

Ninth session of the Assembly
Abu Dhabi, 11 - 13 January 2019

Report of the Chair of the Advisory Committee The sixth cycle of the IRENA/ADFD Project Facility and progress to date

Summary

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 in eligible developing countries recommended by IRENA. The IRENA/ADFD Project Facility (Facility) is the result of this commitment and represents a partnership between IRENA and ADFD. IRENA facilitates an independent selection process of viable renewable energy projects that contribute to sustainable development. The implementation of the Facility is guided by the “General Principles” (A/4/13), which were approved by the Assembly at its fourth session (A/4/DC/4).

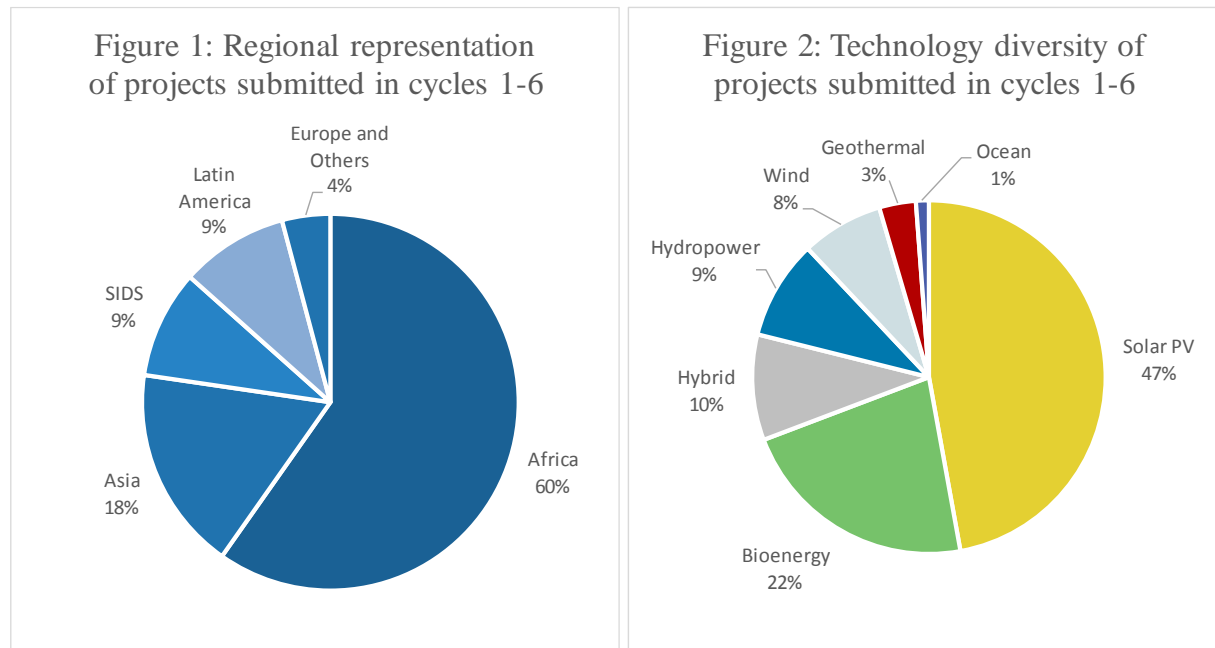
Since the selection of projects in the first cycle in January 2014, six selection cycles have been successfully facilitated by IRENA in total. The seventh cycle was opened for applicants to prepare and save their proposals for submission online, from 12 November 2018 to 14 February 2019. The Advisory Committee (Committee) composed of IRENA Members and appointed annually by the Assembly has the overall responsibility to select and recommend projects to the ADFD, supported by an independent technical Panel of Experts (Panel) who score and comment on the projects.

This report covers the work of the Committee during the sixth cycle of the Facility. The selected projects in the sixth cycle will be announced at the Ninth session of the IRENA Assembly in January 2019. It describes the implementation of the selection process in the sixth cycle in which 13 projects were recommended to the ADFD for funding. The recommended projects aim at improving energy access, energy security and livelihoods, and at the same time are replicable, transformative and sustainable. The projects represent 202 megawatts of new installed capacity and total project costs of USD 384.48 million - USD 139.56 million in loans from the ADFD and over USD 244.92 million in co-financing from other sources. Ensuring the projects have a government guarantee has been an underlying principle guiding the selection process to meet ADFD requirements.

The report also presents improvements to the selection process, progress to date on the selected projects and closer engagement with ADFD on following up with projects after they are selected. On a final note, initiatives to share lessons learnt amongst the selected projects and engagement of other funds on a similar Facility are outlined.

I. Background

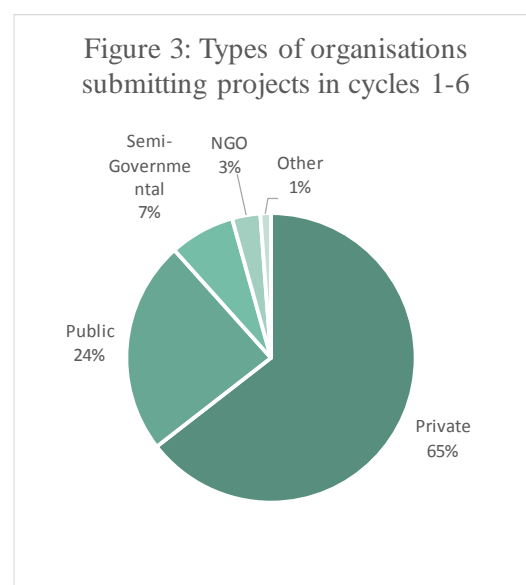
Since the inception of the IRENA/ADFD Facility, IRENA has received 507 project applications which have been evaluated by 69 independent global experts¹ up to and including the sixth cycle. The submissions represent USD 17.6 billion in total project costs which includes USD 4.9 billion requested from ADFD and USD 12.7 billion in co-funding. The demand for ADFD funding through the Facility has continued year on year underlining the continuing need for this type of funding. To examine the trends of this demand from cycle to cycle see Annex 1.



Projects in Africa account for 60% of the submissions. Of the total submissions, countries in Asia account for 18%, 9% from SIDS, 9% from Latin America and 4% from Europe and other countries. See Figure 1.

Solar PV projects constitute 47% of the submissions; these include utility scale solar PV, mini-grid and off-grid projects. Bioenergy projects including the conversion of waste to energy, biomass energy and biodiesel projects are 22% of the submissions. This is followed by 10% for hybrid (combining wind, solar, hydro and/or biomass), 9% for hydropower, 8% for wind, 3% for geothermal and 1% for ocean. See Figure 2.

It is noteworthy that most of the applications received by IRENA are from the private sector and they tend to meet most of the requirements of the selection process but are unable to obtain a government guarantee which is an ADFD requirement for funding. Figure 3 demonstrates that up to 65% of the submissions in all six cycles came from the private sector, 24% from the government sector, 7% semi-governmental and the rest are from NGOs and other entities.

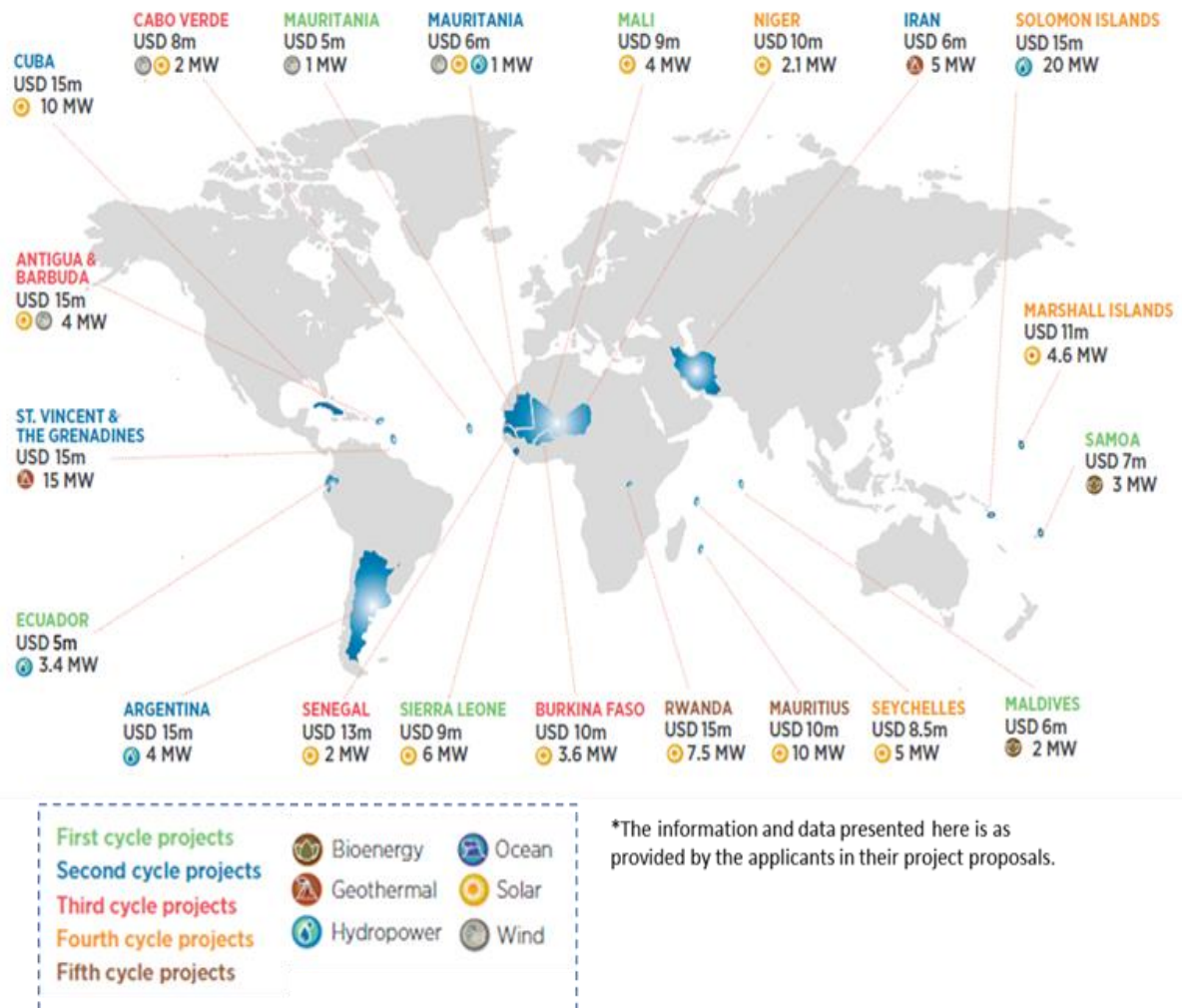


¹ See Annex 3 for the experts engaged.

Attracting projects that have government backing and are able to obtain a sovereign government guarantee remains critical. Where this is not possible, IRENA, with the agreement of the applicants, shares the shortlisted private sector projects with a list of other development funds for possible funding. All project proponents are also introduced to IRENA’s Sustainable Energy Marketplace to seek other forms of funding.

ADFD allocated USD 214 million in loans to 21 renewable energy projects that were selected from those recommended by IRENA. Over USD 420 million was to be provided by other co-funding sources to cover the rest of the project costs. The projects are in Antigua and Barbuda, Argentina, Burkina Faso, Cabo Verde, Cuba, Ecuador, Iran (Islamic Republic of), Maldives, Mali, Marshall Islands, Mauritius, Mauritania, Niger, Rwanda, Saint Vincent and the Grenadines, Samoa, Senegal, Seychelles, Sierra Leone and Solomon Islands, and cover a variety of renewable energy technologies (see Figure 4). These include solar PV rooftop programmes, mini-grid solar PV with battery storage, grid-connected solar PV, small scale hydro, mini-grid wind energy, hybrid systems (wind and solar), biomass, waste to energy and geothermal. The projects are aligned with national development priorities, potentially transformative and mainly located in least developed countries (LDCs) or island nations that have limited access to this type of funding.

Figure 4: Selected projects in the first to the fifth cycle



The progress of the projects selected is detailed in section IV.

II. Project review and selection during the sixth cycle

The Advisory Committee has the overarching responsibility to review the shortlisted projects prepared by the Panel of Experts and to select those to be recommended to the ADFD. The Committee, has two main roles - one is to carry out the overall project review and selection, and the second is - to make suggestions to further improve the effectiveness of the Facility.

The Committee for the sixth cycle was established at the eighth session of the Assembly in January 2018. It consists of seven members and five alternates reflecting equitable geographic distribution (see Annex 3). New Zealand, represented by Dr Mike Allen, Special Envoy for Renewable Energy for the Ministry of Foreign Affairs and Trade, was appointed as Chair of the Committee. The Committee established a Panel of Experts comprising 24 members, to provide technical advice to the Committee (see Annex 3 on the composition of the Committee members and alternates for the sixth cycle and the Panel of Experts).

The sixth cycle opened on 16 November 2017. Webinars for project proponents were conducted in November 2017 and January 2018 to clarify the application requirements and invite applications. By the application deadline date of 15 February 2018, 112 eligible executive project summary applications from 51 eligible² developing countries were received. This is a 25% increase in the number of applications above those received in the previous year. The total amount of ADFD loans³ requested in this cycle was over USD 1.1 billion, with total project costs of USD 3.9 billion indicating that the demand for this type of funding remains high.

Similar to previous years, 45% of the total applications were solar PV projects and with the majority in Africa. However, this year IRENA has received a higher number of bioenergy projects compared to previous cycles (which includes waste-to-energy, liquid biofuels, biogas and solid biomass projects) and hydropower projects. See Annex 4 for regional, technology and type of organisation trends represented through the selection process in the sixth cycle.

In March 2018, experts involved in previous cycles noted that the quality of projects presented appears to be improving. Experts evaluated, scored, ranked, provided qualitative technical comments and shortlisted projects through online dashboards until the end of March and then presented the justification of their shortlisting to the Committee on 4th April via webinar. A total of 52 projects were shortlisted by the Panel of Experts through this process.

From the shortlisted projects, the Committee selected 36 projects via their online dashboards in April and these projects were called upon to submit full project proposals. The Committee considered strategic aspects of the proposals, ensuring geographic spread, technology diversity and alignment with government priorities.

A summary of the comments received from the Panel of Experts evaluating the executive project summary applicants were shared with the applicants to help them to improve their proposals. By the end of June 2018, applicants submitted 23 full project proposals. The reasons for the reduced number of full proposals submitted from those selected by the Committee included the inability to provide a government guarantee letter and/or readiness of the full feasibility study which are mandatory requirements at this stage.

The experts evaluated the 23 full project proposals in July and August. A webinar was convened on 3rd July 2018 to guide them in their work. Following scoring and ranking by the experts, a webinar presentation by the Co-Chairs of the Experts was carried out for the Committee on 10 September 2018.

² Eligible countries list can be downloaded from <http://www.irena.org/ADFD/Project-Facility/Eligibility>

³ Details of the ADFD funding offer can be found at <http://www.irena.org/ADFD/Project-Facility/Funding-Offer>

In early October 2018, the Committee selected a list of 13 projects for recommendation to ADFD.

- The regions represented in the recommended list are Africa, Asia and Latin America.
- The activities range from solar PV utility scale projects to solar PV rooftop projects, hydropower projects, hybrid solar projects and biomass energy projects.

The total quantity of requested loans for the recommended projects is USD 139.56 million with USD 244.92 million in co-financing from governments, development funds and the private sector representing total projects costs of USD 384.48 million.

The ADFD is expected to make its final selection of projects from the list recommended by the Committee by the end of December 2018. The announcement of the selected projects is planned to take place at the ninth session of the IRENA Assembly in January 2019.

Many of the projects that scored high and were not able to obtain a government guarantee are being encouraged to explore IRENA's Marketplace for alternative sources of funding. IRENA also shares these projects with a list of 197 funding contacts via an online dashboard – see Annex 5.

III. Seventh cycle early facilitation

Marking a change and improvement from previous cycles, the online dashboard was opened for applicants to prepare their summary applications into the system well before the time window in which applicants can submit, which is from 12 November 2018 to 14 February 2019 in the seventh cycle. This provided applicants with more time to work on and prepare their applications.

In addition, outreach efforts are being intensified for the seventh cycle to try and reach proponents of government-driven development priority projects that are able to obtain a government guarantee.

Presentations made at the May 2018 African Utility Week, the International Off-grid Rural Electrification Conference (IOREC) and via video conference to other relevant IRENA-organised and attended regional events focus on how to apply and provide feedback by experts on the applications made in previous cycles.

This is assisting project proponents to find out how their projects will be evaluated and what to look out for and focus on to obtain concessional debt through such a Facility. These sessions are also carried out in conjunction with the presentation of IRENA's project facilitation Navigator and Marketplace tools and platforms.

Targeted outreach is taking place with direct messaging to regional organisations and eligible countries and a social media campaign to government contacts in developing countries. Webinars are being used to target eligible countries.

IV. Progress of projects post selection

The selected projects are at various stages of maturity – see Annex 2. Of the 21 projects selected during the first to the fifth cycles, ADFD continues to engage with 16 of them to advance them to completion. Ten of them have signed loan agreements. Nine signed loan agreements have been declared effective and disbursements have commenced to five projects. Seven are at construction phase. Five of the projects are no longer expected to be financed by ADFD as they have faced country debt issues and/or a reprioritization.

A summary of this performance of the projects⁴ selected in terms of the status of the ADFD loan agreements, construction and advancement to completion is outlined in the table below. Note that disbursements to projects can only be made after loan agreements are signed, ratified and declared effective.

⁴ Projects are listed on the IRENA/ADFD website at <http://www.irena.org/ADFD/Selected-Projects>

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

Status	Number of projects
Projects advancing to completion	16
Loan agreements signed	10
Loan agreements ratified and declared effective	9
Loan agreement status for remaining projects A loan agreement for a project from the third cycle is yet to be ratified after the agreement was signed in March 2018. A loan agreement for one of the third cycle projects was finalized in May 2018 and is due for signing. Two loan agreements from the fourth cycle and one from the fifth cycle are being processed with expectations of getting them signed by the first quarter of 2019. Two projects from the fourth and fifth cycles have not reached the stage where loan agreements are processed.	7
Construction and installation commenced in the Maldives and Mauritania (first cycle projects), Mali, Sierra Leone, Cuba, Antigua and Barbuda and Seychelles. See Box 1	7
Disbursements commenced	5
Projects not advancing The reason for projects not advancing includes reprioritization of the respective parties, challenges providing a sovereign guarantee and country debt issues.	5

As per the Guidelines for Applicants available online⁵, 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.

The uniqueness of each project and country specific contexts are contributing to either enable or slow 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:

- capacity of all stakeholders involved;
- country political and economic factors to meet the sovereign government guarantee and co-financing requirement;
- nature of renewable energy resource (geothermal and hydro takes longer to develop than solar PV, for example) and
- climate- induced /environmental factors.

Note also that these are government-driven development-focused projects that take longer than private sector projects to deliver.

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 preparation of procurement documentation and seeking no objection on this. Progress towards completion of construction is not as quick as expected. 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, loan withdrawal. 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. In addition, follow up field monitoring missions have commenced with the aim of validating progress, providing support project teams on the ground and enabling communication of progress to the IRENA membership.

⁵ <http://www.irena.org/ADFD/Apply/Helpful-Resources>

Box 1: Projects at construction/implementation phase***Maldives***

The “Small-scale Waste to Energy Project” aims to address waste management, access to fresh water and provision of sustainable energy solutions in a holistic manner. The project includes construction of three small demonstration waste-to-energy facilities to provide renewable electricity for the population through the combustion of municipal waste while also powering an integrated desalination plant through a heat recovery system. These waste-to-energy facilities are part of the country’s larger waste management framework while also contributing to the government’s ‘Scaling up Renewable Energy Program’.

Mauritania

This “Electrification Project by Wind Power for Coastal Communities” will provide four coastal fishing villages with decentralized renewable power, desalination plants and ice production facilities. 18 wind turbines of 15kW size will be installed.

Sierra Leone

The Freetown Solar Park will produce approximately 9.9 GWh of electricity per year, improving the grid stability and helping to meet peak demand. The local community of Freetown will benefit from the employment opportunities created by the project and from a chance to acquire professional skills through a planned training centre for installation and maintenance. The proponents anticipate the project to benefit more than 15,000 people through access to electricity, improving education, healthcare and access to ICT.

Seychelles

The Ile de Romainville Solar Park will add 5MW capacity into the national grid using the existing transmission network and will benefit the entire population of the island of Mahe. This project will particularly impact low income households by making energy more affordable and accessible.

Cuba

The project seeks to increase the share of renewable energy into Cuba’s national grid through adding grid-connected solar PV of 10 MW capacity. The generation will be from four solar farms that will supply the power into the national grid. The project will use locally assembled PV panels and locally manufactured support structures; hence creating jobs and opportunities for local businesses.

Antigua and Barbuda

The “Transformation of the Water and Government Sectors using Renewable Energy” project is part of a wider climate mitigation and adaptation scheme to transform the water sector and provide energy to key services within the country. Wind turbines and solar PV panels will power desalination plants, enabling increased provision of reliable water services and addressing the severe shortages that the country faces. This project will also provide hospitals and community clinics with back-up power through batteries, which will improve resilience during extreme weather events. The project includes use of foldable wind turbines as an adaptation measure against potential damage during hurricanes.

Mali

The “Hybrid Renewable Energy Systems for Rural Electrification” project will enable 32 villages to access renewable energy in Mali. Of these, 10 villages have existing diesel mini-grids which will be converted into solar hybrid systems. For the remaining 22 villages, new hybrid solar mini-grid systems will be constructed. The provision of cleaner and more reliable electricity for households, medical centres and for education will positively impact 123,000 people across the 32 rural villages.

V. Developments in the pipeline

Following a request by the Directors-General of IRENA and ADFD in early 2018, the IRENA and ADFD operational teams had a brainstorming session in February 2018 to identify recommendations to improve, continue and expand the Facility and to determine what to do with the unused and unallocated funds. Unused funds are as a result of cancelled projects due to inability to move forward with a government guarantee and a lack of co-financing and/or a reprioritization. Unallocated funds are from not enough projects selected in each cycle for funding mainly due to the lack of provision of a government guarantee letter. A number of recommendations were discussed in the brainstorming. These were presented to and are being considered by IRENA and ADFD management.

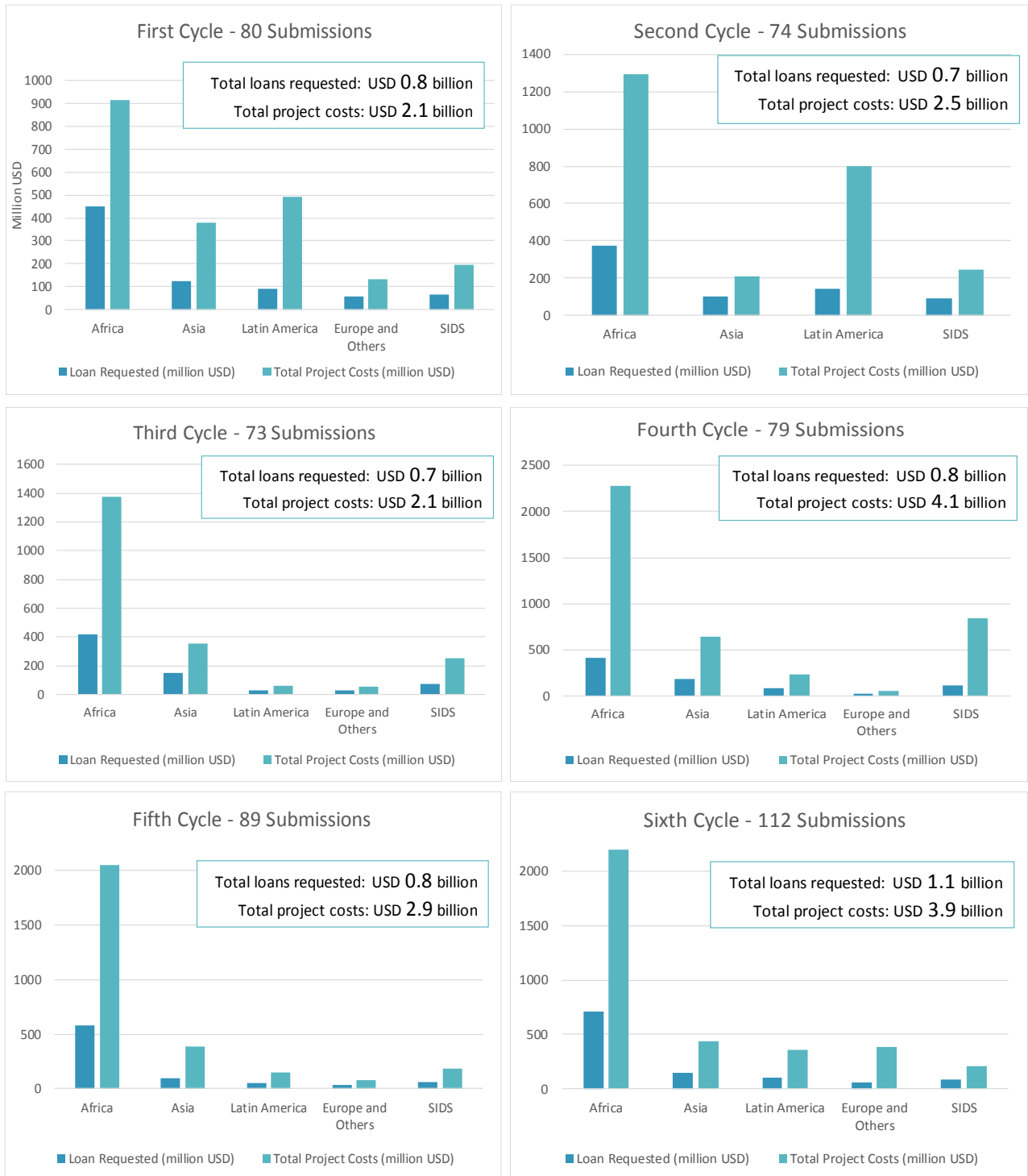
IRENA also carried out a broader knowledge sharing session with the ADFD in October 2018 in which alternatives to a government guarantee-based approach of lending and its pros and cons were presented and discussed.

Two additional sessions are being proposed for upcoming IRENA meetings:

- Learning workshop for selected projects to enable project teams to share lessons learnt in the implementation of project stages and share their experiences so far in order to help projects advance to implementation.
- Engagement of IRENA with other funds for alternative forms of inclusive financing frameworks where IRENA takes the role of global facilitator and “receiving hub” of projects that are then funneled via an independent selection process and set of evaluation criteria to funds to move forward with. The aim of the session is to have a set of recommendations for IRENA’s action going forward in terms of form of engagement and focus of activities that would significantly assist in enabling effective finance for high development-impact renewable energy activities.

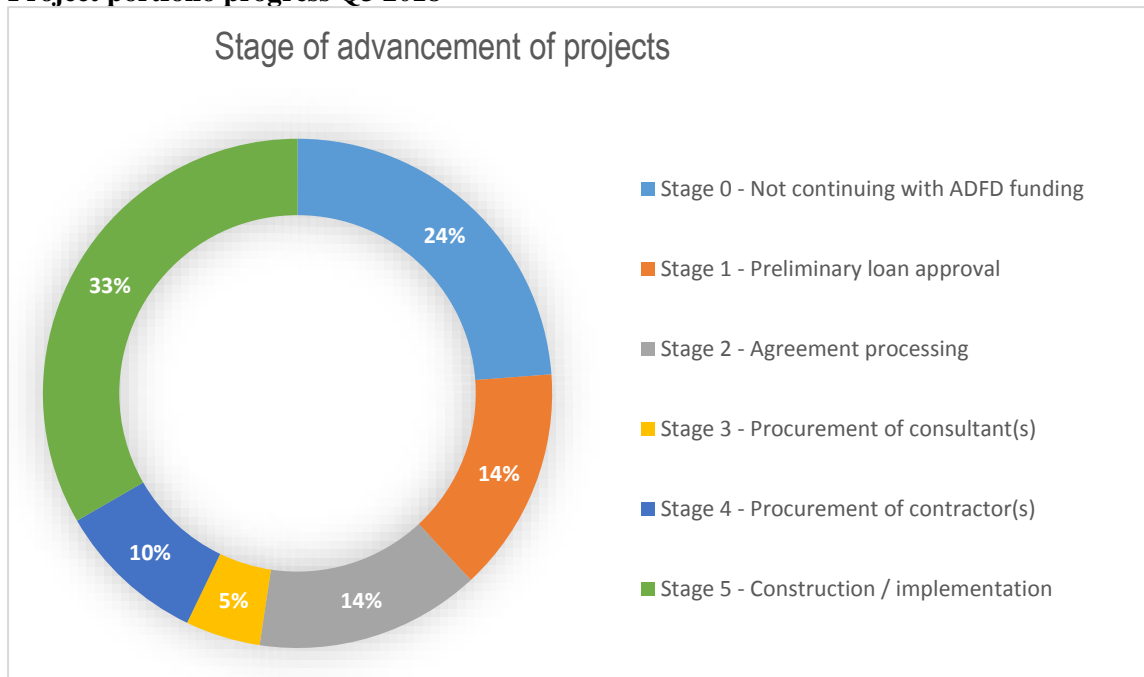
ANNEX 1

Total loan size requested for each cycle with total project costs by region



ANNEX 2

Project portfolio progress Q3 2018



ANNEX 3

Advisory Committee members and alternates in the sixth cycle

Members

- Algeria
- Antigua and Barbuda
- Egypt
- Finland
- France
- New Zealand
- Republic of Korea

Alternates

- Japan
- Jordan
- Pakistan
- Tonga

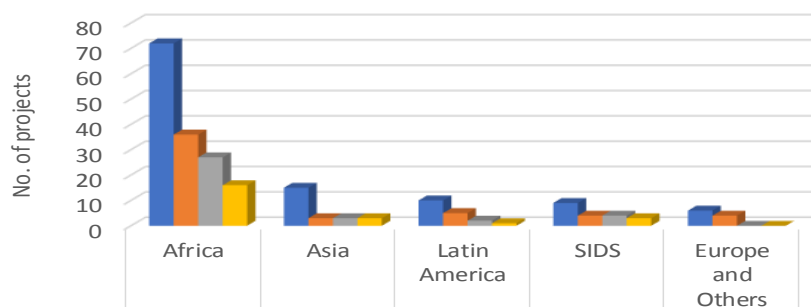
Panel of Experts⁶ in the sixth cycle

- Martin Baart, Ecoligo GmbH (in Germany) – **Co-Chair and Lead**
- Nicolás Castromán, Dirección Nacional de Energía/MIEM – **Co-Chair and Lead**
- Ali Ahmed Ali, Ministry of Electricity and Renewable Energy, International Cooperation (in Egypt) - **Lead**
- Krzysztof Biernat, Bioeconomy / Institute for Ecology and Bioethics, PIMOT Automotive Industry Institute/ CSWU Cardinal Stefan Wyszyński University (in Poland) - **Lead**
- Belkacem Bouzidi, Development Center of Renewable Energy (in Algeria)
- Cyril Carabot, French Renewable Energy Industry Association (in France)
- Boulakhras Chahar, State-owned utility in charge of electricity and natural gas distribution (in Algeria)
- Said Diaf, Development Center of Renewable Energy (in Algeria)
- Niklaus Eggenberger, Swiss Agency for Development and Cooperation (SDC), Embassy of Switzerland in the UAE
- El Mostafa Jamea, MENA Renewables and Sustainability Institute (in Morocco)
- Binod Koirala, University of Twente, The Netherlands/ Nepal - **Lead**
- Aleksi Lumijarvi, GreenStream Network Ltd. (in Finland)
- Guido Mattei, Independent energy expert and evaluator (in Italy) - **Lead**
- Karen McClellan, Intelligent Energy (in the United Kingdom)
- Pamela McKinnon, Emera Inc. (in Canada) - **Lead**
- Karim Megherbi, Access Power (in the UAE)
- Nefesa Mohamed, New and Renewable Energy Authority (in Egypt)
- Yasushi Ninomiya, The Institute of Energy Economics Japan (in Japan)
- Mohamed Omara, New and Renewable Energy Authority (in Egypt)
- Menadi Rachedi, Ministry of Energy (in Algeria)
- Martín Scarone, Ministry of Industry, Energy and Mining (in Uruguay)
- Andy Schroeter, Sunlabob Renewable energy (in Laos) - **Lead**
- Tara Soomro, Department for International Development, Embassy of the UK in the UAE
- Tevita Tukunga, Ministry of Meteorology, Energy, Information (in Tonga)

⁶ Experts in previous cycles listed at <http://www.irena.org/ADFD/Project-Facility/Selection-Process>

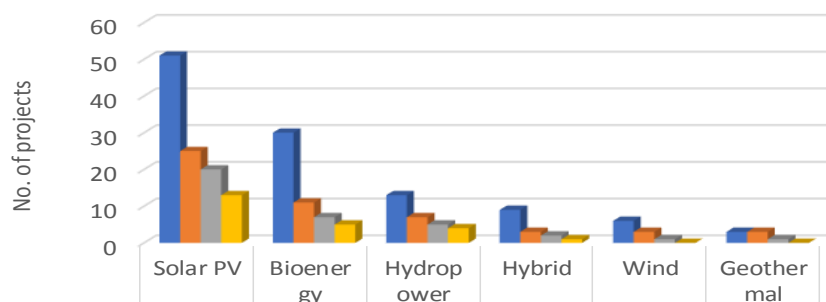
ANNEX 4

Graph 1: Regional representation in the sixth cycle



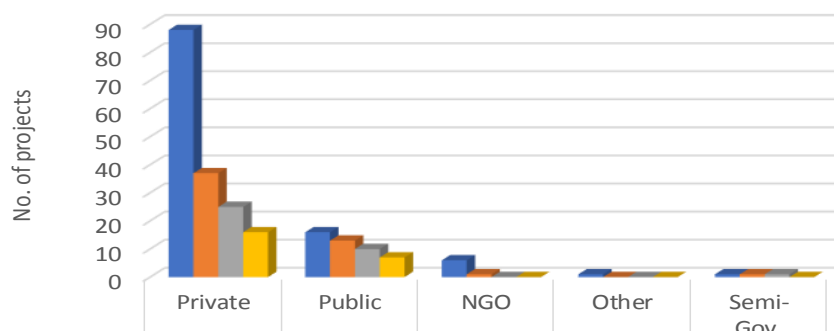
Submitted Project Summaries	72	15	10	9	6
Shortlisted by Panel of Experts	36	3	5	4	4
Selected by Committee to submit Full Proposals	27	3	2	4	0
Submitted Full Proposals	16	3	1	3	0

Graph 2: Technology representation in the sixth cycle



Submitted Project Summaries	51	30	13	9	6	3
Shortlisted by Panel of Experts	25	11	7	3	3	3
Selected by Committee to submit Full Proposals	20	7	5	2	1	1
Submitted Full Proposals	13	5	4	1	0	0

Graph 3: Type of organisations submitting in the sixth cycle



Submitted Project Summaries	88	16	6	1	1
Shortlisted by Panel of Experts	37	13	1	0	1
Selected by Committee to submit Full Proposals	25	10	0	0	1
Submitted Full Proposals	16	7	0	0	0

ANNEX 5

Online dashboard for interested co-funders

