IRENA
International Renewable Energy Agency

18 December 2020

Eleventh session of the Assembly
Abu Dhabi, 18 – 21 January 2021

Report of the Chair of the Advisory Committee on the IRENA/ADFD Project Facility

Overview

In 2009, as part of the bid to host IRENA headquarters in the United Arab Emirates (UAE), the Abu Dhabi Fund for Development (ADFD) committed USD 350 million in concessional loans of co-financing over seven annual cycles, for the implementation of renewable energy projects, recommended by IRENA, in eligible developing countries. The IRENA/ADFD Project Facility (Facility) was the result of this commitment. The Facility represented a partnership between IRENA and ADFD. IRENA facilitated an independent selection process of viable renewable energy projects that contribute to sustainable development in developing countries. The operations of the Facility were guided by the "General Principles" (A/4/13), which were approved by the Assembly at its fourth session (A/4/DC/4).

In January 2020, the selection process for the seven cycles of the IRENA/ADFD Project Facility was completed. At the tenth session of the Assembly, the mandate of the IRENA/ADFD Advisory Committee and Panel of Experts (see Annex I) was extended to the twentieth session of the Council.

This report provides a summary of the Assessment report[1] of the IRENA/ADFD Facility in which project proponents, Committee and Experts in the seventh cycle were engaged for their feedback in April and May 2020, as was the ADFD. The main conclusions from the report point to the active learning approach taken that resulted in improvements from one cycle to the next, thereby providing potential for future collaboration. This Chair's report also provides a summary of the progress of the projects selected from all seven cycles. This progress is detailed in an annual Advancing Renewables publication[2], released at the IRENA Assembly. The next version of the publication will be released at the eleventh IRENA Assembly covering the progress of projects from all seven cycles.

IRENA works to facilitate monitoring and advancement of these projects with ADFD and the project proponents. While COVID-19 pandemic has impacted the advancement of the portfolio, it has also provided an opportunity to change operations. ADFD has adapted to a new way of operating, including virtual onsite appraisals to help advance projects to implementation. IRENA has also focused on collecting information by virtual means to report on the projects. The Committee and Experts note with appreciation that IRENA and ADFD are working together to build on the Facility.

[1] The full assessment report, "IRENA/ADFD Project Facility: Lessons from the selection process", is downloadable at www.irena.org/adfd

[2] The "Advancing Renewables in Developing Countries: Progress of projects supported through the IRENA/ADFD Facility" report is downloadable at www.irena.org/adfd

I. The Assessment report: purpose and methodology

1. An Assessment report of the IRENA/ADFD Facility was carried out in 2020. The report is a self-critical analysis of the selection process of the IRENA/ADFD Project Facility. It involved collecting feedback from the direct stakeholders involved to identify what worked, what did not and what could be improved. Its purpose is to capitalise on the knowledge accumulated by the Facility and make it a useful reference for IRENA's future initiatives, including with ADFD.

2. The report combined three methods: review of historical data and reports including the Chair's report of the Committee for the last seven cycles[3]; a qualitative survey of stakeholders including proponents, Committee and Experts in the seventh cycle; and voluntary semi-structured interviews of these stakeholders, including the ADFD, conducted in April and May 2020.

II. Summary of the Assessment report

3. After seven annual funding cycles, IRENA and ADFD continue collaboration to advance renewables in developing countries. The high demand for concessional funding for transformative energy solutions has been evident since the first cycle of the joint IRENA/ADFD Project Facility began in November 2012. The renewable-based power and end-use projects supported through the Facility improve energy security, expand energy access and – just as significantly – provide valuable models for wider replication.

4. Lessons gained from each cycle have helped to improve every subsequent cycle. For example, the main application requirements were increasingly clarified, and the marketing and outreach of the Facility were enhanced. This, in turn, led to the submission of more suitable proposals and served to strengthen the advancement of renewables in developing countries. Knowledge gained from the Project Facility in several key areas is now informing further collaboration between IRENA and ADFD.

5. Key findings from the past seven cycles include:
    a. Demand for concessional funding for renewable energy projects in developing countries remains strong.
    b. The increased marketing and clarity provided on loan conditions over the cycles provided much better results in later cycles.
    c. Digital platforms provide effective co-ordination among experts for project evaluation.
    d. The challenges of supporting the private sector when projects must comply with sovereign guarantee requirements were overcome by seeking other partnerships to help extend loans to these projects.
    e. IRENA could play a greater role in project facilitation and supporting expert evaluators.

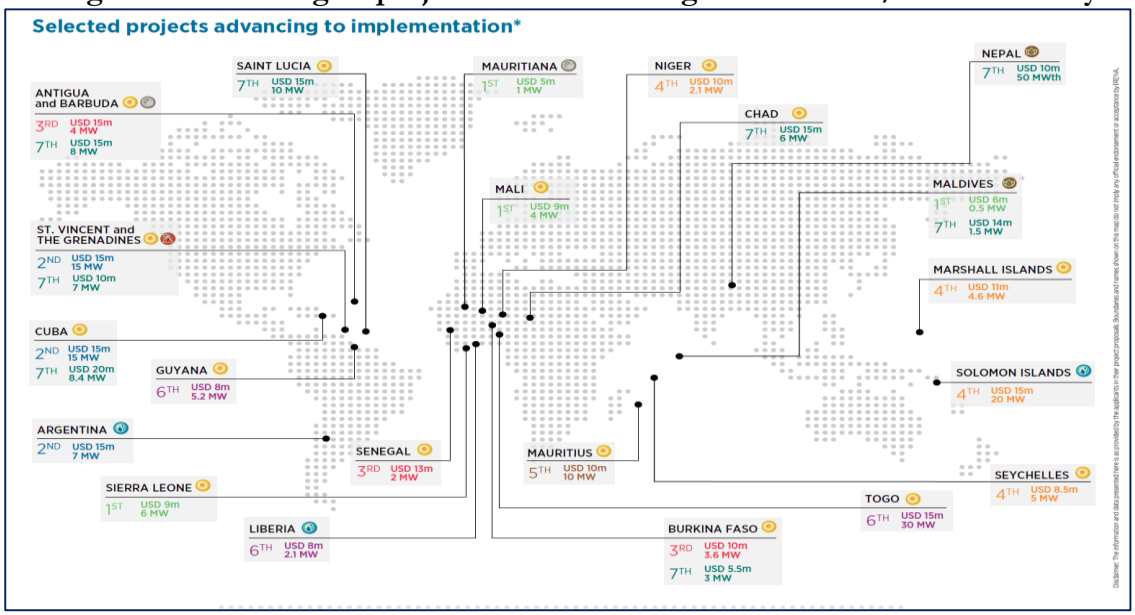
6. ADFD made available an initial USD 350 million in concessional loans to projects with sustainable development benefits in developing countries – one of the original commitments made by the UAE, IRENA's host country, when the Agency was first established. IRENA, in turn, worked collaboratively with its broad global membership – which has grown from less than 110 Members in 2012 to over 160 Members by 2020 – to establish the best possible project selection framework.

7. Each year, IRENA Members helped to disseminate calls for project proposals, were invited to apply and received nominations for positions on the Advisory Committee and the Panel of Experts to evaluate and recommend projects and were encouraged to contribute to the enhancement of the selection process. IRENA Members from selected projects and Experts on the Panel shared their experiences and knowledge of the selection process with applicants during IRENA events, helping to improve proposal submissions in the subsequent cycles.

[3] Reports of the Chair of the Advisory Committee. Links to reports from each cycle available at: https://www.irena.org/ADFD/Apply/Helpful-Resources

8. To date, after seven selection cycles, some 26 projects comprising solar PV, wind, bioenergy, hydropower, geothermal and hybrid technologies including battery storage (mini-grid, off-grid and utility scale) have reached various phases of implementation. They represent 250 megawatts (MW) of planned capacity and, combined, are expected to benefit 3.5 million people in 21 countries in Africa, Asia, Latin America and the Caribbean and Pacific regions.

Figure 1: Advancing 26 projects selected through the IRENA/ADFD Facility



9. Yet the demand clearly remains much larger in developing countries for innovative renewable energy projects to drive sustainable socio-economic development and expand energy access. Over the seven cycles, 602 project applications were received, representing USD 20.7 billion in project costs. This comprised applicants requesting USD 5.9 billion in concessional loans from ADFD, with an additional USD 14.8 billion coming in parallel from other co-funding sources.

10. Since the completion of the final selection cycle in January 2020, IRENA and ADFD have sought to take stock of the valuable knowledge accumulated over the seven cycles. In doing so, both organisations intend to respond to the continuous and significant demand for renewable energy finance, as well as reaffirm their enduring collaboration.

11. Improved outreach and guidance, via targeted webinars with experts and increased engagement with stakeholders at the regional level, resulted in stronger applications from larger numbers of eligible projects by the final cycle. While many proposals came from the private sector, the proportion of public sector submissions increased in the last cycle, reflecting ADFD's aim to support national development priority projects that have government guarantees. On the other hand, the inability of many otherwise high-scoring projects to obtain such guarantees suggests significant opportunities to devise alternative support mechanisms. IRENA and ADFD could, for example, engage with other financiers – notably from the private sector – and explore other financial tools.

12. The Project Facility also required more effective marketing from the start, along with clearer communication from IRENA to project proponents on loan conditions and eligibility criteria. The government guarantee requirement and criteria for levels of technological maturity (the Facility supported tried-and-tested technologies) were not sufficiently clear to some project proponents. In some cases, more feedback was expected on why certain proposals were not selected; in this regard, more technical assistance with the development of project proposals could have been helpful.

13. The evaluation system proved to be an effective and low-cost framework to engage experts in the selection process. The digital platform allowed designated experts to evaluate project proposals based on a flexible set of considerations, reflecting technical and financial aspects, socio-economic and environmental benefits, and prospects to fulfil Sustainable Development Goals (SDGs). The evaluation experts made extensive use of the platform, engaging with one another to establish consensus on each project's scoring. There was room, however, for IRENA to have engaged more closely in the identification of experts and given them clearer guidance both on the standards to apply and on the expected quality of final evaluations.

14. IRENA and ADFD remain committed to working together, while Project Facility stakeholders have expressed the will to build on the lessons of the first seven cycles. The present report represents a key step in this self-assessment process, an important prerequisite for further collaboration and a promising introduction to future initiatives to further support the accelerated deployment of renewable energy in developing countries.

Key facts and data

- The nature and efficiency of the partnership between IRENA and ADFD is best described as a valuable learning curve. Over the years, IRENA and ADFD have learnt to understand each other better, worked more closely together and, as a result, the performances of both the team and the Facility steadily improved.
- Continuous high demand for concessional loans for renewable energy projects in developing countries, with a total of USD 5.9 billion in concessional loans requested over seven years (602 applications received, with total project costs of USD 20.7 billion).
- 90 percent of the Facility's beneficiaries who responded to a subsequent survey stated that the Facility's digital platform was easy to use.
- IRENA staff provided clear and timely guidance to project proponents: all of the Facility's beneficiaries who replied to the survey stated that the guidance to apply (provided by IRENA) was clear; 89% said they received support from IRENA to clarify issues they faced; and 93% said they had timely feedback from the IRENA/ADFD team to their queries.
- 32 projects were selected from all regions of the world, featuring all renewable energy technologies. They amounted to USD 350 million made available by ADFD and USD 567 million from other sources of funding.

III. Evaluation and monitoring: progress of projects post selection

15. IRENA supports the advancement of projects selected by facilitating communications between ADFD and the project proponents and monitoring the projects. As analysed in the Assessment report, the project selection and evaluation process were administered through digital platforms that were effective and low cost. IRENA has built upon this to develop a monitoring platform to track the progress of projects that have been selected for funding by ADFD. The online platform was further developed and deployed in 2020, enabling collaborative reporting and tracking of progress. The platform will improve communication between the project implementing units, ADFD, IRENA and the host government. Further enhancements of the tracker are underway during 2020. The tracker is serving as a useful tool in the context of COVID-19, which has impacted monitoring visits to the projects.

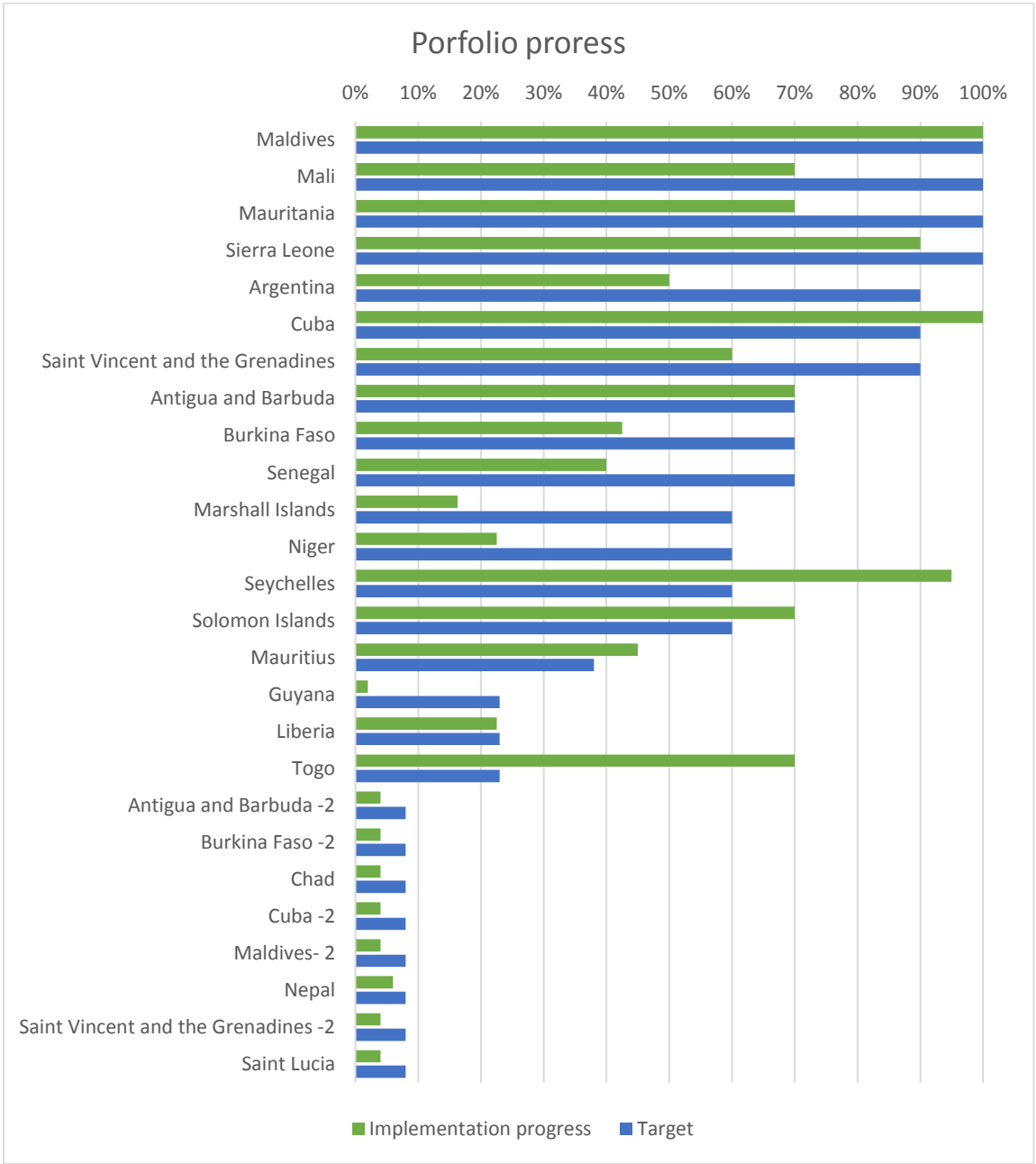
16. A total of 32 projects were selected over the seven cycles of the Facility. ADFD and IRENA continue to engage with 26 of the selected projects to advance them to completion (see Figure 1 and Graph 1 and 2). Two of these started power generation in 2019. Seven projects are at construction, with five of these expected to start providing electricity in 2020. Another five are procuring consultants to undertake engineering design and project management assignments, and contractors/suppliers for the construction phases. Three projects are at agreement processing with two of these already at loan agreement ratification while they start preparing tender documents; the third project is yet to sign the loan agreement. The remaining nine projects are in early stages that precede the processing of their loan agreements. Six of the projects are no longer expected to be financed by ADFD as they have faced country debt issues and/or a reprioritisation.

17. The progress of the portfolio in 2020 has been slightly slower than expected due to the impacts of COVID-19, although some projects have advanced despite this, including the Cuba project (Box 1). Reasons for the slowdown of some of the projects include:

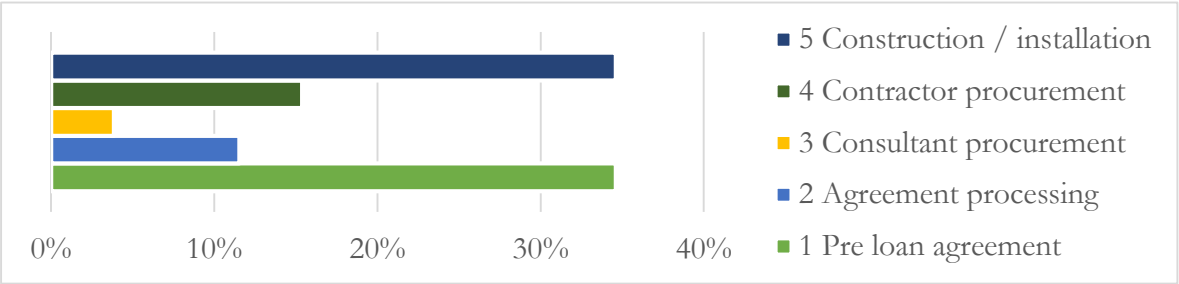
    a. Delays caused by restrictions on personnel and goods movement.
    b. Decreased government revenues in countries that are largely dependent on the tourism industry, affecting the host government's ability to repay the loans on projects.
    c. Reprioritisation of investments in host countries where even demand for energy has reduced, making it difficult to provide co-financing for the projects.

18. As part of the facilitation of communications, IRENA has noted that ADFD and the project proponents are coming up with solutions to overcome the challenges and help projects to progress towards full implementation. One of the main solutions that is helping to advance projects is the proposed approach by ADFD for virtual onsite appraisals.

Graph 1: Progress of the project portfolio (Q3 2020)



Graph 2: Proportion of projects at various stages of implementation



19. A summary of the performance of the projects[4] selected in terms of the status of the ADFD loan agreements, construction and advancement to completion is outlined in the table below. Please note that disbursements to projects can only be made after loan agreements are signed, ratified and declared effective.

Table 1: Status of projects selected from the first to the sixth cycle

Status	Number of projects
Projects advancing to completion	26
Loan agreements signed	16
Loan agreements ratified and declared effective	14
Loan agreement status for the rest of the progressing projects: • Two loan agreements were signed in January 2020 and are going through ratification according to their government procedures. This stage precedes declaration of effectiveness. • A loan agreement for a fourth cycle project prepared in 2019 has not yet been signed by the host government • Nine projects are still in the early stages that precede loan agreement preparations and signing. Eight of these are newly selected in the seventh cycle and the other is from the sixth cycle.	12
Maldives' first cycle project and Cuba's second cycle project are both generating electricity since 2019.	2
Construction and installation ongoing for eight projects in the following countries: Antigua and Barbuda, the Maldives, Mali, Mauritania, Saint Vincent and the Grenadines, Seychelles, Sierra Leone and Togo.	8
Disbursements commenced for Antigua and Barbuda, Argentina, Cuba, the Maldives, Mali, Seychelles and Sierra Leone.	7
Projects not advancing with ADFD funding. The reason for projects not advancing with ADFD funding includes reprioritisation of the respective parties, challenges with providing a sovereign guarantee and country debt issues.	6

20. As per the Guidelines for Applicants available online[5], if a project is selected for ADFD funding, the loan and guarantee agreements should be signed within a maximum period of two years from the date of the official notification by ADFD of the preliminary approval of the loan. There have been challenges observed in meeting this timeline and in advancing the projects to construction and installation.

[4] Projects are listed on the IRENA/ADFD website at http://www.irena.org/ADFD/Selected-Projects
[5] http://www.irena.org/ADFD/Apply/Helpful-Resources

21. Aside from COVID-19, the uniqueness of each project and country-specific contexts are also contributing to either enabling or slowing down the rate of progress. In this regard, some of the projects are advancing more quickly whilst others are taking longer to get to implementation. Key attributes that have been observed to contribute to the rate of progress of projects include:
    - the capacity of all stakeholders involved;
    - the country's political and economic factors that influence the ability to meet the sovereign government guarantee and co-financing requirement;
    - the nature of the renewable energy resource (geothermal and hydro takes considerably longer to develop than solar PV, for example); and
    - climate-induced/environmental factors.

22. It is to be noted that these are government-driven, development-focused projects that take longer to deliver compared to private sector projects.

23. IRENA and ADFD teams encourage the project proponents to reduce the delays by completing other stages in parallel to the ratification process of the loan agreement. For example, setting up the Project Implementation Unit and preparing and seeking no-objection clearance on procurement documentation.

24. Progress towards completion of the projects is often delayed compared to the planned implementation schedules. This is attributed to challenges faced by project implementing teams in completing various stages, key among them being arranging co-financing, procurement of consultants and contractors and loan withdrawal.

25. The need to continuously engage with ADFD and project teams is evident – several projects have continued to request more regular follow up calls with ADFD.

Box 1: Projects generating electricity

Inauguration of completed solar PV parks in Cuba in July 2019
Photograph source: IRENA

Cuba - Grid Connected Solar PV Project

10 MW | USD 15 million loan | Solar PV | Cycle 2

- This solar PV project of 10MWp was prioritised by the Cuban government and managed by the public utility, Union Electrica.
- By May 2019, four solar PV parks (10 MWp) were fully commissioned.
- Savings of USD 5 million were made from not having to pay for an international consultant and from lower solar PV costs, which has been put into an additional 5 MW, increasing the installed capacity to 15 MW. The project proponents moved forward with the delivery of this expansion in 2020 despite COVID-19. Engineers in Cuba supervised installation, tested and put the plant in service with the support of remote specialists.
- A new solar PV project of 14.3MWp with 4 MW battery energy storage system was selected in the seventh cycle.

 Waste to energy facility in R. Vandhoo island has commenced generating at a capacity of 500kW Photograph source: IRENA	**Maldives** - Islands Waste to Energy Project 0.5 MW | USD 6 million loan | Waste to energy | Cycle 1 • Small-scale waste to energy plants with integrated desalination plants put forward by the Ministry of Environment will bring clean electricity and approximately 550,000 litres of drinking water per day for the Island State. • In 2019, the installation of 500kW waste to energy facility was completed at the R Vandhoo site. • Installation of additional facilities is ongoing in 2020. • The second phase of this project is a 1.5MW waste to energy facility in Addu City and was selected for ADFD funding in January 2020.

IV. Concluding points

26. Given that the mandate of the Committee and Panel of Experts was extended till the 20th twentieth Council meeting, this marks the final report of the Committee and Experts involved in the final cycle of the Facility. The Facility has achieved remarkable success, especially with the advancement of projects despite a slight slowdown due to the impacts of COVID-19. IRENA and ADFD continue to work in partnership to help advance the selected projects to implementation. The Committee and Experts also note with appreciation that achievements, experiences and lessons learnt from the Facility are continuing to be built upon.

ANNEX I

Advisory Committee members and alternates[6] in the seventh cycle

Members

- Chad
- Ecuador
- France
- Japan
- Kuwait
- New Zealand - Chair
- Nigeria

Alternates

- Pakistan*
- The Philippines
- Republic of Korea

*Pakistan served as alternate to Kuwait in the work of the Committee.

Panel of Experts in the seventh cycle

- Djibrine Ngarmig Nig, Ministry of Energy (in Chad) – **Co-Chair and Lead**
- Pamela McKinnon, Emera Inc. (in Canada) – **Co-Chair and Lead**
- Ali Ahmed Ali, Ministry of Electricity and Renewable Energy (in Egypt) - **Lead**
- Christopher Ahlfeldt, Blue Horizon Energy (in South Africa) - **Lead**
- Francis Xavier Ochieng, Institute of Energy and Environmental Technology (in Kenya) - **Lead**
- Karen McClellan, Intelligent Energy (in the United Kingdom) - **Lead**
- Krzysztof Biernat, CSWU Cardinal Stefan Wyszynski University (in Poland) - **Lead**
- Jorge Lascas, African Power Platform (in Kenya) - **Lead**
- Lelo Mdhladhla, POWERX (in South Africa) - **Lead**
- Pandey Gyanesh, Nanyang Technological University (in Singapore) - **Lead**
- Aleksi Lumijarvi, Nordic Development Fund (in Finland)
- Charles Kanyunga, Finealt Engineering (in Zimbabwe)
- Cyril Carabot, French Renewable Energy Industry Association (in France)
- Hussain Mogaibel, Islamic Development Bank (in Saudi Arabia)
- Jan Zeevalkink, AYA Consultancy Independent (in the Netherlands)
- Karim Megherbi, EPDA Services (in the UAE)
- Nefesa Mohamed, New and Renewable Energy Authority (in Egypt)
- Nicola Bugatti, Trama TecnoAmbiental, S.L. (in Spain)
- Nihad Harbas, Ministry of Foreign Trade and Economic Relations (in Bosnia and Herzegovina)
- Niklaus Eggenberger, Swiss Agency for Development and Cooperation (in the Embassy of Switzerland in the UAE)
- Maha Mostafa Awad, RCREEE (in Egypt)
- Martín Scarone, Ministry or Industry, Energy and Mining (in Uruguay)
- Yasushi Ninomiya, The Institute of Energy Economics (in Japan)

[6] Countries of Committee members and alternates and Experts on the Panel in previous cycles are listed at http://www.irena.org/ADFD/Project-Facility/Selection-Process