





PROJECT FACILITATION AND SUPPORT





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ABOUT IRENA

The International Renewable Energy Agency (IRENA) is the primary global intergovernmental agency concerned with advancing the energy transition. It serves as the principal platform for international co-operation in the context of the transition, supporting Member countries by providing advice, data and analyses on technology, innovation, policy, finance and investment.

IRENA drives the widespread adoption and sustainable use of all forms of renewable energy – including bioenergy, geothermal, hydropower, ocean, solar and wind energy – in the pursuit of sustainable development, and energy access and security.

IRENA's membership comprises 169 countries and the European Union. Together, they determine the Agency's strategic direction and programmatic activities, in line with the global energy discourse and priorities to accelerate renewables-based energy transitions worldwide.

The IRENA Secretariat carries out its operations mainly through four programmatic divisions:

- Country Engagement and Partnerships (CEP)
- IRENA Innovation and Technology Centre (IITC)
- Knowledge, Policy and Finance Centre (KPFC)
- Project Facilitation and Support (PFS)

These divisions are supported by Administration and Management Services (AMS) and Planning and Programme Support (PPS), while the Office of the Director-General (ODG) provides internal co-ordination and supports IRENA's governing bodies.

ABOUT THE PROJECT FACILITATION AND SUPPORT (PFS) DIVISION

IRENA's Project Facilitation and Support (PFS) division offers members dedicated project implementation support by building cooperation to advance the deployment of energy transition projects, helping project developers secure financing more efficiently, and assisting investors and lenders in building stronger project portfolios.

CONTEXT

Meeting international climate and development objectives requires the mass mobilisation of all available capital sources, as well as re-allocation of capital towards low-carbon technologies, including renewables. An estimated USD150 trillion will need to flow into the energy system by 2050 (see Figure 1), prioritising technology avenues compatible with a pathway to keep global temperature rise within 1.5 degrees Celsius (°C) of pre-industrial levels - the goal set under the 2015 Paris Agreement.

The UAE Consensus, adopted at COP28 in Dubai, calls on Parties to the United Nations Framework Convention on Climate Change to contribute to a tripling of global renewable energy generation capacity and doubling of the average annual rate of energy efficiency improvement by 2030. This goal to triple renewables by 2030, championed by the UAE COP28 Presidency, is rooted in the intellectual framework presented by IRENA's *World Energy Transitions Outlook* (WETO) scenario, which provides a pathway to achieve the 1.5°C goal.



Figure 1: Financing needed to close the energy transition gap under IRENA's 1.5°C Scenario

To help close the gap illustrated by the 1.5°C Scenario, IRENA is facilitating the necessary financing through two key initiatives: the **Energy Transition Accelerator Financing Platform (ETAF)** and the **Climate Investment Platform (CIP)**.

Both the CIP and the ETAF are inclusive, multi-stakeholder climate finance platforms that facilitate capital mobilisation to scale up project deployment and advance the energy transition across developing markets.

IRENA leverages these platforms to facilitate the mobilisation of financial resources, directing them towards a diversified pipeline of renewable energy and other energy transition projects.

ENERGY TRANSITION ACCELERATOR FINANCING PLATFORM



Building on the success of the IRENA - Abu Dhabi Fund for Development (ADFD) financing facility, ETAF was announced during COP26 in Glasgow and officially launched during COP27 in Sharm El-Sheikh, with its funding partners issuing soft pledges totalling USD 1 billion. The ETAF Platform now has 14 partners and soft pledges totalling USD 4.15 billion as of 2024. An open call for project submissions to the ETAF platform

was launched at COP27. As of December 2024, the platform has supported 83 projects, representing 6.2 GW in potential installed capacity to benefit 110 million people. ETAF project support seeks to improve readiness for financial matchmaking, and includes indepth review of projects and related documentation; technical assistance; and eligibility assessments against partner funding criteria. Projects and sponsors also benefit from detailed feedback on project delivery. Those projects considered ready for financing are recommended to ETAF partners. Three large-scale solar PV projects in Uzbekistan, totalling 897 megawatts (MW) and valued at around USD 1 billion, have already reached financial closure.

WHAT IS THE ETAF PLATFORM?



A multi-stakeholder climate finance solution to advance the global energy transition

ETAF aims to accelerate energy transitions by mobilising and directing USD 5 billion into renewable energy projects in emerging economies

ETAF ELIGIBILITY CRITERIA



Geographic coverage: Developing countries/emerging markets within IRENA members or countries in accession.



Business development & readiness:

Projects with pilots completed or full **project feasibility studies** completed.





- Large-scale private sector-led commercial projects
- High priority and impact Public/PPP projects within host country

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Resource and technology:

Commercially proven renewable energy technologies and resources.

THE ETAF APPLICATION PROCESS



Notes: NDCs = nationally determined contributions; SDG7 = Sustainable Development Goal 7.

Website: https://etafplatform.org

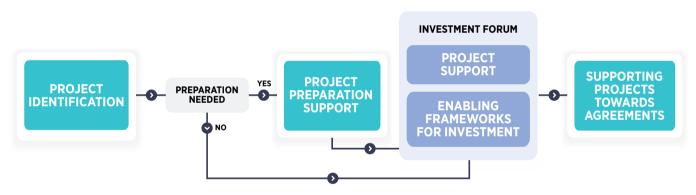
CLIMATE INVESTMENT PLATFORM



The Climate Investment Platform is a joint initiative of the International Renewable Energy Agency (IRENA), the United Nations Development Programme (UNDP) and Sustainable Energy for All (SEforALL), in collaboration with the Green Climate Fund (GCF). The CIP's mandate is to increase capital mobilisation and renewable energy impact investing in developing countries. The CIP is a demand-driven platform that facilitates the development and scale-up of energy transition technologies through tailored technical assistance to

member countries. Project developers, registered in the platform, are considered for technical assistance and project facilitation support to reach bankability readiness for finance matchmaking with registered institutions.

THE CIP PROJECT CYCLE



CIP ELIGIBILITY CRITERIA

To be eligible for IRENA CIP support, the project must:

- Contribute to the clean energy transition.
- Be aligned with relevant Sustainable Development Goals.
- Be consistent and aligned with national climate action priorities.
- Be beyond the conceptual stage and have completed pre-feasibility or preliminary studies.

The platform has supported over 100 projects through targeted technical assistance and advisory. The CIP's network of registered financial partners has grown to 93, comprising leading development finance institutions, international and local banks, private companies, impact investors and funds.

Website: www.irena.org/Energy-Transition/Partnerships/CIP

TECHNICAL ASSISTANCE

IRENA offers extensive in-house expertise and a proven track record in providing technical advisory services for renewable energy projects. Through the Technical Assistance team, the Agency seeks to expedite the implementation of advanced projects with the potential for achieving financial closure. IRENA's Project Facilitation and Support division offers a range of support services such as technical, socio-economic and financial reviews of projects. It also provides advisory support to project proponents to enhance viability during the project development stage through the CIP, and to improve the bankability of proposals submitted via the ETAF platform to enable them to secure credit facilities.

The Technical Assistance team also delivers capacity building workshops on project financing. The team's aims are to bolster renewable energy-related technical skills and project appraising capacities among local financial institutions and banks; enhance the proposal development capacity of sponsors; and enrich the understanding of the renewable energy sector for state actors, enabling them to design and implement conducive policy instruments.



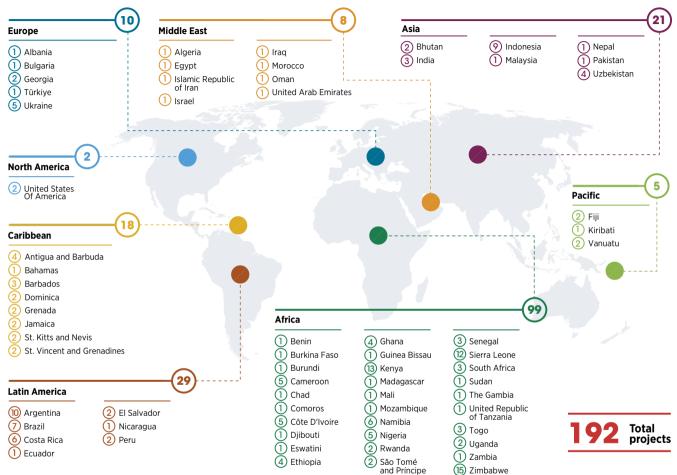
Capacity building workshop in Nadi, Fiji (January 2024).



Capacity building workshop in Nairobi, Kenya (October 2024).

PROJECTS SUPPORTED

Geographic coverage of projects supported by the ETAF and CIP platforms



Notes: CIP = Climate Investment Plaform; ETAF = Energy Transition Accelerator Financing platform; SIDS = small island developing states.

Disclaimer: This map is provided for illustration purposes only. Boundaries and names shown on this map do not imply the expression of any opinion on the part of IRENA concerning the status of any region, country, territory, city or area or of its authorities, or concerning the delimitation of frontiers or boundaries.

SUCCESS STORIES IN PROJECT FINANCING

The following are examples of renewable energy projects around the world that have successfully obtained financing with backing from IRENA's Project Facilitation and Support division, through ETAF, CIP and the IRENA/ADFD Facility.

UZBEKISTAN JIZZAKH, SHERABAD AND SAMARKAND SOLAR PV PROJECTS

TECHNOLOGY Utility-scale solar PV

SIZE 897 MW

SUSTAINABLE DEVELOPMENT GOALS



IMPACT



919 000 tonnes of CO₂-equivalent emissions avoided annually



1 million households served



Up to 1070 jobs created during construction and up to 100 during operation The Abu Dhabi Future Energy Company (Masdar), a world-leading clean energy company, is developing three solar PV projects in Uzbekistan. ETAF partners - Masdar and the Asian Infrastructure Investment Bank (AIIB) - committed capital to the projects under the initiative, with additional funding provided by several multilateral development banks.

Energy Transition Accelerato Financing Platform







ARGENTINA NAHUEVE HYDROPOWER PROJECT

TECHNOLOGY

Hydropower

SIZE 7 MW

SUSTAINABLE DEVELOPMENT GOALS



IMPACT



22 800 tonnes of CO₂-equivalent emissions avoided annually



54 000 people gained first-time energy access



130 jobs created during construction Selected during the second cycle of the IRENA/ADFD facility, the Nahueve project serves as a model for small-scale hydropower development in Argentina. The Abu Dhabi Fund for Development (ADFD) provided a USD15 million loan to the government of Argentina, including for improved water quality and irrigation for the surrounding area. The hydro plant's inauguration is scheduled for late 2025.





MALDIVES SMALL-SCALE WASTE-TO-ENERGY PROJECT

TECHNOLOGY Waste-to-energy

SIZE 2 MW

SUSTAINABLE DEVELOPMENT GOALS





IMPACT



9 200 tonnes of CO₂-equivalent emissions avoided annually

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112 000 people gained access to clean energy and integrated waste management



55 000 tonnes of waste incineration annually led to improved marine environment Since the completion of its first phase in 2019, the Vandhoo waste-to-energy plant in Maldives has provided 20 islands with sustainable energy and improved waste management services. Further expansion is ongoing, reducing fossil fuel dependence and pollution of the islands and marine environment. The project is supported with a USD 6 million loan from the ADFD, allocated through the IRENA/ADFD facility.







BENIN SOLAR PV MINI-GRID PROJECTS

TECHNOLOGY Solar PV mini-grid systems with battery storage capacity

SIZE 2.2 MW

SUSTAINABLE DEVELOPMENT GOALS



IMPACT



450 000 beneficiaries of clean, affordable energy The project entails the installation of solar PV mini-grids with lithium-ion battery storage villages in rural Benin, totalling 2.2 MW of capacity and 4.0 MWh, and combining energy access and productive services. The mini-grid systems are expected to improve the availability of electricity and access to electricity for public infrastructure, communities and households currently unserved in targeted villages.





MALAYSIA SAND TOWN SOLAR

TECHNOLOGY Utility-scale solar PV

SIZE 33 MW

SUSTAINABLE DEVELOPMENT GOALS





IMPACT



26 700 tonnes of CO₂-equivalent emissions avoided annually

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Up to 500 jobs created during construction

The power supplied from the Sand Town Solar will be connected to the grid through the nearest substation. The connection of the power plant with the local grid will improve the stability and reliability of the power supply, helping to reduce unwanted power cuts due to surges.





NIGERIA OFF-GRID SOLAR HYBRID PROJECT

TECHNOLOGY
Solar-diesel hybrid off-grid systems

SIZE 6.6 MW

SUSTAINABLE DEVELOPMENT GOALS



Nigeria has great potential in the off-grid commercial and industrial market. The Solar Hybrid Project is a landmark transaction for solar-diesel hybrid systems in the region's commercial and industrial market and involves the installation of 375 solar hybrid systems across telecom towers.





INDONESIA PALM OIL MILL EFFLUENT (POME) BIOGAS PLANT

TECHNOLOGY Biogas power plant

SIZE 3 MW

SUSTAINABLE DEVELOPMENT GOALS



IMPACT



75 800 tonnes of CO₂-equivalent emissions avoided annually The 3 MW biogas power plant will use covered-lagoon reactor technology to treat and process the liquid waste from palm oil mill effluent (POME) into biogas. The waste will be treated in a recovery pond to produce methane, which is then purified and used to power an engine that, coupled with a generator, produces electricity.





ALBANIA ERSEKA SOLAR PARK

TECHNOLOGY Solar PV plant

SIZE 20 MW

SUSTAINABLE DEVELOPMENT GOALS



The solar park project will help reduce dependency on imported thermal power when hydropower reservoirs are too low to generate sufficient power to meet demand. The project will also allow Albania to export clean, renewable energy to neighbouring countries with which it has inter-connectors – Greece, Kosovo and Montenegro – when the domestic market is over-supplied.



INVESTMENT FORA AND CAPACITY BUILDING

IRENA's commitment to the energy transition encompasses comprehensive training and capacity building initiatives delivered at the regional level. These programmes target a diverse audience, including financiers, policy makers, and project developers, with the goal of strengthening local institutions and enhancing human capacity.

This holistic approach seeks to foster the seamless implementation, operation and management of renewable projects. Ultimately, these efforts contribute greatly to the realisation of shared objectives in the field of renewable energy.

INVESTMENT FORA

BALI, INDONESIA SOUTHEAST ASIA INVESTMENT FORUM, AUGUST-SEPTEMBER 2022



Financial Matchmaking

- 21 projects featured
- **32** bilateral meetings between financiers and project developers



Deep-dive sessions

Bringing together governments, financiers and developers from Southeast Asia to discuss how to mobilize capital in the energy transition



Project exhibition Area to highlight projects from the region The G20 Investment Forum 2022 was co-hosted by IRENA and the G20 Presidency of Indonesia from 31 August to 1 September 2022. It included participants from diverse backgrounds, including the financial community, development partners and other relevant stakeholders from the public and private sectors. The objective was to drive energy transition investments, with particular emphasis on the Southeast Asia region.



Panel discussion: "Developers' Perspective: Developing and Implementing Energy Transition Projects". G20 Investment Forum on Energy Transitions, Bali, Indonesia, August-September 2022

BRIDGETOWN, BARBADOS IRENA-CARIBBEAN COOPERATION FOR FOSTERING ENERGY TRANSITION INVESTMENTS AND FINANCE, MAY-JUNE 2023



17 projects featured8 Caribbean islands



Capacity building

Training on project finance to support developers in preparing bankable projects and share best practices for renewable energy project financing.



Deep-dive sessions

Focused on mobilising funding for infrastructure projects in the Caribbean.

- Panel session, "IRENA-Caribbean Cooperation for Fostering Energy Transition Investments and Finance", Bridgetown, Barbados, May-June 2023
- Provided insights from developers on challenges and opportunities for implementing renewable energy projects.

The event was held from 30 May to 1 June 2023 in Bridgetown, Barbados and was co-organised by the Government of Barbados and IRENA through the SIDS Lighthouses Initiative, in partnership with the Caribbean Climate-Smart Accelerator, the Caribbean Development Bank and the Caribbean Centre for Renewable Energy and Energy Efficiency. It was attended by leaders of Caribbean small island developing states (SIDS), policy makers, regulators, power utilities, and private sector representatives, as well as regional and international investors, project developers, financing institutions, donor countries and development partners, specialised investment funds, and regional, international and multilateral agencies.



Panel Session, IRENA-Caribbean Cooperation for Fostering Energy Transition Investments and Finance, Bridgetown, Barbados, May-June 2023





Financial Matchmaking

• 21 projects featured



 20 bilateral matchmaking meetings between project developers and financiers

২০ Technical assistance

- Provided personalised advice on the ground
- One-on-one project-centric technical review of projects and advice to developers



Deep-dive sessions

The first session focused on the financiers' experiences in the origination and appraisal of renewable energy projects in the region

The second session examined some of the key challenges and opportunities developers face The Latin American Energy Transition Investment Forum, held 7-9 November, 2023 in Montevideo, Uruguay, was a collaborative effort by IRENA, the Government of Uruguay, the Latin American Energy Organization (OLADE) and the Inter-American Development Bank (IDB). The event aimed to boost sustainable development by addressing regional challenges and facilitating capital mobilisation for energy projects, drawing global participation.



"Financiers' Perspective: Access to Energy Transition Finance", Latin America Energy Transition Investment Forum, Montevideo, Uruguay, November 2023.

NAIROBI, KENYA ACCELERATED PARTNERSHIP FOR RENEWABLES IN AFRICA (APRA) INVESTMENT FORUM, OCTOBER 2024

EF Financial matchmaking

- 25 projects featured
- Aggregated installed capacity of around 1 GW
- Aggregated total project cost of USD 2.7 billion
- **41** bilateral matchmaking meetings between project developers and financiers

Technical assistance

- Delivered context-specific training to developers
- Conducted in-depth, project-centric pitching sessions



- Deep-dive sessions • Deep-dive sessions discussed ways
 - Deep-dive sessions discussed ways to accelerate energy transition financing
 - Discussed challenges faced by developers with regards to finance and policy regulation

The APRA Investment Forum, co-hosted by IRENA and the Government of Kenya, was held on 14-16 October 2024 in Nairobi, Kenya. It brought together regional and global decision-makers from the public and private sectors, including governments, the financial community, development partners and other stakeholders who play an active role in realising the objectives of the APRA partnership.



Finance training, Accelerated Partnership for Renewables in Africa (APRA) Investment Forum, Nairobi, Kenya, October 2024.

CAPACITY BUILDING WORKSHOPS



SAINT LUCIA CARIBBEAN REGION CAPACITY BUILDING TRAINING, NOVEMBER 2022

23 delegates participated in the workshop



9 COUNTRIES were represented: Belize, Dominica, the Dominican Republic, Grenada, Guyana, Montserrat, Saint Lucia, Saint Vincent and the Grenadines, and Suriname The workshop was held in Saint Lucia from 22 to 24 November 2022, in collaboration with the Organization of Eastern Caribbean States (OECS). Its aim was to provide comprehensive knowledge on the rudiments of project finance to enhance the capacities of Caribbean renewable energy stakeholders.



Caribbean Region Capacity Building Training, Saint Lucia, November 2022

MAURITIUS CAPACITY BUILDING WORKSHOP, DECEMBER 2022



13 delegates participated in the workshop



5 COUNTRIES were represented: Comoros, Maldives, Mauritius, Seychelles, and São Tomé and Príncipe The capacity building workshop focused on project finance and facilitation support in the Atlantic, Indian Ocean and South China Sea (AIS) held in the SIDS region in December 2022. The workshop was organised in collaboration with the Ministry of Energy and Public Utilities of the Government of Mauritius. The objective was to provide comprehensive knowledge on the basics of project finance to enhance the capacities of renewable energy stakeholders in the participating countries.



Capacity Building Training. Port Louis, Mauritius December 2022.

UKRAINE CAPACITY BUILDING, OCTOBER 2023



Oo 11 delegates participated in the workshop included representatives from both the public and private sectors

IRENA, in collaboration with the US Department of State and the Government of Iceland, organised a comprehensive workshop on project finance during 4-6 October 2023 at IRENA's Innovation and Technology Center (IITC) in Bonn, Germany. The workshop aimed to provide comprehensive knowledge on the rudiments of project finance to enhance the capacity of Ukrainian officials to effectively navigate the complexities of project development and financing in the renewable energy sector.



Capacity Building Training, Bonn, Germany, October 2023.

FIJI PACIFIC REGION CAPACITY BUILDING, JANUARY 2024



17 delegates with diverse backgrounds, including project developers, financial institutions and government representatives

397 **7**7



7 SIDS represented: Federated States of Micronesia, Fiji, Palau, Samoa, Solomon Islands, Tuvalu and Vanuatu



Included practical and theoretical modules on project finance



One day devoted to project pitching by participants, with on-field technical advisory support for projects from five countries The capacity building workshop on project finance in the Pacific region, held from January 16 to 19 2024, was a continuation of IRENA's Project Facilitation and Support to different regions globally to advance understanding on renewable energy project finance, aimed at increasing the bankability of projects.



Pacific Region Capacity Building Training, Nadi, Fiji, January 2024.

KENYA AFRICAN REGION CAPACITY BUILDING, OCTOBER 2024



oQo 41 delegates participated in the training session



7 APRA Members were represented: Kenya, Ethiopia, Ghana, Namibia, Rwanda, Sierra Leone and Zimbabwe



The training covered project development, financial ratios, sensitivity analyses, and the current financial landscape



One day was dedicated to project pitching and technical advisory

The Project Finance Training was held during the Pre-Forum Days on 12-13 October 2024. The training introduced participants to IRENA's project facilitation tools, highlighted the fundamentals of project finance, and provided real-world examples of both successes and challenges in renewable energy project development, with a special emphasis on the APRA region. Apart from IRENA's sessions, the training also included a presentation showcasing tools and services offered by NDC Partnerships. the Global Alliance for People and Planet (GEAPP) and GET.Invest.



African Region Capacity Building Training, Nairobi, Kenya, October 2024.

BAKU, AZERBAIJAN CAPACITY BUILDING WORKSHOP, NOVEMBER 2024



Deep-dive sessions:

- The discussion centered around lowering barriers to scaling-up investments and de-risking projects, and capital mobilisation.
- The training sessions focused on IRENA Project Facilitation Tools available for developers and financial institutions working in the region.

The COP29 Pre-Investment Forum, jointly organized by the COP29 Azerbaijan Presidency and IRENA, addressed the critical need for enhanced investment in the energy transition. Held during the first week of the COP29 climate change conference in Baku, this two-day forum brought together key stakeholders, including governments, financial institutions, development partners, investors and project developers, particularly from Central Asia. It served as a platform to explore opportunities and challenges in mobilising substantial investments for energy transition projects.



IRENA Project Facilitation and Support Presentation. COP29 Pre-Investment Forum, Baku, Azerbaijan, November 2024.

