily slotted in and out (for example, someone could replace the MV lines in the model). They believe this platform will be the the first of its kind, and it will demonstrate how these types of practices can be applied.
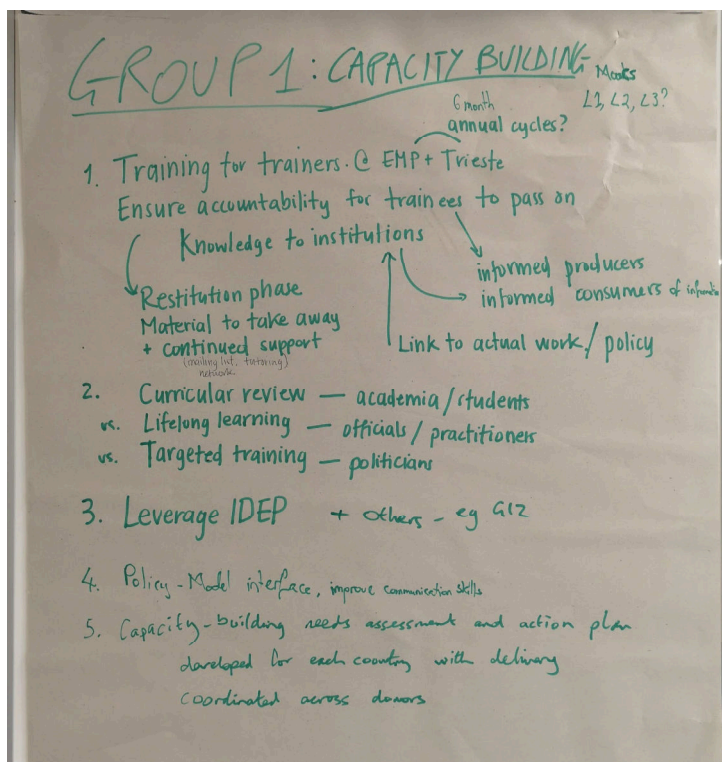
2.2 Parallel Working Sessions

For the Parallel Working Sessions, the room was divided into three groups, which focused on 'unpacking' the Roundtable's focus areas to identify the products, partners and delivery institutions / resource needs in each area. The areas covered were as follows:

1. **Capacity building through co-creation**: improving strategic energy planning and modelling capacity of key national institutions (both technical and political).

2. **Community platforms**: fostering an ecosystem where data, evidence models, and other decision support tools are easily accessible.

3. **Data, models, and standards**: improving the quality and transparency of energy models and the evidence behind them.

The group work was organised in such a way as to allow everyone the chance to discuss and contribute to all three areas. Each group wrote down their key points on flip charts for each area; these were then presented and discussed in plenary. Below are the outcomes of the session for each area.

Group 1. Capacity building through co-creation

Group 1's discussion on capacity building through co-creation was fruitful as it provided a clear steer on what, who, and how effective capacity building on energy system modelling and planning can be delivered.

The underpinning issue identified was that training requires a substantial opportunity cost for trainees, and often the knowledge acquired is not applied at home. As a solution, the participants emphasised the **importance of promoting training of trainers (ToT)** to foster the depth and breadth of the training's impact, ideally by getting an upfront commitment by trainees to pass on their knowledge to the institution they represent. This **'restitution phase' should be supported by training material** that can be taken away and easily tailored to meet specific circumstances, and by subsequent support provided by trainers to facilitate knowledge transfer. **Training should also respond to participants' needs based on their actual work or on policy questions** relevant to their country context.
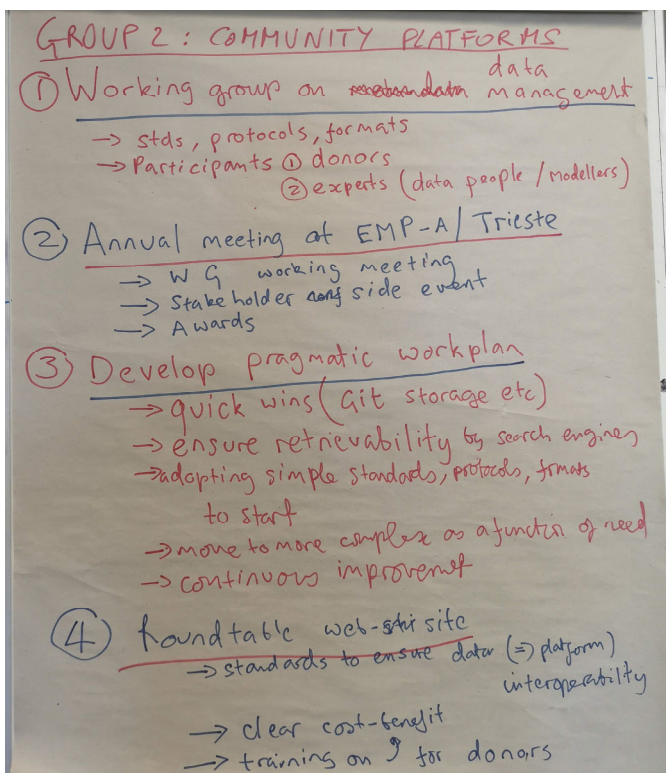
In terms of the target of energy modelling and planning capacity building, the group discussion underscored that the goal was to form both informed producers and consumers of models and evidence. This could be done by providing: a) **curricular review support for universities in Africa and other developing regions** to embed excellence in energy modelling and planning in

the future generations of analysts and policy-makers; b) **lifelong learning for ministry officials, planners, and practitioners**; and c) **targeted training for policy-makers to raise their awareness of the decision support that models can provide them.** An important point raised was the **need to improve the communication skills of modellers and technical analysts to appropriately convey evidence to the policy-makers** – this is something that EMP-A is already thinking about addressing, by having professional communication training during its next edition.

The group acknowledged that several Roundtable organisations are already involved in delivering capacity building and the activities described above should not be additional to, but rather integrated with, existing efforts. For instance, the African Institute for Economic Development and Planning (UNIDEP) within UNECA was identified as an important organisation to be involved in capacity building in Africa. Ron Misty from UNIDEP was supportive about taking on this role.

A final general conclusion of the group discussion and the subsequent plenary was that the **EMP-A and Trieste Summer Schools** would be ideal venues to regularly put into practice the above key recommendations on building energy modelling capacity and supporting the entire 'energy planning ecosystem'. They could be seen **as part of a single ongoing capacity building cycle with six-monthly regional and global ToT events, followed by in-country supporting activities to sustain the different forms of knowledge transfer and policy-science interface**. Such an outcome would surely require a sustainable financial model that would ensure the continuity of the EMP activities in Africa and elsewhere. As a number of Roundtable organisations have already been funding the EMP schools and supporting activities, the Roundtable appears to be an appropriate forum to identify longer-term funding mechanisms for the EMP; this is something that should be discussed further.
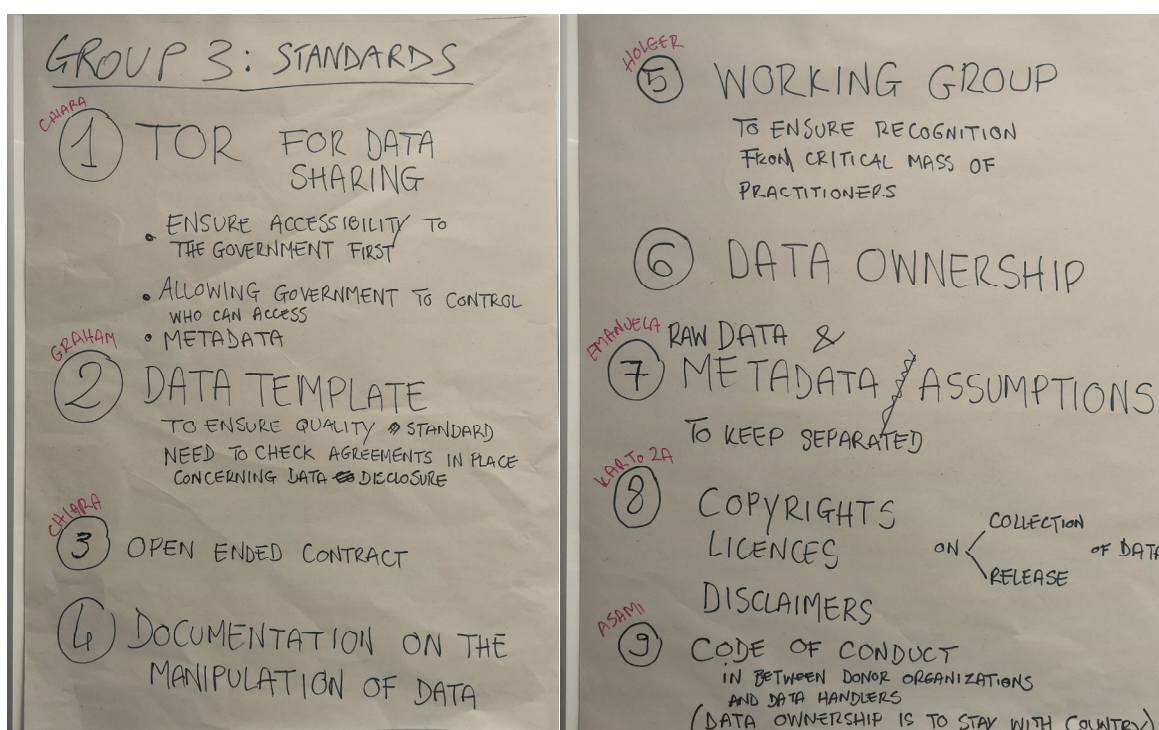
Group 2. Community platforms

Group 2's discussion on community platforms focused on ways the Roundtable could work to foster the accessibility of data and tools. **A first set of suggestions was around the formation of a working group on data management** within the Roundtable Initiative focusing on metadata standards, data management protocols and appropriate formats for improving the interoperability of tools/models. The working group would start to produce simple standards that would then be pilot-tested. It was proposed that the working group include both donors/development partners and modellers and take advantage of the regular EMP-A and Trieste events to meet and engage other stakeholders in side events. A pragmatic work plan for the tasks pertaining to the working group should be laid out before the Trieste High Level Meeting in June. Mark Howells (KTH) offered to take the lead on this task.

A second set of suggestions focused on the need for increased accessibility of data. Two main points were raised: 1) the **retrievability of data sets by search engines** like Google Dataset Search should be improved; 2) the **Roundtable Initiative** should have its own **website** on which the principles and standards for increased platform interoperability developed by the working group would be spelled out. The floor also recognised that a website for the Roundtable was needed to make the initiative more official – and transparent – as nothing discussed or decided within it had yet been published online.

A final set of suggestions covered the need to showcase the cost-effectiveness of greater consistency and accessibility of data. Participants stressed the necessity of putting together a **lean document illustrating the costs and benefits of investing in data standards and protocols**, including spelling out in monetary terms the waste of time and resources in unnecessary gathering or manipulation of existing data**. '**Quick wins' based on good examples and current practices from Roundtable organisations should be included in the document. Linus Mofor (UNECA) proposed to involve the Statistical Divisions of UN regional commissions as they would have reference data on costs on collecting energy data and statistics.

Group 3. Data, models, and standards

Group 3's discussion sought to drill down into ways to improve the transparency and interoperability of data and models, including by using, promoting and enforcing the standards produced by the working group mentioned the Group 2 paragraph above. A number of suggestions were made in this regard:

- **ToRs for energy modelling projects designed and/or funded by Roundtable organisations should contain standard principles on data sharing**, ensuring: 1) **data ownership by and accessibility to the government**, which should ultimately be able to decide who has the right to assess the data; and 2) **minimum reporting standards for metadata** to foster transparency and future interoperability. Aidan Coville (World Bank) mentioned that his team has specific documentation they use when working with consultants to foster data treatment and sharing. He offered to share this documentation

with the Roundtable group. ToRs should enunciate a 'code of conduct' to be followed by data handlers to make sure that no data are lost during the project and data are shared transparently with the country's government. The rules would also apply to the way that government-owned data would be handled, in respect to government's guidelines on confidentiality. Will Blyth (DFID) stepped forward to produce a first draft text for ToRs.

- **Ideally, ToRs would provide a common template for the data and metadata required** to align with the standards developed by the working group, including on the level of transparency about data manipulation and assumptions.

- **ToRs for modelling work should always include adequate provision of capacity building** to the government to support the appropriate understanding and use of the data and modelling output. Furthermore, some text should be included to strongly encourage the use of local experts not just to provide data, but also to work as partners with international consultants / organisations on the modelling as well.

3   Roundtable Discussion outcomes

The one-day workshop in Cape Town provided a number of clear and practical steers for the Roundtable Initiative, which are summarised below.

Harmonised Engagement

- **As a whole, there seems to be strong support for the existence of a harmonising initiative like the Roundtable** among the key international stakeholders engaged in the energy system modelling and planning space. However, the floor noticed that there are some key international players that have not yet been involved in the initiative. OPM will work closely with IRENA, ESMAP, KTH, and others to reach out to other key organisations. In addition, participants were in agreement with the suggestion from Linus Mofor (UNECA) that the Roundtable engages with the [SDG7 Technical Advisory Group](#), which is convened by UNDESA and includes stakeholders from donors, international organisations, and civil society, some of which are already part of the Roundtable group.

- **Strong support has also been shown for the Roundtable Principles.** However, it should be more clearly communicated that the Principles pertain to organisations supporting energy planning processes, rather than to the energy planning itself. As a first step, it would be helpful to change the name of the document into 'Key principles for improving the effectiveness of _the support to_ strategic energy planning in developing and emerging economies.' The document should also be reduced to a one-page enunciating the Principles, with an explanatory annex. The draft of the Principles will be reopened to take account of minor comments. The floor also agreed that, although the Principles are targeted to organisations supporting national energy planning, national governments should be consulted about them through the regional and international organisations within the Roundtable in which they hold membership.

- **Having a central Secretariat, providing pro-active coordination of the initiative, complemented by ad hoc working groups chaired by relevant organisations has emerged as a viable delivery model for the Roundtable.** Although there was no formal discussion, nor vote on the future delivery model of the initiative, the aforementioned approach emerged spontaneously. Indeed, it is clear that the complexity of coordinating a global multi-dimensional initiative of high-profile organisations requires a level of effort that only a dedicated Secretariat can provide. So far, OPM via the DFID-funded Energy and Economic Growth programme has provided resources roughly equivalent to a full-time employee to _de facto_ cover the role of Roundtable Secretariat. However, this is a role that requires a more formal and possibly more sustainable funding solution, as EEG is currently scheduled to end in 2021. This high priority was left open for further discussion. At the same time, the fact that key representatives have volunteered to take the lead on two working groups and other various tasks (see Section 4) emphasises that commitment to the Roundtable Initiative is widespread within its participants.

Capacity Building

- **Strengthening the long-term sustainability of capacity building efforts emerged as a focal area for the energy modelling and planning community.** The discussion centred on the institutionalisation of modelling capacity and data-driven energy planning under different angles, including via training of trainers, involvement of and support to local universities and research centres, training tailored for policy-makers, and professionally-delivered communication training for modellers and technical analysts.

- **The partnership between Roundtable organisations and the regular EMP-A and Trieste Summer Schools has been identified as a way to align the Roundtable's Principles on capacity building to actual training and support delivered.** Indeed, the EMP-A and Trieste training courses have been implementing most of the solutions to fostering long-term sustainability of capacity building proposed above. Important topics for future Roundtable discussions could be how to further improve the training provided by these events (e.g. by promoting the widening of the training offered to other open-source models and platforms, or widening their geographical reach to global) and how to guarantee their long-term funding.

- **The group and subsequent plenary discussion established the need for a Roundtable Working Group on Capacity Building, co-led by UNIDEP and the University of Mauritius (the host of the next EMP-A Summer School edition).** The working group would be tasked with the following: 1) establish curricula support and teaching materials; 2) track training programmes on energy modelling and planning in Africa and assess the specific capacity need trends; 3) develop a standard list of features and benefits of different models/apps to facilitate the choice of tools by countries; and 4) liaise with the Roundtable group's capacity building programmes (including the EMP), to improve the synergies and value added between them.

- **The Roundtable organisations should commit to always including provisions for capacity building in their modelling projects' ToRs**. These should be tailored to the context and specific circumstances in which each project is designed and implemented. Ideally, ToRs should also encourage the use of local experts for modelling purposes.

Data, Models, and Standards

- **The floor agreed to establish a Roundtable Working Group on Data, Models and Standards, led by Mark Howells at KTH.** Mark will prepare a draft work plan for the working group to be presented in Trieste in June 2019. The working group will focus on metadata standards, data management protocols and appropriate formats for improving the interoperability of tools/models, building on the discussion paper defining the R2IAR goals. The working group will include representatives from both donors and modellers within the Roundtable.

- **A number of ways to integrate the Roundtable Principles on data and model robustness and transparency, and national ownership into the ToRs of energy modelling projects were suggested.** These include provisions on 1) establishing the government as the ultimate owner of the data and modelling output; and 2) requiring specified minimum reporting standards for data used and metadata (including transparency on assumptions and data manipulation). Will Blyth (DFID) volunteered to draft an initial text to address point one, while Emanuela Colombo (Politecnico di Milano) offered to support point two by drafting a template to provide transparent information on how data are transformed / manipulated, which could be included in ToRs.

Community Platforms

- **A website for the Roundtable Initiative should be developed.** The website would make the initiative official and public and would constitute an online repository of Roundtable's Principles, activities, outputs, and relevant information. OPM/EEG will discuss with DFIDthe possibility of commissioning the website development.

- **More work on improving the retrievability of datasets by search engines is needed**. OPM/EEG will take the lead to involve Google to understand how to ensure that datasets for energy system modelling are adequately captured by them.

- **In order to build the business case in favour of more consistency and coordination in energy modelling, a short and crisp document should be produced, spelling out the cost-effectiveness of investing in data standards and protocols.** No clear taker for such a task was identified at the workshop, although this task could be included in the work plan for the Working Group on Data, Models, and Standards. The same work plan could also include the Discussion Paper to define the contents of the standards and best practices on R2IAR for data/models from the Roundtable group, which Mark Howells (KTH) and Holger Rogner (OpTIMUS) offered to develop.

Although, there was no discussion of a venue, time, and date for the next Roundtable Discussion, the group agreed that the High Level Meeting of the Trieste Summer School would be a good option. **A room has now been booked at the venue in Trieste on Friday, 28th June 2019.**

4   Actions and recommendations

Below is a list of all key actions and actionable recommendations that were agreed at the workshop in Cape Town. OPM/EEG will own the overall coordination of their implementation, although each of them has an identified lead.

Item	Description	Lead	Action / Recommendation
Harmonised engagement			
1	Re-open the document including the Key Principles to minor comments for two weeks and make it a sleeker document (one page with principles + annex). Make sure it is clear that the Principles pertain to organisations supporting energy planning processes, rather than to the energy planning processes themselves.	Will Blyth (DFID) / Luca Petrarulo (EEG)	Action
2	Define draft clauses / practical ways for project Terms of References to enhance data accessibility and government's ownership: • The idea is that data will belong to the government and it will then decide who will be able to access the data • Capacity building on data interpretation and management should be included.	Chiara Rogate (ESMAP)	Action
3	The Roundtable Initiative needs to start thinking of how it monitors and measures its success and learns from success and unsuccess (monitoring, evaluation, and learning).	Luca Petrarulo (EEG)	Recommendation
4	Check the possibility and appropriateness of having the SDG7 Technical Advisory Group as an initiative to engage with, and possibly a venue, for future Roundtable Discussions.	Linus Mofor (UNECA)	Action
5	Produce a document on good (and bad) cases/examples of coordination and applying the Key Principles by the Roundtable group.	Luca Petrarulo (EEG)	Action
6	Expand the Roundtable group to other key partners, such as JICA and DANIDA.	Luca Petrarulo (EEG) / Asami Miketa (IRENA)	Action
7	All participants to pursue with their own organisations how they intend to endorse the principles, and work with EEG on coordination of the communications. This will involve for regional and international organisations to define the level of consultation about the Principles they want to have with their Member States.	All	Action
8	The Roundtable group should discuss and agree upon the delivery model they want for the Roundtable Initiative, including on the role of the Secretariat	Luca Petrarulo (EEG)	Recommendation
9	Plan for the next Roundtable Discussion (in Trieste on 28th June?).	Luca Petrarulo (EEG)	Action
Capacity building through co-creation			

Item	Description	Lead	Action / Recommendation
10	Recommendations for future EMP-A and Trieste summer schools: • Training material should be made publicly available • Training of trainers should still remain the main goal Plan for the summer schools' grow, with the addition of other training institutions to teach different modules/tracks (e.g. like the IEA Energy Statistics training that will be added this time in Trieste).	Holger Rogner (OpTIMUS)	Recommendation
11	Establish a Roundtable Working Group on Capacity Building to: • Work on curricula establishment support and teaching material • Track training programmes on energy modelling and planning in Africa and assess the specific capacity need trends • Put together a standard list of features and benefits of different models/apps to facilitate the choice of tools by countries • Liaise with the Roundtable group's capacity building programmes (including the EMP) to improve the synergies and value added between them.	Ron Kamwendo (UNIDEP) / Dinesh Surroop (University of Mauritius)	Action
12	Identify ways to improve the communication skills of developing countries' modeller to influence policy-makers.	Luca Petrarulo (EEG)	Action
13	Discuss within the Roundtable group of ways to ensure long-term funding mechanisms for the EMP/Trieste Summer Schools.	All	Action
Data, models, standards			
14	Define a 'mini' workplan for a Roundtable Working Group on Data, Models, and Standards (to be discussed in Trieste): • The working group should be mainly formed by modellers from both the research and practice worlds • EMP-A and Trieste could be the right venues for the working group 's meetings • The working group leadership would reside within the Roundtable group, but wider stakeholder meetings should be considered too.	Mark Howells (KTH) and Holger Rogner (OpTIMUS)	Action
15	Develop a Discussion Paper to define the contents of the standards and collect best practices on R2IAR for data/models from the Roundtable group.	Mark Howells (KTH) and Holger Rogner (OpTIMUS)	Action (to be included in the work plan at item 11)
16	Prepare a template to provide transparent information on how data are transformed / manipulated	Emanuela Colombo	Action

Item	Description	Lead	Action / Recommendation
		(Politecnico di Milano)	
17	Put together a document to flash out the costs and benefits of data standards to support the business case for the Roundtable Initiative and future work on that. This should include collecting anecdotal experience from the Roundtable group on the waste of time and resources due to the lack of data standards. Statistical Divisions of UN regional commissions could be involved as sources.	TBC	Action (to be included in the work plan at item 12)
18	Develop a draft of text to be included in ToRs of energy modelling projects to identify the country's government as the main data owner that decides who gets access to them and ensure no data are lost during the project implementation.	Will Blyth (DFID)	Action
19	Share with the Roundtable group the documentation the World Bank uses when working with consultants to foster data treatment and sharing.	Aidan Coville (World Bank)	Action
Community platforms			
20	Develop and host a website for the Roundtable Initiative: • OpTIMUS website could be a temporary solution • The website should ideally be able to pick up information/updates automatically if pages are set up with specific metadata (check with Mark Howells on how KTH's website does this) • Useful to have a shared calendar of events and capacity building on the website	Will Blyth (DFID) / Luca Petrarulo (EEG)	Action
21	Engage with Google to understand how to improve the retrievability of energy modelling datasets via Google Data Set Search	Luca Petrarulo (EEG) / Mark Howells (KTH)	Action

Annex A   Third Roundtable Discussion Agenda

Third Roundtable Discussion on Strategic Energy Planning, Cape Town, 1st February 2019

8.30 – 9.00	**Registration and coffee**

9.00 – 10.30   **Plenary Session 1 – defining scope and objectives of the Roundtable Initiative**

Welcome, introductions and objectives of the day – Luca Petrarulo (EEG)

Plenary discussion – Will Blyth (DFID)

1. Adoption of the 'Key Principles' by Roundtable participants (review progress and agree communications strategy)
2. Presentation and discussion of the paper "Developing an 'energy planning ecosystem'" – Mark Howells (KTH) and Holger Rogner (OpTIMUS)

10.30 – 11.00   **Coffee break**

11.00 – 12.30   **Parallel Working Sessions – exploring delivery models for key areas of the Roundtable Initiative (to identify products, partners and delivery institutions / resource needs in each area)**

1. <u>Capacity building through co-creation</u>**:** improving strategic energy planning and modelling capacity of key national institutions (both technical and political).
2. <u>Community platforms</u>**:** fostering an ecosystem where data, evidence models and other decision support tools are easily accessible.
3. <u>Data, models, and standards</u>**:** improving the quality and transparency of energy models and the evidence behind them.

Feedback from parallel sessions – 5-10 minutes per group

12.30 – 13.30   **Lunch**

13.30 – 15.00   **Plenary Session 2 – Defining steps towards implementation**

<u>Harmonised engagement</u>**:** next steps towards defining and promoting the adoption of common principles for supporting strategic energy planning in developing and emerging economies

1. Additional deliverables and papers to be commissioned
2. Demonstrating impact – quick wins and concrete case studies
3. Steps towards a long-term delivery model for the Roundtable
4. Resources and institutional needs and engagement
5. Roundup of next steps and milestones

Concluding remarks – Will Blyth (DFID)

Annex B   List of attendees

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

Date and time: Cape Town, 1st February 2019, 9 am – 3 pm
Location: Room 2A, Snape Building, University of Cape Town, South Africa

No.	Name	Organisation
1	Ntumba Katabua	AFD
2	William Blyth	DFID
3	Paolo Carnevale	Fondazione Eni Enrico Mattei
4	Manfred Hafner	Fondazione Eni Enrico Mattei
5	Andrii Gritsevskyi	IAEA
6	Olivia Chen	IEA
7	Asami Miketa	IRENA
8	Gavin Fleming	Kartoza
9	Mark Howells	KTH
10	Hauke Henke	KTH
11	Agnese Beltramo	KTH
12	Babak Khavari	KTH
13	Andreas Sahlberg	KTH
14	Ioannis Pappis	KTH
15	Saga Kubulenso	KTH
16	Holger Rogner	OpTIMUS
17	Luca Petrarulo	OPM / EEG
18	Emanuela Colombo	Politecnico di Milano
19	Graham Pugh	SE4ALL (Consultant)
20	Linus Mofor	UNECA
21	Mustapha Sadni Jallab	UNIDEP
22	Ron Misty	UNIDEP
23	Harald Winkler	University of Cape Town
24	Bruno Merven	University of Cape Town
25	Dinesh Surroop	University of Mauritius
26	Aidan Coville	World Bank
27	Chiara Rogate	World Bank / ESMAP
28	Nicolina Lindblad	World Bank / ESMAP