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IRENA
International Renewable Energy Agency

20 September 2024

Twenty-eighth meeting of the Council
Abu Dhabi, 24-25 October 2024

Annual Report of the Director-General on the Implementation of the Work Programme and Budget for 2024-2025

(including presentation of the Results-based Framework)

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IRENA AT A GLANCE

DIRECTOR-GENERAL

Francesco La Camera has been Director-General since 4 April 2019

DEPUTY DIRECTOR-GENERAL

Gauri Singh has been Deputy Director-General since 8 January 2020

YEAR OF ESTABLISHMENT

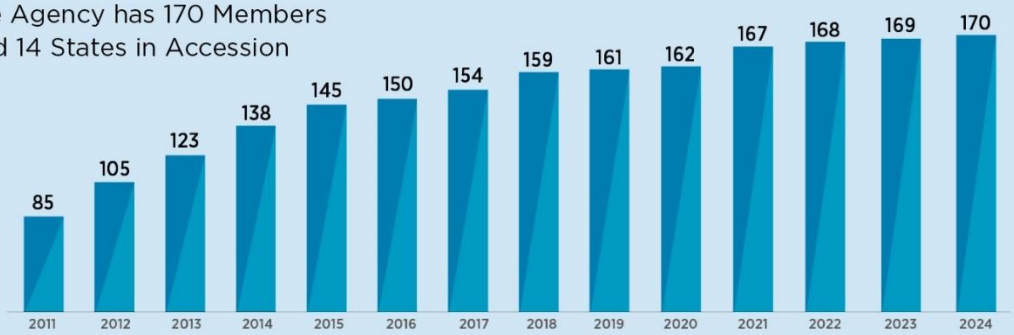
2011

OFFICES

In addition to its Headquarters in Abu Dhabi, IRENA has an office in Bonn, and a UN liaison office in New York.

IRENA MEMBERSHIP

As of 10 Septmber, the Agency has 170 Members and 14 States in Accession



14TH ASSEMBLY BUREAU

President: Rwanda

Vice-Presidents:

Angola

Dominican Republic

Georgia

Iraq

COUNCIL

21 Members

28th Council

Chair (designate): Zimbabwe

Vice-Chair (designate): Bangladesh

29th Council

Chair: TBC

Vice-Chair: TBC

2 Committees

Administration & Finance

Chair: Tonga

Vice-Chair: UAE

Programme & Strategy

Chair: El Salvador

Vice-Chair: USA

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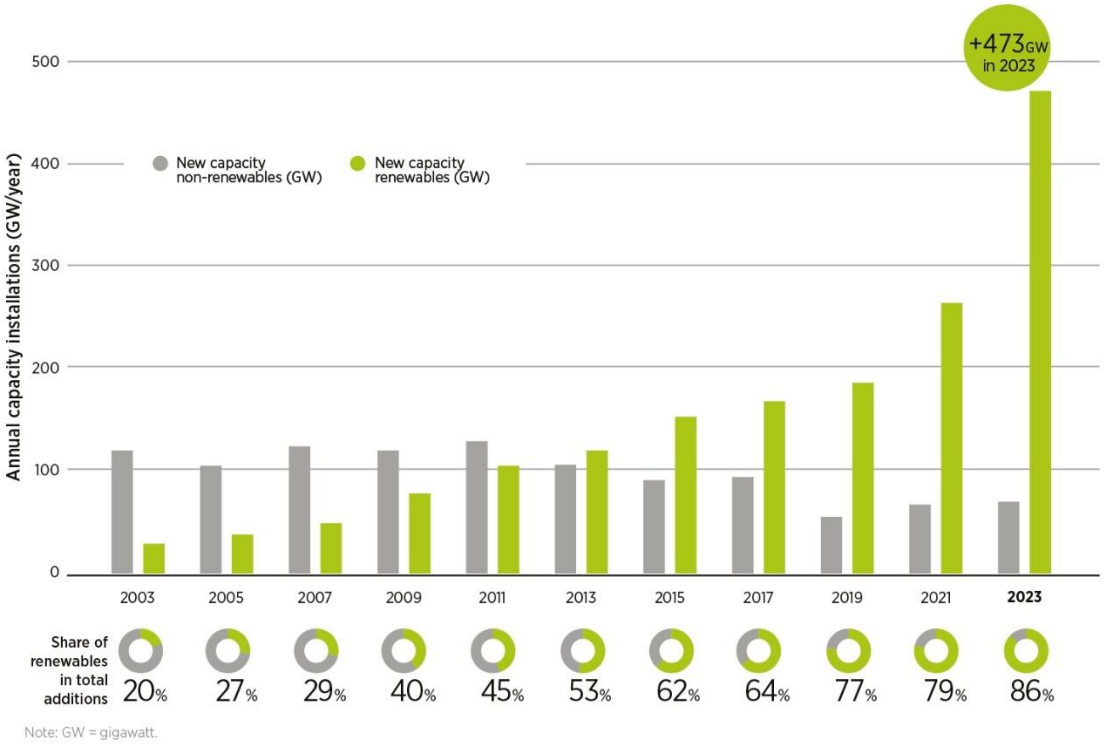
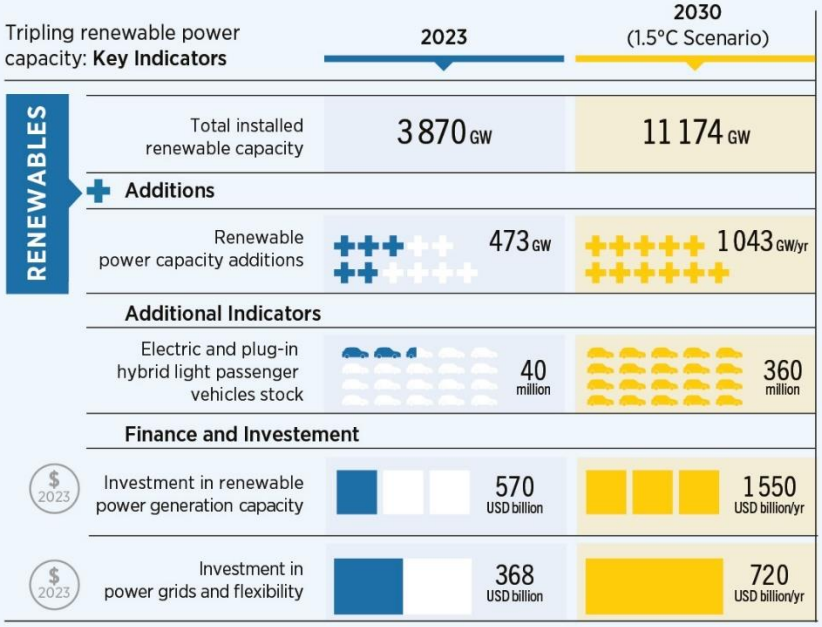
ENERGY TRANSITION AT A GLANCE

Annual installed power capacity additions, 2003-2023



Note: GW = gigawatt.

Tracking COP28 outcomes: Tripling renewable power capacity by 2030



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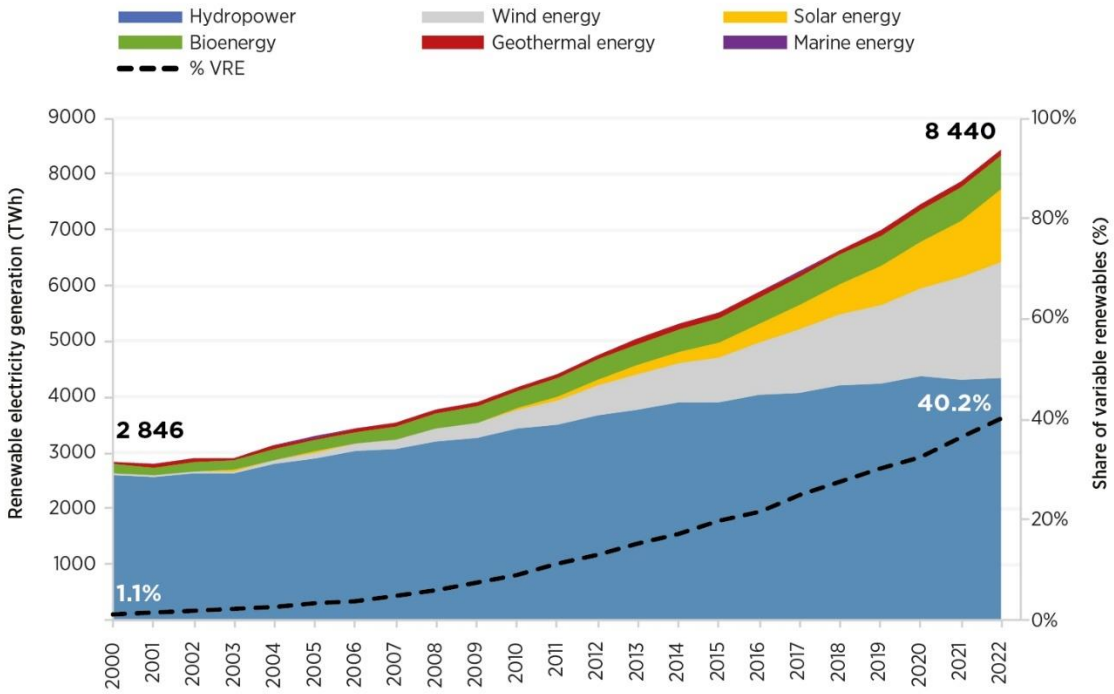
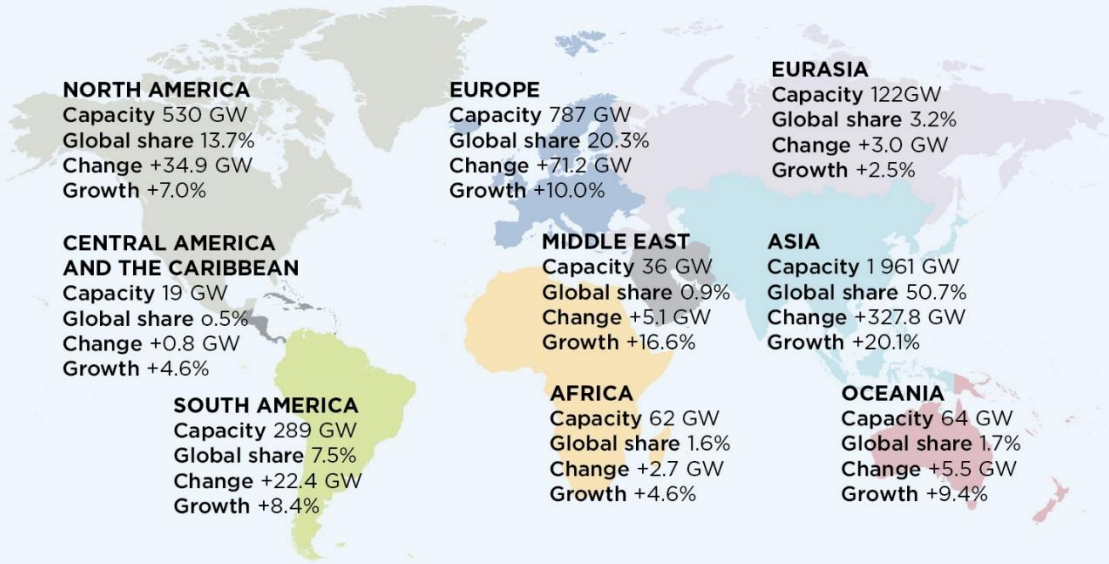
ENERGY TRANSITION AT A GLANCE

Total electricity generation increased by 2.4% annually since 2011



Renewable generation capacity by region



NORTH AMERICA
Capacity 530 GW
Global share 13.7%
Change +34.9 GW
Growth +7.0%

CENTRAL AMERICA AND THE CARIBBEAN
Capacity 19 GW
Global share 0.5%
Change +0.8 GW
Growth +4.6%

SOUTH AMERICA
Capacity 289 GW
Global share 7.5%
Change +22.4 GW
Growth +8.4%

EUROPE
Capacity 787 GW
Global share 20.3%
Change +71.2 GW
Growth +10.0%

MIDDLE EAST
Capacity 36 GW
Global share 0.9%
Change +5.1 GW
Growth +16.6%

AFRICA
Capacity 62 GW
Global share 1.6%
Change +2.7 GW
Growth +4.6%

EURASIA
Capacity 122GW
Global share 3.2%
Change +3.0 GW
Growth +2.5%

ASIA
Capacity 1 961 GW
Global share 50.7%
Change +327.8 GW
Growth +20.1%

OCEANIA
Capacity 64 GW
Global share 1.7%
Change +5.5 GW
Growth +9.4%

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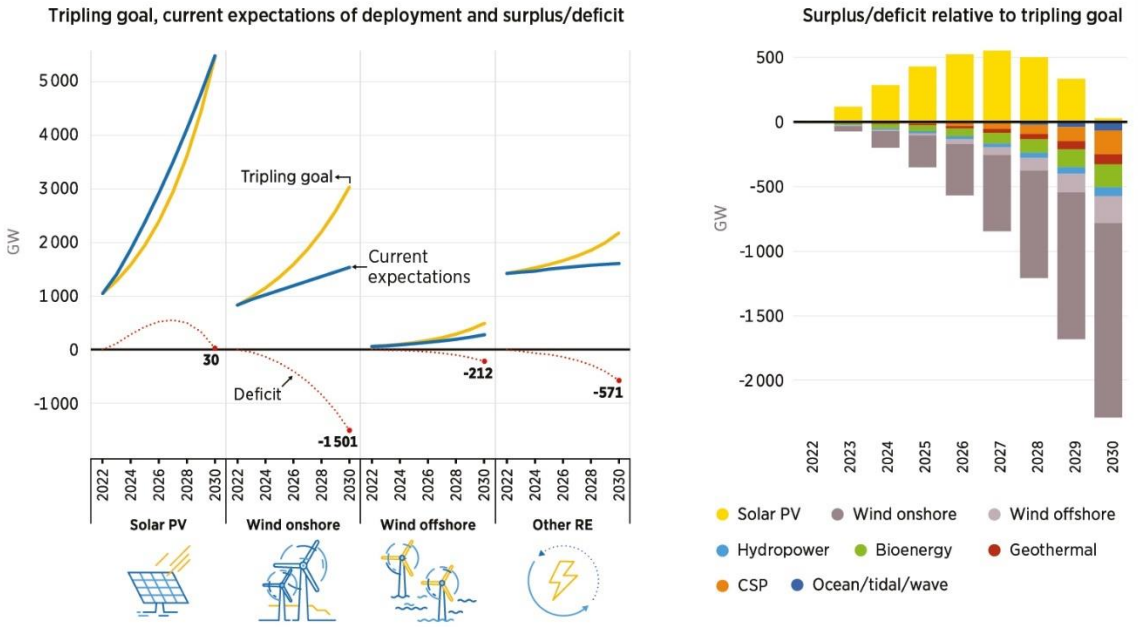
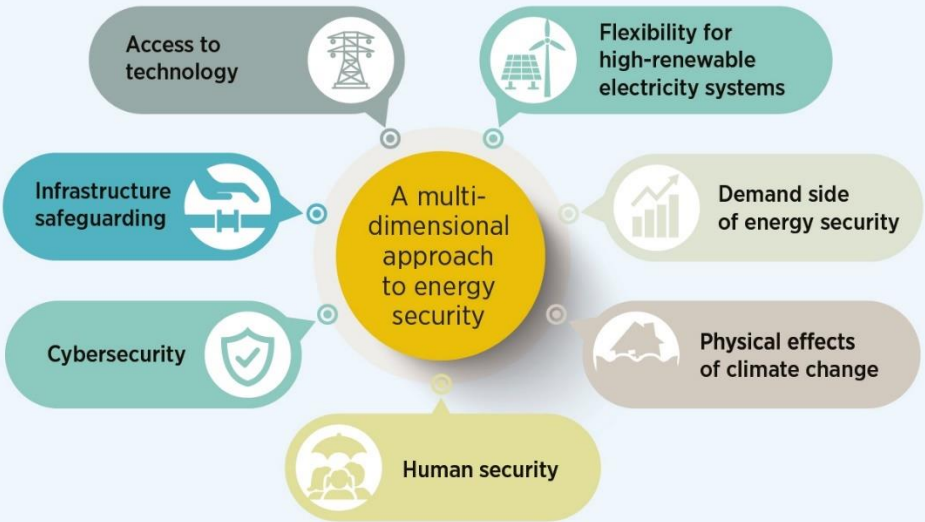
ENERGY TRANSITION AT A GLANCE

Current expectations of global cumulative renewable power capacity to 2030 compared to the tripling goal by technology, 2022-2030



Based on: (BNEF, 2023a, 2024a; IRENA, 2023d; SolarPower Europe, 2023; WindEurope, 2024; Wood Mackenzie, 2024).
Note: The tripling pathway is based on a fixed, simple compound average growth rate needed to increase the capacity of each technology from its base in 2022 to the 2030 tripling goal value. It is therefore only indicative of one possible pathway.

A multi-dimensional approach to energy security



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ENERGY TRANSITION AT A GLANCE

Primary indicators of global progress toward the SDG 7 targets

INDICATOR	2015	LATEST YEAR
7.1.1 Proportion of population with access to electricity	**957.5 million** people without access to electricity	**685 million** people without access to electricity (2022)
7.1.2 Proportion of population with primary reliance on clean fuels and technology for cooking	**2.7 billion** people without access to clean cooking	**2.1 billion** people without access to clean cooking (2022)
7.2.1 Renewable energy share in total final energy consumption	**16.7%** share of total final energy consumption from renewables	**18.7%** share of total final energy consumption from renewables (2021)
7.3.1 Energy intensity measured as a ratio of primary energy and GDP	**4.9 MJ/USD** primary energy intensity	**4.6 MJ/USD** primary energy intensity (2021)
7.a.1 International financial flows to developing countries in support of clean energy research and development and renewable energy production, including in hybrid systems	**12.3 USD billion** international financial flows to developing countries in support of clean energy	**15.4 USD billion** international financial flows to developing countries in support of clean energy (2022)
7.b.1 Installed renewable energy-generating capacity in developing and developed countries	**250 watts per capita** installed renewables capacity	**424 watts per capita** installed renewables capacity (2022)

4

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SECRETARIAT AT A GLANCE

44 publications

20 publications were translated into: AR CH FR DE IT JP PT RU SP

- Tracking COP28 outcomes: Tripling renewable power capacity by 2030
- Floating offshore wind outlook
- Geopolitics of the Energy Transition: Energy security
- Green hydrogen for sustainable industrial development: A policy toolkit for developing countries
- Renewable capacity statistics 2024
- Renewable energy statistics 2024
- Sub-Saharan Africa: Policies and finance for renewable energy deployment

103 events organised/ co-organised by IRENA

46 virtual events + **57 in-person events**

IRENA employs a talented and diverse workforce

178 posts filled

78 nationalities

stationed in Abu Dhabi, Bonn and New York, 46% are women and 54% are men.

8 loaned or seconded officers

Senior Team Gender Balance

50/50

9 714 applications received for 26 vacancies

Media coverage:

27 600 media articles in **52** languages across **164** countries

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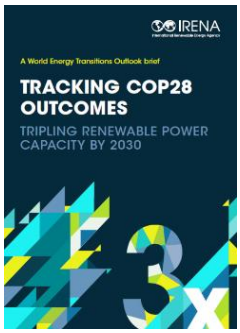
Advancing efforts to achieve a net-zero future for all

Guided by the Medium-term Strategy 2023-2027 adopted last year, IRENA's Work Programme and Budget for 2024-2025 continues to provide analytical, empirical and country support, while benefiting from a number of partnerships and collaborative arrangements. Furthermore, it has expanded its areas of work, extending support to regions as well as deepening its work in the areas of project facilitation and capital mobilisation.

The Work Programme continues to ensure the findings of the Agency's analysis are applied through meaningful programmatic activities to fill knowledge gaps and help shape immediate actions to promote a just and inclusive transition, including by driving investment at scale to support a global renewables-based energy system.

This report presents the Agency's programmatic activities undertaken since January 2024.



The historic decision at COP28 to triple renewable energy capacity globally and double the global average annual rate of energy efficiency improvements by 2030 was largely based on the findings of the IRENA analysis presented in the flagship report World Energy Transitions Outlook. A companion brief on **Tracking COP28 outcomes: Tripling renewable power capacity by 2030,**[1] released at the Berlin Energy Transition Dialogue (BETD) on 19-20 March 2024, offers the most recent tracking data and analysis of global progress towards the objective of tripling global renewable power capacity by 2030.

IRENA analysis shows that expediting the adoption of renewable energy, whilst also implementing complementary energy efficiency measures, presents the most feasible means to decrease global emissions by 43% by 2030, aligning with the conclusions drawn by the Intergovernmental Panel on Climate Change (IPCC). In 2023, the positive trajectory continued; IRENA data indicates that there was an unparalleled surge in renewable power additions – thus, setting a new benchmark in renewable power deployment. 473 GW were added to the global energy mix – accounting for 87% of total newly installed capacity – with solar energy accounting for 73% of this growth (Figure 1).

WETO brief

However, the renewable power capacity does not come near the required c. 1 000 GW per annum that should be deployed by 2030 to hit the target on time (Table 1). The progress in advancing the energy transition thus far is insufficient and its trajectory is markedly off course. Consequently, the average annual capacity additions required are now approaching 1 050 GW for the remainder of the decade to keep 1.5°C within reach. Under IRENA's 1.5°C Scenario, the Group of 20 (G20) countries alone would need to grow their collective renewable power capacity from less than 3 terawatts (TW) in 2022 to 9.4 TW by 2030, accounting for more than 80% of the global total capacity.

Furthermore, the distribution of renewable installed capacity remains highly uneven across the world, both in terms of geography and technology, preventing many countries in the developing world from accessing the development benefits offered by renewables. Solar and wind continue to dominate renewable energy deployment, which itself remains concentrated in a limited number of markets.

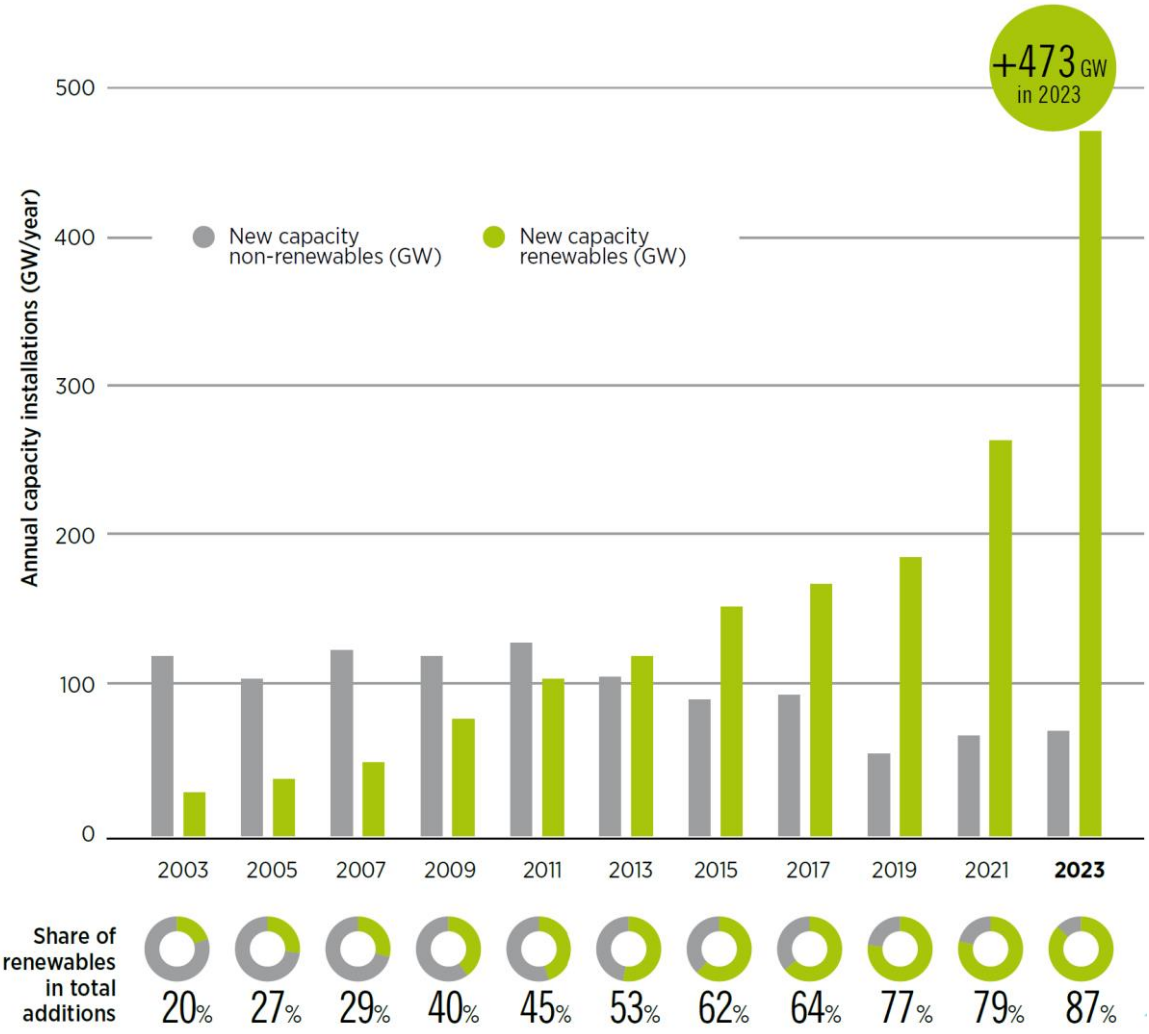
Success also hinges on sustainable and sufficient levels of investments towards the deployment of renewable energy, especially towards the countries in greatest need. In 2023, energy transition-related investments are estimated to have exceeded USD 2 trillion yet emerging market and developing economies accounted for just over half of global investments, with sub-Saharan Africa receiving the least investment in renewables.

[1] Available here.

Comparatively, on a per capita basis, advanced economies (comprising 38 countries and making up 14% of the world's population) attracted five times more investment.

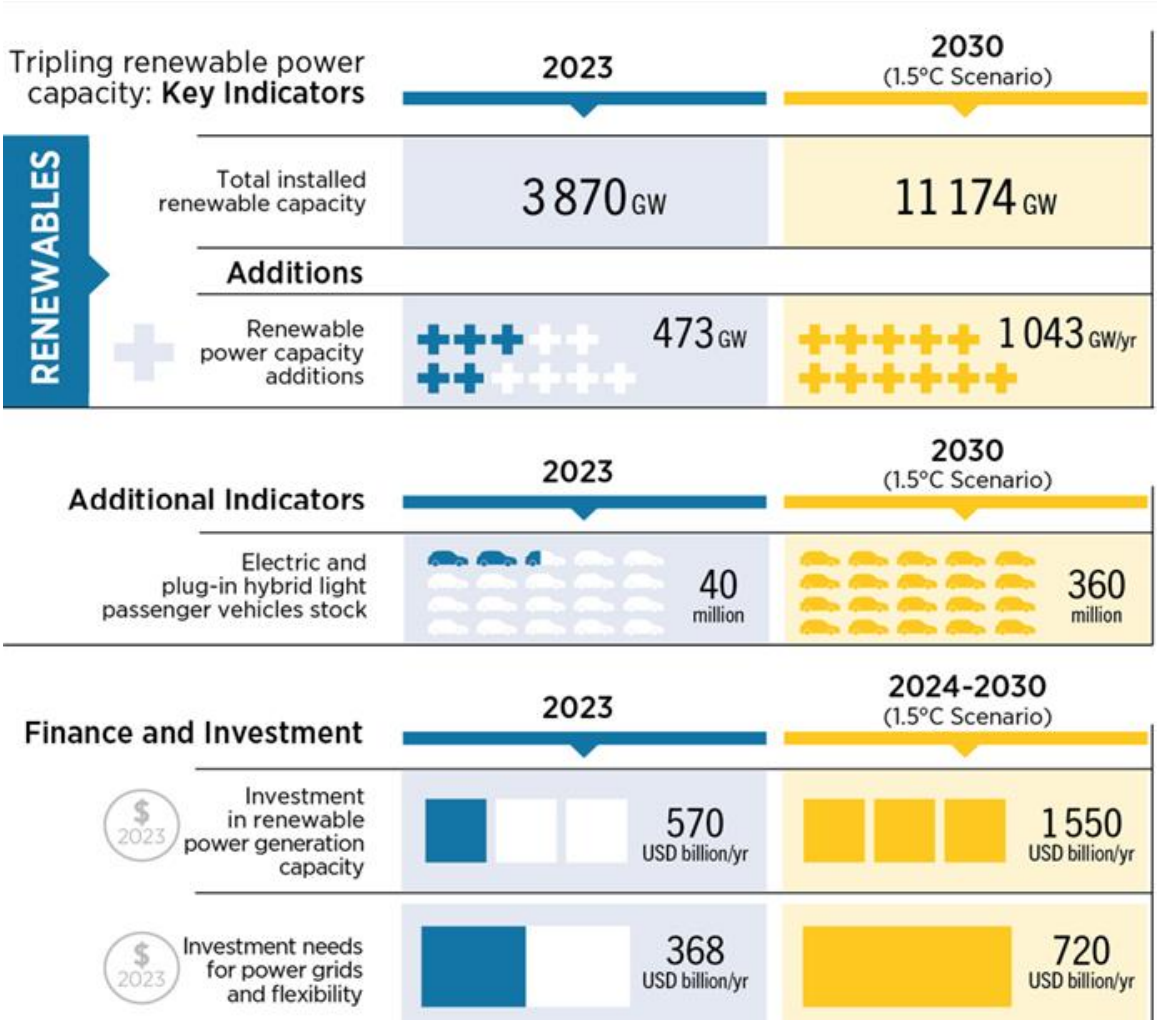
Tripling renewable power capacity by 2030 is both technically feasible and economically viable but requires commitment, policy support and investment at scale. To overcome the barriers impeding the global energy transition and to meet the targets by 2030, the report reiterates the need for a three-pronged approach: modernise and expand physical infrastructure; establishing policies and regulations; and building institutional and human resource capabilities fit for the renewables era. Critical enablers underpinning these pillars will be scaled up financing and intensified international collaboration.

Figure 1: Annual installed power capacity additions, 2003-2023.



Source: IRENA, *Tracking COP28 outcomes: Tripling renewable power capacity by 2030*, 2024.

Table 1: Key indicators for the energy transition show inadequate progress.



Source: IRENA, *Tracking COP28 outcomes: Tripling renewable power capacity by 2030*, 2024

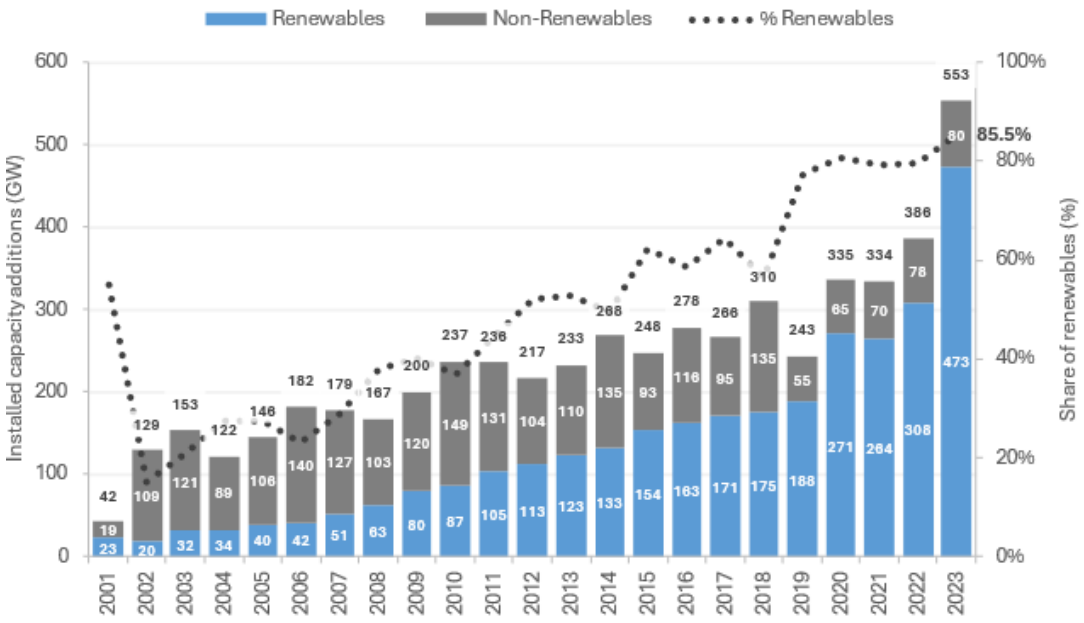
In his keynote presentation at the high-level panel on ***A Global Renewables & Energy Efficiency Target – Commitment to Action*** during the **Berlin Energy Transition Dialogue (BETD)**[2] - organised on 19-20 March 2024 - the IRENA Director-General presented the WETO brief. This session discussed the current state of the global energy transition, highlighting recent success stories and remaining challenges in countries and regions worldwide, as well as avenues and actions to ensure the implementation of the targets set at COP28. In addition, during the high-level policymaker breakfast on ***Fostering Africa-Europe energy cooperation: Implementing commitments and realising Africa's energy transformation***, the Director-General

[2] More information available here.

highlighted how the Accelerated Partnership for Renewables in Africa (APRA) offers an opportunity for European countries to play a prominent role in partnering with Africa to achieve the COP28 targets.

The findings of the 2024 **Renewable capacity statistics 2023**[3] report demonstrate that renewable energy sources have solidified their position as the primary option for new power generation, reverberating throughout the energy sector in recent years. The upward trend continued in 2023, with 473 GW of capacity added, thus increasing total renewable capacity by 14.0% to reach 3 865 GW. Renewable sources of energy accounted for 85.5% of total capacity additions (Figure 2). Solar energy accounted for the largest share of the global total, with a capacity of 1 419 GW. Renewable hydropower and wind energy accounted for most of the remaining additions, with capacities of 1 268 GW and 1 017 GW, respectively.

Figure 2: Renewables share of annual global power capacity expansion, 2001-2023

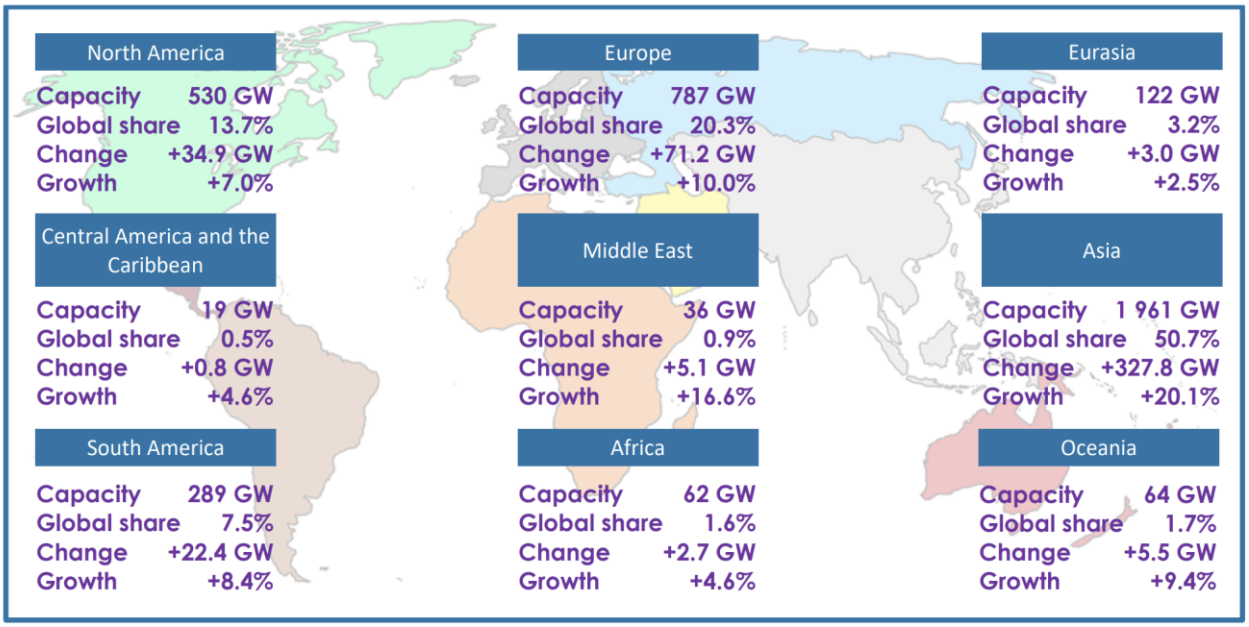


Source: IRENA, *Renewable capacity statistics 2023,* 2024

[3] Available here.

In terms of regional distribution, once again, Asia represented the largest proportion of new capacity additions with 328 GW added in 2023, representing 69% of global new capacity added. This region is now home to a total of 1 961 GW of renewable capacity – 50.7% of the global total. The primary contributor was China, with a substantial addition of 298 GW. Europe and North America also saw expansions in capacity, with increases of 71.2 GW (10% higher than in 2022) and 34.9 GW (7% higher than in 2022), respectively. Oceania rose by 5.5 GW (9% higher than in 2022), primarily owing to capacity additions in Australia, while South America continued its upward trajectory, expanding by 22.4 GW (8.4% higher than in 2022). The Middle East achieved its highest-ever expansion, with the addition of 5.1 GW of new capacity in 2023, representing a growth rate of 16.6%. (Table 2).

Table 2: Renewable generation capacity by region

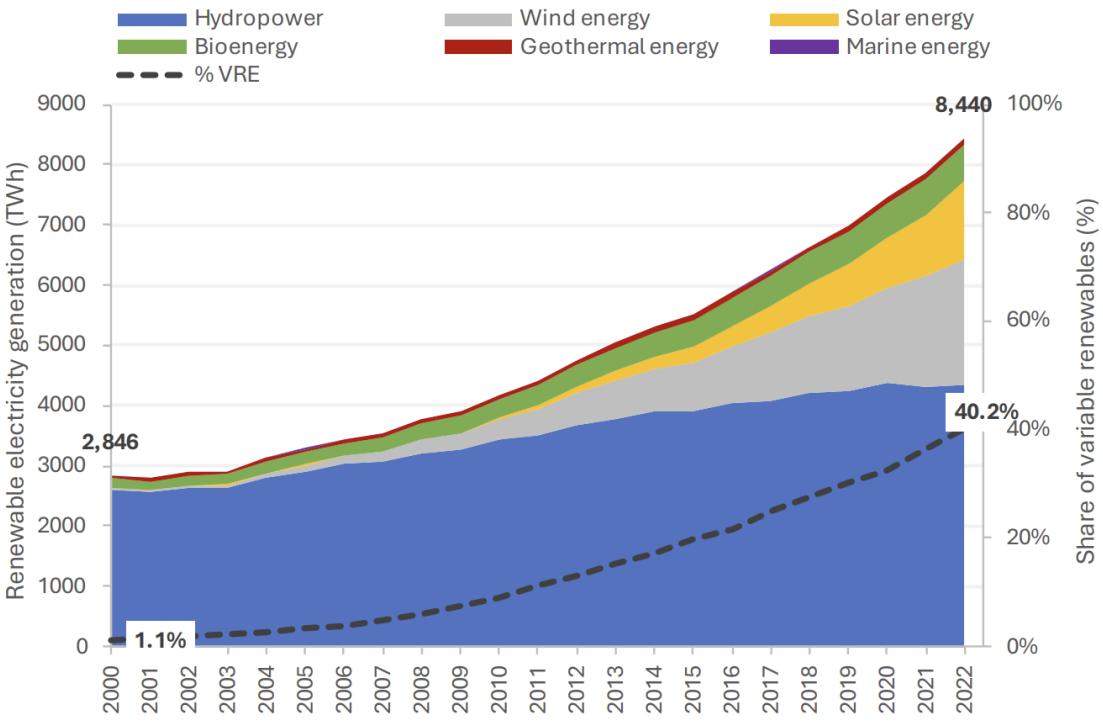


Source: IRENA, *Renewable Capacity Statistics 2024*, 2024

The 2024 edition of IRENA's **Renewable energy statistics 2024**[4] report highlights the steadily increasing trajectory of global renewable electricity generation. In 2022, electricity generated from renewables reached 8 440 TWh worldwide, accounting for 29.1% and registering a 7.2 % increase from the previous year. Hydropower continues to provide the bulk of electricity generation accounting for 4 330 TWh, with a modest increase of 0.8%). Yet consistently since 2010, solar and wind energy are the two renewable energy sources driving the largest growth in renewable electricity, with wind reaching 2 098 TWh and solar 1 294 TWh, and a respective increase of 14% and 25.6% since 2021. They were followed by bioenergy, producing 619 TWh; geothermal contributing 97 TWh and marine energy producing 1 TWh (Figure 3). Asia continues to dominate in absolute terms of renewable electricity generation, generating 3 749 TWh in 2022. For the first time, North America came second, producing 1 493 TWh, followed by Europe – the region generated 1 462 TWh - and South America that generated 940 TWh. Oceania generated 125 TWh, a robust 14.1% increase across energy sources.

[4] Available here.

Figure 3: Cumulative renewable electricity generation, 2000 to 2022

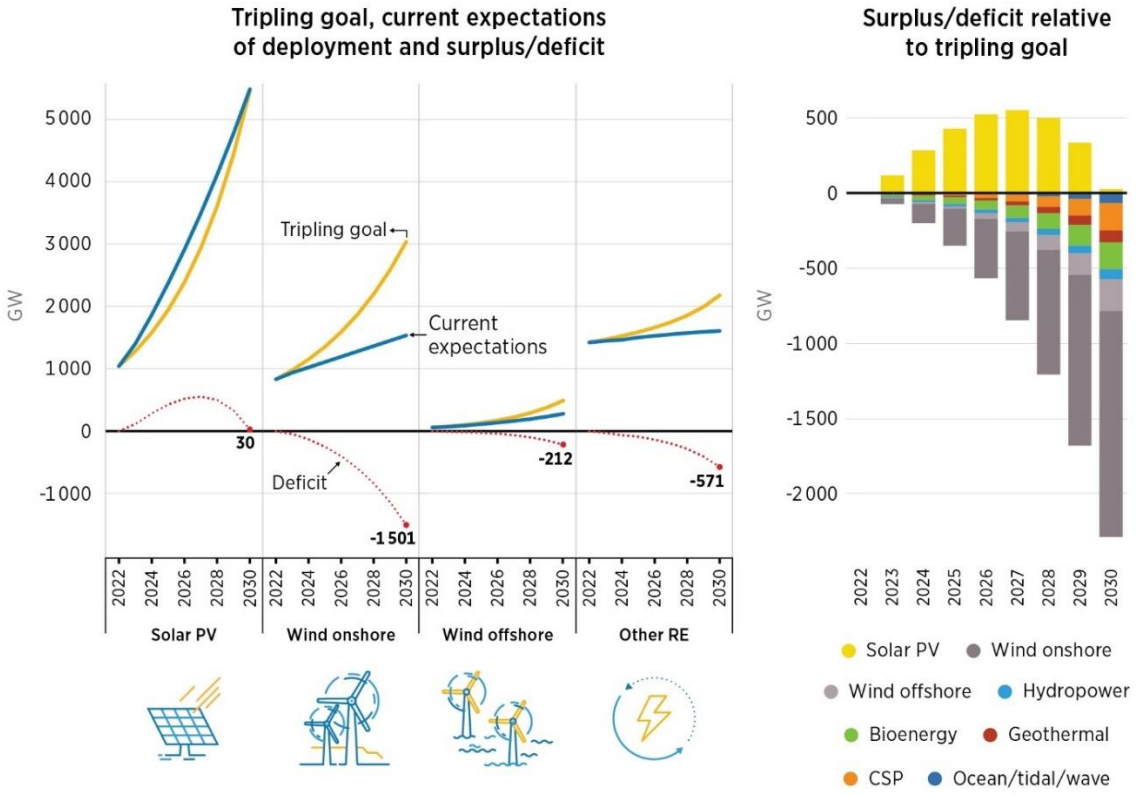


Source: IRENA, *Renewable energy statistics 2024*, 2024

The Group of 7 (G7) countries will play an important role in delivering on the COP 28 goal through the expansion of renewable power capacity within its members, and by leading action to address deployment and integration barriers as well as supporting emerging and developing economies in delivering their contributions. In support of the G7 Italian 2024 Presidency and to inform discussions during meetings of the G7 senior officials and G7 Ministers' Meeting on Climate, Energy and Environment - held in Turin, Italy on 29-30 April 2024 - IRENA developed three reports. The **Tripling renewable power by 2030: The role of the G7 in turning targets into action**[5] report showcases advancements made in various energy transition metrics, including those in enabling areas required to support the tripling goal (*e.g.* grid investments, renewable power curtailment, etc.). The report provides clear recommendations to the G7 on how to address the expected gaps in deployment and delivery risks, including the role of storage targets; the modernisation and expand of grids to cope with the tripling goal; the importance of developing a skilled workforce; the challenge of increased cost of capital, particularly for emerging markets; and the G7's crucial role in supporting emerging market and developing countries to ensure global alignment with COP 28 targets that help deliver Paris Agreement goals (Figure 4).

[5] Available here.

Figure 4: Current expectations of global cumulative renewable power capacity to 2030 by technology compared to the tripling goal, 2022–2030.



Source: IRENA, *Tripling renewable power by 2030: The role of the G7 in turning targets into action*, 2024.

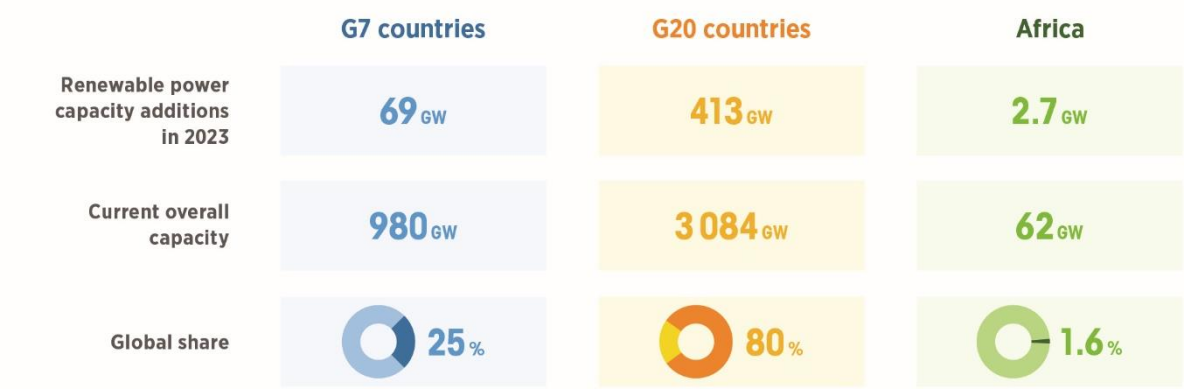
Renewable energy sources can significantly contribute to reducing carbon emissions in hard-to-abate sectors. While viable solutions are now more accessible than ever, and despite notable advancements and heightened interest from policymakers, none of the sectors facing significant decarbonisation challenges are currently projected to achieve net-zero emissions by 2050. IRENA's **Decarbonising hard-to-abate sectors with renewables: Perspectives for the G7**[6] report presents eleven recommendations for the G7 to accelerate the energy transition in those sectors in their countries. The report explores in detail the decarbonisation status, pathways and progress of five of these sectors; highlights cross-cutting issues, challenges and solutions; and provides concrete recommendations on how the G7 can establish the enabling conditions required to implement these solutions.

Africa continues to suffer from insufficient investment, with the continent receiving less than 2% of global investments in renewable energy over the last two decades. As a result, in 2023, the continent contributed only 1.6% of global renewable energy capacity growth. In the Nairobi Declaration on Climate Change in September 2023, African leaders had called on the international community to contribute to the goal of increasing renewable capacity on the continent from 56 GW in 2022 to 300 GW by 2030. The G7 could lead international collaboration in support of African-led initiatives to achieve this target. IRENA's report, **The energy**

[6] Available here.

transition in Africa: Opportunities for international collaboration with a focus on the G7[7], draws from the Agency's extensive work and partnerships with countries in the region, and builds on the work of G7 countries in Africa to date. It identifies priority areas for potential collaboration between the G7 and Africa, including increasing investment in infrastructure and enabling access to finance; expanding energy access and supporting the productive use of energy; effectively managing critical minerals for the energy transition; and strengthening institutional frameworks and capacity. Figure 4 shows the stark disparity in renewable energy capacity when compared with G7 and G20 countries. Specifically, Africa saw only 2.7 GW of renewable power capacity additions in 2023, compared to 413 GW in G20 countries, accounting for a mere 1.6% of global additions and indicating considerable scope for growth to unlock its renewable potential (Figure 5).

Figure 5: Geographical disparities in the distribution of renewables



Source: IRENA, *The energy transition in Africa: Opportunities for international collaboration with a focus on the G7*, 2024

[7] Available here.

In the **G7 Climate, Energy and Environment Ministers' Meeting Communiqué**[8] published on 30 April, G7 leaders tasked IRENA to track and monitor the group's collective contribution toward the global renewable tripling target by 2030.[9] The G7 Communiqué presented the Group's pledge to increase system flexibility through grid reinforcement, in line with IRENA analysis of key metrics. Falling within the range of IRENA's recommendations for energy storage capacity by 2030, it also called for the significant expansion of energy storage capacity, by more than six-fold by 2030, from 230 GW in 2022. IRENA, along with other organisations, was urged to continue working on industrial decarbonisation, and particularly standards and technology development for hard-to-abate sectors.

Achieving the ambitious COP28 renewables target will require concerted actions by the global community to modernise and expand relevant infrastructure, adopt enabling policies, adapt markets, and enhance institutional and human capacities. This will also inspire new perspectives on energy security, historically viewed through the lens of a fossil fuel-dominated era.

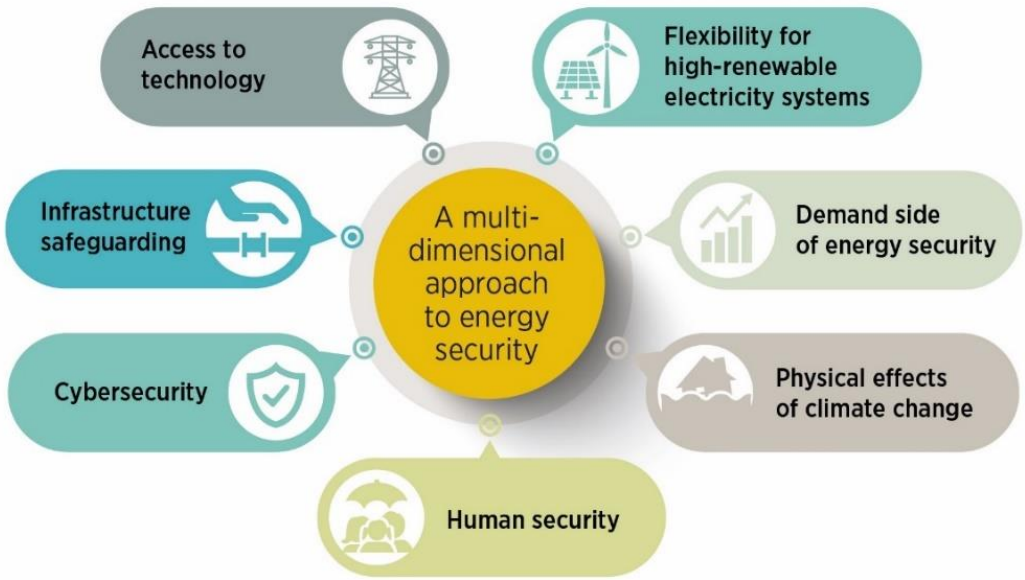
From an industry perspective, IRENA's **Alliance for Industry Decarbonization (AFID**) released a comprehensive report on **Solutions to decarbonise heat in the steel industry[10],** detailing a range of solutions to decarbonise steel manufacturing, such as shifting to low-carbon fuels like hydrogen, electrifying processes with renewable energy, and utilising waste heat recovery systems to improve efficiency and reduce emissions. The report emphasises the importance of collaboration among governments, industry stakeholders, and research institutions to create supportive policies and incentives. It also calls for significant investment in research, the implementation of pilot projects, and workforce training to advance decarbonisation technologies and ensure their successful implementation.

[8] Available here.
[9] More information available here.
[10] Available here.

IRENA's latest edition on the geopolitics of the energy transition series is the **Geopolitics of the energy transition: Energy security**[11] report. Developed under the IRENA Collaborative Framework on the Geopolitics of Energy Transformation, the report stresses the need for a different approach (Figure 6) from the fossil fuel era, and provides related policy recommendations (Figure 7), while placing people and planet at the centre of this changing energy security landscape. Specifically, it cautions against merely transposing thinking from the fossil fuel era to a renewables-based system and identifies multiple issues to take into consideration during national decision making on resource endowments and comparative advantages. This is particularly vital as governments make significant investments in infrastructure for systems that are increasingly electrified, digitalised and decentralised. Crucially, the report underlines that that efforts to enhance energy security are political as well as technical in nature.

Geopolitics: Energy Security

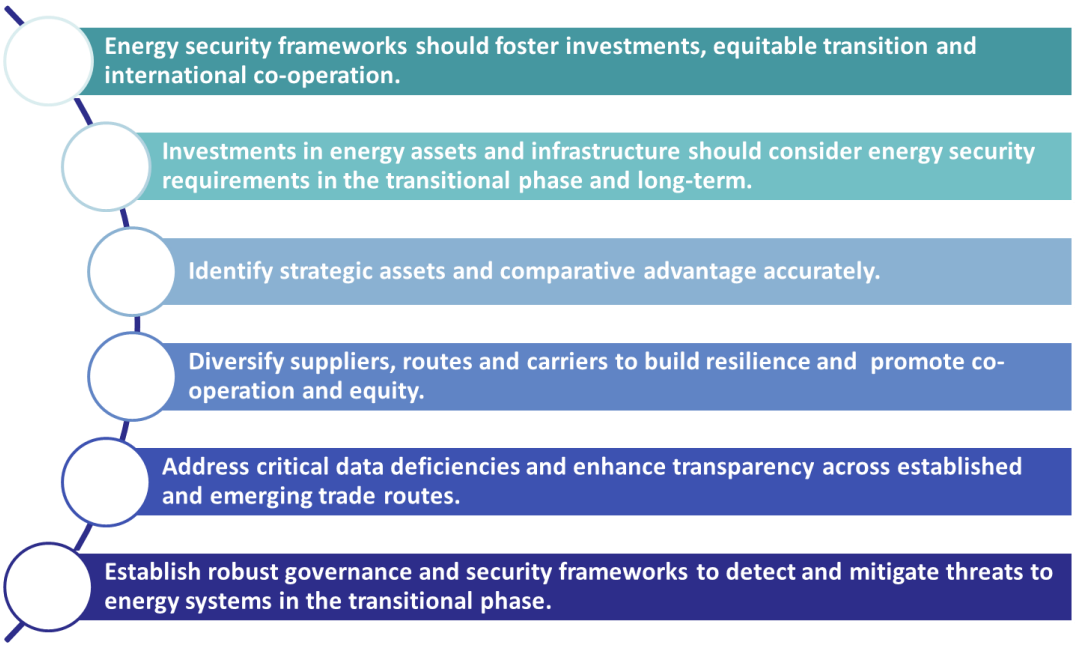
Figure 6: A multi-dimensional approach to energy security



Source: IRENA, *Geopolitics of the energy transition: Energy security*, 2024.

[11] Available here.

Figure 7: Policy recommendations for the new era



Source: IRENA, *Geopolitics of the energy transition: Energy security*, 2024

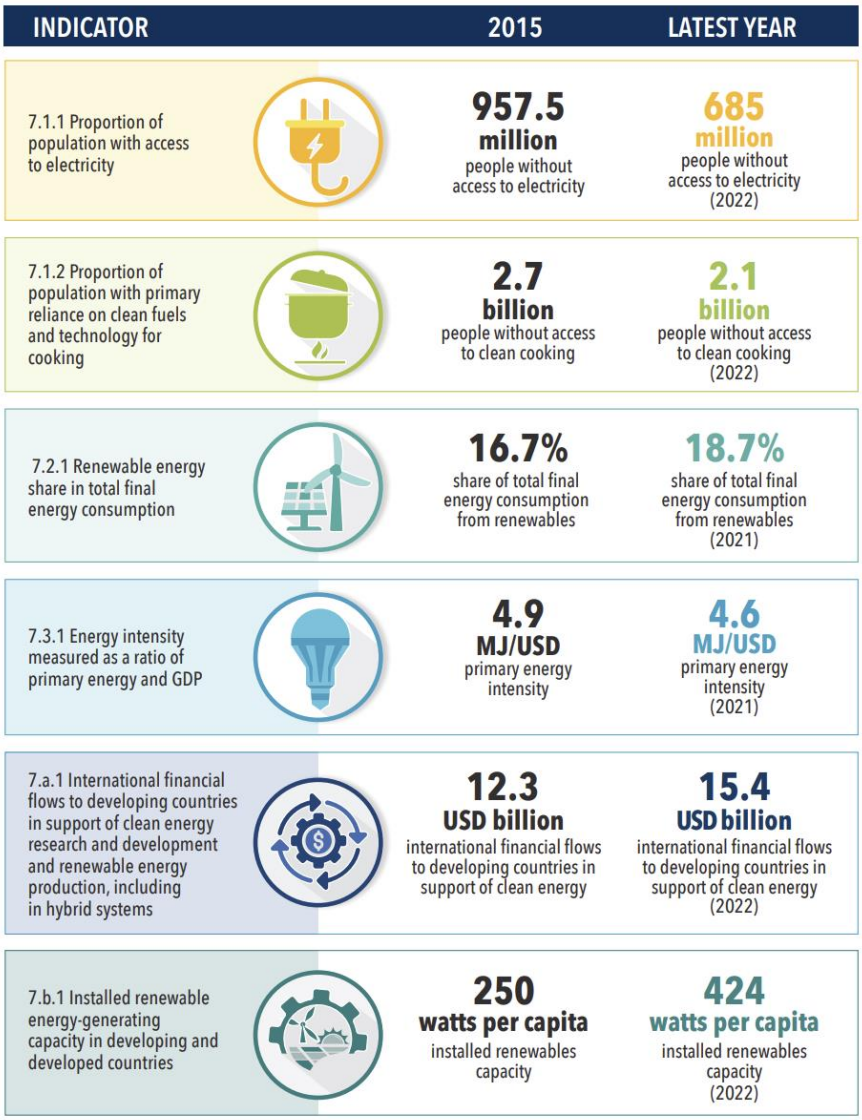
IRENA is a custodian of indicators 7.a.1 (International public finance for renewables) and 7.b.1/12.a.1 (Renewable capacity per capita) of Sustainable Development Goal 7 (SDG 7) and SDG 12, with the responsibility of developing and publishing related statistics for these two indicators. The Agency published updated data for both indicators in the Global SDG Indicators Database[12] on 28 March – data that was also featured in the IRENA Capacity Statistics 2024 online tools. Using the updated indicators, IRENA developed storylines on renewable energy and public finance directed towards developing countries. IRENA's analysis shows that whilst global installed renewable energy capacity has been on the rise – reaching 424 watts per person in 2022 – developed countries account for 3.7 times more installed renewable energy capacity than developing countries. Meanwhile, whilst international public financial flows in support of clean energy in developing countries reached USD 15.4 billion (an increase of 25% from 2021), this remains around half of the 2016 peak of USD 28.5 billion. These findings will serve as IRENA's contribution to the United Nations SDG Report 2024, to be published in July 2024.

IRENA contributed to the **Global Stocktake of SDG 7**[13] event held at United Nations Headquarters on 19 April, to review progress achieved at the conclusion of the UN Decade of Sustainable Energy for All (2014-2024) and raise ambitions regarding SDG 7. To inform the Stocktake and its outcomes, IRENA together with the other SDG 7 custodian agencies[14], developed the **Tracking SDG 7: Energy Progress Report brochure**[15] upon the request of the United Nations. The brochure provided a snapshot of the latest information on global progress in achieving access to affordable, reliable, sustainable and modern energy for all.

[12] Available here.
[13] The Stocktake was mandated through UNGA resolution 77/170, requesting the President of the General Assembly to convene a global stocktaking on global progress on SDG 7.
[14] World Bank, International Energy Agency, United Nations Statistics Division, and World Health Organization.
[15] Available here.

The 2024 edition of the **Tracking SDG 7: The Energy Progress Report 2024**[16] was launched at a side event during the 2024 High-level Political Forum in New York, USA. The report found that progress on basic energy access reversed for the first time in a decade. As population growth outpaces new connections, 685 million people living without electricity access in 2022, and 2.1 billion people continue to rely on damaging cooking fuels globally. Renewable energy has seen robust growth over the past two years, and energy efficiency improvements is gradually improving after a drop-off during the pandemic, albeit still not enough to meet the SDG 7 target. Renewables accounted for 18.7% of total final energy consumption worldwide in 2021 – a marginal increase compared to 16.7% in 2015. Progress in energy efficiency has been slow, with only 0.8% in 2021. Moreover, while 74% of the world's population had access to clean cooking technologies in 2022, 2.1 billion people continue to depend on polluting fuels. International public financial flows in support of clean energy in developing countries increased by a record 25% - USD 15.4 billion – in 2022 compared to 2021 (Figure 8). The disparities between geographies in terms of attracting them persist, with 80% of flows going to 25 countries.

Figure 8: Current status of indicators for Sustainable Development Goal 7



Source: IEA, IRENA, UNSD, World Bank and WHO, *Tracking SDG7: The energy progress report*, 2024

[16] Available here.

In preparations for the Global Stocktake, IRENA was invited to outline the current status of renewable energy and finance in **Regional Consultations** organized by UN-Energy between February and April 2024. At the meetings, IRENA discussed progress related to SDG 7 indicators on renewable energy and public financial flows in support of clean energy, highlighting key shortfalls leading to inadequate progress. IRENA stressed that to meet the objectives of the 2030 Agenda, the share of renewables in total final energy consumption (TFEC) would need to almost triple to 33-38% by 2030, while the flow of finance from developed to developing countries should substantially increase through official development assistance, risk mitigation and a more equitable landscape for lending.

In focus:
International Day of Clean Energy

In recognition of IRENA's leading role in accelerating the renewables-based energy transition globally, the United Nations proclaimed 26 January – the Agency's founding date – as the **International Day of Clean Energy**. The inaugural celebration coincided with the 15th anniversary of IRENA. In a video message, the IRENA Director-General stressed that "the establishment of an international day is a testament to the growing support for renewables seen worldwide. A fair, just, equitable and urgent transition towards clean energy is essential to avoid the worst of climate effects and spur sustainable development".

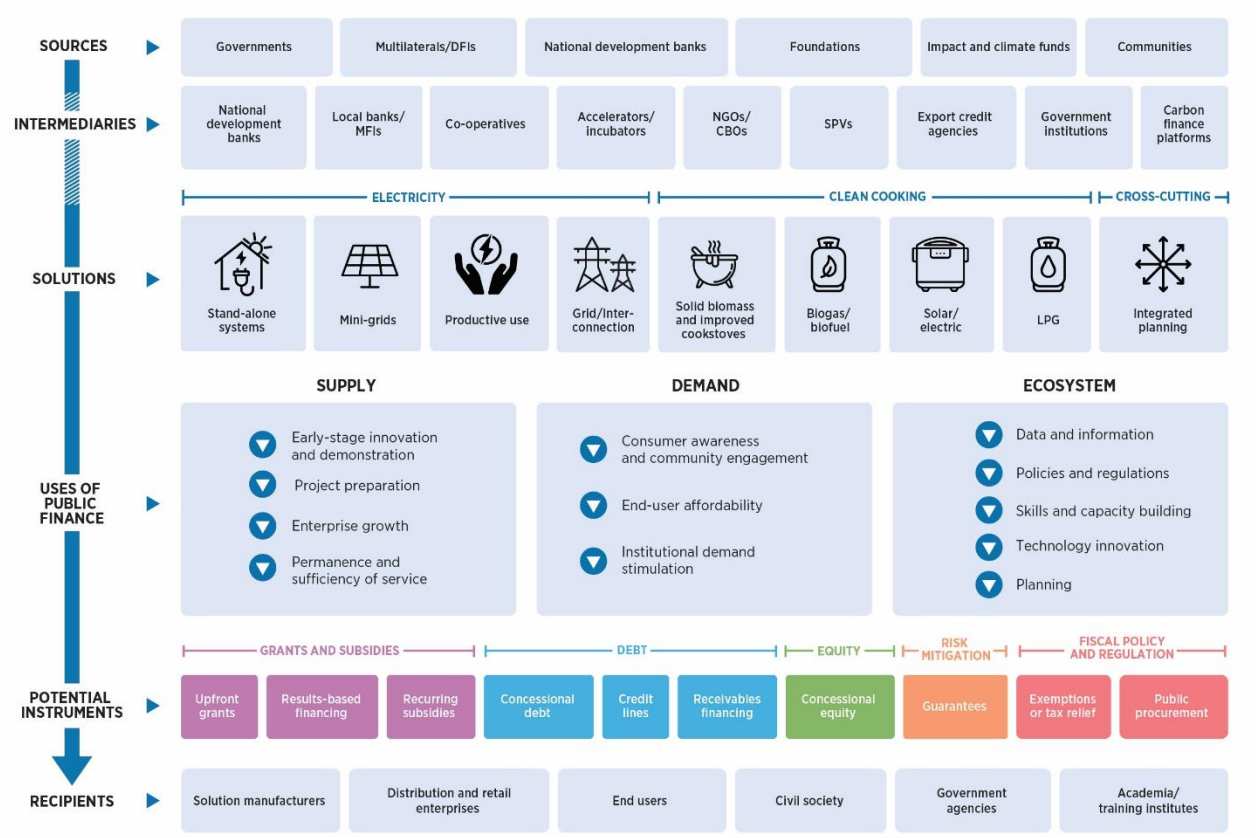
To commemorate the occasion, IRENA, together with the Permanent Missions of the United Arab Emirates and Panama to the UN – the two countries that had tabled the resolution - organised a virtual meeting on 25 January[17] under the umbrella of the **Renewables Talk for IRENA Permanent Representatives**, with the theme **Building a Sustainable Future: Renewables for Climate Action and Sustainable Development**.[18]

The 15th edition of the Renewables Talk brought together high-level participants from IRENA Members and partners to celebrate the International Day of Clean Energy and raise awareness about the importance of clean energy in extending access to energy worldwide. It also advocated for international efforts to realise the objectives outlined in the Paris Agreement and the 2030 Agenda and provided insights into the outcomes of COP28 negotiations regarding the advancement of clean energy.

Public finance is crucial to achieving universal energy access. While a range of technological solutions already exist for electrification and clean cooking, public financing remains essential to deploy energy services in areas unaddressed by the market, e.g. planning and building energy infrastructure and an ecosystem that supports the sustainability and resilience of energy deployment – such as education, agriculture, healthcare, industrial development, capacity building, awareness raising and skills development. IRENA's **Public finance and policy for energy access**[19] brief offers a framework to guide policymakers and public financiers in identifying the necessary finance to advance energy access (Figure 9). The framework (a) maps the public finance needs across the energy access ecosystem; (b) identifies challenges in scaling up public finance for energy access; and (c) identifies stakeholder preferences across public finance instruments, intermediaries and recipients.

[17] More information available here.
[18] More information available here.
[19] Available here.

Figure 9: IRENA's framework for the use of public finance for expanding energy access



Notes: CBO = community-based organisation. DFI = development finance institution. LPG = liquefied petroleum gas. NGO = non-governmental organisation. SPV = special purpose vehicle.

Source: IRENA, *Public finance and policy for energy access*, 2024

It is widely accepted that the uptake of renewables in Africa holds the key to the continent's socio-economic transformation as well as in tackling the challenge of growing populations and economies, by reducing reliance on fossil fuels for power generation and harmful use of biomass for heating and cooking. Yet even though Africa has an abundance of renewable resources, energy access remains overall low, with 571 million people in sub-Saharan countries still lacking it in 2022. Moreover, the region received less than 1.5% of the USD 2.8 trillion invested globally in renewable energy projects over 2000-2020, with its share dropping to less than 1% of the global total in 2022. IRENA's **Sub-Saharan Africa: Policies and finance for renewable energy deployment**[20] report examines more closely the trends of renewable energy investment and finance in Sub-Saharan Africa, driven by political commitments to the sector's deployment and underpinned by policy frameworks. The report concludes with recommendations to attract and distribute evenly significant investments, calling for a fundamental shift in lending, and backing from the international community and multilateral development banks in the form of concessional financing, grants and tailored risk-mitigation support.

The status of the clean energy transition in small island developing states (SIDS) has two predominant contexts, each with specific challenges and socio-economic benefits related to increasing the adoption of renewable

[20] Available here.

energy solutions. Some SIDS are predominantly electrified, relying heavily on imported fossil fuels. A sustainable energy transition for these countries requires integrating renewables into existing electrification schemes, thereby significantly reducing their dependency on imported fossil fuels, whilst strengthening local capacities and resources. Other SIDS have significant unelectrified populations. These countries often face economic vulnerabilities exacerbated by poverty, food insecurity, water-borne illness, lack of healthcare, volatile agriculture, deforestation and climate vulnerabilities. The least-electrified SIDS are now at a crossroads in their attempts to reach universal energy access: they can either increase access through imported fossil fuel use, or 'leapfrog' straight to clean energy by significantly scaling up progress in implementing decentralised renewable energy solutions.

To support SIDS in each of these contexts, IRENA published two companion reports. **The Small Island Developing States at a Crossroads: The socio-economics of transitioning to renewables**[21] report focuses on contexts where near-universal access to electricity has been achieved but where countries are still relying heavily on imported fossil fuels. The brief provides an overview of the features of grid-based electricity systems in SIDS, explores the socio-economic and end-user benefits of renewables and outlines policy priorities to help accelerate grid-linked renewable energy deployment.

The **Small Island Developing States at a Crossroads: Towards equitable energy access in least-electrified countries**[22] report focuses on SIDS with significant unelectrified populations that face economic vulnerabilities and decentralised renewable energy solutions would offer significant socio-economic and environmental gains. Arrangements for sustainable finance, technology transfer, institutional capacity-building and local skills-building will all be key in such contexts. The brief focuses on three countries – Guinea-Bissau, Papua New Guinea and Vanuatu – and examines the socio-economic benefits of energy access solutions in terms of progress potential, barriers, opportunities and recommendations for scaling up proven solutions. The reports were launched at a webinar[23] on 28 March, accompanied by two promotional videos.[24]

Within the energy community there has been growing debate on whether a 100% renewable energy system is technologically feasible, lowest cost, and most environmentally sustainable option for the decarbonisation of the global energy system. Against this backdrop, and building on the COP28 UAE Consensus momentum, the IRENA Coalition for Action published the brief, **100% renewable energy scenarios: Supporting ambitious policy targets**[25], which examines five energy scenarios: three focused on achieving 100% renewables and two striving for net-zero emissions. The brief evaluates and contrasts similarities and differences among these scenarios, providing recommendations to support ambitious policy objectives and achieve a fully renewable energy-powered system by mid-century. The brief was launched at the first part of the Annual High-Level Public – Private Dialogue, held on 16 April in the margins of the 14 IRENA Assembly, offering a platform for global leaders to delve deeper into required actions, innovative pathways, and comprehensive roadmaps towards a net zero system by 2050. The second part of the Dialogue took place virtually on 7 May.

[21] Available here.
[22] Available here.
[23] Available here.
[24] https://youtu.be/_pipzgfG7I0 and https://youtu.be/wUwrkCZxLgs.
[25] Available here.

IRENA's International Women's Day event on 8 March was held under the theme, **Invest in Women: Accelerate Progress Through Renewable Energy**[26], and aimed to amplify the voices and contributions of women, paving the way for accelerated progress in renewable energy and beyond. The stories shared and insights gained during this event contributed to the promotion of gender equality, which is critical in a world grappling with numerous socio-economic and environmental crises. The discussion highlighted that renewable energy emerges as a promising platform for championing gender equality and equity initiatives. Investing in renewables and empowering women, not only as beneficiaries but also as active agents of change, helps mitigate poverty, inequality, and environmental degradation. Advocating alternative economic models that foster a shift towards a green economy and a caring society that amplifies women's voices is essential.

The event also served as the launch of IRENA's Gender Survey 2024. Contributing to data gathering is the best way IRENA can support countries and societies toward a just energy transition.

Gender survey 2024

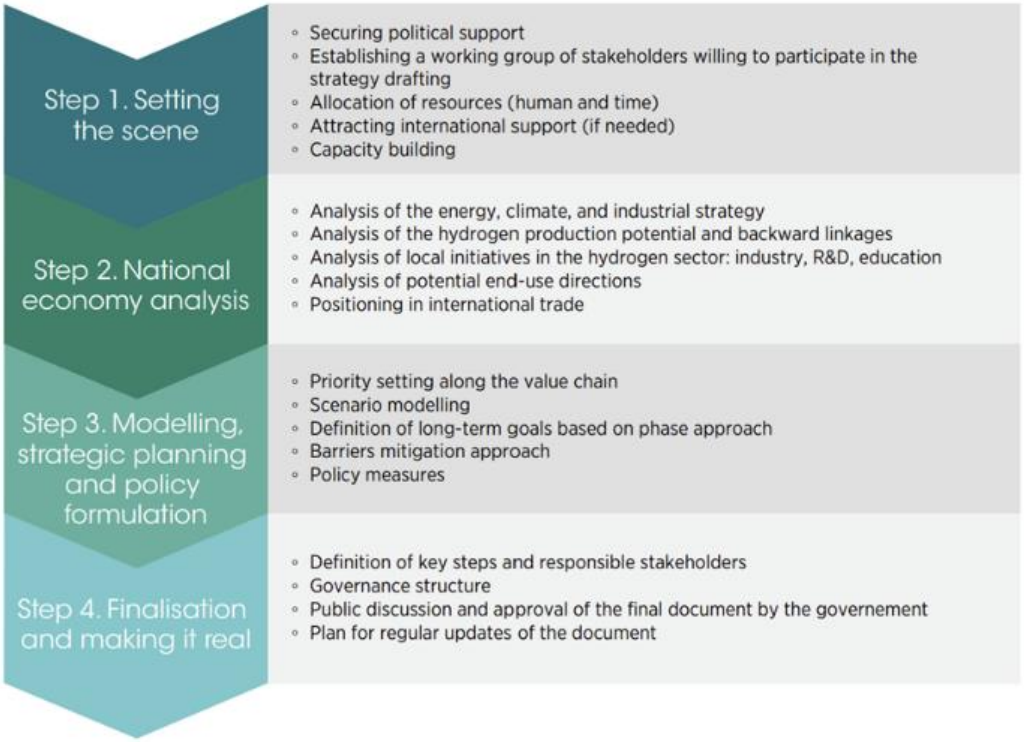
IRENA continued its efforts to build the capacity of educators for the energy transition as a partner of the COP 29 Climate Change Summer Camp for educators, led by the upcoming COP 29 Presidency. The training brought together 75 teachers from 35 countries to learn how to incorporate climate change education into their teaching practice. IRENA led the workshop components focused on renewable energy education, which explored how energy learning can be integrated into different subject areas. The training was delivered in collaboration with partners including UNFCCC, UNESCO, OCE, FEE and Teach for All.

[26] More information available here.

Harnessing technology and innovation

In recent years, the porential role of green hydrogen in transforming energy systems and advancing sustainable development in developed and developing countries alike has been widely recognised. Testament to the fact is that 46 national (and supra-national) strategies and eight roadmaps on hydrogen had been drafted and published worldwide, and at least 20 more countries have been in the process of producing such documents by May 2024. To benefit and help guide policy makers through the process of developing effective green hydrogen strategies, IRENA examined these strategies and fleshed out best practises and lessons learned. The report also addresses various challenges hindering the adoption of green hydrogen as well as long-term planning, barrier identification, export considerations, target and priority setting, governance and policies, and provides a step-by-step methodology to guide the drafting of hydrogen strategies (Figure 10).The findings are presented in the **Green hydrogen strategy: A guide to design**[27] report, which is s part of IRENA's ongoing analytical work on options, enabling conditions and policies to accelerate the decarbonisation of economies.

Figure 10: Flowchart for hydrogen strategy making



In collaboration with United Nations Industrial Development Organization (UNIDO) and the German Institute of Development and Sustainability (IDOS), IRENA developed the report **Green hydrogen for sustainable industrial development: A policy toolkit for developing countries**[28], which explores avenues for developing countries to benefit from the hydrogen value chain. The report identifies seven primary economic activity clusters to spark green industrialisation, foster innovation, accelerate decarbonisation and generate employment. Policy coordination, comprising four key elements, stands at the centre of strategic action at the policy level. As such, prioritising local use of green hydrogen; aligning national objectives; starting with

[27] Available here.
[28] Available here.

small- to medium-sized projects; and phasing implementation of green hydrogen production and applications are all proposed as key features.

Achieving net zero requires a comprehensive transformation of all sectors, including not just power but also end uses. Green hydrogen and its derivatives have a central role to play in reducing emissions and achieving the Paris Agreement targets. IRENA's **International co-operation to accelerate green hydrogen deployment**[29] report, developed under the umbrella of the Agency's Collaborative Framework on Green Hydrogen (CFGH), assesses progress in the area, including the development of green hydrogen supply and demand structures. The report's conclusions are a synthesis of the essential insights shared by IRENA Members and experts that participated in the Framework's meetings held in 2023 focusing on demand and supply structures for green hydrogen.

To align with the 1.5-degree goal of the Paris Agreement, global electrolyser capacities need to grow from negligible numbers today to 5772 GW by 2050. At the request of the 2023 Japan G7 Presidency, IRENA produced the **Shaping sustainable international hydrogen value chains**[30] report analysing the potential complexities of international hydrogen value chains, extending from developing countries to future renewable hydrogen demand hubs. According to the findings hydrogen value chains can be highly complex, requiring a broader sustainability approach, while encompassing economic, governance, and environmental aspects. The report highlights the socio-economic benefits and potential risks for developing countries, whose primary strategy is to establish a hydrogen sector focused on export. The report also offers suggested actions addressing the demand and the supply side of the emerging renewable hydrogen sector as well as policy recommendations to tackle the negative externalities by expanding local value creation and building a local market, among others.

A relatively nascent renewable energy technology that has been increasingly attracting attention due it its high-capacity factors and growing competitiveness is offshore wind. Floating offshore wind energy is widely recognised as holding an even greater potential. G7 countries in particular are increasingly scaling up national efforts to enhance their floating offshore wind capacities. Commissioned by the 2023 Japanese G7 Presidency IRENA's **Floating offshore wind outlook**[31] report explores the current state of the market for floating offshore wind, as well as recent technological developments and identifies policy considerations to accelerate its deployment and help achieve the tripling goal.

According to the 2023 edition of the **Tracking SDG7: The energy progress report**[32], an estimated 2.3 billion people remained without access to clean cooking in 2021, indicating that the world is alarmingly off-course in its efforts to meet Target 7.1 by 2030. IRENA's report, **Advancing renewables-based clean cooking solutions: Key messages and outcomes**[33], summarises key findings drawn from a series of virtual knowledge exchanges organised in 2023, with the aim to facilitate in-depth dialogue on various technologies among practitioners operating in sub-Saharan Africa and Asia.

The existence and availability of standardised renewable energy data is central to policy making in the context of the energy transition. However, policymakers lack a comprehensive energy taxonomy that adequately addresses the nuances of renewable energy sources, especially in the context of the climate crisis. To address this issue, IRENA developed the **Energy taxonomy: Classifications for the energy transition**[34]. IRENA's proposed energy taxonomy clusters all energy sources, products and uses under three main groups within energy: non-renewable energy, renewable energy and energy storage. It goes beyond traditional classifications by classifying synthetic fuels like hydrogen based on their origins and introduces a new segment for energy storage to bring clarity to the diverse sources of energy used in storage technologies. The taxonomy constitutes a fist attempt at harmonisation and will remain a constantly evolving tool that is designed to improve the

[29] Available here.
[30] Available here.
[31] Available here.
[32] Available here.
[33] Available here.
[34] Available here.

precision of energy statistics in line with global standards. It is important to note that the taxonomy is not for carbon accounting, which follows separate international guidelines.

IRENA's **Global Network of Long-Term Energy Scenario practitioners (Global LTES Network)** has made significant progress in assisting government energy planners and energy scenario practitioners in exchanging experiences and practices to enhance the development and use of LTES through extensive outreach, knowledge exchange and synthesis of practices across the global energy planning community. Between January and May 2024, the Global LTES Network organised dedicated **webinars for peer-to-peer learning** within the energy scenarios practitioner's community. The webinars addressed pressing topics for the clean energy transition such as net-zero pathways, climate target achievement and the impact of the UNFCCC global stocktake in the energy planning process. The webinar series will continue throughout 2024, further enriching these key dialogues.

On 9-11 September, IRENA convened the fifth edition of the **International Forum on Long-Term Energy Scenarios (LTES) for the Clean Energy Transition**[35] in Bonn, Germany. The event was held in hybrid format to allow participation from a wide array of government officials and experts, to explore innovative approaches and strategies for developing energy scenarios that support a global shift to a sustainable and efficient energy system. Key areas of discussion such as attracting investments, promoting an effective communication of LTEs; aligning Energy and Climate Strategies; and game changing emerging technologies like hydrogen, among others, were elaborated.

[35] More information available here.

Nine years after IRENA had hosted the **International Energy Workshop (IEW)** – the leading conference for the international energy modelling community - the Agency reprised its role and convened the 42nd edition of the Workshop in Bonn on 26-28 June.[36] This year's conference featured three plenary sessions with three key themes respectively, and over 140 presentations in parallel sessions. Participants had the opportunity to delve into discussions on ways to include climate change considerations in today's models; the policy aspect of energy modelling; as well as data advances in energy modelling.

Since 2021, IRENA's System Planning Test-Continental Masterplan (SPLAT-CMP) model has been the underlying optimisation model of the Africa Continental Master Plan (CMP) for electricity generation and transmission. The CMP initiative was undertaken to support the AU African Single Electricity Market (AfSEM) initiative launched that year. In an effort to enhance transparency and reproducibility of the modelling results as well as increased awareness and understanding of the model results, IRENA developed the **Advancements in continental power system planning for Africa**[37] report**.** The report offers a detailed description of the methodology behind the SPLAT-CMP model and provides possible strategies for further model improvement.

Building on the success of the "Energy Solutions for Cities of the Future" programme, IRENA has been supporting the **Mission Innovation** by organising nine virtual sessions to facilitate knowledge exchange among its member cities under the Urban Transition Mission. The meetings focus on renewable energy technologies and their applications in cities and will take place from 14 February to 19 June 2024. The programme has been providing a platform for urban energy planners/officials and experts from local energy authorities and utilities to not only learn systematically about renewable energy options in distributed power generation systems,

[36] More information available here.
[37] Available here.

buildings, urban transportation, but also share their experiences and success stories, and discuss the challenges encountered.

The **Summary report of IRENAs Innovation Week 2023**[38] carefully captures presents the key points and main messages that emanated from the meaningful discussions among leading policy makers, innovators and industry experts from across IRENA's diverse global membership. Convened under the theme, "Renewable solutions to decarbonise end-use sectors" in Bonn, Germany on 25-28 September 2023, the Innovation Week showcased emerging renewable-based solutions from around the world, and helped identify the necessary actions to fully unlock the potential of renewables in end-use sectors.

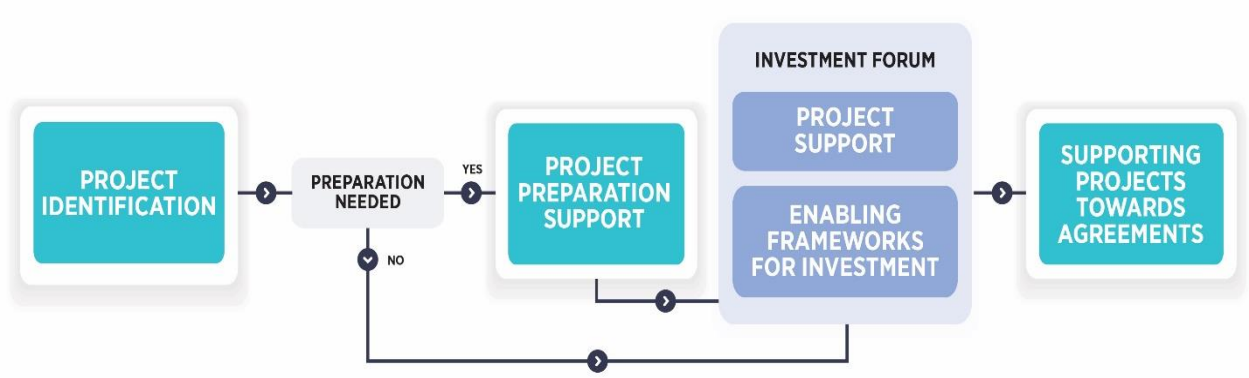
[38] Available here.

Investments for a sustainable future

IRENA supports the acceleration of renewable energy deployment through the **Climate Investment Platform (CIP)** and the **Energy Transition Accelerator Financing Platform (ETAF)**, with a unique service offering available to Members. In addition, IRENA provides technical assistance, support, and capacity building to facilitate project development, which feeds into the creation of pipelines for investment-ready projects to benefit from the platforms.

The CIP acts as a bridge between renewable energy projects and actors seeking to contribute to renewable energy project development primarily through finance and, in some cases, technical assistance, amongst others. Once projects qualify for support under the CIP, IRENA provides technical assistance to develop comprehensive Project Information Documents (PIDs) that verify and summarise all the relevant information necessary to attract financing. Projects are then introduced to financial partners by presenting relevant PIDs. A project and a financier are considered matched once IRENA's introduction leads both parties to agree to explore the option of funding a project (Figure 11).

Figure 11: CIP project support cycle.



To-date, CIP has received a record of 494 projects, with 209 projects eligible for support. Of these, 90 projects are actively supported; 39 have benefitted from technical assistance support, 14 were matched with interested financing partners, and five projects achieved financial close. The regional distribution of projects is as follows: 155 are from sub-Saharan Africa, 52 are from South America, 28 are from MENA, 35 are from Southeast Asia, 42 are from South Asia, 16 are from Southeast Europe, nine are from Central Asia, and 30 are from SIDS (Table 3 and Table 4).

Table 3: Number of CIP projects supported by region.

Region	# of Total projects	# of Projects supported
Central Asia	10	0
Central America	15	0
East Asia	4	0
Europe	58	2
Middle East	17	2
North Africa	12	0
North America	12	0
SIDS	32	22
South America	52	22
South Asia	43	8
Southeast Asia	38	13
Sub-Saharan Africa	195	21
Other	6	-
Total	**494**	**90**

Table 4: Climate Investment Platform

Cumulative capacity of projects supported (90 projects)	2 282 MW
Cumulative capacity projects that have gained interest from financiers (14 projects)	416 MW
Cumulative value of projects that have gained interest from financiers	USD 804.04 million
Cumulative capacity of projects that reached financial close (5 projects)	64.8 MW
Maximum project size (MW) that gained interest from financiers	117 MW
Region with most projects	Sub-Saharan Africa
Total cost of projects that have reached financial close	USD 84.9 million

The **Energy Transition Accelerator Financing (ETAF) Platform**, an initiative led by IRENA[39], was established to mobilise capital from global financial institutions such as Multilateral Development Banks, Development Financial Institutions and the corporate sector. The primary objective is to expedite the implementation of renewable energy projects and accelerate the energy transition in developing countries. The platform aims to mobilise an initial USD 1 billion in soft pledges for project investment by 2023 and expand to USD 5 billion by 2030. It also aims to facilitate investments supporting a minimum of 1.5 GW of renewable energy technologies by 2024, increasing to at least 5 GW by 2030. This will be achieved through backing renewable-supportive infrastructure, including electricity transmission services and storage.

Through the assessment process, ETAF has identified the following critical barriers in their recommendations to partners: i) insufficient project readiness or completeness; ii) inadequate financial structure; iii) project size considerations; iii) insufficient alignment with SDGs; and iv) limited track record. When proposals meet the

[39] Within the ETAF structure, IRENA acts as the Secretariat and manages the ETAF platform from project sourcing to financial close.

ETAF eligibility criteria but are deemed incomplete for assessment, proponents are given the chance to resubmit.

By the end of 2023, ETAF had mobilised USD 4.15 billion in soft commitments from the following eleven partners: the Abu Dhabi Fund for Development (ADFD), the Asian Infrastructure Investment Bank (AIIB) and Masdar – the three founding financing partners who joined ETAF at COP27 in 2022 with a total pledge of USD 900 million; and the OPEC Fund, the Inter-America Development Bank (IDB), the Emirates Development Bank (EDB), the Islamic Development Bank (IsDB), the European Bank for Reconstruction and Development (EBRD), HSBC and the International Finance Corporation (IFC), who joined by - or at - COP28, bringing more than USD 3 billion in pledges. ETAF also offers project developers guarantees and de-risking products through its partners, Swiss Re, Islamic Corporation for the Insurance of Investment and Export Credit (ICIEC) and Multilateral Investment Guarantee Agency (MIGA).

ETAF is accepting eligible renewable energy project submissions through its online platform, following an official Call for Projects was launched at COP27. Over 73 project proposals have been submitted to the ETAF Platform, representing over 5.96 GW in capacity. Close to half (33 out of 73) of the received proposals are located in countries in sub-Saharan Africa, the leading region in the number of received proposals (Table 5). Responding to members' demand, the IRENA Coalition for Action organised a webinar in March 2024 to present ETAF, attracting forty CoA members and leading to additional project information submissions from some of them.

To date, the Platform partners have recommended 17 proposals that fulfil the requirements in four assessed dimensions: energy transition potential; implementation readiness; developer track record; and commercial viability. These projects require a total investment of close to USD 3.4 billion and have a 2 634 MW power generation potential (Table 6).

Table 5: Number of ETAF projects proposed and recommended.

Region	Total project proposals	Projects recommended to ETAF partners
North Africa	5	0
Sub-Saharan Africa	33	5
North America	2	0
Central America	4	3
South America	4	0
Central Asia	6	4
Southeast Asia	1	0
South Asia	4	2
Southeast Europe	7	1
Middle East	4	2
SIDS	2	0
Pacific	1	0
Total	**73**	**17**

Table 6: ETAF Platform

Number of project proposals supported	17
Cumulative capacity of projects supported	2 644 MW
Minimum project size (MW) that has gained interest from financiers	5.34 MW
Maximum project size (MW) that has gained interest from financiers	1000 MW
Cumulative capacity of projects that have gained interest from financiers	897 MW
Cumulative value of projects that have gained interest from financiers	USD 3.4 Billion
Total cost of projects that have reached financial close (3 projects)	USD 1 Billion
Location of projects that have gained interest from partners	Sub-Saharan Africa, Central Asia

Out of the 17 recommended projects to ETAF Partners 17 projects have received provisional interest from at least one ETAF Partner. The three technologies, attracting most interest from partners, are solar PV (utility scale), hydropower and onshore wind. So far, three solar PV projects in Uzbekistan, with a total expected installed capacity of 897 MW, have achieved financial close with support from ETAF partners. These projects generate electricity to power more than 1 million homes, or for 5 million inhabitants, while reducing emissions by more than 1 million tons of CO_2 equivalent (tCO_2e) annually.

A solar plant in Uzbekistan installed by one of the ETAF partners.

IRENA is working together with the founding partners to create and implement the ETAF Charter. This document will outline the governance framework for partner collaboration, highlighting the roles and responsibilities of all partners. Five partner meetings were conducted in 2023 covering various aspects, including governance, project eligibility, mobilising new partners with additional financial, de-risking and technical assistance products, and improvements to ETAF's operational procedures, among others. Together with ETAF founding partners, IRENA signed the ETAF Joint Declaration in October 2023. This document

outlines the governance framework for partner collaboration, highlighting the roles and responsibilities of all partners, including IRENA as ETAF Secretariat. In addition, the operational manual was drafted to guide the day-to-day activities carried out by the Secretariat while also highlighting procedures that are expected to be completed by partners to deliver on ETAF's mandate. The draft manual is under review and is expected to come into effect in 2025.

A forum for partners was held in January 2024 to formally introduce the seven partners, who joined at COP28. Among the topics of discussion were the new partnership onboarding strategy for 2024, prioritising the project pipeline, upcoming activities for 2024, and a debriefing from the last project review meeting. The second Forum of Partners is anticipated took place in June 2024 and the third one is scheduled to take place by the end of the year. Africa50[40] received approval from all thirteen partners to join the Platform this year and is anticipated to collaborate with the Secretariat on building a pipeline of bankable projects in Africa.

The **IRENA Investment Forums** are a key element in the Agency's strategy to support the mobilisation of investments in energy transitions. They bring together decision makers from the public and private sectors including the financial community, development partners and other relevant stakeholders to drive energy transition investments. Selected projects are featured for matchmaking with financial institutions participating in the Forums for the purpose of establishing an engagement that could lead towards a financial investment in the project(s). The CIP is the main channel by which projects are sourced and supported with the preparation of documentation and technical assistance, where applicable, for the purpose of being presented to investors.

On 14-16 October, the first **APRA Investment Forum**[41] will be convened in Nairobi, Kenya to help create and implement a pipeline of projects in support of APRA objectives. Two pre-Forum days on 12 and 13 October will be dedicated to training and project pitching for developers from APRA countries and international developers active or interested in the region. The Forum will feature multi-stakeholder discussions, project matchmaking, and high-level sessions on investment priorities, enabling frameworks, innovative financing, and supply chain development in APRA countries. Participants can expect the Forum to foster collaboration, address project development challenges, and provide opportunities for investment through targeted matchmaking and technical support.

To increase the project portfolio from the developing countries, ETAF Secretariat has actively engaged in APRA activities throughout 2024. Specifically, the Secretariat participated in three APRA consultative workshops presenting and raising awareness about the Platform. As a result, there has been a significant increase of project information submissions from APRA countries, with 15 PIDs submitted by August 2024 compared to nine in December 2023.

IRENA is committed to supporting its members in developing and enhancing their institutional capacity for structuring energy project financing deals, as well as in creating a conducive policy environment attracting project investments in renewables. To this end, IRENA held a four-day long ***Project Finance Capacity Building Workshop for Pacific SIDS***[42] on 16-19 January 2024, targeting government officials as well as private sector stakeholders engaged in renewable energy projects. The workshop brought together 17 participants from diverse backgrounds, encompassing project developers, financial institutions, and government representatives from seven SIDS including the Federated States of Micronesia, Fiji, Palau, Samoa, Solomon Islands, Tuvalu and Vanuatu. It featured both theoretical and practical modules on project finance and included a day dedicated to project pitching, during which participants had the opportunity to present their projects. The participants were also urged to submit projects via CIP and ETAF once they had completed the requisite studies and documentation.

[40] Established by African governments and the African Development Bank, Africa50 helps bridge Africa's infrastructure funding gap by facilitating project development, mobilising public and private sector finance, and investing in infrastructure on the continent.
[41] More information available here.
[42] More information available here.

IRENA through the **SIDS Lighthouses Initiative (LHI)** is providing support to the Government of Vanuatu[43] to identify and develop a strong pipeline of renewable energy projects. This support aims to help Vanuatu achieve its ambitious goals of transitioning to 100% renewable energy in electricity generation by 2030, while also improving energy access, resilience, and supporting broader sustainable development objectives. An in-country mission was conducted from 19-29 July 2024, to assess local conditions, consult with key stakeholders, and gather essential data that will significantly inform the selection and prioritisation of projects that best meet the country's needs and long-term vision. The consultations also highlighted best practices, challenges and data gaps as well as provided crucial input for refining project documents.

Through the **Global Atlas for Renewable Energy Initiative**[44], IRENA continues to support its Members in assessing their renewable potential, to assist in planning and deploying renewable projects at different scales. In 2024, IRENA published **The Global Atlas for Renewable Energy Initiative: 10+ years in the making**[45], which presents the knowledge platforms and country-level technical analyses developed throughout the years to increase access to capital and spur renewable energy investments. Furthermore, IRENA published **The Global Atlas for Renewable Energy: A decade in the making**[46], which describes all the relevant datasets hosted on the Global Atlas platform – a ground-breaking free web GIS renewable resource tool developed to keep the global community updated on the plethora of relevant datasets for supporting renewable projects development. To date, the platform comprises more than 1 000 renewable resource datasets, as well as ancillary information, at different scales – global, regional and country-specific – from 50 leading international technical institutes and private companies. Using these datasets, IRENA supported the Republic of Iraq with the Iraq Solar and Wind Atlases and assessed the techno-economic potential for developing solar and wind projects for SIDS. It has also been used to support Montserrat via its pre-feasibility site assessment service covering five onshore wind sites earmarked for potential utility-scale project development. The assessed sites for Montserrat have a cumulative prospective installed capacity of 20 MW, which will support the country in progressing with feasibility studies and subsequent project development.

At the city scale, the Agency has also up-scaled the **SolarCity Simulator**[47] – an innovative web-based application that enables users to assess the technical and financial potential of rooftop PV systems – by covering three cities in Belize (Belize City, San Pedro, and San Ignacio) and one in Guyana (Georgetown). These simulators were released at the Caribbean regional consultative workshop in Jamaica (see below). In addition, capacity-building workshops on rooftop solar photovoltaic (PV) potential assessments were conducted online for Belize, Burkina Faso and Mauritius, while the workshop for the Solomon Islands was conducted during IRENA's workshop[48] on the Launch of the Solomon Islands Renewable Readiness Assessment Report.

Latin America possesses significant untapped potential for biomass production, owing to its advantageous climate, abundant land resources and robust agricultural sector. However, the region's bioenergy potential has been only partially developed, with some countries boasting significant production bases and well-established markets, while others are at the first stages of exploration. To explore the potential of the region, IRENA

[43] At the request of the Department of Energy within the Ministry of Climate Change Adaptation, Meteorology, Geo-hazards, Energy, Environment, and National Disaster of Vanuatu.
[44] More information available here.
[45] Available here.
[46] Available here.
[47] More information available here.
[48] More information available here.

organised a workshop in São Paulo on 17 March 2023, featuring public and private sector representatives, focusing on Argentina, Brazil and Colombia. IRENA's **Sustainable bioenergy pathways in Latin America: Promoting bioenergy investment and sustainability**[49] report presents key findings that emanated from the discussion.

Along similar lines, IRENA developed the **Sustainable bioenergy potential in Caribbean small island developing states**[50] report, which provides a preliminary assessment of the bioenergy potential of six small SIDS, namely Cuba, the Dominican Republic, Haiti, Jamaica, Trinidad and Tobago, and Guyana. These countries comprise about 94% of the group's area and 93% of its population. The report evaluates the feasibility of utilising different sources like sugarcane, oil palm and municipal solid waste for bioenergy production, while considering the essential equilibrium between environmental well-being and socio-economic advantages within these regions. The report has been translated into Spanish as well.[51]

In supporting its Members to improve electricity access, IRENA has assessed the potential for battery storage to provide affordable access through solar PV mini grids in West Africa – mainly in Burkina-Faso, Mali, Nigeria and Senegal. The insights from this assessment are available at the **West-Africa Electrification platform**,[52] to inform planning. This platform explores several pathways to universal access, identifying potential markets and showcasing the role of battery storage in mini grids. A summary report is also being drafted.

[49] Available here.
[50] Available here.
[51] Available here.
[52] More information available here.

International cooperation and partnerships

IRENA remains committed to in-person engagement with Members, to exchange views and enhance strategic collaboration through the organisation of over 40 high-level Members' visits by Heads of State, Ministers of Foreign Affairs, Ministers of Energy, Special Envoys for Climate Change, etc. and bilateral meetings at IRENA headquarters. IRENA is also engaging and expanding outreach with States in Accession and non-Members to reiterate the benefits of joining IRENA, as well as to expedite the ratification and accession processes. In addition, in recognition of the value of collaborating with intergovernmental organisations, academia and private sector representatives, IRENA, to benefit from the knowledge exchange and their expertise as well as to identify and engage in strategic collaboration to advance the energy transition.

This year, the 14th session of the **IRENA Assembly** took place in two parts under the theme 'Outcome of COP28: Infrastructure, Policies and Skills for Tripling Renewables and Accelerating the Energy Transition'. During **Part I**[53], which took place in a virtual setting on 15 January 2024, Members had the opportunity to consider and discuss a number of programmatic and institutional matters relevant to the Agency's future work and direction. They also considered several administrative and institutional matters are crucial to IRENA's functioning.

14 Assembly Part I

Marking the 4th World Energy Transition Day, **Part II**[54] of the 14th session of the IRENA Assembly and related meetings was convened in-person from 17 to 18 April 2024. The Assembly served to bring together global leaders and energy decision-makers to take stock of operational plans and policies and highlight the concerted action undertaken to implement the energy transition across countries, regions, and the world. There were over 1400 registered participants to Part II of the fourteenth session of the Assembly from 137 Members and the European Union, eight States-in-Accession and other United Nations Member States, including 68 represented at ministerial level, together with representatives from 178 organisations.

14 Assembly Part II

[53] More information available here.
[54] More information available here.

The Opening featured a **High-level Plenary Session on Tripling of Renewables,** aligned with the Assembly theme. The session set the scene for the Assembly's deliberations and served to identify concrete and immediate actions to drive the implementation of the COP 28 outcomes. The COP28 targets, adopted from IRENA's flagship World Energy Transitions Outlook (WETO), set a direction for the future of the global energy system in line with the Paris Agreement. The sessions also explored how to harness international cooperation as a catalyst of change, effective monitoring of the progress and action on course correction. Participants also discussed how IRENA can best leverage its comparative advantages to accelerate the implementation of the tripling pledge and what targeted support it can provide for the next round of NDCs.

On the Pre-Assembly Day on 16 April 2024 and during the Assembly, IRENA organised several Ministerial and High-level Meetings, focusing on critical and pertinent issues for the energy transition.

The **High-Level Dialogue on Energy Transition in Latin America and the Caribbean: A Regional Pathway** provided a platform for an exchange on scaling up renewables-based energy transition in the region, while discussing how the COP28 Pledge can be put into action in the region, with a view to supporting its ambitions to achieve inclusive and sustainable growth and transition away from fossil fuels. Immediate opportunities to achieve the energy sector transformation as well as enabling technology, finance and policy choices were identified.

The SIDS Ministerial on Charting a Resilient and Sustainable Energy Future for SIDS succeeded in setting the direction for the upcoming 4th International Conference for SIDS. At the Ministerial, participants had the opportunity to discuss sustainable development and climate priorities as well as ways to ensure the continued effectiveness of initiatives (*e.g.* the SIDS Lighthouses Initiative) in mobilising the necessary finance and boosting decarbonisation. The importance of maintaining inclusive and strong partnerships was reiterated.

The **High-level Plenary session on Accelerated Renewable Deployment in Africa (APRA)** explored strategies for boosting renewable energy in Africa through international collaboration and ways to overcome challenges, leverage partnerships for greater renewable energy investment and build a resilient local private

sector in Africa's renewable landscape. During the moderated discussions, panellists pointed to the importance of contextualised support, reiterating the fact that each African country is unique in its needs and priorities.[55] The **High-level Plenary session on Accelerating the Development of Bankable Renewable Energy Projects – Leveraging IRENA's Facilitation Platforms for Global Transition** focused on country and regional challenges impeding project development and deployment, and possible solutions to overcome them. Participants addressed the importance of integrating national efforts with IRENA's initiatives to foster renewable energy projects, as well as how each individual country could enhance their renewable energy initiatives, focusing on overcoming barriers and fostering international collaboration.

The dedicated event on the **Integration of CMP as an enabler to support project preparation and mobilizing financing for renewable energy projects** served to present key outcomes from the CMP initiative, encouraged collaboration among members to overcome financing challenges, while advocating for favourable financial frameworks, investment policies.

The event on **Regional Energy Transition Outlooks for Africa – Pathways to 2050** introduced the African Regional Energy Transition Outlook (RETO) as a basis to foster discussion with key stakeholders concerning different views on the energy transition in Africa and how investments in renewables can leverage socio-economic development in the continent. The key outcomes of this discussion will serve as inputs to the RETO scenarios.

Back-to-back with the Assembly, on 19th April, IRENA organized a full-day workshop on **Development of Regional Energy Transition Outlooks for Africa - Operational Workshop on Regional Scenarios**. The event brought together 20 country representatives from Africa to deepen the discussions on particular aspects of RETO scenarios. Participants delved into the unique regional and country-specific factors and objectives that should inform the RETO development process, emphasising policies and targets identified by stakeholders as key priorities.

The **Roundtable on the Role of Public Finance and Policy in Achieving Universal Energy Access under SDG7**[56] brought together government leaders, development bodies, donors, the private sector and energy practitioners, to explore public finance and policy roles in improving energy access as well as cooperation needs and strategies to leverage public funds for extending essential energy services, supporting sustainable development goals, and enhancing local capacities within the energy sector. IRENA's brief, **Public finance for universal energy access** (see section above), was also presented.

The **GOWA Ministerial Dialogue on Scaling Finance for Offshore Wind as Key to Reach the Tripling Renewables Goal** focused on how best to utilise de-risking tools, blended finance and partnerships to overcome market challenges in emerging regions.

The **Ministerial Roundtable on Geopolitics of Energy Security**[57] served to share insights and lessons learned, while also looking at future energy security challenges as the world moves towards renewable energy. Discussions also focused on the major geopolitical shifts set to profoundly influence energy trade dynamics, alter international dependencies and reshape the geopolitical landscape. IRENA's report, **Geopolitics of the energy transitions: Energy security** (see section above), was launched at the meeting. The report calls for new perspectives on energy security in the renewables-based era.

Policies and strategies to speed up the energy transition, ensure inclusivity and enhance local benefits were explored at the **Policies and Skills for an Accelerated Energy Transition** meeting. Participants discussed

[55] More information available here.
[56] More information available here.
[57] More information available here.

deployment methods, as well as auctions and renewable energy targets, as means to signal long-term commitment, and ways to bolster supply chains and workforce skills. With a particular emphasis on overcoming skills shortages, the discussion also focused on scaling education and training, including upskilling and preparing youth for renewable energy jobs.

The **Accelerating ASEAN's Growth and Resilience: Grid Interconnections Power the Tripling of Renewables** event brough together various stakeholders to create a united vision on how connecting power grids can help solve energy, climate, and development issues in the states of the Association of Southeast Asian Nations (ASEAN).

The event on **Enablers for trade in green hydrogen and derivatives** focused on the catalysts for international trade in green hydrogen and its derivates, with aims to identify key drivers, policy frameworks, and technological advancements that can facilitate the global exchange of green hydrogen, fostering a sustainable energy transition.

The **Scaling-up Sustainable Bio-based Energy and Fuels in Emerging Markets** event was an opportunity to identify methods to utilise sustainable biomass in emerging markets to foster sustainable circular bio-economies. It also served to showcase advancements in bio-based cooking technologies and sustainable aviation fuels, highlighting their impact on sustainable bio-economies as well as successful risk mitigation strategies and the importance of supportive policies.

The **Harvesting Synergies: The Water-Food-Energy Nexus for Enhanced NDCs** meeting focused on the crucial connections between water, food and energy systems, emphasising the need for a transformative approach to sustainability and climate commitments. The discussion sought to motivate stakeholders across different sectors to exchange strategies and innovations in sustainable agriculture, emphasising the use of renewable energy.

The event on **Electrification of Road Transport Enabling Policies and Systemic Innovation** explored policies and innovations supporting the electrification of road transport, bringing together policymakers, experts, and industry leaders to discuss the transition to renewables-based electrification for various vehicle types. Policy insights and successful practices were shared from different markets, and IRENA provided inputs on its work to promote road transport electrification.

The session on **Participatory Strategies for Developing Just and Renewable-Based Energy Pathways** emphasised the importance of inclusive and cooperative energy planning processes. It highlighted the critical role of inclusivity in developing long-term energy scenarios and shaping policies to enhance social inclusion and cross-governmental cooperation for strategic national planning. Successful country examples were showcased to illustrate these aspects. The discussion also presented key findings from the work of IRENA's Global LTES network, offering practical insights to enhance stakeholder involvement and foster effective dialogue in energy planning.

The ninth edition of the **IRENA 2024 Legislators Forum** was held under the theme Building Blocks for a Renewable Future: Accelerating Progress Towards the COP28 Pledge. At the meeting, participants discussed the crucial role of a holistic policy approach, focusing on not deployment and enabling policies, structural changes for a just transition, and the modernisation of energy infrastructure to support a renewables-based system. Discussions also focused on ways to advance renewable energy within Legislators' regions, considering the urgent climate action needed and the ambitious COP28 pledge to triple global renewable energy by 2030. In addition, the **IRENA Legislators Dialogue on Power Up the Future** event– aimed specifically at young people – was held to spark a vital conversation between present and future leaders and explore ways to engage young leaders in renewable energy policymaking and forge a shared commitment to building a sustainable future 100% powered by renewable energy.

This year's **High-Level Public-Private Dialogue** was convened under the theme Building momentum towards a 100% Renewable energy system. Building on the achievements of COP28, the Dialogue called for global strides towards the achievement of ambitious renewable energy goals and enhanced policy innovation.

Discussions also focused on the importance of enhancing cross-sector collaboration, maintaining COP28's momentum for ambitious climate and energy efficiency targets, and exploring innovative strategies for electrification and sustainable energy use.

The pivotal role of women and girls in advancing the transition to a sustainable economy and renewable energy cannot be overstated. The fifth edition of the **Women in Diplomacy** event presented a unique opportunity to strengthen the network of female diplomats engaged in renewable energy and climate change to amplify their pivotal roles in shaping a sustainable future and foster collaboration toward achieving shared goals. The theme of the meeting was Synergies for Change: Women – Diplomats Driving Joint Efforts in Renewable Energy and Climate Action.

IRENA's Youth Forum[58] was convened under the Youth at the Core of a Just Energy Transition: Skills, Empowerment and Innovation event on 16 April. The 2024 edition of the Forum aimed to not only foster discussions but also equip young participants with the tools and knowledge necessary to shape a more sustainable and inclusive energy future. During the session, participants had the opportunity to explore and promote actions in three main areas: a) skills for a just energy transition; b) empowering youth voices in energy agendas; and c) fostering youth-led innovation in sustainability.

The dialogue also aimed to bridge knowledge gaps, enhance global education and training, and provide practical skills for renewable energy careers, seeking to ensure young people's perspectives are integrated into energy agendas and to support their innovative solutions. In a dedicated effort to foster stronger connections with youth, IRENA introduced the IRENA Youth Social Media Ambassadors for the IRENA Youth Forum by involving four youth delegates to take photographs and provide coverage of the event.

IRENA organised a youth event on **Exploring Youth Entrepreneurial Solutions in the Sustainable Energy & Green Sector**, held at the IRENA Pavilion during the World Future Energy Summit convened in April 2024 in Abu Dhabi. Discussions highlighted the important role of youth in being at the forefront of creating disruptive innovations and entrepreneurial solutions in the sustainable energy and green sector. It also showcased successful entrepreneurs supported by IRENA through various programmes, including the IRENA NewGen Accelerator Programme for Youth, and shed light on the opportunities and challenges faced by young green entrepreneurs.

On 18 March, IRENA launched for the second year, the **IRENA NewGen Renewable Energy Accelerator (NewGen)**[59]**,** aimed at supporting young entrepreneurs and innovators in driving the renewable energy transition. NewGen provides capacity building, mentorship and other resources to youth-led projects and start-ups that are developing innovative solutions to advance the adoption of renewable energy at the global level. NewGen is open to youth-led projects and start-ups with a focus on innovative solutions in areas such as energy storage, grid integration and energy efficiency. Selected participants will receive training, mentorship and other resources to help them develop and scale their solutions. They can also compete for the IRENA Youth Award, and other engagement opportunities throughout the Acceleration programme.

[58] More information available here.
[59] More information available here.

IRENA's **Utilities for Net Zero Alliance (UNEZA)**[60], established at COP28, provides a meaningful international platform for cooperation among power utilities entities to address and overcome common barriers to the realisation of net-zero ambitions and more near-term emissions reduction targets. At the 14th IRENA Assembly **Ministerial Roundtable on Infrastructure for the Energy Transition: Utilities for Net Zero Alliance**, participants addressed the crucial role of infrastructure in the energy transition and in achieving the goal of tripling renewables by 2030. Crucially, UNEZA members adopted the UNEZA Roadmap to 2030 that addresses key challenges and expanding impact beyond the Alliance and includes the joint target to raise total renewable energy capacity to 749 GW by 2030, an increase of 2.5 times relative to 2023.

The Roadmap is accompanied by the UNEZA Plan of action[61] that addresses the pressing need to scale and modernise global grid infrastructure to support clean power development and the tripling of renewables by 2030. Framing the priorities of the UNEZA members, the 'Global Infrastructure Program' strategy was developed, focusing on key priorities around infrastructure upgrades and UNEZA's actions in the coming years. Members have committed to significant investment programmes to reinforce, digitalise and modernise grid infrastructure in line with the global benchmark of a doubling by 2030, subject to regulatory frameworks and consenting regimes being aligned to this ambition. To accelerate the energy transition, six focus areas have been defined where actions along four pillars can alleviate challenges in the ecosystem.

UNEZA members serve more than 300 million customers worldwide. IRENA hosts the Alliance's Secretariat, supported by partners including the UN Climate Change High-Level Champions, International Electrotechnical Commission, Global Renewables Alliance, Coordinador Eléctrico Nacional, and Green Grids Initiative. Membership is open to utilities, developers, power system technology companies and knowledge partners determined to expedite the transition towards a net zero future by 2050.

The annual **Global Geothermal Alliance (GGA) Annual Meeting** convened Alliance member governments and partner institutions to explore challenges and prospects in the sector, share knowledge and experiences and provide feedback and guidance on the priority areas of focus for the Alliance to better support faster deployment of geothermal power and heat globally. During the Meeting, members approved the following the Steering Group for 2024/2025; the need for a new Vision and Mission for the Coalition to be beyond SDG and incorporate elements such as community involvement, UAE Consensus, and a 100% renewable energy system by 2050; the amalgamation of the six existing Working Groups into three, to avoid fragmentation of efforts, their co-chair and the Work Programme for each Group for 2024.

During the **Roundtable Dialogue on Translating Tripling Renewables Pledge into Action**, country representatives discussed the expected contribution of geothermal energy to the tripling renewable energy capacity as being indicated by the UAE Consensus at COP28 and the ways geothermal energy could contribute significantly to the goal's achievement. Furthermore, members and partners emphasised to need accelerate the utilisation of geothermal energy across in agri-food value chains and the significance of geothermal energy in sustainable development.

[60] More information available here.
[61] More information available here.

The **Alliance for Industry Decarbonization (AFID)**[62] **event** during the Assembly, served to present a set of actions and joint initiatives for short and long-term plans as well as solicit feedback on the Alliance's ambitions and programme. Furthermore, on April 18, 2024, AFID organized **The Industry Perspective: The Global Decarbonization of Industries** event at the IRENA Pavilion during the World Future Energy Summit. The event provided an in-depth look at global efforts to decarbonize industrial value chains and accelerate net-zero ambitions as well as a platform for open dialogue, sharing valuable lessons learned and addressing common challenges. In the margins of IRENA's 27 Council, AFID participated in the session on **Industry-Driven Partnerships for Accelerated Energy Transition** held on 14 June. The session facilitated exchange among the IRENA Members and private sector on how the net zero and decarbonization goals set at the national level could be practically supported by the industry for an accelerated energy transition.

Finally, IRENA, in cooperation with the Clean Energy Ministerial (CEM) organised a meeting on **Progress & options for wider collaboration** to discuss the ongoing partnership with IRENA and CEM initiatives, highlighting progress and exploring cooperation opportunities. It also sought insights on enhancing international collaboration, integrating IRENA's contributions into CEM workstreams, finding common ground for greater impact, fostering collaboration to benefit Global South countries.

IRENA has been actively engaged with G20 Presidencies in advancing the global energy transition. Requested by Brazil as G20 Presidency 2024, IRENA has provided valuable insights, technical advice and inputs to the Energy Transition Working Group (ETWG) on the priority areas that the Presidency has set in the agenda for discussions throughout G20 in 2024. In this regard, IRENA has been working with Brazil on a joint report with the aim to facilitate the discussion around delivering a just and inclusive energy transition for EMDEs among G20 countries and other relevant stakeholders.

[62] More information available here.

Efforts at the regional level

Under the umbrella of the Accelerated Partnership for Renewables in Africa (APRA),[63] IRENA facilitated the **4th APRA country consultation**[64] in Harare, Zimbabwe on 24-26 January. Coordinated by the Ministry of Energy and Power Development of Zimbabwe, the consultation served to identify the country's national priorities and energy transition ecosystem. It also provided a platform for stakeholders to engage in discussions not only on renewables-based energy transition but also on broader cross-cutting issues such as economic growth and industrial development, job creation, improving lives and livelihoods, and other development ambitions. The meeting was attended by H.E. Dr Jenfan Muswere, Minister of Ministry of Energy and Power Development as well as over 100 local and international participants from a broad range of stakeholder institutions.

Along the same lines, the **5th APRA country consultation**[65] was organised by the Ministry of Infrastructure of Rwanda, in partnership with IRENA, on 15 February in Kigali, Rwanda. At the consultation, participants had the opportunity to elaborate on the country's national priorities across economic growth and industrial development, job creation, improving lives and livelihoods and other development ambitions. The results derived from the workshop were utilised in the development of the national workplan intervention areas relevant to accelerate the clean energy transition.

Together with the Ministry of Water and Energy, IRENA organised the **6th APRA country consultation**[66] in Ethiopia on 3 June. Discussions focused on Ethiopia's national priorities across economic growth and industrial development, job creation, improving lives and livelihoods and other development ambitions. The results derived from the workshop were utilized in the development of the national workplan intervention areas relevant to accelerate the clean energy transition.

The **7th APRA country consultation**[67] was convened on 15-17 July, in collaboration with the Ministry of Energy of Ghana, supported by a series of bilateral consultations with government entities and partners to draw

[63] Founded at the African Climate Summit in September 2023 by Kenya, Ethiopia, Namibia, Rwanda, Sierra Leone and Zimbabwe, with support from Denmark, Germany, the UAE and IRENA, the Partnership aims to accelerate the energy transition in respective countries.
[64] More information available here.
[65] More information available here.
[66] More information available here.
[67] More information available here.

up a detailed planning and coordination framework for the development and implementation under the umbrella of this partnership.

On 14-15 March 2024, the **Pacific Small Islands Developing States Decarbonisation Forum**[68] was hosted by Japan, IRENA through the SIDS Lighthouses Initiative and the Green Climate Fund. The Forum included a series of workshops dedicated to strengthening renewable energy deployment in SIDS, strengthening local and regional capacity to access climate finance and sharing best practices, lessons learned and innovative energy transition solutions. Expanding on these efforts, this virtual forum shone a light on climate actions in small islands, showcasing various tailored solutions and technology options to address the distinctive challenges and opportunities of SIDS.

Since its inception in 2014, IRENA's SIDS Lighthouse Initiative (LHI) has been promoting the deployment of renewables to transform energy systems in island countries. As the Initiative progresses, the need to measure the impact of its efforts has emerged. In the context of developing a set of indicators to track progress at national, regional, and global levels, the first **Caribbean region consultation workshop**[69] was convened on 26 February-6 March in Kingston, Jamaica. The workshop brought together representatives from the Governments of Antigua and Barbuda, Bahamas, Barbados, Belize, Cuba, Curacao, Dominican Republic, Grenada, Jamaica, Montserrat, Saint Lucia, Saint Kitts and Nevis, Turks and Caicos, Trinidad and Tobago, regional organisations and relevant partners such as CCREEE, CCCCC, CDB, the World Bank, IDB, Green Solutions International SKN, Clean Energy Regulatory Reform Advisory and NDC Partnership. The meeting presented draft progress indicators and impact measures, and sought feedback on relevance, appropriateness and potential improvements.

[68] More information available here.
[69] More information available here.

The inaugural regional consultation workshop in the **Atlantic, Indian Ocean and South China Sea (AIS) region**[70], held on 11-13 March 2024 in Victoria, Seychelles, brought together government ministries representatives from Cabo Verde, Comoros, Sao Tome and Principe, Seychelles, Mauritius and the Maldives, the public sector, development partners including the Common Wealth's Climate Finance Access Hub and ECREEE, financial institutions, and other relevant stakeholders involved in energy transition and monitoring progress within international frameworks. The structure and methodology of the consultation emphasised a participatory approach, leveraging mechanisms of discovery to encourage engagement and ownership among stakeholders.

[70] More information available here.

Collaborative Frameworks

IRENA's **Collaborative Frameworks**[71] (Table 7) reflect the Agency's commitment to enhancing Member engagement and ownership of the programmatic output, while enabling peer-to-peer collaboration and exchange of national experiences, challenges and respective solutions.

Table 7: List of Collaborative Frameworks and their respective Co-facilitators

Collaborative Framework on Critical Materials for the Energy Transition		
Collaborative Framework on Enhancing Dialogue on High Shares of Renewables in Energy Systems		
Collaborative Framework on the Geopolitics of Energy Transformation		
Collaborative Framework on Green Hydrogen		
Collaborative Framework on Hydropower		
Collaborative Framework on Just and Inclusive Energy Transition		
Collaborative Framework on Ocean Energy/Offshore Renewables		
Collaborative Framework on Project Facilitation to Support on-the-ground Energy Transition		

[71] More information available here.

The **Collaborative Framework on Critical Materials for the Energy Transition** met for the third time on 4 April[72] to explore the potential for innovation to efficiently address and alleviate potential shortages in the supply of critical materials. Industry, academia and public sector experts focused their presentations on diverse energy transition technologies geared towards decreasing the demand for critical materials through innovations. The Framework will hold its fourth meeting on 15 October to provide a platform to Members for sharing experiences on innovation and data governance, while addressing the complexity of securing the supply of critical materials.

The **Collaborative Framework on Enhancing Dialogue on High Shares of Renewables in Energy Systems** organised a meeting on 14 May. The meeting will provide an opportunity to share experiences and discuss how the six workstreams of the Framework could support the realization of the global pledge of tripling global renewable energy capacity by 2030, with key perspectives of developing enabling infrastructure, policy and regulation, skills and institutional capacity, mobilizing finance, and international collaboration.

The third flagship publication under the umbrella of the **Collaborative Framework on the Geopolitics of Energy Transformation** on the ***Geopolitics of the energy transition: Energy security*** was released at a dedicated Ministerial Roundtable during the 14 IRENA Assembly (see section above).

On 22 March[73], the ninth meeting of the **Collaborative Framework on Green Hydrogen (CFGH**) focussed on green hydrogen derivatives. The meeting explored various aspects of derivatives trade, such as the certification of hydrogen derivatives and specific regulations addressing them.

The **Collaborative Framework on Hydropower** convened its eighth meeting on 14 August, focusing on sustainable and resilient hydropower development. The meeting provided insights on the vital role of sustainable hydropower projects in realising the energy transition, by showcasing tools and success stories that integrate sustainability into different types of hydropower projects. It offered also an opportunity to explore ways to enhance or maintain hydropower's contribution to the energy system, in terms of adequacy and flexibility, while minimizing environmental impacts.

The **Collaborative Framework on Just and Inclusive Energy Transition** is continuing to enable peer-to-peer dialogue and multistakeholder action on approaches to develop policies and mobilize resources that help pave the way of the equity and justice elements of the energy transition. Building on the work to date on jobs, youth and gender, skills and education, supply chain value, citizen and community engagement, amongst other, the framework remains a relevant platform for IRENA Members to share their insights under the theme.

On 26 March, the eight meeting of the **Collaborative Framework on Ocean Energy/Offshore Renewables** took place. Insights and forecasts on supply chain stress and bottlenecks in the offshore wind sector were examined. Additionally, discussions elaborated on how ports/harbours help facilitate the acceleration of offshore wind deployment, with a focus on polices and best practices in serving as potential energy hubs. Participants also discussed the requirements for optimal grid infrastructure planning and harmonisation to match the anticipated growth in offshore wind capacity.

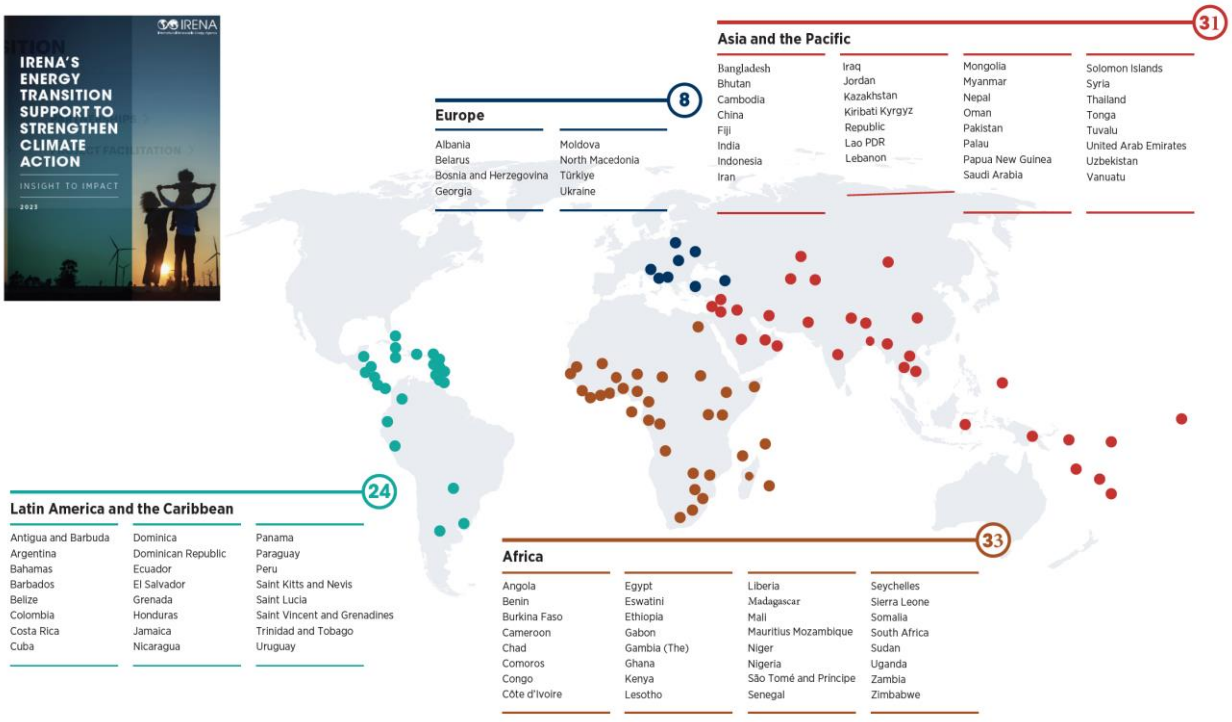
The **Collaborative Framework on Project Facilitation to Support on-the-ground Energy Transition** met on 12 June, coinciding with the 27th meeting of the IRENA Council. The meeting served to enhance the collaboration between IRENA and government entities implementing renewable energy projects domestically, to raise awareness on the Agency's platforms facilitating project financing.

[72] More information available here.
[73] More information available here.

Targeted climate action

IRENA's Members are increasingly reaching out to the Agency with requests to receive targeted support for climate action to enhance their Nationally Determined Contributions (NDCs) and support implementation. In response to this, IRENA is currently engaging and supporting 96 countries with NDC enhancement and implementation across all continents. This is equivalent to 5.4 billion people and covers total energy-related greenhouse gas emissions of 30 450 megatonnes of carbon dioxide equivalent ($MtCO_2e$). Currently, IRENA's NDC enhancement and implementation support includes 190 activities to support the needs of IRENA Members, who are the Parties to the 2015 Paris Agreement, in enhancing and implementing their energy transition plans while reflecting these climate action commitments in NDC submissions (Figure 12). IRENA's contribution to long-term strategies includes six work packages, of which four exist within the NDC Support umbrella.

Figure 12 : IRENA's climate action engagement



2025 constitutes a milestone in the implementation of the Paris Agreement. Countries will need to submit their third round of NDCs, demonstrating their raised ambitions and strategies to achieve the global tripling renewables target as reflected in their national climate targets. To get an overview of the upcoming NDC submissions and specifically their energy sector component., IRENA undertook a survey of 51 Members in 2023. Responses were received from 12 sub-Saharan African, nine Asian, seven Middle Eastern and North African, seven Latin American and three South East European countries, and 13 SIDS. The results of the survey are included in the **Climate action and the energy transition: IRENA Member survey on Nationally Determined Contributions**[74] report, which highlights challenges, priorities and opportunities for NDC enhancement and implementation, as well as the development of long-term low emissions development strategies (LT-LEDS) as identified by Members.

[74] Available here.

Communications, outreach and engagement

IRENA places great importance amplifying the impact of its work through its outreach and communication activities.

Testament to the Agency's successful communications strategy is that IRENA has been referenced in over 27,600 media articles in 52 languages across 164 countries since the beginning of the year. Global media outreach accompanied the launch of flagship reports, including the World Energy Transitions Outlook (WETO) Brief: 'Tracking COP28 outcomes: Tripling renewable power capacity by 2030', 'Renewable capacity statistics 2024' and 'Geopolitics of the energy transition: Energy security'. Flagship reports have been translated in all UN languages, including for the WETO Brief: 'Tracking COP28 outcomes: Tripling renewable power capacity by 2030' and 'Renewable capacity statistics 2024', to ensure the maximum level of outreach. These efforts have been successful. For example, the WETO Brief, launched during BETD, was mentioned 424 times in 10 languages across 36 countries in its first three days from launch, while "Renewable Energy Statistics 2024" report resulted in 430 articles in 13 languages across 58 countries in its first two weeks.

To enhance the visibility of IRENA's work among its diverse membership, the Agency expanded its hosted media programme for the 14th IRENA Assembly. The programme gives the opportunity to international journalists, particularly from developing countries, to attend and cover the IRENA Assembly. This year's programme was the most diverse to date, with 17 journalists representing most regions, including Africa, the Caribbean, Central Asia, Europe, Latin America, the Pacific Islands, and Southeast Asia. Their coverage resulted in 76 varied media pieces, including articles, podcasts, and broadcasts, spanning a wide range of topics.

The number of visitors to the IRENA website reached 1.5 million between 1 January and 10 September 2024, marking a significant increase of 38%, compared to the same period last year. In total, www.irena.org generated over 4.5 million pageviews, 18% more than in the same period last year. Continuity of innovative formats like interactive visual stories, and introduction of new multimedia formats such as motion graphics, has encouraged user interaction and helped to establish the website as a reliable hub of knowledge on the energy transition.

The peak days this year were marked by major events, such as the 14th session of the IRENA Assembly, IRENA Youth engagement events and campaigns, as well as flagship publication launches, such as the WETO Brief. For example, all content related to Youth, including on the Youth Forum and New generation of decision-makers, accumulated over 450,000 pageviews, engaging global youth, increasing reach of IRENA knowledge products, and amplifying impact. Furthermore, the Youth Forum page, which hosts the programme application links, has registered over 300,000 visits thus far.

The new interactive versions of IRENA reports are an ongoing success and generate high engagement, with the WETO reports (2022 and 2023) attracting 43,000 views since January 2024. These products substantially increase engagement, adding to the download numbers for these reports. The Annual Report has also been produced in a digital format, accompanied by an interactive infographic, and attracted significant attention. In addition, visual stories - cumulatively viewed more than 28,000 times since January 2024 - facilitate overview and enhance access to the reports and key data, strengthening the outreach.

Since 1 January 2024, IRENA has produced and promoted 30 videos, which encompassed regular webinar recordings, human impact stories, key events such as the first International Day of Clean Energy/IRENA's 15th Anniversary, and in-house-produced videos (Lumen5) on critical reports, as well as major IRENA initiatives. Additionally, during the 14th IRENA Assembly, the Agency published recordings and select clips from the sessions, amounting to 26 videos on the Agency's YouTube channel.

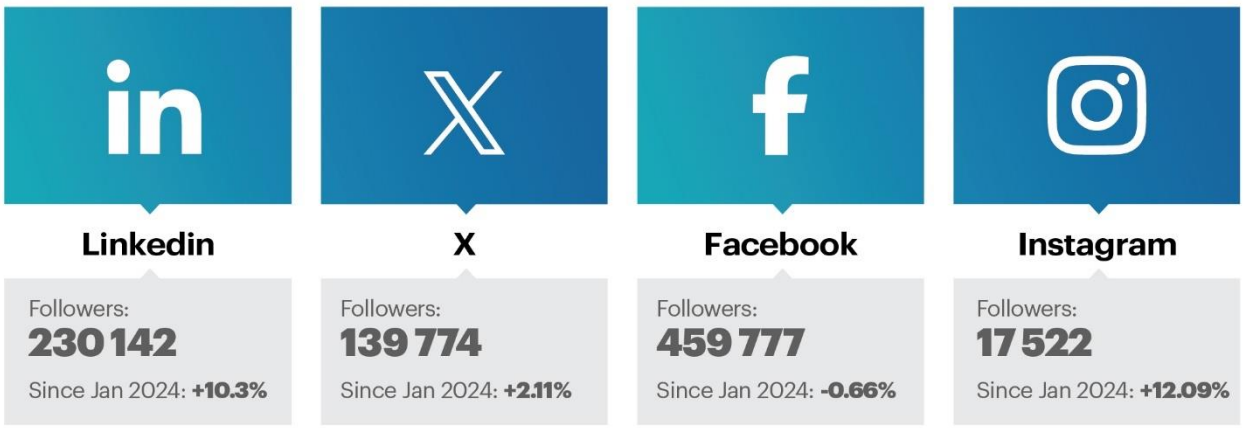
Between 1 January and 12 September 2024, IRENA published a total of 30 newsroom articles. The majority (22) of them covered recent IRENA reports or activities. Five newsroom articles were dedicated to showcasing the five key enablers of the tripling target in the lead-up to the tripling campaign. The rest are five IRENA experts' blog posts (Expert Insights) and three human impact stories.

In the same period, dedicated mailing campaigns have provided targeted information on IRENA press releases, and events to a pool of 145,912 stakeholders, including Member focal points. Moreover, IRENA sent a total of 56 mailers, including four dedicated to the 14th Assembly; 12 press releases; 16 job alerts; and 15 invitations or calls to applications for certain activities e.g. Youth. In March, IRENA launched 'The Renewables Digest', monthly newsletters. Six monthly newsletters had been sent out by 12 September 2024. The remaining three mailers were 'special occasion' announcements on IRENA's 15th Anniversary/Clean Energy Day and response to submitted applications of Youth Forum 2024.

The highest open rate during this period was generated by the Call to Application for NewGen 2024 in March at 58.3%. The highest clicks were generated by the Call to Application for Youth Forum 2025 in September at 14%.

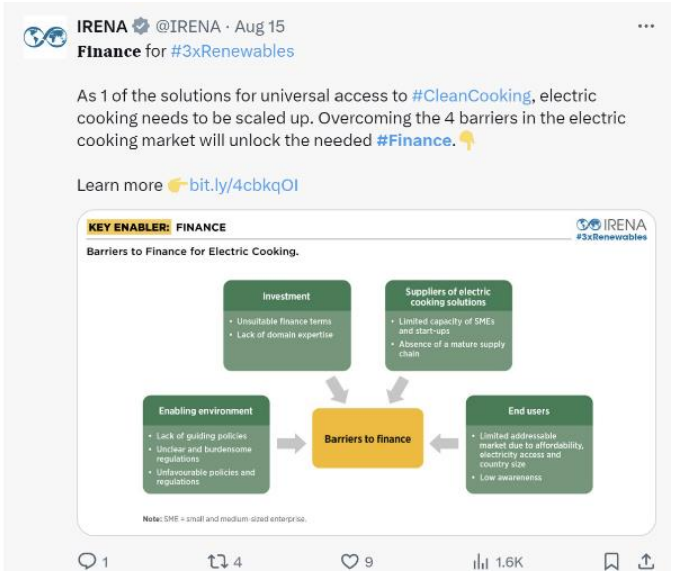
In terms of social media presence, IRENA has reached 230,142 LinkedIn followers, up from 206,503 followers in January 2024, constituting an increase of 10.3%. Furthermore, IRENA's X account has now 139,774 followers, up from 136,824 followers in January 2024 - an increase of 2.11%. Instagram saw a 12.09% increase in followers, reaching 17522 as of the reporting date. Instagram and LinkedIn are the fastest growing social media platforms, with interaction and engagement rates being the highest on those platforms as well (Figure 13).

Figure 13: IRENA social media statistics



IRENA continues to implement and explore creative content styles on social media. IRENA's social media accounts built strong messaging around tripling of renewables through an increased use of hashtag #3xRenewables. For example, during the summer months, the key component to increase engagement and keep the accounts active was consistency and repackaging of existing content on #3xRenewables. The five key enablers of the energy transition identified by IRENA were posted every day for five weeks throughout July and August. Each visual asset for this campaign was branded with uniformity and consistent messaging (Figure 14), with the engagement of every post crossing over 1,000 impressions and leading to a cumulative reach of 42,000 people.

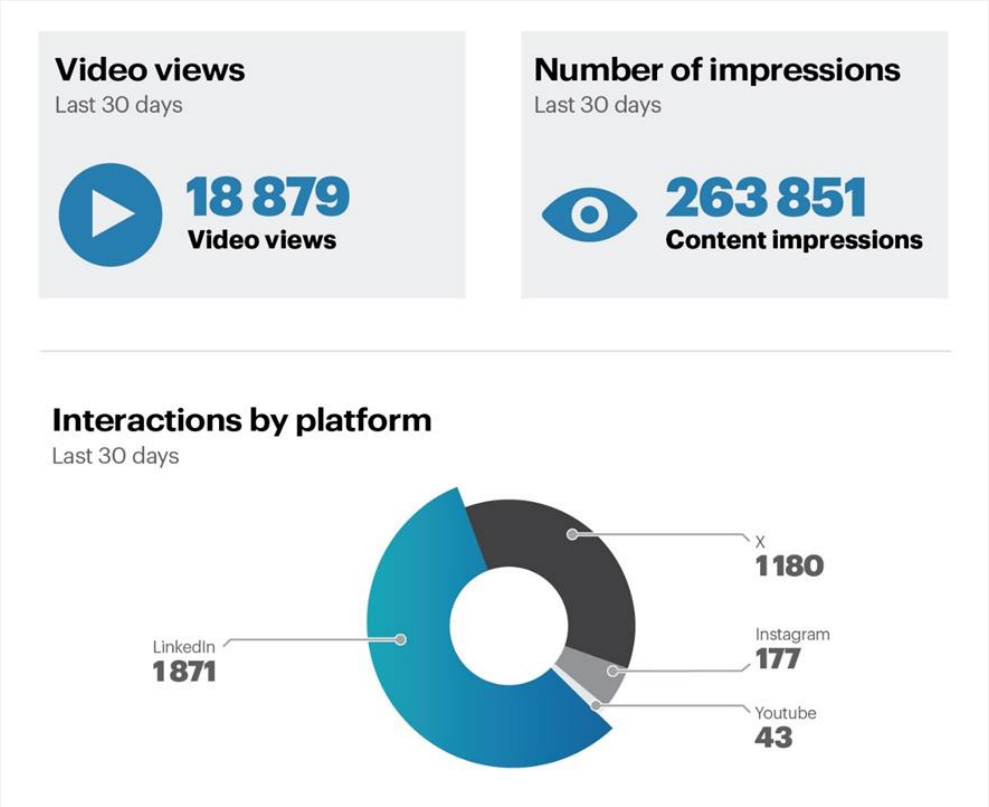
Figure 14: Examples of social media posts that showcase key enablers of #3xRenewables



In focus: 14th IRENA Assembly

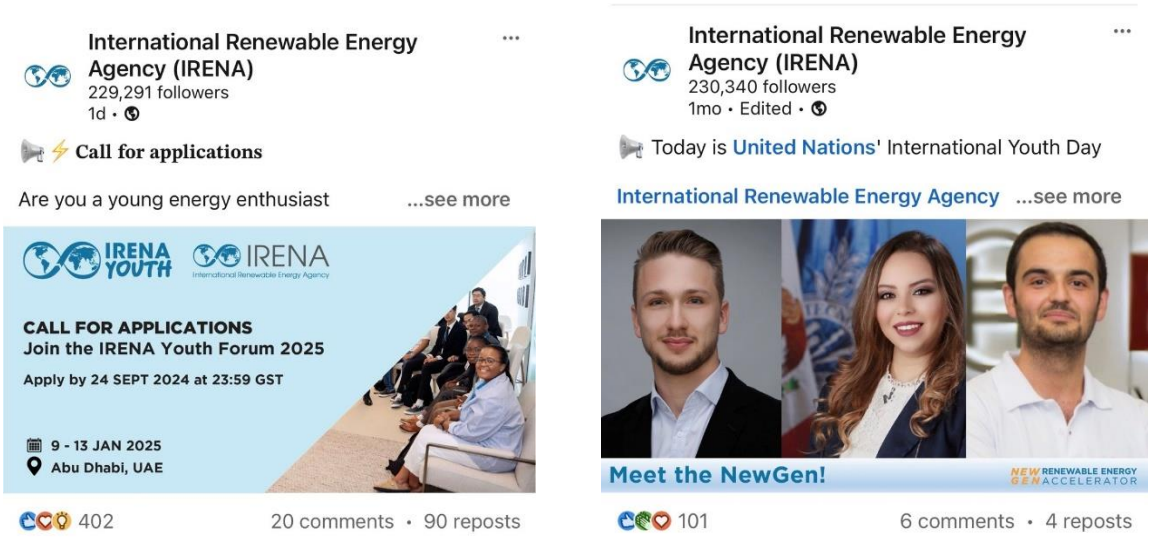
The 14th session of the IRENA Assembly attracted significant attention on X, LinkedIn and Instagram. The hashtag #IRENA14A generated over 200,000 impressions between 10 and 20 April 2024. Assembly content pieces were placed on all three platforms and all of the views, impressions, and reposts were organic. A total of 130 content pieces went out from IRENA's social media accounts and 3,271 content pieces were shared by external users, including stakeholders, media houses, youth delegates, etc. Organic video views were more than 18,000 on all X alone, while the highest number of interactions were observed on LinkedIn, followed by X (Figure 15).

Figure 15 : Social media metrics of the 14th IRENA Assembly



Significant engagement is also noted on youth-related posts. In July, IRENA launched the "Meet the NewGen" Campaign as a weekly series, to introduce entrepreneurs from 17 startups selected under IRENA's NewGen Youth Accelerator. The campaign runs on LinkedIn and Instagram. It attracted the attention of young energy enthusiasts, with a keen interest in learning more about the Accelerator. Additionally, social media posts related to Youth Forum, Youth Logo design contest, Summer Youth Programme, played a key role in enhancing IRENA's youth outreach on social (Figure 16).

Figure 16: Examples of social media posts with Youth content



IRENA also continues to engage with stakeholders, youth, and energy organisations. To strengthen its youth engagement this year, IRENA selected five global youth ambassadors to promote messaging from the IRENA Youth Forum 2024 on all social media platforms. The ambassadors created multi-media content around tripling messaging, the role of youth in the global energy transition, and how IRENA supports young people to take the lead in sustainable development. An interactive video format called 'Reels' was used to engage young people and encourage them to amplify IRENA's messaging. As a result of this activity, IRENA's Instagram gained over 1,000 followers during the Assembly, and IRENA's reels were watched by over 40 000 people. The Agency's presence increased significantly on Instagram, a platform widely used by today's youth.

IRENA's **Policy Talks** – an innovative method of engaging and extending the reach of IRENA's analytical work – dedicated the first session on 25 January 2024 to presenting the key insights of IRENA's **NDCs and renewable energy targets in 2023: Tripling renewable power by 2030**[75] report. The webinar served to discuss renewable energy targets in countries' NDCs, and their level of ambition in relation to IRENA's 1.5°C scenario and the goal of tripling renewables in the power sector by 2030, highlighting the financial gap and required policies. The next Policy Talk on 15 February 2024 focused on **Post-COP28: Translating pledges into action in the GCC.**[76] Drawing on IRENA's report, Renewable energy markets: GCC 2023, the discussion highlighted the significant progress in renewables achieved by countries in the region, the need to increase the

[75] More information available here.
[76] More information available here.

share of renewables in total installed generation capacity and the opportunities for GCC countries to advance the energy transition. The next Policy Talk focused on **Water for Hydrogen Production**,[77] presenting the key findings of the report of the same title and underscoring the importance of integrating water sustainability into energy planning. **Green hydrogen for sustainable industrial development: A policy toolkit for developing countries**[78] was the topic of the Policy Talk on March 2024. The webinar served to share insights into the potential of green hydrogen in advancing sustainable development and just transition through policy coordination.

The fortnightly **IRENA Insights**[79] programme of short, focused **webinars** showcases key insights from teams across the Agency continue to be held apace. On 6 February, IRENA held a webinar on the insights from the **Offshore Wind Energy Patent Insights** on innovation trends in the offshore wind supply chain, jointly prepared by the European Patent Office and IRENA, assessing patent statistics to reveal technological trends in the offshore wind industry. At the 20 February webinar, IRENA discussed the findings of the **International trade and green hydrogen** report, highlighting the potential of international trade in balancing supply and demand for green hydrogen and the role of trade policies in fostering the development of green hydrogen supply chains, acknowledging the significance of global collaboration. The focus of the webinar on 18 March was the **Scenarios for the Energy Transition: Experiences and good practices in Africa**[80] report that presented key findings and recommendations broadly relevant to African countries and stakeholders, attempting to improve their planning processes across the world. The webinar on 2 July delved into the ***IRENA National Energy Transition Planning Dashboard*** - a global repository of official energy planning documents and modelling tools developed and/or used by government institutions for official planning purposes from 73 countries. On 16 July, IRENA held a webinar presenting findings from the ***Decarbonising Hard-to-Abate Sectors: A Pivotal Role for the G7*** report. The session explored the sectors' decarbonisation status and trends, addressing cross-cutting challenges, and presenting recommendations for G7 countries to overcome them. The focus of the 23 July webinar was on ***The energy transition in Africa: Opportunities for international collaboration with a focus on the G7***. This webinar presented findings from the namesake report highlighting the areas for collaboration between African nations and G7 countries to drive the energy transition.

[77] More information available here; report available here.
[78] More information available here; report available here.
[79] More information available here.
[80] Report available here.

Monitoring and Evaluation Framework

Background

Three times a year, IRENA reports on the implementation of its Work Programme and Budget, submitting progress and annual reports to the IRENA Council and Assembly. These reports provide information on achieved outputs, updates on the Agency's institutional and strategic activities, and an overview of IRENA's budget. The Agency currently lacks standardized monitoring systems, resulting in each division developing different systems to track and report their work.

An external evaluation of the agency's Medium-term Strategy 2018-2022 highlighted the existence of relatively well-developed output and activity-focused monitoring systems within IRENA's teams. However, monitoring at the outcome or impact level is limited, and the Agency lacks a shared results or monitoring framework that all teams can contribute to. Moreover, there is currently no set of strategically defined baselines, targets and timelines to measure the Agency's progress towards achieving its goals.

As a first step, IRENA developed its first Theory of Change, included in the Medium-term Strategy 2023-2027 adopted in January 2023. During this period, the Agency aims to strengthen its institutional approaches, tools, and mechanisms to continuously improve its overall outputs and delivery with a focus on clearly articulated programmatic activities.

In 2023, IRENA developed a results-based framework (RBF) to track and demonstrate the impact of the Agency's work, and the Work Programme and Budget for 2024-2025. Both were adopted at the 14th session of the IRENA Assembly in January 2024. This programmatic cycle will be the first step in a gradual shift to the RBF that will eventually guide the delivery and evaluation of the IRENA work.

Process to develop a Monitoring and Evaluation system

IRENA has been working with a consulting company to develop a comprehensive monitoring and evaluation (M&E) framework that enables the tracking and reporting of discernible and traceable impact of IRENA's programmatic activities. This phase of the process includes two workstreams taking place in parallel. In workstream one, programmatic divisions as well Communications, Events and Publications Units are working on defining baselines, targets and timelines; identifying data collection methods and sources as well as management and analysis processes; and identifying standardised reporting mechanisms and structures. The baselines are set based on data from the previous biennium, against which progress will be measured on the Immediate and Intermediate outcomes. Under workstream two, IRENA ICT is working with the company to identify options for a web-based M&E tool, based on IRENA existing technologies.

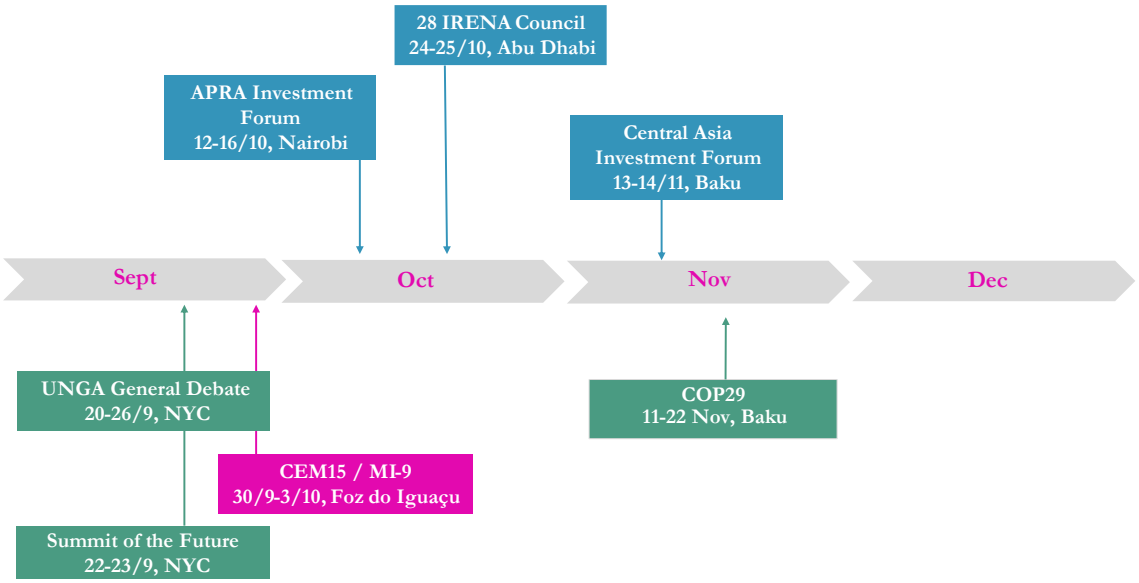
This phase will conclude at the end of September/beginning of October. As a next step, IRENA will analyse the data as well as choose the appropriate web-based M&E tool and take steps to incorporate/build it into existing IT systems by the end of the year. Moreover, the Agency will begin the process of setting up the framework for a results-based budgeting to be implemented with the adoption of the next Work Programme and Budget. The 2024-2025 biennium will serve to transition IRENA into the M&E system. As the Agency begins to implement it, adjustments can be made to improve it.

It is envisioned that the key activities and Outputs in the next Work Programme will be mapped against the Outcomes, to ensure alignment with the Theory of Change and Medium-term Strategy

Looking ahead

This section provides a snapshot of some of IRENA's upcoming key events as well as selected upcoming events and publications.

Upcoming key events



Selected upcoming IRENA events and publications

Table 8: Tentative list of IRENA Events, 2024

Date	Event name
23-25 Sept	Global Renewables Summit (New York, USA)
12-16 Oct	APRA Investment Forum
15-Oct	4th Meeting of the Collaborative Framework on Critical Materials
24-25 Oct	28 IRENA Council (Abu Dhabi, UAE)
11-22 Nov	COP29 (Baku, Azerbaijan)
13-14 Nov	Central Asia Investment Forum (Baku, Azerbaijan)

Table 9: Selected upcoming publications, 2024

Quarter	Provisional report title
Q4	Renewable power generation costs in 2024
Q4	Socio-economic footprint of the energy transition: Malaysia
Q4	Renewable energy and jobs: Annual review 2024
Q4	Delivering the UAE Consensus: Tracking progress toward tripling renewable energy capacity and doubling efficiency by 2030
Q4	World Energy Transitions Outlook 2024: 1.5ºC Pathway
Q4	Innovation landscape for growth powered by renewable energy
Q4	Off-grid renewable energy statistics 2024

Effective functioning of the organisation

To deliver on the Agency's mandate, IRENA relies on the contributions and support of its Members, cooperation with a wide range of experts and institutions, and the commitment of its talented staff. This chapter summarises IRENA's key institutional and strategic activities to date. The Administration and Management Services (AMS) Division supports efficient implementation of the Work Programme and facilitates effective use of the Agency's resources. IRENA continues to innovate in its processes and practices to remain responsive to the dynamic nature of its programmatic work.

Budget

The Budget Section provides strategic advice to the senior leadership team and programme managers on planning, administration and management of IRENA's financial resources. The support to the Agency also includes preparation of IRENA's budget, in cooperation with Planning and Programme Support Unit, reporting processes, and administration of core and voluntary contributions through budgeting and control services, forecast information and preparation of financial reports for management, governing bodies and donors.

Finance

The Finance Section continues to perform a critical role in the overall functioning of the Agency and is responsible for managing the financial resources and preparation of Annual Financial Statements, ensuring full compliance with IRENA's Rules and Regulation and International Accounting standards.

The Section also manages the day-to-day financial operations, including payment processing, payroll, investments and contributions. In addition, it ensures accuracy, timeliness and compliance in financial transactions. Finance endeavours to continue to seek improvements and increase efficiencies in its processes whilst maintaining internal controls and mitigating potential risks.

Information and Communication Technology (ICT)

ICT continues to serve as a strategic enabler and tool for the Agency in the implementation of its Work Programme by providing state-of-the-art IT services and solutions to IRENA units. ICT is regularly maintaining and consolidating its IT capabilities through initiatives for digital transformation (process automation, paperless, remote work etc.), infrastructure modernisation (in HQ as well as in Bonn and New York Offices, cloud and on premise), operational excellence (IT governance, cost optimisation, proactive maintenance, regular monitoring etc.) and internal capacity building (trainings, technology workshops etc.).

As per the IT strategy, which is closely aligned with the IRENA Medium-term Strategy, ICT is strengthening its role as a:

- Driver of digital transformation towards higher institutional effectiveness and efficiency through the maintenance and enhancement of the Executive dashboard, ERP and other online tools for collaboration and knowledge sharing. In particular, some initiatives related to Artificial Intelligence and a framework for its use in the Agency are ongoing.
- Enabler of the development of value-added business capabilities on renewable energy through the maintenance and enhancement of the IRENA website and web platforms on renewable energy. Continuous enhancements to the IRENA website related to new and major events are implemented.
- Pillar of the organisational resilience and compliance through the implementation of the cybersecurity management framework and the business resilience plan. For example, several enhancements to the network performance and security are implemented.

Human Resources

The work of Human Resources has spanned administrative, operational and strategic activities. Significant effort has been placed on aligning human resource policies and processes more closely with the Agency's strategic and programmatic objectives, including additional personnel sourcing and building organisational capabilities that are needed to achieve the Agency's operational objectives with the right combination of skills, knowledge, competencies and expertise, while promoting geographical, cultural and gender diversity. Human resources practices, rules and procedures have continued to be refined and updated to ensure effective and efficient responsiveness to the emerging and evolving needs and challenges of the Agency, while safeguarding its core values and principles. Attracting, developing and retaining highly qualified staff is key to the Agency's success. In this respect, IRENA has continued its outreach efforts to attract talent from all over the world, including by tapping into Members' expertise, and through the mechanisms provided by the decision of the Assembly at its second session (A/2/DC/5) such as loan and secondment arrangements.

Since 1 January 2024, 26 vacancies (core and project, including Interns and Associate Professionals) were announced and over 9,714 applications were received. Out of 93 core posts, 82 are filled or under recruitment (70 filled and 12 under active recruitment) and 11 are vacant (Figure 17). The 70 staff in core posts are from 44 nationalities out of which 46% are women and 54% are men. There are also 122 project posts that are currently filled or under recruitment (108 filled and 14 under active recruitment. Combined core and project posts amount to a total of 178 staff, who come from 78 nationalities, with 46% women and 54% men (Figure 18 and 19).

Figure 17: Staff Status as of 31 August 2024

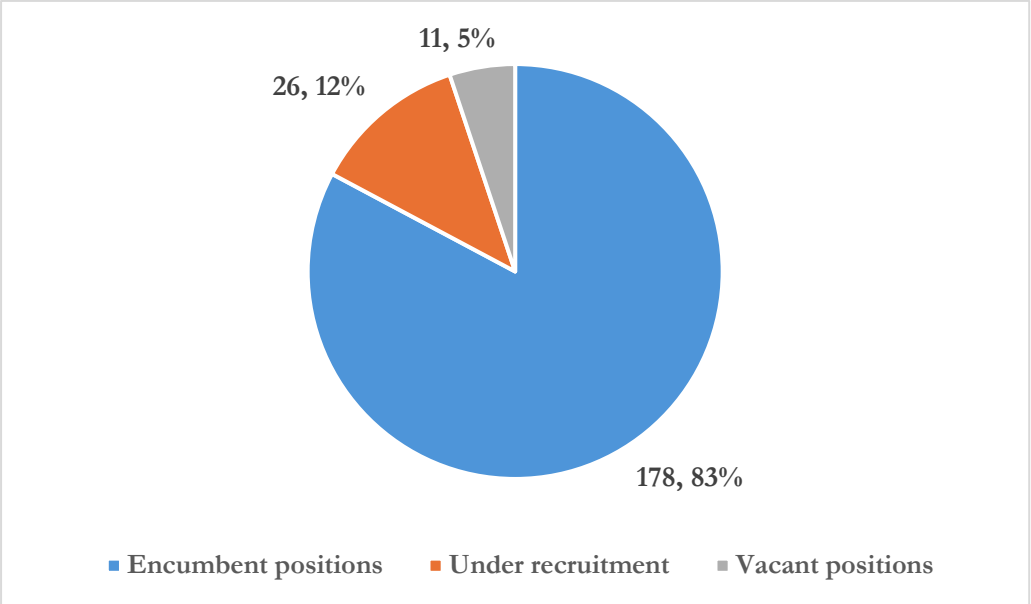


Figure 18: Employee profile statistics

Figure 19: Geographical Distribution (core and project posts), as of 31 August 2024

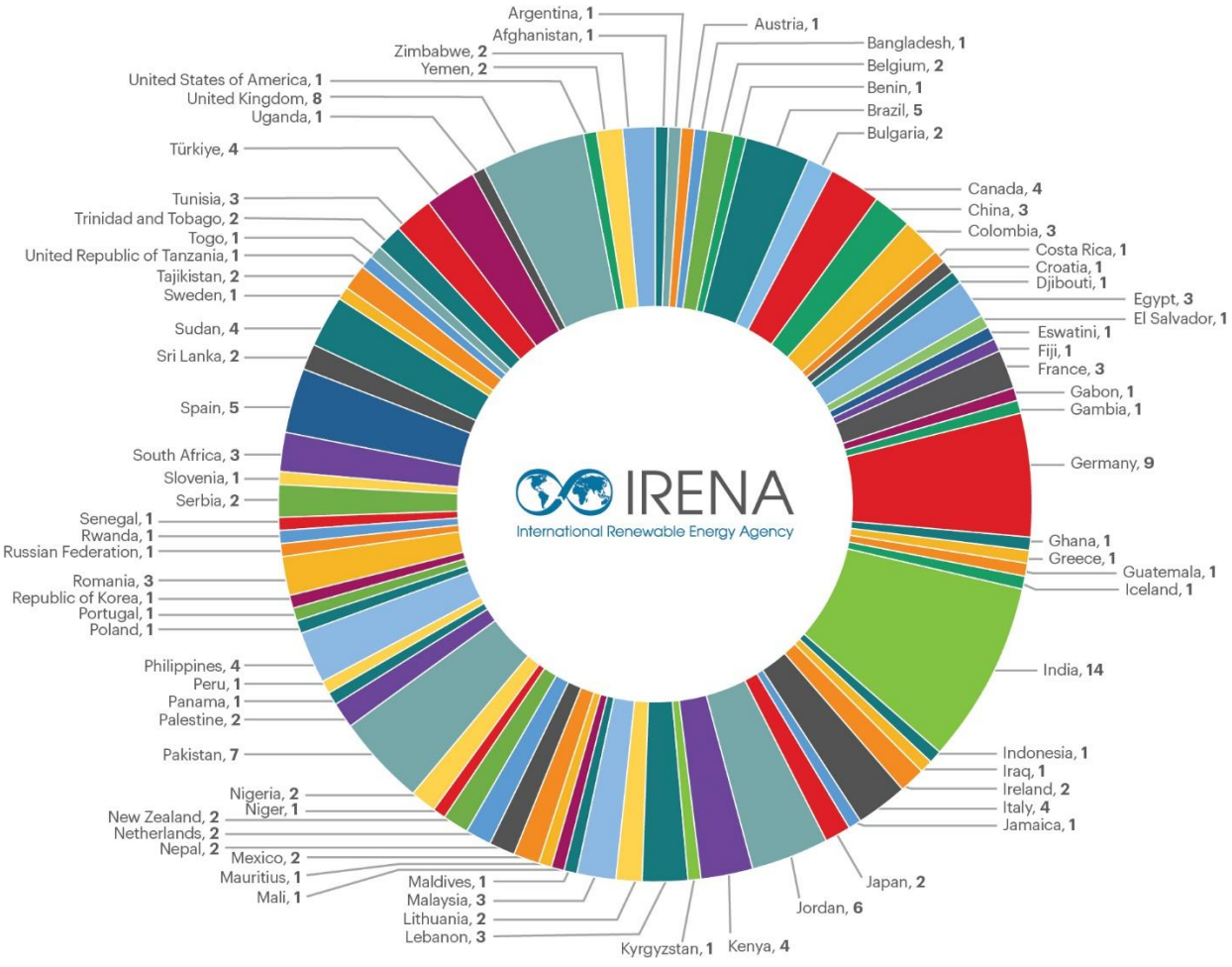


Table 10: Filled/under recruitment: Core and Project posts by level as of 31 August 2024

Level	Filled or Under Recruitment	Total
ASG	**1**	**1**
D-2	**1**	**1**
D-1	**7**	**7**
P-5	**21**	**23**
P-3/4	**75**	**81**
P-2/1	**61**	**61**
Sub-total Professional and above	**166**	**174**
General Services	**38**	**41**
Total	**204**	**215**

Table 11: Loaned personnel as of 31 August 2024

Division	Title	Loaned from
CEP	Programme Officer	United Arab Emirates
ODG	Liaison and Protocol Officer	United Arab Emirates
ODG	Communications Officer	United Arab Emirates
CEP	Loaned Officer - SGCC	China

Table 12: Seconded Officers (Voluntary Contributions) as of 31 August 2024

Division	Title	Seconded from
CEP	Programme Officer	Republic of Korea
CEP	Programme Officer - Geothermal	Iceland
IITC	(JPO) Associate Programme Officer	Germany
KPFC	(JPO) Associate Programme Officer	Germany

Procurement

The Agency has continued to implement its administration of cost-effective procurement process for goods, services and other related requests. To ensure the transparency, fairness, openness and competitiveness of the procurement process bidding opportunities, the Request for Proposals (RFP) or Invitation to Bid (ITB) are mostly posted on IRENA's website and disseminated to the vendors registered with IRENA's vendors' database.

From January 2024 and as of 31 August 2024, more than 244 procurement contracts and agreements for goods and services have been awarded totalling USD 4.53 million. Furthermore, in the same period, the number of vendors registered in Procurement Section database has increased within the last three years also to reach almost 676 vendors from various countries worldwide.

General Services and Travel

Travel support and services were provided to staff, delegates and participants in conferences and workshops. From 1 January to 30 August 2024, the Agency facilitated travel of staff and delegates and received 504 travel requests and 230 services for 22 workshops. The section continues to provide facility management services for IRENA Headquarters and staff. This is an important function, which contributes to a healthy and productive work environment while delivering continuous day-to-day services for staff. As part of these ongoing services, General Services continues to explore further enhancement measures for Health and Safety to provide an even better work environment for staff.

Implementation progress overview

There are a total of 40 Work Programme activities for the 2024-2025 biennium, spreading across the five strategic objectives or pillars identified in the current Medium-term Strategy 2023-2027: a centre of excellence for knowledge and innovation; a network hub for all stakeholders; a global voice of renewable energy; a source of advice and support for countries and regions; and project facilitation and capital mobilisation (Table 13).

The assessment on progress is undertaken based on the average progress on delivering the activities. Based on the overview of progress today, the implementation of outputs continues as envisioned.

Table 13: IRENA's Strategic Objectives

Centre of Excellence for Energy Transformation	•Provide thought leadership and authoritative knowledge, data and analyses on all aspects of the energy transition and its impacts at global, regional, national and sectoral levels.
International Collaboration and Network Hub	•Galvanise international collaboration and provide an inclusive platform for all stakeholders to foster targeted action, alignment of activities and knowledge sharing for impact on the ground.
Global Voice of Renewables	•Pursue excellence in renewables innovation, development and deployment and promote practical application of knowledge for systemic change.
Support for Regions and Countries	•Assist regional and country-level decision-making and support implementation strategies to reduce global emissions, adapt to climate change, and improve energy access, security and affordability for sustainable development
Facilitating Projects and Mobilising Capital	•Facilitate the development of project pipelines and channel investment toward renewables-based energy systems in developing countries.

Resource overview

This section presents details of the core budget and voluntary contributions applicable to the Work Programme and Budget for 2024-2025.

Biennial budget overview

Table 14: 2024-2025 Biennium Budget utilisation by funding source (in USD Thousands)

Funding Source	2024-2025 Biennium Budget	Utilisation as of 31 Aug 2024	
		Commitment and Expenses	Proportion of 2024-2025 Biennium Budget
Assessed Contributions (Core Budget)	**44,778**	**19,831**	**44%**
Core Non-Assessed UAE Contribution:			
UAE Support	5,000	1,952	39%
Governing Body Meetings	3,200	1,591	50%
IT Infrastructure Support	920	460	50%
Subtotal	**9,120**	**4,004**	**44%**
Core Non-Assessed Germany Contribution:			
Innovation and Technology Centre	10,890	4,583	42%
Subtotal	**10,890**	**4,583**	**42%**
Total Core Non-Assessed	**20,010**	**8,587**	**43%**
Grand Total	**64,788**	**28,418**	**44%**

In addition to Core Non-assessed contributions, UAE and Germany provide annual in-kind contributions of approximately USD 5.6 million and USD 1.9 million respectively.

Table 15: 2024-2025 Biennium Budget Utilisation by division (in USD Thousands)

Division	2024-2025 Biennium Budget	Utilisation as of 31 Aug 2024	
		Commitment and Expenses	Proportion of 2024-2025 Biennium Budget
Country Engagement and Partnerships	8,426	3,783	45%
IRENA Innovation and Technology Centre	10,890	4,583	42%
Knowledge, Policy and Finance Centre	10,500	4,382	42%
Project Facilitation and Support	3,421	1,518	44%
Office of the Director-General	18,288	8,425	46%
Administration and Management Services	13,263	5,727	43%
Grand Total	**64,788**	**28,418**	**44%**

Table 16: 2024-2025 Biennium Budget Utilisation, Country Engagement and Partnerships Division (in USD Thousands)

Country Engagement and Partnerships	2024-2025 Biennium Budget	Utilisation as of 31 Aug 2024	
		Commitment and Expenses	Proportion of 2024-2025 Biennium Budget
Staff costs	**4,822**	**2,411**	**50%**
Total Non-Staff Costs	**3,604**	**1,372**	**38%**
Project & Seconded Personnel, Interns and Consultants	2,187	1,090	50%
Programme and Expert Meetings	556	141	25%
Furniture and Equipment	15	-	0%
General Operating Expenditures	179	73	41%
Travel of Staff	61	12	20%
Contractual Services	606	56	9%
Grand Total	**8,426**	**3,783**	**45%**

Table 17: 2024-2025 Biennium Budget Utilisation, IRENA Innovation and Technology Centre (in USD Thousands)

IRENA Innovation and Technology Centre	2024-2025 Biennium Budget	Utilisation as of 31 Aug 2024	
		Commitment and Expenses	Proportion of 2024-2025 Biennium Budget
Staff costs	**4,668**	**2,084**	**45%**
Total Non-Staff Costs	**6,222**	**2,499**	**40%**
Project & Seconded Personnel, Interns and Consultants	4,226	1,806	43%
Programme and Expert Meetings	227	27	12%
Travel of Staff	258	123	48%
Contractual Services	1,078	380	35%
General Operating Expenditures	333	163	49%
Furniture and Equipment	100	0	0%
Grand Total	**10,890**	**4,583**	**42%**

Table 18: 2024-2025 Biennium Budget Utilisation, Knowledge, Policy and Finance Centre (in USD Thousands)

Knowledge, Policy and Finance Centre	2024-2025 Biennium Budget	Utilisation as of 31 Aug 2024	
		Commitment and Expenses	Proportion of 2024-2025 Biennium Budget
Staff costs	**5,285**	**2,040**	**39%**
Total Non-Staff Costs	**5,215**	**2,343**	**45%**
Project & Seconded Personnel, Interns and Consultants	3,949	1,974	50%
Programme and Expert Meetings	88	27	31%
Furniture and Equipment	15	2	15%
Travel of Staff	80	32	39%
Contractual Services	890	230	26%
General Operating Expenditures	193	78	40%
Grand Total	**10,500**	**4,382**	**42%**

Table 19: 2024-2025 Biennium Budget Utilisation, Project Facilitation and Support Division (in USD Thousands)

Project Facilitation and Support	2024-2025 Biennium Budget	Utilisation as of 31 Aug 2024	
		Commitment and Expenses	Proportion of 2024-2025 Biennium Budget
Staff costs	**2,512**	**1,161**	**46%**
Total Non-Staff Costs	**909**	**357**	**39%**
Project & Seconded Personnel, Interns and Consultants	513	250	49%
Furniture and Equipment	6	-	0%
General Operating Expenditures	72	29	41%
Travel of Staff	102	51	50%
Contractual Services	216	26	12%
Grand Total	**3,421**	**1,518**	**44%**

Table 20: 2024-2025 Biennium Budget Utilisation, Office of the Director-General (in USD Thousands)

Office of the Director-General	2024-2025 Biennium Budget	Utilisation as of 31 Aug 2024	
		Commitment and Expenses	Proportion of 2024-2025 Biennium Budget
Staff costs	**9,553**	**4,329**	**45%**
Total Non-Staff Costs	**8,735**	**4,096**	**47%**
Project & Seconded Personnel, Interns and Consultants	4,583	2,149	47%
Programme and Expert Meetings	238	53	22%
Travel of Staff	570	373	65%
Contractual Services	2,961	1,404	47%
Furniture and Equipment	5	4	83%
General Operating Expenditures	378	112	30%
Grand Total	**18,288**	**8,425**	**46%**

Table 21: 2024-2025 Biennium Budget Utilisation, Administration and Management Services (in USD Thousands)

Administration and Management Services	2024-2025 Biennium Budget	Utilisation as of 31 Aug 2024	
		Commitment and Expenses	Proportion of 2024-2025 Biennium Budget
Staff costs	**8,824**	**4,250**	**48%**
Total Non-Staff Costs	**4,439**	**1,478**	**33%**
Project & Seconded Personnel, Interns and Consultants	1,869	857	46%
Travel of Staff	13	-	0%
Contractual Services	634	43	7%
General Operating Expenditures	1,816	484	27%
Furniture and Equipment	107	93	87%
Grand Total	**13,263**	**5,727**	**43%**

Table 22: Core Non-Assessed Contributions (in USD Thousands)

Core Non-Assessed Contributions		
as of 31 August 2024, in USD		

Budgeted Voluntary Contributions		
	2024	
	Committed	**Received**
Germany		
IRENA Innovation and Technology Centre	5,445,000	5,445,000
United Arab Emirates (UAE)		
UAE Support	2,500,000	2,500,000
Governing Body Meetings	1,600,000	1,600,000
IT Infrastructure Support	460,000	460,000
Subtotal UAE Contributions	**4,560,000**	**4,560,000**

Total Budgeted Voluntary Contributions	**10,005,000**	**10,005,000**

Other Voluntary Contributions		
	2024	
Donor	**Committed**	**Received**
Germany	751,427	212,175
Iceland	505,000	505,000
Japan	609,835	609,835
Republic of Korea	377,977	377,977
United Arab Emirates	57,174	57,174
Total	**2,301,413**	**1,762,161**

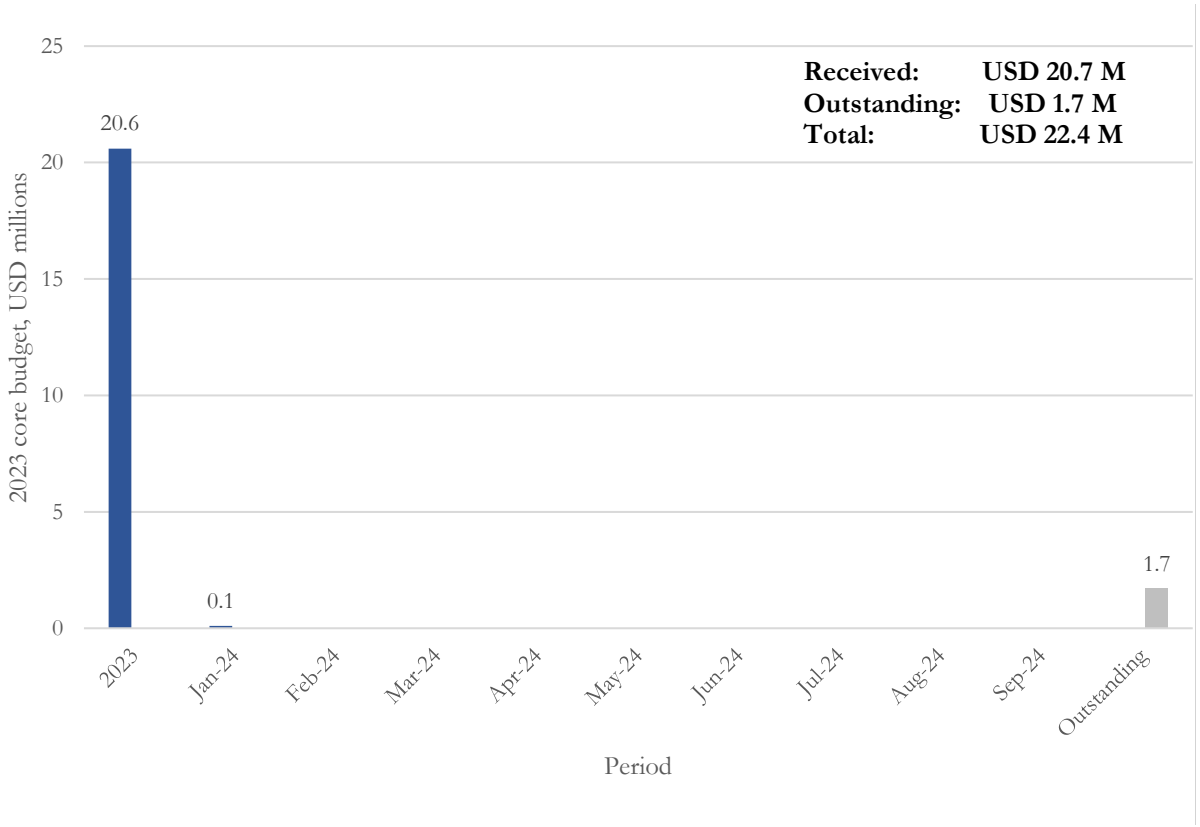
Other Voluntary Contributions - Non-Members		
	2024	
Donor	**Committed**	**Received**
OPEC Fund for International Development	400,000	-
Total	**400,000**	-

Multi-Year Voluntary Contributions			
Donor	**Multi-Year Commitments**	**Received prior to 2024**	**Received during 2024**
Belgium (Government of the Walloon Region)	3,193,656	2,104,331	1,089,325
Denmark	21,936,645	5,224,278	-
European Commission	9,229,315	3,294,752	-
Netherlands	800,320	400,160	-
Total	**35,159,936**	**11,023,521**	**1,089,325**

Multi-Year Voluntary Contributions - Non-Members			
Donor	**Multi-Year Commitments**	**Received prior to 2024**	**Received during 2024**
Deutche Gessellschaft fur Internationale Zussamenarbeit GmbH	397,598	231,982	-
Global Energy Alliance for People and Planet	2,544,130	1,204,666	-
Physikalisch-Technische Bundesanstalt	564,667	280,899	-
United Nations Development Programme	6,265,000	1,984,714	-
Total	**9,771,395**	**3,702,261**	**-**

Fund for Developing Countries Representatives		
	2024	
Donor	**Committed**	**Received**
United Arab Emirates	350,000	350,000
Total	**350,000**	**350,000**

Figure 20: Received and outstanding assessed contributions for 2023 core budget (in USD millions, as of 11 September 2024)



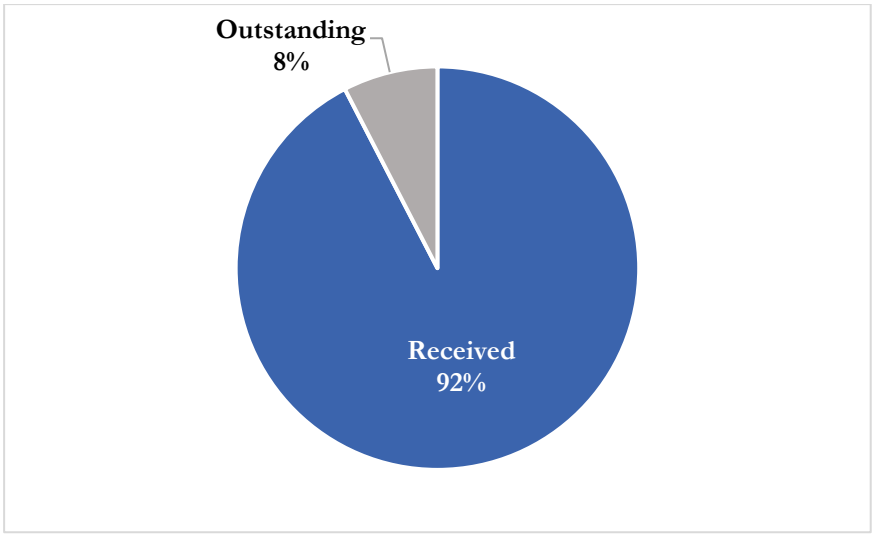
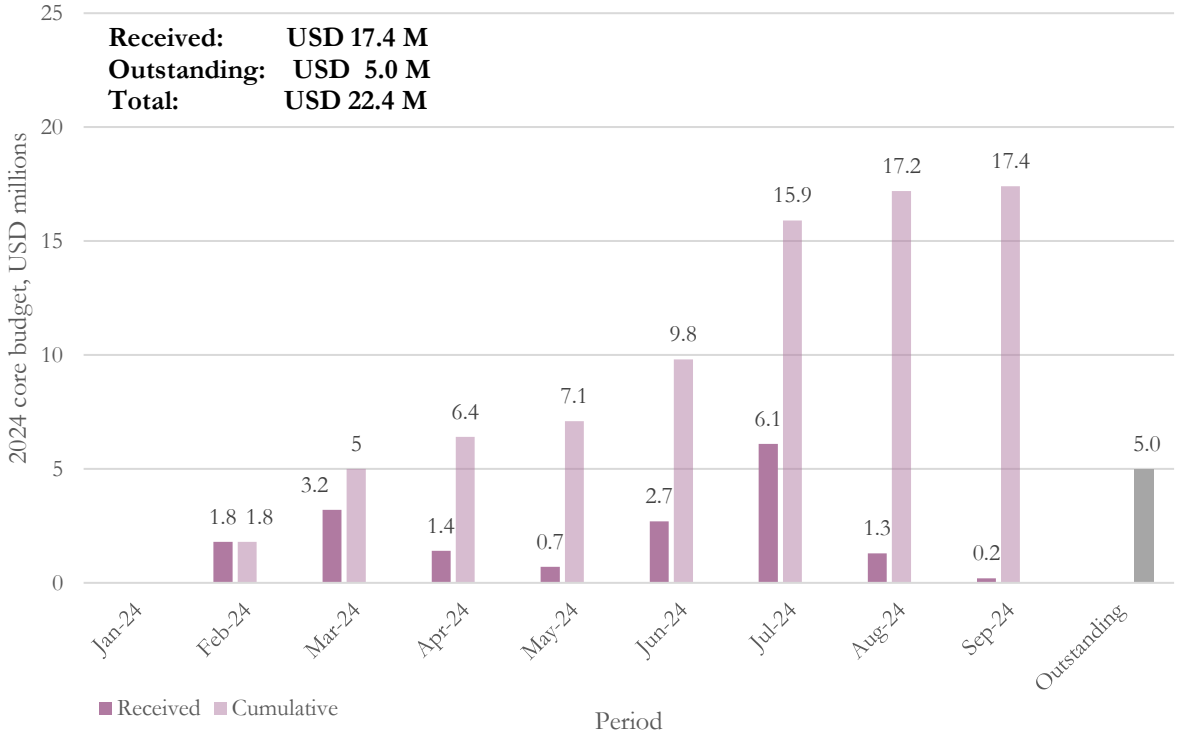


Figure 21: Received and outstanding assessed contributions for 2024 core budget (in USD millions, as of 11 September 2024)



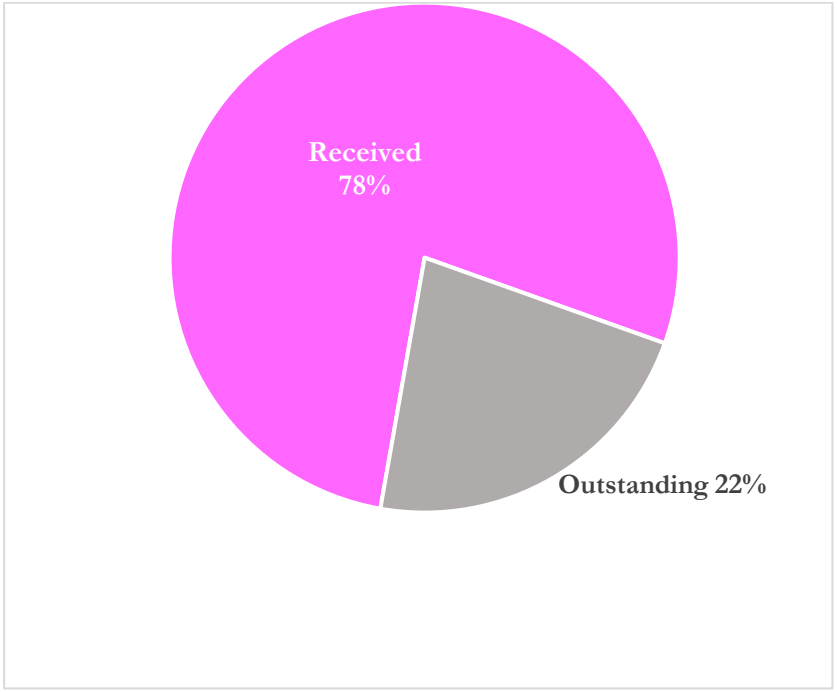


Figure 22: Number of Members with received and outstanding contributions to the 2023 core budget (11 September 2024)

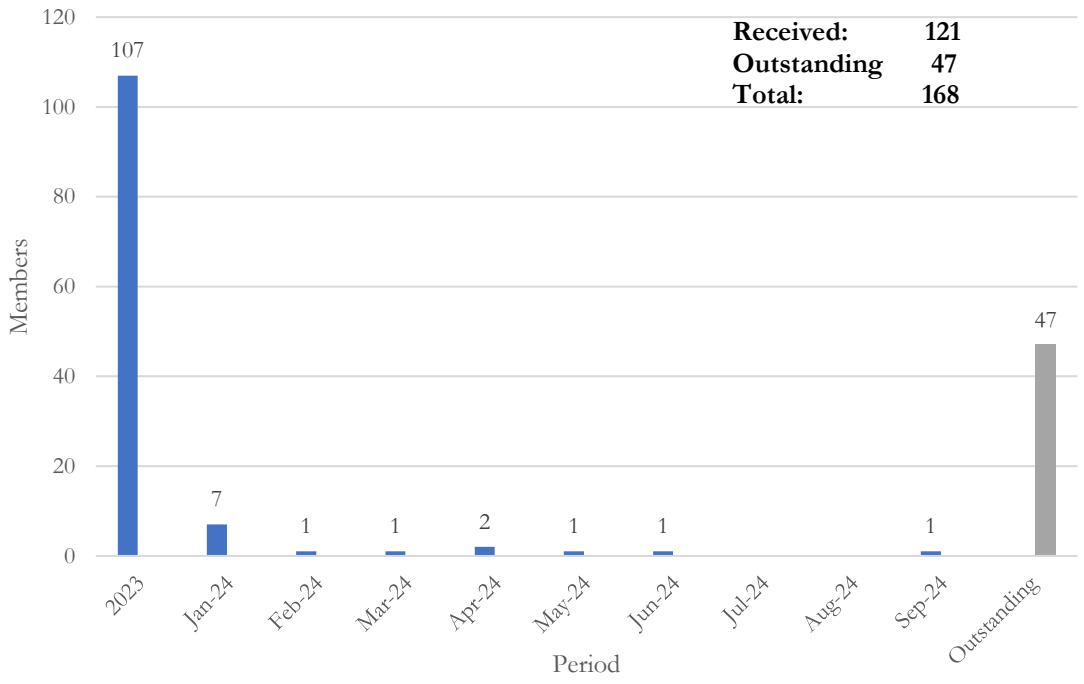
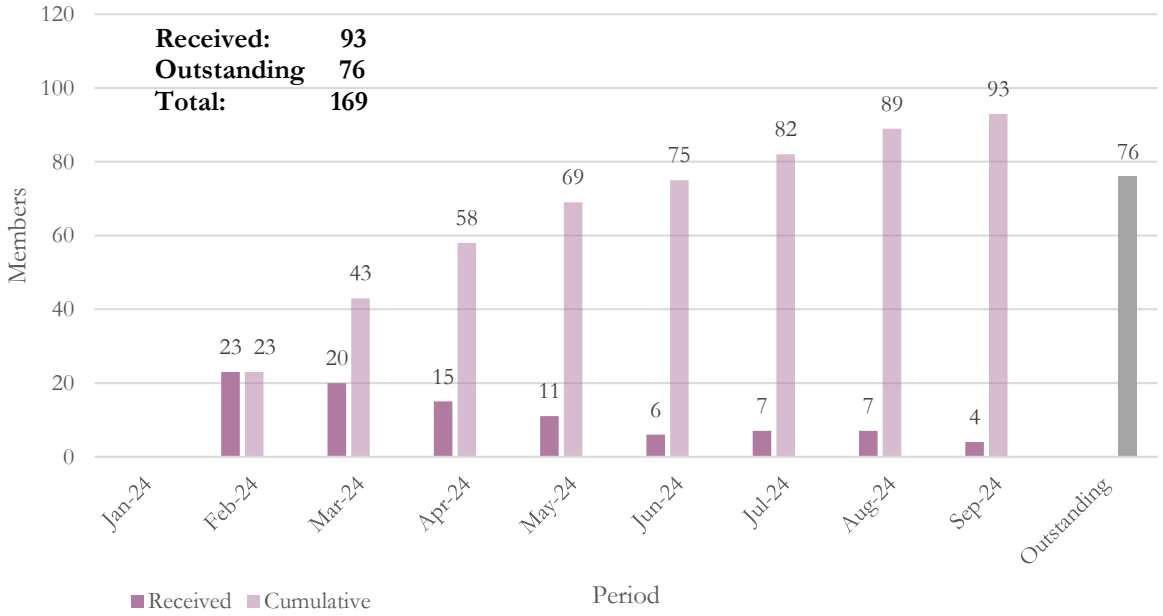


Figure 23: Number of Members with received and outstanding contributions to the 2024 core budget (11 September 2024)



IRENA Donors (2024-2025) (as of 31 August 2024)

	**Denmark** **Ministry of Foreign Affairs**	2023-2027 support
	**European Commission** **DG ENER**	EU Remap: In-depth analysis of renewable energy technology opportunities to support regional cooperation in national energy and climate plans. Innovation to foster the renewable energy transition.
	DG NEAR	Conditions and obstacles for the development and integration of renewable energy sources in the Eastern Partner countries.
	DG INTPA	Regional Energy Transition Outlooks in Africa and Latin America and Caribbean.
	**Germany** **Federal Ministry for Economic Affairs and Climate Action**	Partial WETO support
	Physikalisch-Technische Bundesanstalt (PTB)	Quality Infrastructure for Green Hydrogen
	GIZ	Senegal's clean energy transition
	**Iceland**	Support for geothermal work
	**Japan** **Ministry of Agriculture, Forestry and Fisheries (MAFF)**	Biomass Strategy for Sustainable Bioenergy Production
	Ministry of Economy, Trade and Industry (METI)	Various Projects
	**Kingdom of the Netherlands** **Ministry of Foreign Affairs**	Geopolitics of the Energy Transition

	Republic of Korea	Workshop on 'Tripling renewable power by 2030'
	Walloon Region (Belgium)	Deployment of renewable energy and decentralised renewable energy with a focus on Francophone Africa.
	United Arab Emirates	FDCR
	Global Energy Alliance for People and Planet	Climate change and energy poverty
	OPEC Fund for International Development	ETAF Project Facilitation and Support Facility support.
	Open Society Foundations	Empowering Lives and Livelihoods
	Rockefeller Brothers Fund	Acceleration Partnership for Renewables in Africa

As directed by its Membership, IRENA continues to diversify its resource base by seeking extra-budgetary support. In the 2024-25 biennium, IRENA received to date a total of USD 3,201,487 through voluntary contributions, with an additional USD 14,941,123 to be received before year-end.

Work Programme 2024-2025 – Implementation Matrix

This section presents a full matrix detailing the progress of Work Programme activities by output and by key activity, resourced by both core and voluntary contributions.

The asterisk (*) indicates that the delivery of the programmatic output is financially supported by one or more voluntary contributions. If there is not an asterisk, then the delivery of the programmatic activity is exclusively covered by the core non-assessed and/or core assessed contributions.

At the twenty-third meeting of the Council, Members requested more nuanced information in the implementation matrix section in the form of a traffic light system. In response, the IRENA Secretariat is introducing a speedometer in the 'Status' column with four traffic lights (and an arrow that would resolve possible issues, if printed black and white) indicating:

- Red for an activity stalled long-term or will be abandoned,
- Orange for when progress is lagging, but we are confident we will deliver within the programmatic cycle,
- Green for when it is on track or has not started yet and
- Blue for when it is completed.

The legend below outlines some of the risk factors/reasons why progress for an activity might be lagging or stalling, but the list is not exhaustive.

Risk Factors	
External Risks	• Project affected by difficulties in engagement/commitment of stakeholders.
	• Commitments affected due to changes of government and/or political priorities.
	• Lack of access to data.
	• Limited capacity of local partners impedes progress and results.
	• Catastrophic events (e.g. natural hazards and disasters, pandemics etc.) affect operations and schedules.
Internal Risks	• Key IRENA staff working on the activity has left.
	• Shifting priorities in the course of the year.

I. Centre of Excellence for Energy Transformation

Core assessed and core non-assessed resources (in USD thousands): 8,012. Key activities supported by additional voluntary contributions are footnoted.

Objective: Provide thought leadership and authoritative knowledge, data and analyses on all aspects of the energy transition and its impacts at global, regional, national and sectoral levels.

Key activities	Status	Description
World Energy Transition Outlook (WETO) (2024[81] and 2025 editions)		▪ World Energy Transition Outlook 2024 brief on "Tracking COP28 Outcomes: Tripling Renewable Power Capacity by 2030" launched at Berlin Energy Transition Dialogue Conference 2024 (March 2024) [Click here].
		▪ "World Energy Transitions Outlook 2024" report.
		▪ World Energy Transition Outlook 2025 brief.
		▪ "World Energy Transitions Outlook 2025" report.
Regional Energy Transition Outlooks* (Africa (Target 5); EU (Target 1) and South America (Target 1)		▪ "Regional Energy Transition Outlooks for South America" report.[83]
		▪ "Regional Energy Transition Outlooks for Africa" report[83].
		▪ "Regional Energy Transition Outlooks for EU" report[83].
		▪ "Eastern Partnership (EaP) study" in collaboration with the EU Commission.[82]
		▪ "Sustainable Bioenergy Pathways in Latin America: Promoting Bioenergy Investment and Sustainability" report (January 2024) [Click here].
		▪ "Sustainable Bioenergy Potential in Caribbean Small Island Developing States" report[83] (February 2024) [Click here].
Renewable Energy Capacity and Generation (2024 and 2025 editions)		▪ "Renewable capacity statistics 2024" report (March 2024) [Click here].
		▪ "Renewable energy statistics 2024" report (July 2024) [Click here].
		▪ "Energy taxonomy: Classifications for the energy transition" report (March 2024) [Click here].
Renewable Energy Power Generation Cost (2024 and 2025 editions)		▪ "Renewable Power Generation Costs in 2023" report.
		▪ IRENA Renewable Cost Database was updated including RE projects commissioned in 2023.
Renewable Energy Jobs (2024 and 2025 editions)		▪ "Renewable Energy Jobs 2024" report in collaboration with the International Labour Organization.

[81] Supported by the Government of Germany.
[82] Supported by the European Commission.
[83] Supported by the Government of Denmark.

Geopolitics of the Energy Transition (2024 and 2025 editions)*		▪ "Geopolitics of Energy Transformation: Energy security" report[84] (April 2024) [Click here].
Global Landscape of Renewable Energy Finance		▪ "Global Landscape of Renewable Energy Finance 2024" report.
		▪ Workshop for the Sustainable Risk Mitigation Initiative (May 2024).
		▪ Analysis of investment trends at the global level.
Innovation Landscape Report and Innovation Week		▪ "Innovation Landscape for Sustainable Development Powered by renewables" report.
		▪ Innovation Week 2025: Innovative solutions for renewables-based sustainable growth.
Tracking SDG7: The Energy Progress Report (2024 and 2025 editions)		▪ "Tracking SDG 7: Energy Progress" report brochure in collaboration with the other SDG 7 custodian agencies (World Bank, IEA, UNSD, WHO) (April 2024) [Click here].
		▪ Participation and presentation of progress on renewable energy and finance in support of SDG7 during United Nations consultation meetings in the lead up to the Global Stocktake on SDG7 (April 2024).
		▪ "Tracking SDG 7: The Energy Progress 2024"[85] report in collaboration with the other SDG 7 custodian agencies (World Bank, IEA, UNSD, WHO) (June 2024) [Click here][86].

II. International Collaboration and Network Hub

Core assessed and core non-assessed resources (in USD thousands): 9,963. Key activities supported by additional voluntary contributions are footnoted.

Objective: Galvanise international collaboration and provide an inclusive platform for all stakeholders to foster targeted action, alignment of activities and knowledge sharing for impact on the ground.

Key activities	Status	Description
Governing Body Meetings and other Member engagement		▪ Summary Report of the 26th Council meeting [Click here].
		▪ Organisation and delivery of Part I of the Fourteenth session of the IRENA Assembly for peer-to-peer engagement among Members and Stakeholders (15 January 2024) [Click here].
		▪ Draft Report of the Fourteenth Session of the Assembly covering agenda items 1 to 8, which were considered during Part I of the fourteenth Assembly [Click here].
		▪ Organisation and delivery of Part II of the Fourteenth session of the IRENA Assembly for peer-to-peer engagement among Members and Stakeholders (17-18 April 2024) [Click here].

[84] Supported by the Government of Germany, the Government of Netherlands and the Government of Norway.
[85] Supported by IBRD.
[86] Supported partially by the World Bank/IBRD.

		▪ Draft Report of the Fourteenth Session of the Assembly that covers Part I and Part II of the Fourteenth session of the Assembly.
		▪ Organisation and delivery of the 27th Council meetings, including the meetings of the Administration and Finance Committee (AFC) and the Programme and Strategy Committee (PSC) [Click here].
		▪ Organisation of the 28th Council meetings, including the meetings of the Administration and Finance Committee (AFC) and the Programme and Strategy Committee (PSC)
		▪ Draft Summary Report of the 27th Council meeting [Click here].
		▪ On-going preparation for the Fifteenth Session of the IRENA Assembly for peer-to-peer engagement among Members and Stakeholders.
		▪ In-person engagement with Members to discuss and exchange views on enhancing strategic collaboration through the coordination of over 15 high-level Members' visits to the IRENA HQ and bilateral meetings.
		▪ Engagement and outreach with States in accession and non-Members to enhance the benefits of becoming an IRENA Member as well as expediting ratification and accession process – resulting in an increase of IRENA Membership to 170.
		▪ In-person engagement with IGOs, Academia and Private Sectors representatives to discuss and exchange views on enhancing strategic collaboration.
		▪ **Permanent Representatives** ▪ Engagement and outreach with PRs of IRENA and other heads of missions to enhance their role as direct on-the-ground liaison with IRENA, resulting in over 6 ceremonies for the Presentation of Credential Letters and for a total number of 69 accredited Permanent Representatives.
		○ Fifteenth edition of the Renewables Talk for IRENA Permanent Representatives in Commemoration of 15th Anniversary of IRENA and 1st International Day of Clean Energy (January 2024) [Click here].
		○ Sixteenth edition of the Renewables Talk IRENA Permanent Representatives.
		○ On-going preparation for the third annual edition of the Renewables Talk for IRENA Permanent Representatives for 2024.
		▪ **Women in Diplomacy**[87] ○ Fifth edition of the Women in Diplomacy on Synergies for Change: Women – Diplomats Driving Joint Efforts in Renewable Energy and

[87] Supported by the Government of the United Arab Emirates.

		Climate Action, held in the margins of the Fourteenth session of the IRENA Assembly (April 2024) [Click here].
		○ Sixth Women in Diplomacy
		○ On-going preparation for the seventh edition of Women in Diplomacy in 2024.
		○ Supported preparations for the 6th ASEAN Senior Officials Meeting on Energy – IRENA (June 2024).
		○ Supporting preparations for the 8th ASEAN Ministers on Energy Meeting – IRENA[88] (September 2024).
		▪ Supporting preparations for the 4th IRENA-Singapore High Level Forum (October 2024).
		▪ Participation in the 4th International Conference on Small Island Developing States – United Nations (27-30 May 2024).
		▪ 'Delivering just and inclusive energy transitions for emerging economies and developing countries: through collective actions to unlock investment opportunities" report together with Brazilian G20 Presidency.
		▪ "Tripling renewable power by 2030: The role of the G7 in turning targets into action" report (April 2024) [Click here].
		▪ "Decarbonising hard-to-abate sectors with renewables: Perspectives for the G7" report (April 2024) [Click here].
		▪ "The energy transition in Africa: Opportunities for international collaboration with a focus on the G7" report (April 2024) [Click here].
		▪ 9th Meeting of Collaborative Framework on Green Hydrogen (22 March 2024) [Click here].
		▪ 8th Meeting of Collaborative Framework on Ocean Energy & Offshore Renewables (26 March 2024) [Click here].
Collaborative Frameworks*[89] on Critical Materials; Geopolitics; Green Hydrogen; High Shares of Renewable Energy; Hydropower; Just & Inclusive Energy Transition; Offshore Renewables; and Project Facilitation.		▪ 9th Meeting of Collaborative Framework on Ocean Energy & Offshore Renewables.
		▪ 3rd Meeting of Collaborative Framework on the Critical Materials for the Energy Transition (4 April 2024) [Click here].
		▪ 4th Meeting of Collaborative Framework on the Critical Materials for the Energy Transition.
		▪ Meeting of the Collaborative Framework on Enhancing Dialogue on High Shares of Renewables in Energy Systems on Tripling global renewable energy capacity by 2030. (May 2024). [Click here].

[88] Supported in part by the Government of Japan.
[89] Supported in part by the Government of Denmark.

		▪ Meeting of the Collaborative Framework on Enhancing Dialogue on High Shares of Renewables in Energy Systems (October 2024).
		▪ 4th meeting of the Collaborative Framework on Project Facilitation to Support on-the-ground Energy Transition (12 June 2024).
		▪ 8th Meeting of Collaborative Framework on Developing Sustainable Hydropower Projects (14 August 2024) [Click Here].
		▪ Zimbabwe Country Consultation Workshop (24 January 2024) [Click here].
		▪ Rwanda Country Consultations Workshop (15 February 2024) [Click Here].
Accelerated Partnerships for Renewables in Africa (APRA)*[90]		▪ Ethiopia Country Consultation Workshop (3 June 2024) [Click here]
		▪ Ghana Country Consultation Workshop (15 July 2024) [Click here]
		▪ Namibia Action Plan March 2024: compilation of actions from extensive consultations with the country, including bilateral discussions towards ambitious renewable energy deployment and green industrialization.
		▪ Kenya Action Plan April 2024: compilation of necessary short to mid-terms interventions to accelerate ambitious renewable energy deployment and green industrialization.
		▪ Sierra Leone Action Plan May 2024: compilation of actions aimed at accelerating renewable energy deployment for enhancing electricity access, greening minerals Mining, Fisheries and Agriculture Sectors.
		▪ Rwanda Action Plan May 2024: compilation of short to mid-term priority actions to increase access to electricity, boost sustainable agriculture practices and supporting the climate goals.
		▪ APRA Investment Forum in Kenya (12-16 October 2024).
		▪ SIDS Lighthouses Initiative Ministerial meeting (April 2024) – IRENA 14 Assembly.
		▪ Participation in 4th International Conference on Small Island Developing States – United Nations (27-30 May 2024).
SIDS Lighthouses Initiative[91]		▪ SIDS LHI High Level Event at SIDS4 (29 May 2024).
		▪ Atlantic, Indian Ocean and South China Sea (AIS) Regional Consultative Workshop on *Provision of Development of the progress indicators and impact measures of the implementation of the SIDS Lighthouses Initiative Priority Areas - Seychelles* (March 2024) [Click here].

[90] Supported in part by the Government of Denmark, GEAPP and Rockefeller Brothers Fund.
[91] Supported in part by the Government of Denmark

		▪ Caribbean Region Consultative Workshop on *Provision of Development of the progress indicators and impact measures of the implementation of the SIDS Lighthouses Initiative Priority Areas - Jamaica* (26 February – 1 March 2024) [Click here].
		▪ "Renewable Readiness Assessment Solomon Islands" report (February 2024) [Click here].
		▪ "Renewable Readiness Assessment Papua New Guinea" report.
		▪ Atlantic, Indian Ocean and South China Sea (AIS) Regional Capacity Building Workshop on *Power Purchase Agreement Negotiation and Assessment – Comoros* (2025).
		▪ Pacific Regional Investment Forum (2025).
		▪ Project Identification and Development Technical Assistance to the Government of Vanuatu.
		▪ Increase in SIDS Lighthouses Partners (January 2024 to present) by 7 new partners.
		▪ Partners Consultation Workshop on *Provision of Development of the progress indicators and impact measures of the implementation of the SIDS Lighthouses Initiative Priority Areas* (June 2024).
		▪ IRENA produced an updated QuickScans report specifically tailored for Small Island Developing States (SIDS), providing a concise overview of their renewable energy potential, power sector characteristics, and opportunities for accelerating the energy transition.
		▪ IRENA developed an interactive QuickScans dashboard for SIDS, offering a user-friendly platform to visualize key data, explore renewable energy scenarios, and track progress towards energy targets.
		▪ IRENA carried out a survey focusing on islands in the Caribbean, Indian Ocean, and the Pacific, assessing their specific vulnerabilities to climate change, energy needs, and opportunities for renewable energy-based solutions to enhance resilience.
		▪ IRENA is developing a NDC implementation study analyzing the decarbonization potential of the Seychelles transport sector, assessing the feasibility of transitioning to electric vehicles and the associated impacts on the national grid infrastructure. The study is providing the Seychelles government with policy recommendations and technical insights to guide their NDC implementation and support sustainable transport development.
		▪ SIDS Annual Progress Report (January 2025).
		▪ Evaluation study of the Entrepreneurship Support Facility (February 2024).

		▪ Workshop on *Enhancing business skills* in Windhoek, Namibia (20 May 2024), co-hosted with the Southern Africa Centre for Renewable Energy and Energy Efficiency (SACREEE).
Access: Beyond Food; Empowering Lives & Livelihoods[92]; and IOREC*[93]		▪ Empowering Lives and Livelihoods – Renewables for Climate Action (L&L) initiative: o Engaged with 13 countries, undertaking assessments and programme development for funds mobilization: Burkina Faso, Cuba, The Gambia, Guinea, Malawi, Mali, Mauritania, Mozambique, Nepal, Rwanda, Sao Tome and Principe, Uganda, and Zimbabwe. o Signed MoUs with SELCO Foundation (India) and SNV (Netherlands), while firming up concrete scope of work the L&L initiative. o Facilitating engagement with Power Africa Health and Telecommunication Alliance (HETA) for IRENA to be one of the partners of the alliance. ▪ Continued working with FAO, UNDP, UNICEF and WHO and undertaking discussions with other initiatives and institutions for partnership.
		▪ 6th edition of IOREC will take place in Gaborone, Botswana (2-6 December 2024) in conjunction with SADC Sustainable Energy Week, hosted by the Government of Botswana and co-organized by SADC Centre for Renewable Energy and Energy Efficiency (SACREEE), United Nations Industrial Development Organisation (UNIDO) and IRENA.
		▪ **Alliance for Industry Decarbonization (AFID**) *[94] o Digital Learning platform "MyChange" on sustainability (January 2024).
		▪ Decarbonization sessions: IRENA 14th Assembly and WFEF (April 2024).
Technology and decarbonisation: Alliance for Industry Decarbonisation; GOWA[95]; GGA[96]; LTES[97] network; and RE for Peacekeeping.*[98]		o AFID session at AIM Congress (May 2024) [Click Here].
		o "Solutions to Decarbonize Heat in the Steel Industry" report [Click here].
		▪ "Green Hydrogen Unveiled: A Cross-Industry Dialogue for Sustainability" report.
		o "Accelerating decarbonisation using bioenergy with carbon capture, utilisation and storage" report.

[92] Supported in part by the Walloon region of Belgium, the Government of the UAE and the Open Society Foundation.
[93] Supported by the Walloon region of Belgium.
[94] Supported by the Government of the United Arab Emirates.
[95] Supported in part by the Government of Denmark.
[96] Supported in part by the Government of Iceland and the Government of Japan.
[97] Supported in part by the Government of Denmark.
[98] Supported in part by the Government of UAE.

		○ "Advancing bioenergy with Carbon Capture, Utilization, and Storage (CCUS) - Policies, Regulations, MRVs and Certification" report.
		○ AFID Commitment – COP28 [Click here].
		○ Concept of enterprise twinning platform & ESG.
		○ "Opportunities for BECCUS projects at the national/regional level in different geographies" report.
		○ Open Book on green hydrogen projects including large scale industrial projects.
		○ Circularity blueprints for decarbonization for industries.
		○ "Overcoming challenges and fostering finance solutions for industry decarbonization" report.
		○ AFID decarbonization sessions: Climate Week NYC, USA (September 2024).[Click here].
		○ AFID CEO Dialogue: COP29 in Azerbaijan (November 2024).
		▪ **Utilities for Net Zero Alliance (UNEZA**) ○ "Roadmap to 2030" (April 2024) [Click here].
		○ Plan of action for 2024-2025 (April 2024).
		▪ Development of Alliance Governance (June 2024).
		○ Joint thought leadership 'Grid lock' to global grid, outlining strategies to overcome energy transition challenges.
		○ Identify barriers to clean energy deployment in the Global South (August 2024).
		○ Large grid infrastructure projects (December 2024).
		○ High level policy statement with recommendations by industry on Clean Energy Supply Chains. (August 2024).
		○ Announce collective, medium term demand signal to encourage capacity expansion among OEMs (November 2024).
		○ Encourage mandates for the use of harmonized international standards for critical equipment (July 2024).
		▪ **Utilities for Net Zero Alliance (UNEZA):** ○ UNEZA net-zero sessions: Climate Week NYC, USA (September 2024) [Click here] & [Click here]
		○ UNEZA net-zero sessions: World Utilities Congress in UAE (September 2024) [Click here].

		○ UNEZA net-zero sessions: COP29 in Azerbaijan (November 2024).
		▪ **Long-Term Energy Scenarios (LTES):** ○ Synthesis report on Long-Term Energy Scenarios (LTES) Asia webinar series.
		○ Summary of the practices and experiences from the LTES webinar series.
		○ Follow-up report on "LTES and LT-LEDS alignment at a country level".
		○ Energy Planning Dashboard, global repository of energy planning documents and modelling tools.
		○ Side event on Participatory Strategies for Developing Just and Renewable-Based Energy Pathways.
		○ Toolkit for government scenario planners that synthesises practices on implementing stakeholder engagement processes for LTES.
		○ Webinar series: Peer-to-Peer learning within the energy scenarios practitioner's community.
		▪ **Global Geothermal Alliance (GGA):** ○ Co-hosted workshop with King Abdullah Petroleum Studies and Research Center (KAPSARC) & co-published brief "Scaling Up Geothermal Power Generation to Rebalance the Energy Trilemma" (January 2024) [Click here].
		○ GGA Annual Meeting at the Fourteenth Session of IRENA Assembly (18 April 2024).
		○ Participated in the Icelandinc Geothermal Congress (IGC) (May 2024).
		○ Developing a Stakeholder engagement strategy for the OECS Geothermal Energy for Capacity Building, Utilisation, Investment and Local Development (GEOBUILD) Programme in the Caribbean.
		▪ **Peacekeeping**. ○ Energy Transition Assessment Report Somalia.
		▪ **Global Offshore Wind Alliance (GOWA)** ○ Provision of substantive technical expertise and guidance in developing its comprehensive work plan, ensuring alignment with global renewable energy targets and outlining a strategic roadmap for advancing offshore wind deployment.
		○ Contributed to the establishment of the GOWA Secretariat, providing operational support and guidance to ensure efficient functioning.
		○ Provision of regular updates on the Alliance's development and fostering a collaborative and

		informed community of practice.
		○ Close coordination with relevant international organisations and initiatives, to ensure complementarity of efforts, avoid duplication, and maximize collective impact.
		○ Establishing close links between GOWA and IRENA's Collaborative Framework for Offshore Renewables (CFOR).
		○ Development of a concise brief on GOWA, highlighting benefits of offshore wind development, showcasing successful case studies, and providing guidance on policy frameworks and investment opportunities to accelerate offshore wind deployment in emerging markets.
		○ Supported the organization of a high-level ministerial session at the IRENA Assembly.
		○ Provision of strategic and logistical support to the GOWA Steering Committee.
		○ Supported membership expansion by four new members (Canada, Nova Scotia, Newfoundland and Labrador, and New York State).
		▪ **Regulatory Energy Transition Accelerator (RETA)** ○ Collaborated with the IEA and the World Bank on the RETA platform. ○ Streamlining regulatory frameworks, addressing barriers to investment, and creating an enabling environment for the rapid deployment of renewable energy technologies, in collaboration with the IEA and World Bank.
		○ Unlocking the potential of regional interconnections: Technical and regulatory harmonization of grid codes" report.
		○ Focused on capacity-building activities for SIDS regulators to develop and implement effective island-specific grid codes and regulations that facilitate the integration of high shares of renewable energy in an island context.
		▪ **Marrakech Partnership for Global Climate Action** ○ Serves as the focal point for energy, coordinating the contributions of 20 member organisations representing non-state actors.
		○ Facilitating dialogue, consolidating key messages, and ensuring the voices of these stakeholders are effectively represented at COP29. Actively engaging with the High-Level Climate Champions from the UAE and Azerbaijan to amplify the impact of the Marrakech Partnership's initiatives and advocate for ambitious climate action from all sectors.

		○ Led the development of the infrastructure and resilience section of the Sharm el-Sheikh Adaptation Agenda (SAA) annual report, highlighting the role of resilient infrastructure in achieving climate adaptation goals and showcasing best practices and innovative solutions from non-state actors.
		▪ **Cool Coalition** ○ Promoting district cooling technologies, facilitating knowledge sharing, showcasing best practices, and accelerating the deployment of sustainable cooling solutions to reduce reliance on coal-based power generation.
		○ Contributed a comprehensive technology chapter to the UNEP Global Cooling Report, focusing on the role of renewable energy-based cooling solutions in mitigating climate change and achieving sustainable development goals. This contribution highlighted innovative technologies, best practices, and policy recommendations to accelerate the transition to sustainable cooling systems globally.
		▪ **Clean Energy Ministerial' s Transforming Solar Supply Chains (TSSC)** ○ Supporting TSSC's workstream 2 by developing analysis on solar PV supply chain economics and opportunities, providing insights to support countries in developing competitive and sustainable solar PV industries.
		○ Supporting TSSC's workstream 3 by developing analysis on standards for solar PV supply chains, contributing to the development of greater transparency and sustainability within the industry.
		▪ Energy Transition Education Network (ETEN) ○ On-going efforts to build the membership of the Energy Transition Education Network by engaging with education and training provider.
		○ Facilitating exchange of best practice between providers, including development of case study library with education and training best practices and resources.

Skill development: Initiatives on Energy Transition Education Network; Entrepreneurs; Youth and Legislators Forum.		○ Skills gap survey.
		○ Energy Transition Career Guide.
		▪ Youth ○ Launch of the call for applications for the second cohort of the IRENA NewGen Renewable Energy Accelerator Programme for Youth (March 2024) [Click here].[99]
		○ Fifth IRENA Youth Forum during the Fourteenth session of the IRENA Assembly (April 2024) [Click here].[100]
		○ Introduction of the IRENA Youth Social Media Ambassadors for the IRENA Youth Forum, involving four youth delegates to take photographs and provide coverage of the event (April 2024) [Click here].
		○ Youth event on *Exploring Youth Entrepreneurial Solutions in the Sustainable Energy & Green Sector* organised at the IRENA Pavilion during the World Future Energy Summit held in Abu Dhabi (April 2024) [Click here].
		○ Launch for the second cohort of the IRENA NewGen Renewable Energy Accelerator Programme for Youth (May 2024))[Click here].
		○ Youth event on *Green Value Chain Integration: Opportunities for Youth-led innovations to accelerate green transition in private & public sectors* organised at the Annual Investment Meeting Congress 2024 in Abu Dhabi (May 2024) [Click here].
		○ On-going preparation for the second edition of the IRENA NewGen Rising Starts Award (September 2024).
		○ Launch of the IRENA Youth Logo Contest 2024 [Link].
		○ On-going preparation for the Sixth IRENA Youth Forum, which will be convened from 9 - 13 January 2025 in Abu Dhabi, United Arab Emirates at the margins of the fifteenth session of the IRENA Assembly (11-13 January 2025)
		○ Launch of the call for application for the sixth IRENA Youth Forum: The New Generation of Decision Makers [Link].

[99] Supported by the Government of the United Arab Emirates.
[100] Supported by the Government of the United Arab Emirates and the Global Energy Alliance for People and Planet.

		▪ Legislators Forum o Ninth edition of the IRENA Legislators Forum during the Fourteenth session of the IRENA Assembly (April 2024) [Click here].
		o IRENA Legislators Dialogue on Power Up the Future – a dialogue with Youth held in the margins of the Fourteenth session of the IRENA Assembly (April 2024)
		o On-going preparation for the tenth edition of the IRENA Legislators Forum, which will take place at the margins of the fifteenth session of the Assembly in January 2025.
		▪ Outreach and engagement: o Identify and integrate new members into the Coalition for Action – 12 new members, totalling 158 Coalition members.
		o Engage Coalition Members, including by bringing in Global leaders across the Coalition Membership to IRENA led events, and an ETAF webinar for Coalition members to submit projects.
Coalition for Action: White papers and joint actions		▪ Technical webinar with Coalition members and ECOWAS regional energy institutions on *Enhancing Investments in RE and Regional Connectivity Across West Africa* (February 2024) based on the "Scaling Up Renewable Energy Investments in West Africa" report (October 2023) [Click here].
		▪ Annual satisfaction and work program survey followed by virtual consultation to discuss and validate recommendations derived from the survey (January - March 2024).
		▪ "100% Renewable Energy Scenarios: Supporting Ambitious Policy Targets' report (April, 2024) [Click here], launched at the High-Level Public-Private Dialogue, held in the margin of the 14th Session of the IRENA Assembly.
		▪ "Moving to 100% Renewable Energy System, Policy recommendations" which will build on the findings from the prior report "100% Renewable Energy Scenarios: Supporting Ambitious Policy Targets' report (April 2024) [Click here]".
		▪ Annual Strategy meeting for Coalition members to finalise and adopt the Work Programme for 2024-2025 (15 April 2024).
		▪ High-Level Public-Private Dialogue on *Building Momentum Towards a 100% Renewable Energy System* during the 14th Session of the IRENA Assembly (16 April 2024).
		▪ Side event on *Harvesting Synergies: The Water-Food-Energy Nexus for Enhanced NDCs* at the 14th Session of the IRENA Assembly (16 April 2024).

		▪ "Community Energy Benefits: Broadening the ownership of renewables for a just and inclusive energy transition" report.
		▪ "Citizens in the Energy Transition: ▪ Driving change, sharing benefits" report.
		▪ "Best Practices for Agri-Renewable Projects" report.
		"Renewable Energy Siting and Permitting: Balancing Climate and Nature Conservation Goals" report.
		▪ "Regional: Scaling up investments in Indonesia" brief will be set aside due to insufficient capacity from Coalition members to author the report.
		▪ "Regional: Scaling up investments in Argentina" report.
		▪ "Decarbonising End Use Sectors Working Group: How to make green hydrogen utilisation economically viable: opportunities, challenges and key recommendations" brief will be reincorporated into IRENA centrally. Coalition members will be adding input through a dedicated survey IRENA is conducting, to develop a study aimed at understanding the specific risks perceived by investors and stakeholders in green hydrogen projects.
		▪ "Tripling Renewable Power Capacity: Innovative Grid, Solar and Storage Solutions" report.
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III. Global Voice of Renewables

Core assessed and core non-assessed resources (in USD thousands): 8,107. Key activities supported by additional voluntary contributions are footnoted.

Objective: Pursue excellence in renewables innovation, development and deployment and promote practical application of knowledge for systemic change.

Key activities	**Status**	**Description**
End-use transition: Analysis on technology status, innovative		▪ "Decarbonising hard-to-abate sectors with renewables: Perspectives for the G7" report for the 2024 G7 Presidency (April 2024) [Click here].

alternatives and enabling frameworks for the energy transition in end-use sectors; policies for decarbonisation of industry; Hydrogen for RE transition including technology status, innovative alternatives and enabling frameworks for the scale-up of green hydrogen (Target 3)		▪ "International co-operation to accelerate green hydrogen deployment" report (April 2024 [Click here].
		▪ Assessment of renewable and hydrogen pull effect in developing countries.
		▪ "Green hydrogen for sustainable industrial development" report in collaboration with UNIDO and IDOS (February 2024) [Click here].
		▪ "Green hydrogen auctions: A guide to design" report.
		▪ "Green hydrogen strategy: A guide to design" report (July 2024) [Click here].
		▪ Shaping sustainable international hydrogen value chains" report. [Click here].
		▪ Reaching Zero with renewables in aluminum.
		▪ "Derisking green hydrogen" report.
		▪ Global Installation Forecast and market Potential of Next-Generation (perovskite) Solar Cells desk research delivered in August 2024.
Critical materials: Analysis of current and future demand and supply of critical materials for the energy transition and the potential for technological substitution through innovation (Target 1).		▪ "Critical Materials: Batteries for electric vehicles" report.
		▪ Constructing a ranking of critical materials for the global energy transition
		▪ Critical Materials for renewable energy: Improving data governance
		▪ Technical brief on Sodium-ion batteries
NDCS and RE targets: analysis on ambition and impact of RE targets and NDCs (Target 2).		▪ NDCs and RE targets 2024.
Technology specific: Analysis on sustainable Aviation Fuels in Southeast Asia; policies for end-of-life management of wind power and the circular economy (Target 2).		▪ "Assessment of barriers and enablers to foment the production of sustainable aviation fuels in the Southeast Asian Region" report.
		▪ Floating offshore wind outlook (July 2024) [Click here].
		▪ Contributed to the development of a set of best practices for integrating renewable energy technologies, including wind and solar power, into UNESCO World Heritage sites, balancing the need for clean energy solutions with the imperative of cultural preservation.
		▪ Workshop to present the findings, co-organized by UNESCO and Wallonia, with at least 10 countries.
		▪ Collaborating with the Global Wind Organization (GWO) to develop guidelines for offshore wind technician training programs tailored to the specific needs of developing countries. The guidelines will facilitate knowledge transfer and capacity building across both North-South and South-South contexts.

Infrastructure*[101]: Analysis on technology cost and performance; Flexibility, storage and power to X; Planning; Policy for decentralised solutions (Target 4). Nexus*[102]: RE in Gender, RE in adaptation (Target 2).		▪ "Hydrogen Trade Outlook for Southeast Asia"[103] report.
		▪ E-learning course on mini-grid policy and regulations, covering topics such as legal and licensing provision, tariff setting and main grid arrival. The course will also cover business models for mini-grids and how they are affected by different types of regulations.[104]
		▪ **Grid Integration and Resilience** ▪ IRENA is producing a comprehensive report on grid modernization strategies for developing countries, outlining best practices, technology options, and policy recommendations to enhance grid efficiency, reliability, and integration of renewable energy sources. The report served as a valuable resource for policymakers and utilities in modernizing their electricity infrastructure. ▪ IRENA is developing a report on enhancing grid resilience in developing countries, focusing on strategies to mitigate the impacts of climate change, extreme weather events, and other disruptions to electricity supply. The report provides guidance on strengthening grid infrastructure, incorporating distributed energy resources, and enhancing emergency preparedness. ▪ IRENA is conducting capacity-building activities on grid infrastructure planning and development for Sub-Sahara Africa, SIDS and ASEAN, strengthening their expertise in integrating renewable energy sources, evaluate regional interconnections, enhancing grid reliability, and expanding access to electricity. ▪ IRENA conducted a comprehensive survey on grid infrastructure development challenges and opportunities in Africa, gathering valuable data and insights to inform policy recommendations and investment strategies. ▪ IRENA conducted a comprehensive survey and interview of SIDS stakeholders to identify policy and technical challenges related to grid integration of renewable energy sources in island contexts. This will inform the development of targeted support for SIDS to increase their share of renewables. ▪ IRENA developed grid modernization capacity building modules focused on advanced grid technologies and planning approaches to support system operators in developing countries in managing grid stability and reliability with increasing levels of variable renewable energy sources. ▪ IRENA supported USAID's efforts to enhance grid integration of renewable energy in West Africa with the provision of specific capacity building modules to the Power Africa West Africa Energy Program (WAEP). The capacity building activities contributed to the AfDB's Desert to Power initiative's training programs, showcasing successful collaboration in strengthening regional grid infrastructure to accommodate increasing

[101] Supported in part by the European Commission.
[102] Supported in part by the Walloon region of Belgium.
[103] Supported by the Government of Japan.
[104] Supported in part by the Walloon region of Belgium.

		renewable energy deployment.
		▪ Analysis of policies for distributed PV in Small Island Developing States (SIDS), South Asia remote communities (islands and villages), and developing countries with high electrification rates but with frequent blackouts (e.g. Lebanon, Pakistan, South Africa).[105]
		▪ "Cost trends of the utility-scale of storage battery systems assessment" report.[106]
		▪ "Trends in business models and business feasibility of energy services from utlity scale battery storage" report.[107]
		▪ "Electricity storage market analysis by 2030" report. [108]
		▪ IRENA's International Women's Day event on *Invest in Women: Accelerate Progress Through Renewable Energy* (8 March 2024) [Click here].
		▪ Online survey[109] to generate data for IRENA's latest editions of the *A Gender Perspective* series (covering the entire RE landscape) launched at the above event.
		▪ Assessment of renewable energy in climate change adaptation: Methodological brief.[110]
		▪ "Decentralised solar PV: A gender perspective" report.
		▪ "Socio-economic impact assessment tool of climate change adaptation" report.[111]
Institutional capabilities: Analysis of policies for livelihoods (Target 1)		▪ "Public finance for universal energy access" report (April 2024) [Click here] launched at a side event during the 14th session of IRENA Assembly.[112]
Global communications strategy with multi-lingual content, information and outreach.		▪ IRENA communications priorities for 2024.
		▪ IRENA communications campaign[113]: The global campaign around tripling renewable power capacity and tracking COP28 outcomes started with a pre-campaign activity at the IRENA Assembly 2024. The main campaign will launch in mid-October 2024 and continue until the Assembly 2025, covering flagship report launches, including "Delivering the UAE Consensus' report.
		▪ Press releases & translations, international (social) media outreach and communications amplified reach of key publications including Geopolitics of energy transition: Energy security, World Energy Transition brief on Tracking COP28 outcomes: Tripling

[105] Supported in part by the Walloon region of Belgium.
[106] Supported by the Government of Japan.
[107] Supported by the Government of Japan.
[108] Supported by the Government of Japan.
[109] www.irena.org/gendersurvey.
[110] Supported in part by the Walloon region of Belgium.
[111] Supported in part by the Government of Denmark.
[112] Supported in part by the Walloon region of Belgium and the Government of Norway.
[113] Supported in part by the Global Energy Alliance for Planet and People.

		renewable power capacity by 2030 and G7 briefs collection: Tripling renewable power by 2030: The role of the G7 in turning targets into action; The energy transition in Africa (APRA): Opportunities for international collaboration with a focus on the G7; Decarbonising hard-to-abate sectors with renewables: Perspectives for the G7; Renewable energy statistics 2024; Renewable energy capacity statistics 2024 and two G20 reports.
		▪ Strategic communications support around key, global high-level events, including IRENA Assembly, G7 events, BETD, SIDS4 and other SIDS events, International Day of Clean Energy, IRENA 15th anniversary, IEW 2024, UN General Assembly and NY Climate Week.
		▪ Four digital stories launched.
		▪ Launched a video series on socio-economic impacts of renewables in SIDS.
		▪ Two digital report based on flagship publications published.
		▪ 27 videos published across the website and social media.
		▪ Issued 44 IRENA publications, comprising 28 reports [Click here] and an additional 16 specialised publications and briefs.
		▪ Issued 20 IRENA report translations (languages: Arabic, Chinese, English, French, German, Italian, Japanese, Portuguese, Russian and Spanish).
		▪ IRENA publications featured on knowledge sharing platforms and in electronic libraries/stores, including Apple store, Scribd, Refinitiv, Amazon and others.
		▪ Maintain regular strategic publication output, with predictable flagship reports, timely thematic studies, and other specialised releases.
		▪ Continued application of the Agency's digital-first communication approach, with printing limited to key publications and/or peripherals for major events, and the issuance of the second edition (April 2024) of the IRENA Publications Catalogue featuring QR codes for PDF downloads, distributing 250+ copies at the 14th IRENA Assembly.
		▪ Re-issued the IRENA Publications management guidelines for 2024, incorporating a new policy on the use of generative AI in the production of IRENA reports and other publications.

		▪ Hosted full briefing for existing and new IRENA staff to highlight key updates to IRENA publishing procedures and quality control processes (February 15, 2024), as well as to introduce new software.
		▪ Completed the implementation of the IRENA.PleaseReview platform for all teams across the Agency, providing greater efficiency, security and transparency in the peer review process for publications. Completed a syst-wide software update in August 2024. 40 publications have been reviewed using the system to date in 2024.
		▪ Began discussions to implement a comprehensive Publications Management System to digitalise the entire IRENA publications management procedure and related processes. Initial concept/map of the PMS completed in June 2024.
Innovation to Foster the Renewable Energy Transition (IFRET) (Target 1).[114]		▪ "Certification of green hydrogen derivatives" report.
		▪ Development of Toolbox on enablers for deployment of offshore renewable technologies.
		▪ Development of toolbox on enablers to decarbonise end-use sectors.
		▪ Development of model for the trade of green commodities.
		▪ Development of capacity building and analytical knowledge and material on urban energy planning primarily for countries with Eastern European climates, promoting sustainable and integrated urban energy systems.

IV. Support for Regions and Countries

Core assessed and core non-assessed resources (in USD thousands): 9,292. Key activities supported by additional voluntary contributions are footnoted.

Objective: Assist regional and country-level decision-making and support implementation strategies to reduce global emissions, adapt to climate change, and improve energy access, security and affordability for sustainable development

Key activities	Status	Description
End use transition: Capacity building and technical assistance on the design of hydrogen strategies; capacity building on policies for RE in end-use and circular economy (Target 2)		▪ Webinar on *Leveraging Industry's Role for Accelerating Green Hydrogen Development* in collaboration with MED•GEM Network (29 April 2024) [Click here].
		▪ SEE - Capacity Building on Green Hydrogen.
NDCs and RE targets: capacity building and technical assistance on energy planning*[115]„ long term energy scenarios, on climate action		▪ NDC support through input, recommendation and review. ▪ Overview of countries' climate commitments, including NDCs and LT-LEDS, to be delivered through reports, including: o "Accelerating Energy Transition and Climate

[114] Supported in part by the European Commission.
[115] Supported in part by the Walloon region of Belgium.

plans*[116] design of RE targets and policies; technical assistance on RE potential. (Target 20)		Action: IRENA Members Survey on Nationally Determined Contributions" report.
		o "IRENA's energy transition support to strengthen climate action: Insight to impact, 2024" report.
		**NDC Partnership:** ▪ Active participation in NDC Partnership Steering Committee meetings, providing expert input on renewable energy integration and contributing to strategic decision-making.
		▪ Provided support to the NDC Partnership in developing its 2030 workplan, ensuring alignment with global renewable energy targets and contributing to a robust roadmap for climate action.
		▪ Collaborated with the NDC Partnership to support the development and enhancement of the NDC Navigator 3.0, a comprehensive online platform providing guidance, resources, and tools for countries to enhance their NDCs and accelerate climate action.
		▪ Provision of tailored technical assistance to at least 15 countries under the NDC Partnership framework, strengthening their capacity to implement ambitious climate commitments: o Facilitating the alignment of energy and climate planning in Georgia through a comparative analysis of the NDC, LT-LEDS, and NECP, offering recommendations for consistency and enhanced ambition
		o Supporting the prioritisation and costing of NDC actions in Tanzania, focusing on renewable energy and energy efficiency technologies
		o Conducting a vulnerability assessment of power infrastructure In El Salvador to provide adaptation recommendations to enhance the climate resilience of the energy sector.
		o In discussions with 13 additional countries, including South Africa, Namibia, Tunisia, Benin, Burkina Faso, Fiji, Samoa, Marshall Islands, Malawi, Moldova, Tonga, Peru, and Colombia, to explore potential NDC Partnership support and identify opportunities to enhance their climate ambition.
		o Developing a comprehensive NDC 3.0 toolkit on climate action, including mitigation, adaptation, grid infrastructure, and roadmaps, providing practical guidance and resources to support countries in enhancing their NDC 3.0.
		o Developing a comprehensive capacity-building toolkit on LT-LEDS for developing countries, providing practical guidance, resources, and best

[116] Supported in part by the Government of Denmark.

		practices to support countries in developing ambitious and achievable long-term climate strategies.
		○ Led the energy components in the NDCs 3.0 Regional Forum for Eastern Europe and Central Asia, organized by the NDC Partnership and other partners providing expert insights and guidance on accelerating renewable energy deployment, grid integration, and policy frameworks to support participating countries (Albania, Azerbaijan, Belarus, Bosnia and Herzegovina, Georgia, Kazakhstan, Kosovo, Kyrgyzstan, Moldova, Montenegro, North Macedonia, Serbia, Tajikistan, Türkiye, Turkmenistan, Ukraine, and Uzbekistan) in enhancing their climate mitigation and adaptation efforts.
		▪ Bilateral NDC support: ○ Support to the Maldives, Mauritius, and British Overseas Territories in strengthening their island-specific NDCs, focusing on renewable energy integration, climate adaptation measures, and resilient infrastructure development.
		○ Comprehensive support to the UAE in strengthening their NDC, delivering tailored modelling support to enhance the accuracy and ambition of their emissions reduction targets.
		○ Convened event on ***Tripling renewable energy capacity by 2030*** during the SB60 Bonn Climate Change Conference, in collaboration with the LDC, SIDS, and Africa Group of Negotiators Co-Chairs, attended by representatives from approximately 15 countries.
		▪ Nationally Determined Contributions/ National Energy and Climate Plans Alignment studies for Energy Community countries.
		▪ Continental Power Systems Masterplan (CMP) programme: Phase 2 has been completed and synthesis reports published by AUDA-NEPAD. Phase 3 is ongoing.[117]
		▪ East Africa Power Pool Capacity Building Programme.
		▪ Senegal Capacity Building Programme: Phase 1 (Power sector modelling) is near complete. Phase 2 is in preparation.[118]
		▪ Central African Power Pool report: Planning and prospects for renewable power. report
Infrastructure: regional assessments for integrating renewables (Target 2)		**T-MED** ▪ Advancing T-MED Initiative, together with the European Commission, fostering partnerships and knowledge sharing, to accelerate the deployment of renewable energy and clean technologies in the Mediterranean region.
		▪ Conducted in-depth analysis of the T-MED initiative, with the European Commission, to develop scenarios, assess clean tech manufacturing potential, and explore innovative financing mechanisms.

[117] Supported in part by the European Commission.
[118] Supported in part by the Government of Germany.

Nexus: RE in adaptation, technical assistance in clean cooking*[119]; climate adaption*[120] (Target 4)		▪ "Advancing renewables-based clean cooking solutions - Key messages and outcomes" report (March 2024) [Click here].
Skills & institutional capacities: RE curriculum and training activities; Trainings on energy management and audit (Target 6)		▪ Teaching for Net Zero – educating the educators for the energy transition[121] • IRENA continues to co-lead the Greening Education Partnership pillar on greening curriculum and contributed to the new global guidance document published in June 2024 by UNESCO [Click here]. • IRENA was a partner of the COP 29 Summer Camp for Educators.
		▪ "Guidelines on skilling Africa's renewable energy workforce and design of national and regional qualification frameworks"[122].
Clean Energy Corridors for Latin America, Northeast Asia, and Sub-Saharan Africa		▪ "The energy sector of Panama: Climate change adaptation challenges report" (July 2024) [Click here].
		▪ Fourth (May 2024) and Fifth (July 2024) cohorts of the Eni-IRENA Capacity Building programme in Biofuels [Click here].
Renewables Readiness Assessment (RRA)* (Target 4)		▪ Chad Renewable Readiness Assessment: Experts Consultation Workshop (6-7 March 2024) [Click here].
		▪ Chad Renewable Readiness Assessment: Expert Validation Workshop.
		▪ "Renewable Readiness Assessment: Chad" report.[123]
		▪ Georgia Renewable Readiness Assessment: Experts Consultation Workshop (20-21 March 2024) [Click here].
		▪ Georgia Renewable Readiness Assessment: Expert validation workshop (17 July 2024) [Click here].
		▪ "Renewable Readiness Assessment: Georgia" report.
		▪ Somalia Renewable Readiness Assessment: Expert Validation Workshop (27-28 February 2024) [Click here].
		▪ "Renewable Readiness Assessment: Somalia report. [124]
		▪ Iraq Renewable Readiness Assessment: Experts Consultation Workshop (28-29 May 2024) [Click here].
		▪ Iraq Renewable Readiness Assessment: Expert Validation Workshop.
		▪ "Renewable Readiness Assessment: Iraq" report.

[119] Supported in part by the Walloon region of Belgium.
[120] Supported in part by the Government of Denmark.
[121] Supported by the Government of the United Arab Emirates.
[122] Supported by the Government of Denmark.
[123] Supported by the Walloon region of Belgium.
[124] Supported in part by the Government of the United Arab Emirates.

		▪ Bangladesh Renewables Readiness Assessment: Stakeholder Consultation workshop.
		▪ "Renewables Readiness Assessment: Bangladesh" report.
Power sector planning tools (Flextool, SPLAT, OnSSet*)[125]		▪ SPLAT ▪ The SPLAT modeling framework has been developed to run the continental power system model for Africa within the necessary time horizon and temporal resolution required for the RETO Africa. Progress on integrating the hydrogen framework into SPLAT is on track and advancing steadily. Efforts have been initiated to translate the RETO scenarios vision into quantitative assumptions for modeling. ▪ The soft linking between SPLAT and other tools, such as FlexTool and OnSSET, has undergone testing across selected scenarios, proving successful thus far.
		▪ SPLAT helpline for regional partners: on demand support for AUDA-NEPAD and other African partners using SPLAT for energy planning in context of African Continental Power Systems Masterplan (CMP) project supported by IRENA as official modelling partner.
		▪ "Advancements in continental power system planning for Africa: Reference manual for SPLAT-CMP model version 2023" report documenting SPLAT models.
		▪ "African Renewable Electricity Supply options (AfRES) for Energy Modelling Database: Utility Scale Solar PV" report documenting SPLAT models.
		▪ "African Renewable Electricity Supply options (AfRES) for Energy Modelling Database: Onshore Wind" report documenting SPLAT models
		▪ The West Africa Electrification platform developed for Burkina Faso, Mali, Nigeria and Senegal [Click here] launched.[126]
		▪ Report on the West Africa Electrification platform developed for Burkina Faso, Mali, Nigeria and Senegal.
		▪ Development of FlexTool modelling framework to assess the flexibility of Africa's future power system, within the context of the Regional Energy Transition Outlook (RETO) Africa.
		▪ Data collection assessing flexibility with FlexTool in South America undertaken in cooperation with Enel (May 2024) [Click here].

[125] Supported in part by the European Commission.
[126] Supported by the Walloon region of Belgium.

V. Facilitating Projects and Mobilising Capital

Core assessed and core non-assessed resources (in USD thousands): USD 4,156. Key activities supported by additional voluntary contributions are footnoted.

Objective: Facilitate the development of project pipelines and channel investment toward renewables-based energy systems in developing countries.

Key activities	Status	Description
Climate Investment Platform (CIP): Project information documents * (Target 20)		▪ 494 projects submitted on the CIP of which 90 projects have been supported.
		▪ 14 of the supported projects gained interest from financing partners, and five projects achieved financial close.
		▪ CIP engaged 89 financing partners.
		▪ Additional derisking support mobilised in form of insurance and guarantees from 6 providers.
		▪ Five projects have reached financial close.
Energy Transition Accelerator Financing (ETAF)*: Projects recommended to ETAF partners (Target 15)		▪ 73 projects have been submitted through ETAF Platform, 17 of these have been presented to the ETAF Partners for their funding considerations.
		▪ 15 of the projects (worth USD 3.4 billion) received initial interest from Partners.
		Second draft of the ETAF operational manual has been shared with partners for review.
		▪ USD 4.15 billion mobilised as soft commitments from 11 ETAF partners.
		▪ Mobilised USD 1 million towards supporting project pipeline development.
		▪ Additional derisking support mobilised from three insurance and guarantee providers.
		▪ Co-financing via three projects that have reached financial close for USD 1 billion.
Global Atlas for Renewable Energy: Platform maintenance and application[127]		▪ Global Atlas for Renewable Energy – version 4.2.
		▪ Maintenance of the Global Atlas for Renewable Energy platform – infrastructure and geoserver.
		▪ Update of the renewable energy resource and ancillary datasets from data providers (Members, international institutions and private sectors – TheWindPower, TU-Delft).
		▪ Bioenergy simulator platform – version 2.0.[128]
		▪ Maintenance of the Bioenergy simulator – infrastructure and geoserver.

[127] Supported in part by the Government of Denmark.
[128] Supported by the Government of Norway.

		▪ Update of the Bioenergy simulator methodology – development and implementation.[129]
		▪ "The Global Atlas for Renewable Energy Initiative: 10+ years in the making" report (May 2024) [Click here].
		▪ "The Global Atlas for Renewable Energy: A decade in the making" report (March 2024) [Click here].
		▪ Support IRENA analysis on renewable potential assessment: ▪ Global techno-economic potential of geothermal, hydro, solar and wind [Section 2.2] ▪ Solar and wind techno-economic potential for small Islands [Sections 3.1-3.3]. ▪ Solar and wind atlases for the Republic of Iraq.
Capacity building and technical assistance on climate investment; project finance; procurement; and PPA*[130] (Target 2)		▪ Capacity building workshop on renewable energy project development for seven Pacific SIDS.
		▪ Provision of support for financial documentation review for ETAF and CIP project submissions.
		▪ Project facilitation brochure guiding stakeholders on current work undertaken and results.
		▪ Expert insights on "Five pillars that determine commercial renewables projects' bankability" (April 2024) [Click here].
		▪ Three Webinars on ETAF Project Facilitation: ▪ Coalition for Action members ▪ Officials from the Government of Iraq upon request. ▪ Officials from the Government of Ukraine upon request.
Regional Investment Forums (Target 2) [131]		▪ CoP-29 Energy Transition Investment Forum for Central Asia (November 2024).
		▪ West Africa Investment Forum (Abuja Nigeria).
Pre-feasibility, site and zoning assessments; and resource mapping (SolarCity simulator)* (Target 2)		▪ Development of pre-feasibility analysis for floating solar photovoltaic and offshore wind technologies – methodology and report.[132]
		▪ Pre-feasibility analysis for 5 onshore wind sites earmarked for project development in Montserrat – assessment and report. [43]
		▪ "Investment opportunities for utility-scale solar and wind areas, Mali" report (August 2024) [Click here].
		▪ "Investment opportunities for utility-scale solar and wind areas, El Salvador" report (May 2024) [Click here].

[129] Supported by the Government of Norway.
[130] Supported in part by the Government of Denmark.
[131] Supported in part by OPEC Fund for International Development.
[132] Supported in part by the Government of Denmark.

		▪ "Investment opportunities for utility-scale solar and wind areas, Georgia" report.
		▪ IRENA SolarCity simulator – add new functionalities and features.
		▪ Maintenance of the SolarCity simulator – infrastructure and geoserver.
		▪ Three SolarCity simulators for Belize – Belize City [Click here], San Pedro [Click here], and San Ignacio [Click here].[43]
		▪ A SolarCity simulator for Guyana – Georgetown [Click here]. [43]
		▪ Three SolarCity simulators for DR Congo – Kinshasa, Mbandaka, and Kananga.[133]
		▪ Capacity building on rooftop solar PV potential and the use of the SolarCity simulator ▪ Workshop for Solomon Islands high-level government representatives (6-8 February 2024, 20 participants) [Click here].[134] ▪ Caribbean Regional Consultative Workshop on SIDS Lighthouses Initiative Progress Indicators and Impact Measures (26 February- 1 March 2024, 50 participants) [Click here].[45] ▪ Workshop for Mauritius (18 March 2024, 68 participants). [45] ▪ Workshop for Burkina Faso (28 March 2024, 54 participants).[135] ▪ Workshop for Belize (24 April 2024, 63 participants).[136] ▪ Workshop for Comoros (8 May 2024, 22 participants).[47]
		▪ Capacity building on identifying investment opportunities for utility-scale solar and wind areas: methodology and results ▪ Workshop for Georgia high-level government representatives (17 July 2024, 80 participants) [Click here].

ADDITIONAL OUTPUTS		
Strategic Management		
Key Activities	**Status**	**Description**

[133] Supported in part by the Government of Japan.
[134] Supported in part by the Government of Denmark.
[135] Supported in part by the Government of Japan.
[136] Supported in part by the Government of Denmark.

New York Liaison Office		▪ Co-organised the first celebration of the International Day on Clean Energy at the United Nations with the organization of a Panel Discussion on the theme: "Building a Sustainable Future: Renewables for Climate Action and Sustainable Development" [Click here].
		▪ Coordination of IRENA participation in the negotiations on the Pact of the Future to be adopted at Summit of the Future (22-23 September 2024).
		▪ Coordination of IRENA participation in the negotiations on the outcome of the 4th International Conference on Small Island Developing States, to be held on 27-30 May 2024, in Antigua and Barbuda as well as the facilitation of IRENA's engagement in the Summit.
		▪ Facilitation of the engagement of UN high-level stakeholders in the Fourteenth session of the IRENA Assembly.
		▪ Engagement with the New York-based Permanent Missions to the UN to strengthen IRENA's voice at the UN level.
		▪ Coordinate IRENA inputs to 2024 ECOSOC Forum on Financing for Development.
		▪ Active participation in the Global stocktaking marking the completion of the UN Decade of Sustainable Energy for All to further accelerate the implementation of SDG 7 of the 2030 Agenda for Sustainable Development (April 2024) [Click here].
		▪ Coordination of IRENA participation in the 2024 UN High-level Political Forum on Sustainable Development, including side events.
		▪ Support to the delivery of the IRENA side event.
		▪ Coordination of IRENA participation in the 2024 UN High-Level Week.
		▪ Coordination and facilitation of IRENA participation in SDG7 Action Forum.
		▪ Enhance capacities and improve operations of NYO, in collaboration with Procurement and IT.
		▪ Coordination and facilitation of IRENA participation at the LLDC3 conference in Gaborone, Botswana on 9-13 December 2024.
Legal Office		The Legal Office provides legal advice and guidance in relation to all areas of activity of the Agency, including among others, institutional and governance matters; preparation of and advise on internal issuances, guidelines and directives; administrative matters and others related to human resources (HR); commercial contracts; collaborative arrangements, agreements and strategic partnerships; communications and publications matters,

		as further described below.
		Institutional and governance matters: ▪ The Legal Office provides legal support for the preparation and conduct of the meetings of IRENA's governing bodies. In sum, the Legal Office advises Members on the submission of credentials and reviews from a legal perspective the relevant documentation submitted to IRENA's governing bodies. ▪ The Legal Office has been involved in matters concerning the interpretation and application of the Statute of IRENA and the Rules of Procedure of the Assembly and the Council. ▪ Furthermore, the Legal Office has provided legal support as needed in connection to proposals and queries submitted by Members and in relation to the credentials for their Permanent Representatives.
		Administrative and HR matters: ▪ The Legal Office has been closely involved in advising on several HR matters, including on appeals of staff members and the preparation of HR's related Policies and Directives. ▪ It has also been involved in establishing an internal approval process for the representation of IRENA in organs of outside entities.
		Cooperation arrangements and commercial contracts: ▪ The Legal Office has been involved in the conclusion of MoUs, partnership agreements, cooperation agreements, voluntary contributions, among others. ▪ It has also provided advice to the Contract Review Committee and supported the Procurement office when required. ▪ The Legal Office has advised various teams in the negotiation of complex agreements and contracts, including those relevant for IRENA's platforms such as ETAF. Specifically, the Legal Office supported the negotiation and finalisation of the ETAF Joint Declaration with partner institutions and continuously supports the conclusion of collaborative agreements with new partners.
		▪ Communications and ICT: The Legal Office has provided legal support on matters relating to the fraudulent use of IRENA's name and logo. It has also been involved in the preparation of terms of use for IRENA's website and for the website of IRENA's specific platforms.
		▪ Publications: The Legal Office has provided advice on matters related to the use of IRENA's intellectual property and the use of disclaimers. It has also advised on the conclusion of data sharing agreements with third parties for the use of their data in IRENA's publications, and on the conclusion of agreements with other organisations for the preparation of joint

		publications.
Events Unit		▪ Events and Missions database for internal and external communication maintained.
		▪ Organized 103 events since January 2024, of which 46 were virtual and 57 were physical.
		▪ Student Leaders Programme, part of Growth@IRENA programme: Around 500 students applied and out of which 70 students were engaged during IRENA's virtual spring cohort that expanded to 6 weeks of courses and around 370 students applied and out of which 80 students were engaged during IRENA's in person summer cohort that expanded for 5 weeks of courses.
		▪ Outreach activities with the UAE, including partnering with The World Future Energy Summit (WFES), Abu Dhabi Global Markets (ADGM), Abu Dhabi Creative Hub, Dubai Cares, Dubai Electricity & Water Authority (DEWA) Innovation Centre and Youth Arab Centre, Emirates Development Bank (EDB), UAE Humanitarian Council, Zayed foundation, Khalifa foundation, Emirates Foundation, Sharjah University, Abu Dhabi University, Khalifa University, Trends Research and Advisory, International Institute for Cultural Diplomacy, Ministry of Energy and Infrastructure, Annual Investment Meeting Congress and Emirates Environment Foundation.
		▪ Continue to maintain the Fund for Developing Country Representatives (FDCR) and supported the participation of 66 eligible LDC and SIDS Members that attend the 14th IRENA Assembly and related meetings and 4 eligible members that attended the 27th IRENA Council meeting.
Diversification of resource base		▪ Contributions concluded in 2024: ▪ Germany (GIZ) (Senegal - CMP) ▪ Iceland (Geothermal support) ▪ Japan (Various projects) ▪ Rep. of Korea (Workshop on Tripling renewable power by 2030) ▪ OPEC Fund for International Development (ETAF support)
Monitoring and evaluation system		▪ Development of an enhanced Monitoring and Evaluation (M&E) system.
Programmatic reports to the Council and Assembly		27th meeting of the IRENA Council: ▪ "Progress Report of the Director-General on the Implementation of the Work Programme and Budget for 2024-2025".
		28th meeting of the IRENA Council: ▪ Annual Report of the Director-General on the Implementation of the Work Programme and Budget for 2024-2025".

Enabling IRENA delivery		
Outputs	**Status**	**Description**
Upgrades and enhancements to the IRENA website, platforms, and other IT systems.		▪ New Utilities for Net Zero Alliance (UNEZA) website developed and launched.
		▪ Google Analytics G4 upgrade for website performance tracking finalized and operational.
		▪ ERP quarterly upgrades. Q2 Upgrade completed and Q3 upgrade planned.
		▪ Enhancements to the IRENA website.
		▪ Continuous support to hybrid and virtual events, including collaborative framework and governing bodies meetings.
		▪ Enhancements in IT systems supporting administrative processes and reporting. New reports developed in ERP.
		▪ Enhancements in IT tools for internal communication and IT infrastructure in HQ. Network upgrade at HQ implemented.
		▪ Development of a framework for the use of Artificial Intelligence in the Agency.
Human resources		▪ 17 new staff appointments and internal movements and 5 new Associate Professionals.
		▪ Reclassification review of Terms of Reference.
		Update of HR Policy Manual ▪ Directives in draft on Individual Consultants.
		▪ Directives on Recruitment and Performance Management.
Efficient budget services		▪ Support across the Agency and to external clients in administration of core funds and voluntary contributions.
		▪ Regular internal reporting, as well as preparation of reports to donors and governing bodies.
Delivery of efficient financial services		▪ IRENA and IRENA SPF 2023 Audited Annual Financial Statements submitted to 27th Council.
		▪ Responsible for managing the financial resources of the Agency, including financial reporting cash management, maintaining internal controls and ensuring financial compliance.
Support to the Provident Fund operations		▪ Annual members' meeting (June 2024).
Efficient procurement services		▪ Maintain open, fair, transparent, and competitive procurement bidding process in line with relevant regulations and policies.

		▪ Develop a process of procurement operation through establishment of 31 Long-Term Agreements (LTA) to allow for an effective and efficient response and implementation of work programme.
		▪ Continue searching the market aggressively to widen the supplier's database to accomplish best value for money. 676 vendors have been contracted during the reporting period and more than 1000 vendors expressed their interest to bid for business with IRENA.
Effective general and travel services		▪ Effective general and travel services.
		▪ Administration support, enhancement of Facility Management, and other services e.g., Health and Safety.
		▪ Travel logistic services management for Workshops and Travel on missions.

Annex

At the informal PSC meeting on 5 September 2024, Members requested IRENA to present in further detail certain areas of the Agency's work. This section serves this purpose.

Accelerated Partnership for Renewables in Africa

Background

Energy plays a fundamental role in Africa's development pathway. Improving livelihoods and tapping into socio-economic opportunities will depend crucially on the expansion of access to reliable, affordable, and sustainable energy. Energy systems will require tremendous change and investment in the coming decade to meet the needs of the continent's growing populations, most notably youth. Africa is extraordinarily diverse, and no single approach will advance its energy future. Energy pathways that prioritise a systemic shift towards renewable energy have much to offer to the continent across its industrialisation, development, and climate priorities toward resilient and inclusive economies and societies.

This vision is deeply embedded in the *Nairobi Declaration on Climate Change and Call to Action*, which calls for bringing the renewable capacity to 300 GW by 2030 from 56 GW in 2022. The Declaration focuses on climate-positive growth, notably green industrialisation, and local value creation. Among other things, it positions the continent's abundant renewable potential and mineral riches as a lynchpin of Africa's and global climate strategy. Moreover, the COP28 outcome on tripling renewables and doubling efficiency by 2030 adds a level of urgency and clarity on the way forward.

The Accelerated Partnership for Renewables in Africa (APRA), launched by African countries and international partners during the Africa Climate Summit in Nairobi in September 2023, is designed to help realise the vision. It is an African country-led international partnership that brings together governments and stakeholders working to accelerate the deployment of renewables to enhance energy access, enable green industrialisation,

and improve economic and societal resilience. The Partnership promotes a holistic approach to energy transitions, provides political leadership, mobilises action and commitments from public and private entities, and coordinates international efforts for meaningful systemic change. APRA current membership includes Ethiopia, Ghana, Kenya, Namibia, Rwanda, Sierra Leone, and Zimbabwe. APRA will expand in the coming months and years, to engage more countries with high ambition on renewable energy and green industrialisation in Africa and beyond.

As of July 2024, the partnership receives support from Denmark, Germany, UAE, and the USA, in addition to contributions from GEAPP, GIZ, the Danish Energy Agency, and the Rockefeller Brothers Fund. Under the auspices of IRENA, serving as the APRA Secretariat, these collaborative efforts are committed to advancing renewable energy and catalyzing economic growth in the APRA Member Countries.

By fostering a strategic transition to renewable energy, the Partnership aims to achieve several key outcomes:

Energy Access, Security, and Green Growth: The Partnership places renewable energy at the forefront of Africa's energy landscape, not only ensuring improved energy access and security but also nurturing green growth. By prioritising renewables, the Partnership creates an environment conducive to job creation and enhanced livelihoods, particularly benefiting the continent's burgeoning youth.

Leveraging Resources for Industrialisation: Recognising the wealth of renewable and mineral resources in Africa, the Partnership unlocks a pivotal opportunity for green industrialisation. This localised industrial drive, powered by renewables, contributes not only to domestic development and prosperity but also promotes the critical role of Africa in the global energy transition.

Collaborative Approach and Tailored Solutions: The commitment to collaborative work under the leadership and vision of African nations underpins the APRA approach. By rapidly scaling up all forms of renewable energy, the Partnership provides political, technical and financial elements to tackle and overcome significant barriers currently faced by the participating African nations. Acknowledging their diversity, it emphasises the need for tailored country approaches, ensuring coherent strategies that suit each nation's unique context.

To realise these outcomes, the Partnership has identified three immediate key focus areas:

1. **Mobilising finance.** Africa, which is home to 17% of the global population, has received less than 2% of worldwide investments in renewable energy in the last decade. Enhanced public finance, especially concessional finance from Multilateral Development Banks (MDBs) and International Financial Institutions (IFIs), along with guaranteed instruments, will be crucial to de-risk investments, reduce the cost of capital and attract private investment at scale.
2. **Engaging the private sector.** The momentum required for this vast transformation hinges heavily on private sector participation, making it a key priority for APRA. Encouraging the creation of synergistic collaborations between local and international businesses, financial entities, and seasoned technology partners can catalyse the desired change, enabled by conducive policies.
3. **Technical assistance and capacity building**. Swift, targeted assistance in the initial phase, combined with sustained capacity enhancement over the long term, is crucial for executing implementation plans and establishing comprehensive policy frameworks that promote investment and deliver socio-economic benefits. These strategies must be custom designed to meet the unique needs and circumstances of each country.

APRA is being implemented based on national action plans, which are developed by African countries, with IRENA's support and input from all partners and stakeholders on the ground. It focuses on international cooperation, and alignment of initiatives and projects with the national action plans, to accelerate realisation of priorities and demonstrate the impact and efficacy of the approach.

Progress to date

APRA's approach relies on extensive in-country consultations conducted initially to gather detailed, up-to-date, and contextually relevant information. The scope of information covers targets, plans, policies, institutional and regulatory preparedness in each participating country for advancing cutting-edge industrialization driven by renewable energy sources.

APRA leverages this data to work closely with national authorities in formulating comprehensive national action plans focused on short to mid-term, to accelerate long-term strategies. These plans, lean and living documents, detail specific programs and activities where partner and private sector support can be harnessed to simultaneously advance the country's industrialization objectives and universal energy access goals. Extensive consultations have been conducted in Namibia (16-18 August 2023), Sierra Leone (23-25 October 2023), Kenya (31 August -1 September 2023), Zimbabwe (24-26 January 2024), Rwanda (15 February 2024), Ethiopia (3-5 June 2024), and Ghana (15-17 July 2024) resulting in the development of national action plans for Kenya, Namibia, Sierra Leone, and Rwanda. For Ghana, the consultation process is currently in progress. The development of National Action Plans for Ghana and Ethiopia will be completed in the course of 2024.

National Action Plans consolidate current priorities to accelerate progress in a holistic manner and guide in-country public and private support. As such, they facilitate a strategic approach to energy transition and targeted partner engagement under strong national political leadership. Common priorities across the National Action Plans completed for Kenya, Namibia, Rwanda, and Sierra Leone involve enhancing renewable energy system integration, rapidly expanding energy access, and improving energy infrastructure.

For instance, Kenya's strategic plan prioritises the greening of transportation through the accelerated adoption of E-mobility and the modernisation of power infrastructure. Namibia, in contrast, seeks to establish a renewable energy-powered green industry, with green hydrogen production at its core. Sierra Leone's agenda focuses on enhancing electricity access and promoting sustainable mineral mining, by rapidly expanding electrical capacity and extending transmission and distribution networks, aiming for universal electricity access by 2035. Rwanda's approach underscores sustainable agriculture, universal electrification, the transition from traditional cooking methods to modern energy solutions, and comprehensive economy-wide decarbonisation.

Upcoming Activities

1. **APRA Investment Forum - Nairobi (14-16 October 2024)**: IRENA together with the Government of Kenya is preparing for the APRA Investment Forum, scheduled to take place in Nairobi from 14-16 October. The Forum will bring together a diverse array of stakeholders, including government representatives, financial institutions, project developers, and private sector partners. It will feature high-level and expert discussions on investment priorities, enabling frameworks, and innovative financing mechanisms. In addition, the Forum will host project matchmaking sessions designed to connect public and private project proponents with potential commercial and financial partners. A Technical Assistance space will be available throughout the event, providing advisory services from IRENA and APRA partners to support project development. Training and project pitching opportunities will be offered to developers from APRA member countries, aimed at enhancing their capabilities and creating a bankable project pipeline. Following the Forum, dedicated project facilitation sessions will be held in all APRA countries to ensure local engagement and alignment with national contexts.

2. **APRA High Level Event at Wall Bank Fall Meetings (21 October 2024)**

   The APRA Investment Forum side event, scheduled for October 21st, 2024, in the margins of the World Bank Fall Meetings in Washington, D.C., will highlight outcomes from the APRA Investment Forum in Nairobi. With high-level participation from institutions like IRENA, World Bank, AfDB, and GEAPP the Forum aims to showcase flagship projects and drive collaboration to support joint

project pipelines with multilateral banks and financiers in the renewable energy sector in APRA countries.

3. High-Level Meeting at COP 29 – Baku, Azerbaijan

Later this year, the Secretariat will organize a high-level meeting at COP 29 in Baku, Azerbaijan. During this event, the progress of APRA will be reviewed, including an overview of the Partnership's achievements as well as ongoing and completed activities. Key discussion topics will encompass insights into finance mobilisation efforts, private sector engagement strategies, capacity building initiatives, and the implementation of renewable energy projects across member countries. The meeting will also outline strategic priorities and plans for the coming year, focusing on enhancing energy access, promoting green industrialisation, and improving economic resilience throughout Africa.

4. Ongoing Implementation of National Action Plans

APRA harmonises national action plans with the development assistance agendas of its international partners, ensuring cohesive support for country-specific activities, projects, and initiatives. This alignment guarantees that requests from member countries receive the necessary backing. For instance, Germany is supporting green industrialisation in Namibia through initiatives such as the H2 Business Alliance (BMZ) and the German-Namibian Green Hydrogen and PtX Cooperation (BMWK). In Kenya, Denmark is aiding the development of forecasting tools for variable renewables under a comprehensive five-year cooperation plan, and the Kenyan Government has submitted a proposal to the CIF for grid modernisation. Additionally, Denmark plans to support capacity-building in Rwanda for long-term energy modeling.

Requests not directly addressed by the current APRA partners may be managed through Partners' funding resources for APRA implementation, especially for limited-scope projects. Examples of such resources include Denmark's dedicated funding through the Sustainable Energy Fund for Africa (SEFA) hosted by the African Development Bank and support from the Global Energy Alliance for People and Planet (GEAPP). These funding resources will ensure that specific priorities within the national action plans receive the necessary financial support, thereby facilitating targeted progress towards the overarching goals of the APRA partnership.

For broader activities within the national action plans that lack funding, APRA will proactively seek new partners through extensive outreach. By presenting these non-supported activities to potential new partners, APRA aims to attract entities whose capabilities and strategic interests align with these activities.

5. Monitoring & Evaluation, and Communication

To ensure the effective implementation of the APRA partnership, the Secretariat will develop a robust monitoring and evaluation framework that will systematically track the progress of national action plans and all related support activities, including bilateral support from partners and requests channeled through APRA.

Furthermore, a strategic communication plan that will outline methods for disseminating updates and achievements, ensuring transparency, and showcasing the impact of partners' contributions to supported activities is currently under development.

Contact Information

Inquiries about APRA's mission and current activities are welcome. For more information, please contact APRA@irena.org.

Governance Structure

To effectively advance APRA, agile provisional arrangements have been put in place to ensure rapid implementation. These will be reviewed after two years based on the experience and the needs in line with the evolutionary nature of the work. The current includes a Steering Committee, APRA Forum, Country Working Groups, and the Secretariat. The roles and functions of these entities are detailed as follows:

Steering Committee: This top-tier body provides strategic direction and oversight, comprising representatives from selected APRA governments and IRENA. The Committee sets overarching goals, policies, and priorities, reviews progress, and guides membership expansion. The Steering Committee at present includes Kenya, Sierra Leone, Denmark, Germany, and IRENA, meeting monthly at the senior-official level and biannually at the Ministerial level. Its functions encompass providing political and substantive direction, reviewing progress, setting annual plans and priorities, and approving membership criteria and expansion.

APRA Forum: An inclusive platform for all APRA members, the Forum meets periodically, at least annually on the margins of the IRENA Assembly, to discuss progress, and challenges, and provide input to the Steering Committee and the Secretariat.

Country Working Groups (CWG): Composed of APRA members, experts, practitioners, and entities engaged in specific countries, CWGs are led by respective African countries and supported by IRENA. Guided by APRA plans, CWGs include public and private stakeholders and meet periodically based on implementation pace.

APRA Secretariat: The APRA Secretariat is responsible for the overall management of APRA. It develops annual and country-specific plans under the guidance of African countries, coordinates the Partnership, implements decisions of the Steering Committee, and convenes Forums. The Secretariat engages in comprehensive country consultations to identify key priorities for renewable energy deployment and economic growth, serves as a knowledge repository, coordinates partnerships, manages requests, and provides strategic communication and public outreach. It also ensures knowledge management and information sharing among CWGs and informs the work of the Steering Committee. The Secretariat prepares annual and periodic progress reports, and monitors and evaluates APRA's performance against set indicators, targets, and objectives to facilitate data-driven decision-making. The Secretariat is led by IRENA and supported by UNOPS at the operational level.

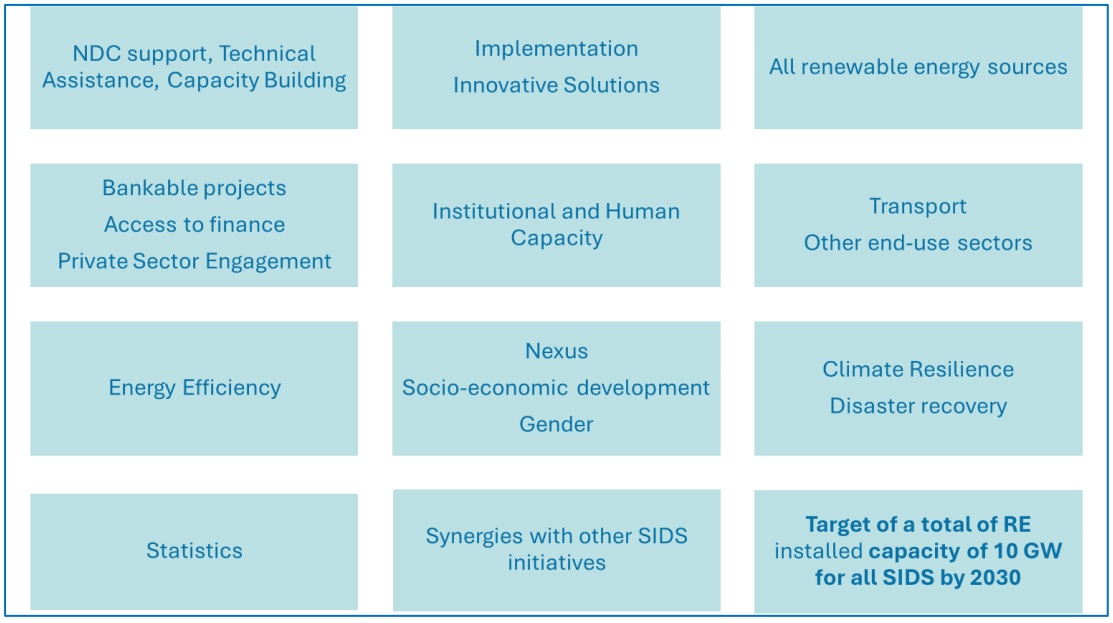
Overview of IRENA's support for SIDS Energy Transition Efforts through the SIDS Lighthouses Initiative

The SIDS Lighthouses Initiative (LHI) was launched at the UN Climate Summit in 2014, in response to the SIDS' call for action through the SIDS Accelerated Modalities for Action (SAMOA) Pathway and cemented through the renewed SIDS declaration for resilient prosperity - the Antigua and Barbuda Agenda for SIDS (ABAS), in 2024.

> *"Accessing the necessary financing for energy transition remains a significant hurdle. To meet our targets, we need a projected minimum investment of USD 10 billion by 2030. This is where robust partnerships become indispensable."*
>
> **Honourable Fiamē Mata'afa, Prime Minister of Samoa at the AOSIS- IRENA-SIDS Lighthouses Initiative side event, 29 May 2024, SIDS4, Antigua and Barbuda.**

SIDS accelerated efforts in the deployment of renewables and energy efficiency interventions and its global leadership in climate action was reflected in the SIDS LHI targets being exceeded three years in advance, resulting in the endorsement of the Initiative's twelve priority areas and a target of 10 GW of total installed RE capacity in all SIDS by 2030 (Figure 24).

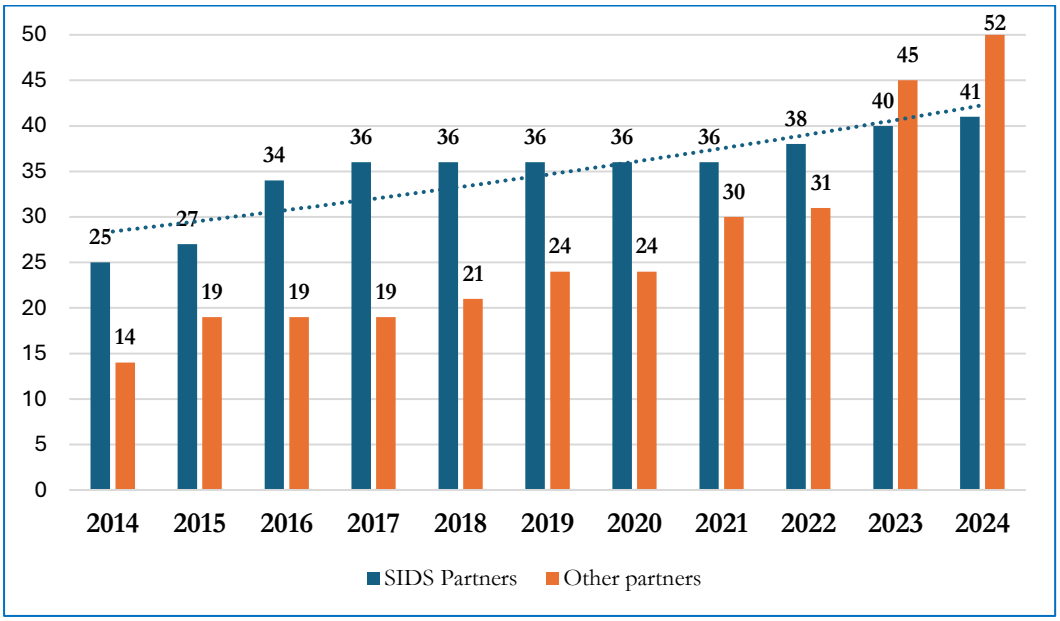
Figure 24: The twelve priority areas of the SIDS Lighthouses Initiative endorsed by SIDS and partners in 2018



IRENA has been coordinating the SIDS LHI since 2014, a multi-stakeholder partnership framework that fosters collaborations between SIDS and partners to implement the energy transition agenda in small island economies towards a shared vision of an energy-secure and resilient future and brings together forty-one (41) SIDS from the Atlantic, Indian Ocean and South China Sea (AIS), Caribbean and the Pacific regions, as well as fifty-two (52) other partners, including developed countries, regional and international organisations,

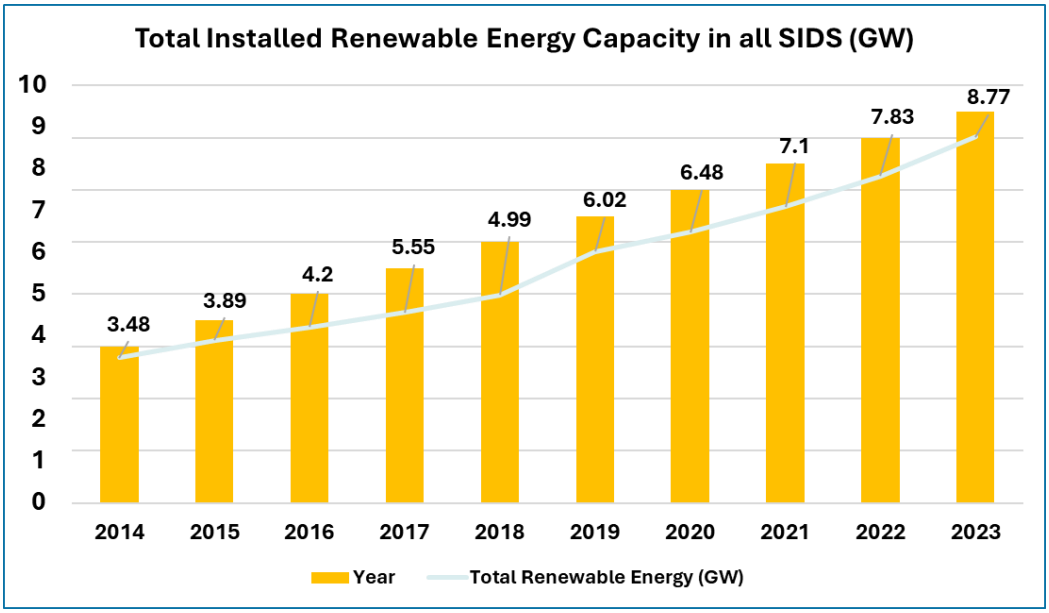
development partners, private companies, research institutes, and non-profit organisations. In 2024, Jamaica became a SIDS partner, whilst the Government of Malta, Barefoot College and Green Solutions International SKN and the Asian Infrastructure Investment Bank (AIIB) joined as development partners. In 2023, Airborne Wind Energy, the Caribbean Development Bank (CDB) and the Indian Ocean Rim Association (IORA) joined as development partners (Figure 25).

Figure 25: SIDS Lighthouses Initiative Partners: 2014 – 2024



Furthermore, through the SIDS LHI IRENA has been tracking the impressive uptake of renewables in SIDS, which is at 8.7 GW by the end of 2023 and in parallel has developed a monitoring and evaluation framework that highlights the progress and the impacts of energy transition in SIDS (Figure 26). However increased capacity and financial support is needed in SIDS to reach the last mile and to ensure that no one is left behind.

Figure 26 : Total installed renewable energy capacity in all SIDS (GW)



From 2022 to-date, IRENA has supported 25 SIDS through the Initiative with up to 55 activities ranging from NDC support, technical assistance, capacity building promoting all indigenous renewables sources including innovative solutions, strengthening access to finance and developing bankable projects, engaging the private sector, integrating energy efficiency and nexus with socio-economic sectors such as agriculture, health, water, tourism, enhancing climate resilience, disaster recovery driven by data-driven decision-making and enabling frameworks (Table 23).

Table 23: IRENA SIDS LHI supported activities in 25 SIDS

No. SIDS	Country Name	Region	No. Activities	Type of Support and Activity Details
1	Antigua and Barbuda	Caribbean	1	Roadmap for the electrification of the transport sector and decarbonisation of the power sector by 2030
			2	Rooftop solar simulation analysis
			3	Assessment of technical needs to achieve a just transition of the workforce to greener occupations
			4	Technology plan and mitigation analysis to evaluate the early stage of transport sector decarbonisation with e-mobility
			5	Case study: Progress Indicator and Impacts measures of the implementation of the SIDS LHI 12 priority areas
2	Bahamas	Caribbean	6	Support the NDC revision process and implementation assessment of the Bahamas National Energy Policy
3	Belize	Caribbean	7	Development of Belize's baseline and mitigation scenarios for the energy sector using REmap.
			8	Support on energy data management methodology, development and implementation of the energy MRV
			9	Rooftop solar simulation analysis
4	Cape Verde	AIS	10	Rooftop solar simulation analysis
			11	Site assessment for solar and wind potential
5	Comoros	AIS	12	Rooftop solar simulation analysis
			13	Site assessment for solar potential
6	Cuba	Caribbean	14	Review of the energy component of the NDC
			15	Assessment of agri-food value chains for RE solutions
7	Dominica	Caribbean	16	Support on energy data management methodology, development and implementation of the energy MRV
8	Dominican Republic	Caribbean	17	Development of mitigation scenarios for the energy sector
			18	Revision of national GHG target mitigation potential
			19	Development of GHG inventories and harmonisation with mitigation actions; and capacity building activities
9	Grenada	Caribbean	20	Conduct energy data audit and capacity building on energy management and audit

10	Guyana	Caribbean	21	Support on energy data management methodology, development and implementation of the energy MRV
			22	Rooftop solar simulation analysis
11	Fiji	Pacific	23	Review of energy data management methodology
			24	Review of the Climate Change Bill
			25	Energy legislative and regulatory gap analysis
12	Mauritius	AIS	26	Rooftop solar simulation analysis
13	Monserrat	Caribbean	27	Site assessment for utility scale onshore wind potential
14	Nauru	Pacific	28	Site assessment for solar potential
15	Palau	Pacific	29	Development of the electricity roadmap to green hydrogen and ocean energy technologies
16	Papua New Guinea	Pacific	30	Energy data management for GHGs and NDC target tracking
			31	Support on energy data management methodology, development and implementation of the energy MRV
			32	Renewable Readiness Assessment
17	Saint Lucia	Caribbean	33	Rooftop solar simulation analysis
18	Saint Kitts and Nevis	Caribbean	34	Revision of NDC mitigation targets and national climate plans
			35	Support on energy data management methodology, development and implementation of the energy MRV
			36	Rooftop solar simulation analysis
19	Sao Tome and Principe	AIS	37	Cost effectiveness analysis of RE technology options
			38	Assessment of healthcare facilities for RE solutions
			39	Rooftop solar simulation analysis
20	Samoa	Pacific	40	Showcasing human impacts of RE on women: Video series
21	Saint Vincent and the Grenadines	Caribbean	41	Support on energy data management methodology, development and implementation of the energy MRV
			42	Showcasing human impacts of RE in relation to water, health and food security: Video series
22	Seychelles	AIS	43	Rooftop solar simulation analysis
			44	Capacity building for climate finance tracking to be integrated into national budgeting processes
			45	Showcasing human impacts of RE on children and the education sector: Video series
			46	Grid integration analysis
			47	Techno-economic assessment of various e-mobility options
			48	Case Study: Progress Indicator and Impacts measures of the implementation of the SIDS LHI 12 priority areas
23	Solomon Islands	Pacific	49	Renewable Readiness Assessment
			50	Rooftop solar simulation analysis
			51	Hydro potential mapping

24	Tonga	Pacific	52	Support on energy data management methodology, development and implementation of the energy MRV
			53	Capacity building for youth focussing on climate change and RE
			54	Case study: Progress Indicator and Impacts measures of the implementation of the SIDS LHI 12 priority areas
25	Vanuatu	Pacific	55	Project identification and pipeline for bankability support

IRENA continues to convene the annual SIDS Ministerial in the margins of the IRENA Assembly, in which the progress of the implementation of the SIDS LHI priority areas is assessed and SIDS are provided an opportunity to highlight key national, regional and global issues that are pertinent to achieving their climate and sustainable development goals.

In the international fora, IRENA continues to partner with SIDS, the Alliance of Small Island States (AOSIS) and key partners such as the UN-OHRLLS amongst others, in delivering high-level events in the margins of COP and UNGA and recently at the International Conference on Small Island Developing States (SIDS4).

Furthermore, IRENA continues to strengthen strategic engagements with regional partners to ensure that the SIDS LHI priorities are aligned with Regional Energy Ministerial outcomes and has also increased its presence with the recruitment of regional focal points in the Pacific and planned ones for the Caribbean region. In addition, joint efforts are ongoing with regional organisations in delivering regional capacity building programmes such as developing bankable power purchase agreements, bankable project proposals, energy auditing and management as well as the planned Pacific Investment Forum in 2025.

"In order to achieve just and equitable transition, we need to focus on the challenges, obligations and risk. We need financial instruments that can back PPAs ensuring that we have the guarantees required when undertaking major energy projects like geothermal and as large ocean states, it would be an injustice if we refuse to make the case for ocean-based technologies and IRENA needs to take up as part of its mandate."

Honourable Vince Henderson, Minister of Foreign Affairs, International Business, Trade and Energy, Dominica, at the SIDS Ministerial, IRENA 14th Assembly, April 2024

The SIDS LHI knowledge hub that includes a website, social media page, and the SIDS LHI Annual Progress Report, as well as various media products such as video series, articles continue to reflect updates of SIDS ongoing efforts towards achieving their national renewable energy targets in partnership with key stakeholders and partners. Furthermore, through the SIDS Lighthouses Initiative IRENA continues to utilise global, regional and national platforms to highlight SIDS energy transition priorities to the world.

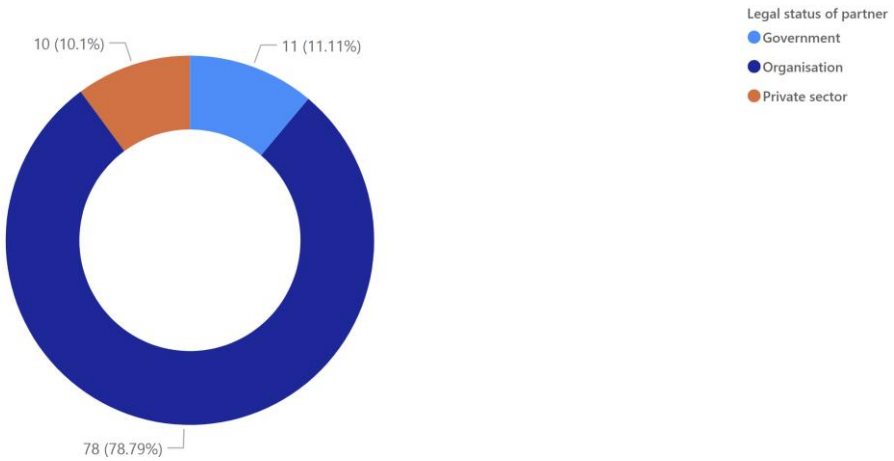
Partnerships

Overview of implementation

International cooperation and enduring partnerships with all stakeholders are essential to accelerate the transition towards renewable energy. IRENA promotes partnerships through bilateral cooperation, multilateral initiatives and cooperation platforms.

IRENA has over 100 active **bilateral result-oriented partnerships** with governmental organisations, development partners and private sector active in the renewables area, to achieve long-term impact in its work on the ground through leveraging efforts and resources, maximising synergies and complementarities, and avoiding possible duplication (Figure 27).

Figure 27 : Breakdown of IRENA partnerships by type



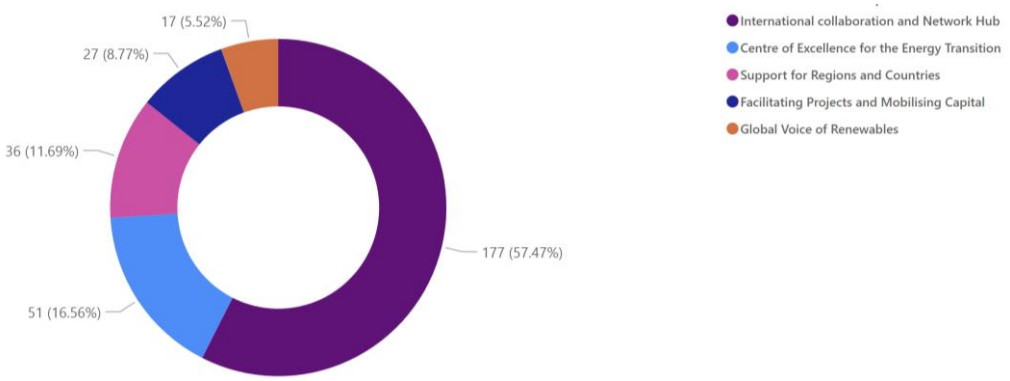
Source: IRENA partnership tracker

International, intergovernmental and non-governmental organisations are natural and indispensable partners to IRENA, as are the many private sector companies already seizing the opportunities offered by renewable energy. Cooperation with private sector is subject to "Guiding principles for engaging in cooperation activities with the private sector". The Guidelines facilitate formulation and implementation of cooperation activities with the private sector to support the achievement of IRENA's goals, while maintaining a principled approach that manages risks and ensures IRENA's impartiality, integrity and independence in full compliance with the Statute, decisions of the governing bodies, and the applicable regulations, rules, and policies.

With its global membership and wide reach, IRENA aims to be a locus of partnerships, transcending traditional approaches and modes of cooperation. These partnerships are key to translating IRENA's expertise, knowledge and tools into a sustained impact on the development and deployment of renewable energy. Consistent with the MTS, IRENA is collaborating with public and private partners, networks and constituencies in furtherance of its mission and goals. Partnering with a broad range of constituencies providing diverse expertise, advice and support has become one of IRENA's hallmarks in many areas of its work.

The partners are supportive of IRENA's mandate and objectives as stipulated in IRENA's Statute, the Medium-term Strategy and the work programmes adopted by IRENA's Assembly and collaborate with IRENA within the framework of the signed MoUs and partnership agreements (Figure 28).

Figure 28: Breakdown of partnerships by IRENA's programmatic pillar

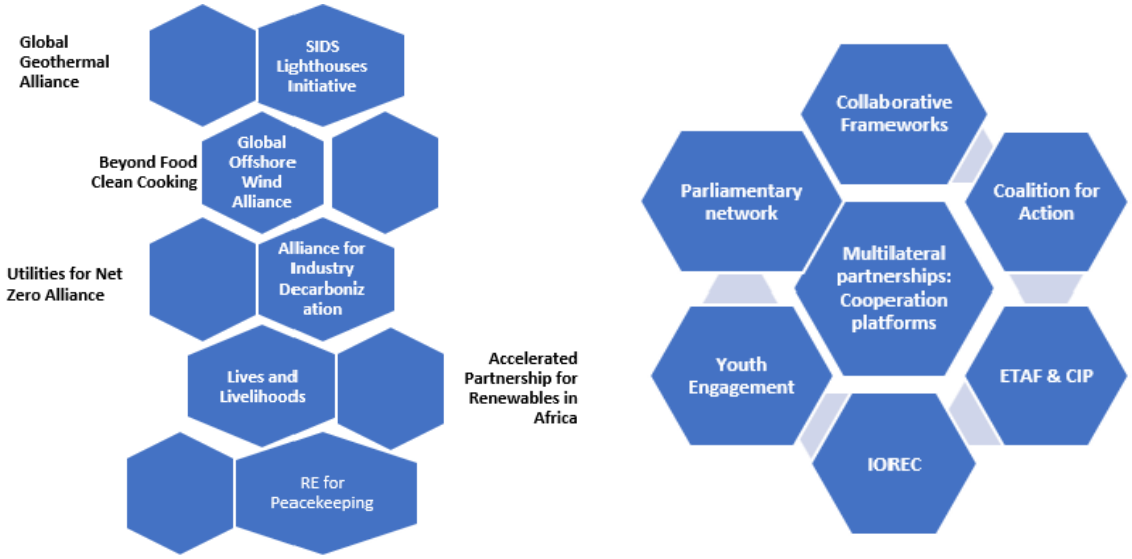


Source: IRENA partnership tracker

IRENA monitors implementation of bilateral cooperation activities through steering group meetings and coordination calls with key results achieved recorded in IRENA internal partnership tracker.

IRENA is advancing partnerships through multilateral initiatives and platforms in accordance with the core strategy pillar of International Collaboration and Network Hub (Figure 29).

Figure 29: IRENA multilateral partnerships



Source: IRENA website

International cooperation on energy and industry needs to be further enhanced. With the undisputed centrality of energy and industry to the global development and climate agenda, international cooperation has increased in recent years, helping to steer the energy transition. The speed at which energy and industrial sectors respond to geopolitical developments and the tripling pledge makes it imperative that cooperative multi-stakeholder cooperation platforms, modalities, instruments, and approaches remain agile and relevant.

IRENA galvanises international collaboration and provides an inclusive platform for all stakeholders to foster targeted action, alignment of activities and knowledge-sharing for impact on the ground. Moreover, given that IRENA is not an implementing agency, it is essential to maintain strong links with those operating on the ground to ensure the lasting impact of its programmatic activities.

IRENA's global Membership, broad reach, and access to the vast expertise contained by its Members are recognised as key advantages compared to other organisations operating in the energy field. IRENA has proven to be an able convener of Members and stakeholders, including the private sector, international and regional organisations, academia, research institutions, and others, while maintaining focus, impartiality, and independence.

The partnership work of IRENA also involves the greater inclusion of groups that have a special stake in shaping the energy transitions, such as youth, labour unions, parliamentarians, and community representatives. IRENA will seek their input and participation in the Agency's processes and programmatic activities, to include diverse voices as a critical input to acceleration of energy transitions worldwide.

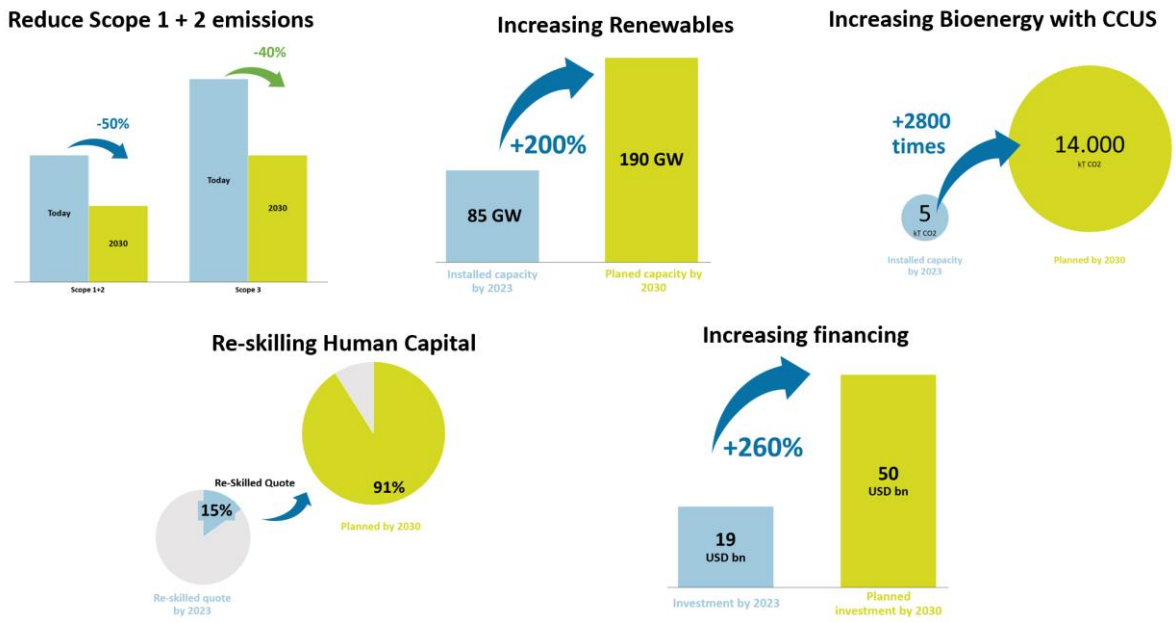
Overall impact with examples from different initiatives

I. Alliance for Industry Decarbonization

In accordance with its Implementation Plan, the Alliance for Industry Decarbonization (AFID) has adopted joint Action plans for 2024 that foster actions for the decarbonisation of industrial value chains, promoting understanding of renewables-based solutions and their adoption by industry to contribute to country-specific net-zero goals.

In implementing the actions and its Decarbonization Commitment, 75 member companies and ecosystem knowledge partners of AFID are advancing joint activities, initiatives and realise projects on the ground to advance the key decarbonization pillars related to technologies, industrial processes and enablers (Figure 30).

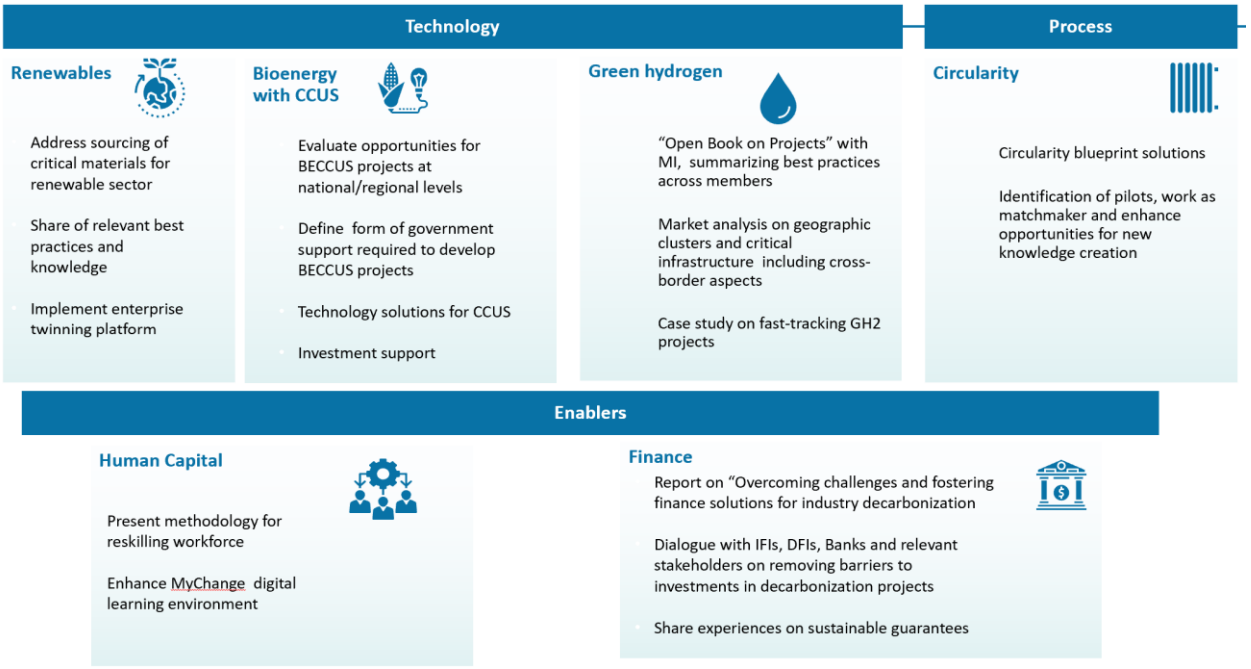
Figure 30: AFID joint activities and initiatives



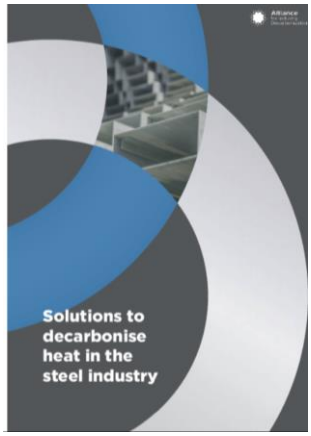
Furthermore, AFID developed MyChange digital platform used by the members to raise awareness of the challenges connected to the SDG and the 2030 Agenda.

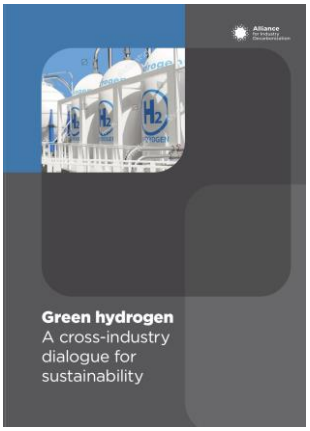
Overall, AFID serves as a global platform for enhancing dialogue at the industry level and increasing cooperation through exchange of insights, experiences and best practices across the energy and hard-to-abate sectors. The Alliance also aims to help companies develop solid decarbonisation strategies and implementation plans, supported by specific decarbonisation solutions and cross-industry collaboration. The members and partners under six working groups are implementing the key actions below in 2024 (Figure 31).

Figure 31: AFID key actions for 2024



Finally, two new publications have been published on the AFID website and disseminated among the membership and another two publications will be published on BECCUS by the end of 2024.



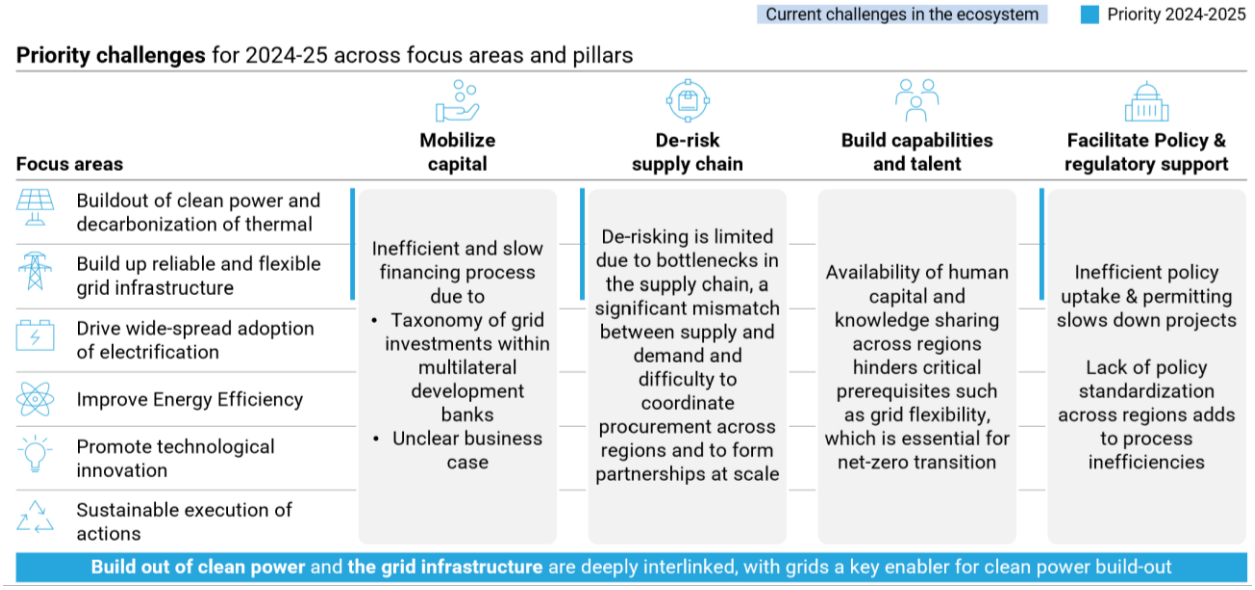


II. Utilities for Net Zero Alliance

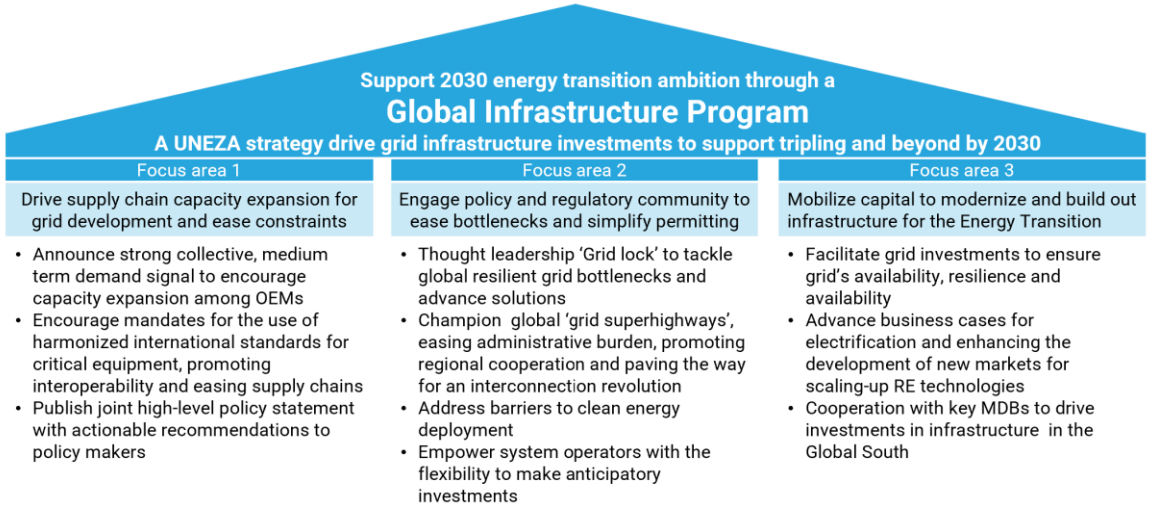
The Utilities for Net Zero Alliance (UNEZA) provides an international platform for cooperation among power utility entities, to address and overcome common barriers to the realisation of net zero ambitions and nearer-term emission reduction targets.

The members are implementing the Plan of action for 2024 that addresses the pressing need to scale and modernise global grid infrastructure to support clean power development and the tripling of renewables by 2030. To accelerate the energy transition, six focus areas have been defined, where actions along four pillars can alleviate challenges in the ecosystem (Figure 32).

Figure 32: Six focus areas to accelerate the energy transition



In addition, UNEZA is accelerating the just energy transitions through stronger international collaboration in the power sector, while focusing on implementing the following actions.



UNEZA members are delivering projects towards tripling renewable energy capacities by 2030 and are open for membership to companies and partners determined to expedite the decarbonisation and transition towards a net zero future by 2050.

AFID and UNEZA presented their progress and engaged with IRENA Members at the 14th session of the IRENA Assembly and the 27th Council meeting. IRENA Member have supported these two important partnerships and shared their respective experiences on decarbonisation and net zero transitions.

Ministerial Roundtable 'Infrastructure for the Energy Transition: Utilities for Net Zero Alliance', 14th session of the IRENA Assembly

UNEZA engaged global CEOs and key stakeholders at the World Utilities Congress 2024 to identify and tackle the existing structural, regulatory, and financial barriers that may impede the progress of energy transitions.

UNEZA CEO roundtable: Joint roadmap to address supply chain constraints

Thirty-eight UNEZA member companies and support partners have adopted the Roadmap to 2030 which includes a joint target to increase total renewable energy capacity to 749 GW by 2030, an increase of 2.5 times relative to 2023.

The member utilities announced joint intent to invest more than $116 billion annually in grids and renewables which represents a strong signal of deepening commitment to power system transformation towards 2030 targets to be announced during the New York Climate Week 2024. Moreover, UNEZA has published a high-level Statement on building a resilient and diverse clean energy technology supply chain.

III. Energy Compact on Renewable Energy for Peacekeeping

The transition of the United Nations (UN) peacekeeping operations to renewable energy offers a unique opportunity for the UN and the countries hosting these operations. By powering the operations with renewables instead of fossil fuels, they can simultaneously deliver on climate, development, peace, and security objectives.

To achieve this, Denmark, Norway, the United Arab Emirates, IRENA, the UN Department of Operational Support (UNDOS), and the UN Department of Peace Operations (UNDPO) have partnered over the Energy Compact on Renewable Energy for Peacekeeping. The Compact seeks to accelerate the transition of UN peacekeeping operations to renewable energy through public and private partnerships, developing local capacity to supply renewable energy to UN missions, and ultimately, to host communities.

At the UN High-Level Political Forum on Sustainable Development in New York on 17 July 2023, the Permanent Mission of the UAE to IRENA, the Permanent Mission of Norway to the United Nations, IRENA, the support countries, host countries and Friends of the Compact consolidated actions to support the Compact. A pipeline of prospective projects requiring support have been prepared and actions were agreed under a Joint Communiqué to achieve the aim specified in the Compact.

Moreover, at a Ministerial meeting at the 28th UN Climate Change Conference (COP28) in Dubai, the United Arab Emirates and partners adopted a Declaration to mobilise international support towards this particular Energy Compact. The meeting noted the unique and extraordinary opportunity to leverage the UN's 2030 commitment to source 80% of its electricity from renewable energy in host countries such as the Central African Republic, Cyprus, the Democratic Republic of Congo, Somalia and South Sudan. By supporting renewables

project development in fragile settings, the collaboration seeks to enhance energy access in surrounding communities and help counter drivers of conflict and displacement.

In the context of bringing project development into fruition on the ground, participants of the meeting – UN peacekeeping representatives, humanitarian organisations, international financial institutions, support countries, host countries and energy peace partners – shared experiences on replicable models for financing and developing renewable energy projects. The discussed tools and instruments include leasing arrangements, power purchase agreements and Peace Renewable Energy Credits. Some of them have been successfully used in pilot projects in Baidoa, Somalia, as well as Malakal and Yei in South Sudan.

Source: Solar power project in Baidoa, Somalia. Credit Kube Energy

In 2024, IRENA prepared the Energy Transition Assessment Report of Somalia. The assessment concluded that although numerous challenges remain, the country is well-positioned to benefit from the energy transition to a more sustainable future. The Baidoa project implemented under the Peacekeeping framework has provided valuable experiences and a unique model to implement more projects on the ground.

As the next step, the partners agreed to mobilise technical capacity and financial resources to develop a pipeline of community electrification projects anchored in UN humanitarian and peacekeeping sites. By powering UN field missions with more renewable energy, the Energy Compact partners hope to lay the foundation of sustainable and inclusive development and deliver a positive legacy in adjacent local communities.

IV. Geothermal Global Alliance (GGA)

The Geothermal Global Alliance is an initiative under IRENA that was launched at COP21 in Paris. The **goal of the GGA** is to serve as a platform for dialogue, cooperation and coordinated action between the geothermal industry, policy makers and stakeholders worldwide to overcome barriers to geothermal development which includes technical, regulatory and financial challenges. Over the last years, the GGA has focused on scaling up geothermal potential for power generation, heating and cooling, adaptation in the agri-food sector and direct-use. A series of high-level and technical meetings have been held to facilitate best practices and knowledge transfer of geothermal energy use to its members and partners globally. In addition, reports such as Global Geothermal Market and Technology Assessment (2023) and Strategic Heating Plan for Mongolia: Integrating

renewable energy solutions in district heating systems (2023) have ben published. Today, the GGA comprises 55 country members and 59 partners, fostering international cooperation and knowledge transfer across the globe.

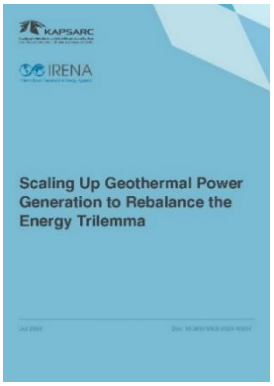
In 2024, the GGA has been working actively to accelerate the global reach of geothermal energy to advance the pledge made by 133 parties under the UAE Consensus to triple renewable energy capacity by 2030 and set the foundation to move towards a sustainable and cleaner energy future. Geothermal energy can play a significant role in achieving this goal, since it can be used for electricity generation as well as district heating and cooling, agriculture, and the tourist industry, while offering the potential to provide flexibility for a stable and reliable energy supply.

Some the activities undertaken in 2024 include:

A webinar co-hosted by IRENA/GGA and the King Abdullah Petroleum Studies and Research Center (KAPSARC) on "Scaling Up Geothermal Power Generation to Rebalance the Energy Trilemma" on 23 January 2024**.** The webinar aimed to:

- Highlight the current and potentially greater contributions of geothermal energy in rebalancing the energy trilemma, especially in the Middle East and Africa.
- Examine the megatrends in technological innovation in the sector and how market dynamics and policy environment changes affect the geothermal industry.
- Propose policy options and recommendations to advance geothermal development at a scale.

The webinar was very successful and highlighted the substantial knowledge transfer that can be adopted from the oil and gas industry to the geothermal sector and the pretexting infrastructure that could be re-used with advanced geothermal technologies. The relevant publication can be accessed here.



The **GGA Annual Meeting** was held at the Fourteenth Session of the Assembly on 18 April 2024. The meeting brought together member governments and partner institutions to have an exchange on the challenges and opportunities in the geothermal sector, share knowledge and experiences and provide feedback and guidance on the priority areas of focus for the Alliance to better support faster deployment of geothermal power and heat globally. Over 50 participants attended the meeting.

At the **Icelandic Geothermal Conference (IGC**) on 30 May 2024, IRENA made a presentation and participated in a fireside chat at the closing ceremony with the former president of Iceland, Dr. Ólafur Ragnar Grímsson. The inspiring discussions focused on the future development of the geothermal sector, the way forward and the major milestones/barriers ahead – Geothermal energy is more than just electricity production!

Source: IGC conference website: Fireside chat between our Deputy Director, Gauri Singh, and former president of Iceland, Dr. Ólafur Ragnar Grímsson

The GGA contributed to the **Washington Post article** on the recently published article on "How ancient healing hot springs could fuel a clean energy future". The article highlights how geothermal energy production can coexist with the onsen operator without harming the local water systems. The article can be accessed here.

Source: From the WP article on their website. A geothermal plant in Tsuchiyu Onsen. (Noriko Hayashi for The Washington Post)

IRENA is developing a **Stakeholder Engagement Strategy (SEP)** for the OECS Geothermal Energy for Capacity Building, Utilisation, Investment and Local Development (GEOBUILD) Programme in the Caribbean. The SEP will outline strategies and actions to effectively engage all relevant stakeholders, including government agencies, local communities, private sector entities, technical consultants, international organisations, and other key partners, across the five beneficiary member states. This project is ongoing with the initial phase expected to be finalised in 2025. Further information on the project can be accessed here.

Source: GeoBuild project website

The GGA is contributing to the development of a report of the **European Economic and Social Committee (EESC)** on "The potential of geothermal energy for the green transition" to be published by the end of the year. In this framework, the recommendations of the EESC would help policymakers to draw up a common European Strategy for the development of geothermal energy capacity. Information on the initiative can be found here.

The GGA is also contributing to the IRENA **Empowering Lives and Livelihoods initiative**. The initiative was launched at COP28, to promote the use of renewable energy technologies, including geothermal, across agriculture value chains for reinforcing resilience and bolstering economic activities across the sector. The agri-food sector is a key contributor to climate change, where the use of fossil fuels accounts for about 30% of the sector's greenhouse gas-related emissions. In 2022, IRENA published a report on "Powering Agri-food Value Chains with Geothermal Heat" that provides recommendations to accelerate the deployment of geothermal energy in the agri-food sector through the adoption of geothermal energy to improve livelihoods. The initiative is currently focusing its work on implementation, up-scaling and promoting direct-use of geothermal energy in agricultural processes and food drying, leading to additional income, increased food security and job creation in local communities. As a part of the initiative, the GGA will be working in Africa and Asia in 2024 and 2025.

The GGA contributed to multiple initiatives throughout the Agency. Some highlights of the work include:

- Capacity building and geothermal development in the Caribbean.
- Engaging with the public/private sector to promote investment into geothermal development, along with evaluation of multiple projects.
- Contributing to the Empowering Lives and Livelihoods initiative, evaluating how geothermal direct-use can contribute to food security.

V. Cooperation with a private sector – Eni

Under the Partnership Agreement, IRENA and Eni implemented five capacity building programmes on sustainable biofuels for 11 countries in Africa namely Algeria, Angola, Côte d'Ivoire, Egypt, Kenya, Mozambique, the Republic of Congo, Rwanda, and Zambia.

The goal of the programmes is to support the integration of the African continent into sustainable biofuel value chains and strengthen the competencies and skills of national African institutions involved in the biofuels sector. The joint partnership programme of IRENA and Eni has created a strong foundation for establishing a knowledge community on sustainable biofuels.

Source: Capacity building session. Credit: Eni

Evolution of IRENA's project facilitation and support work

Introduction

IRENA supports Members to access finance, up-scale investment and Nationally Determined Contribution (NDC) implementation, especially through investments in renewable energy, by building a solid pipeline of projects. This work covers the entire project size spectrum from utility-scale projects to commercial and industrial level, and micro & small level projects, as well as energy efficiency measures. This includes facilitating their realisation through a comprehensive set of operational tools, including – but not limited to – project-based technical assistance packages, targeted de-risking instruments, structured capacity building and project matchmaking sessions during IRENA regional investment forums.

IRENA offers Members dedicated project implementation support by helping project developers secure financing more efficiently and supporting investors and lenders to build stronger project portfolios. IRENA hosts and manages the Climate Investment Platform (CIP) and the Energy Transition Accelerator Finance (ETAF) Platform. Both CIP and ETAF are inclusive, multi-stakeholder climate finance platforms that facilitate capital mobilisation to scale up the development of renewable energy projects across developing markets. These two platforms benefitted from the lessons learned during the implementation of the IRENA/ADFD Facility, which introduced IRENA's facilitation services to member countries in 2014.

I. IRENA / Abu Dhabi Fund for Development (ADFD) Facility

Structure

In 2009, the Abu Dhabi Fund for Development (ADFD) committed USD 350 million in concessional co-financing loans to be allocated over seven annual cycles to implement renewable energy projects in developing countries. The Agency was responsible for project selection and recommendation to ADFD for final consideration and funding. The joint IRENA/ADFD Project Facility (the Facility) is the result of these commitments and represents a unique partnership between IRENA and ADFD.

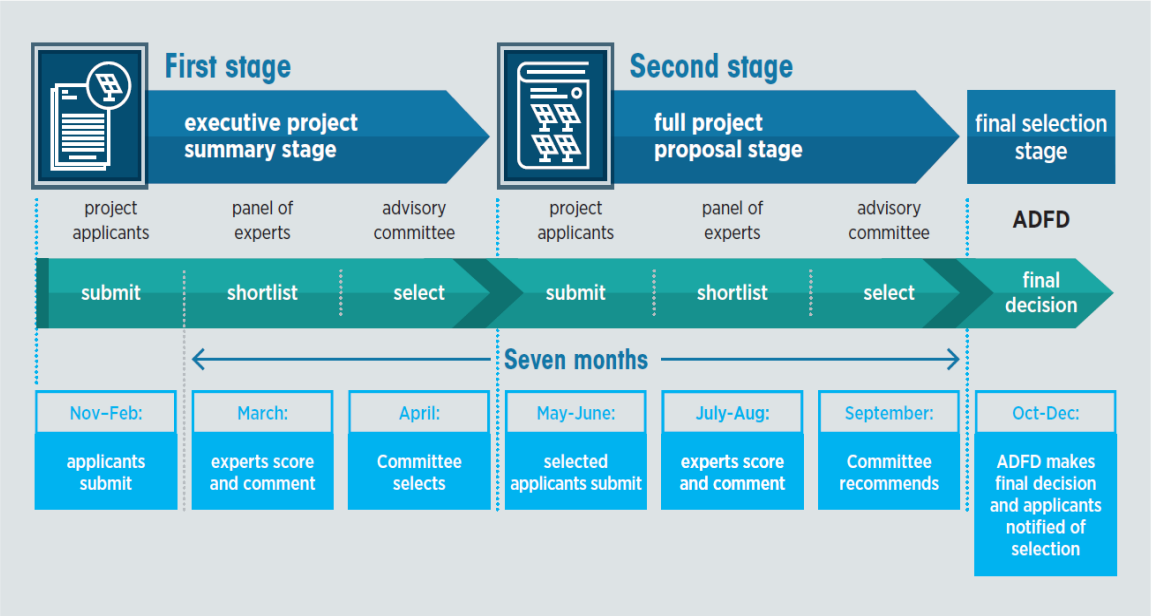
Project pipeline methodology

ADFD's commitment was to allocate USD 50 million per cycle of debt funding for selected projects, for ticket sizes of USD 5 to 15 million, for no more than 50% of the project cost. The funding attracted a concessional loan rate of 1-2 % per ADFD's commitment to supporting low and middle-income countries from the OECD Development Assistance Committee (DAC) list of Official Development Assistance (ODA) recipients.

Annual cycles of project selection were conducted between 2014 and 2020. IRENA carried out outreach activities yearly to mobilise eligible projects from its Members, while also clarifying eligibility requirements. Over the seven years, 602 projects were submitted to the Facility, representing financing needs of USD 5.9 billion. Of these, 32 were eligible for USD 350 million.

Project selection involved a two-stage process on the IRENA side, with an external panel of experts supporting the technical review process and an Advisory Board providing an oversight function. The annual selection process resulted in the selection of, on average, five projects with support from at least 60 personnel (including IRENA and ADFD Staff, external technical experts and an Advisory board) annually (Figure 33).

Figure 33: IRENA/ADFD Facility project selection timelines



Impact:

The IRENA/ADFD Facility enabled projects from 21 countries to access concessionary financing for public-sector and PPP renewable energy projects in markets that would be difficult to support by conventional funders. Participation of ADFD in supporting the projects helped attract the required co-financing to the tune of over USD 500 million. The projects are delivering various renewable energy benefits (access to energy, fresh water, waste management, better health care, improved healthcare, education, productivity, etc) for more than 2 million people.

Way forward

At the end of the seventh cycle of projects in January 2020, the Facility was closed. Members commended its positive impact on financing members' energy transition renewable energy projects. Furthermore, members called on IRENA to utilise the lessons of the IRENA/ADFD Facility in formulating new avenues in which the Agency can facilitate more inclusive access to financing, especially in developing member states. IRENA supports ADFD in coordinating follow-up monitoring activities to track implementation progress and report project impacts to members.

II. Climate Investment Platform (CIP)

The Climate Investment Platform (CIP) is a Joint initiative of IRENA, the United Nations Development Program (UNDP) and Sustainable Energy for All (SE4ALL) in collaboration with the Green Climate Fund (GCF), established in January 2020 to support small to medium-sized renewable energy projects, particularly those in hard to access geographies that require more guidance throughout their development journey. By catering to projects that need additional assistance, CIP plays an essential role in accelerating the energy transition where it is most needed. The platform has 441 partners with a range of expertise in financial, academia, and risk mitigation.

CIP provides tailored support, guiding projects through critical stages by offering technical assistance and helping to develop Project Information Documents (PIDs) that consolidate key project details, making them ready for investor consideration. Once the PIDs are finalised, IRENA introduces the projects to financial partners. A match is established when both parties agree to explore funding options, resulting in successful collaborations.

The Climate Investment financial partners provide a diverse range of funding options. These include debt financing, equity, guarantees, grants and mezzanine. The financial support is bundled through a combination of these funding mechanisms, tailored to meet the unique needs of each project.

Project pipeline methodology

A project proposal undergoes a comprehensive six-stage process to ensure its readiness. Firstly, the developers register their projects and attach all necessary documentation. Subsequently, the CIP team, consisting of 4 individuals, review and evaluate each project. The lean group focuses on high-impact projects to optimize resource employment and mobilisation. During the review, if it meets the criteria, a panel decision is made, and the development of the Project Information Document (PID) begins. Afterward, the PID undergoes a revision phase and is presented to suitable financial partners for financial matchmaking.

CIP's progress

By providing early-stage technical assistance and facilitating connections with partners, the CIP takes a more proactive approach to ensure projects are well-prepared and more efficiently executed.

As of August 2024, 492 projects have been sourced on the CIP, with 209 projects eligible for support. Of these, 90 projects have been actively supported; 39 have benefitted from technical assistance support, 14 were matched with interested financing partners, and five reached financial close. CIP has closed 64.8 MW worth USD 85 million, positively impacting 4 million lives.

Key lessons learned through the CIP include but are not limited to the need to include government bodies to boost investor confidence and broaden technical assistance to cover the entire project development process. On the same token, it is crucial to explore innovative financing to match project needs with partner offerings and demonstrate impact to attract philanthropic and grant funding, for small-scale projects.

Leveraging Investment Forums to Accelerate Project Deployment

The IRENA Investment Forums are a key element in the Agency's strategy to support the mobilisation of investments in energy transitions. They bring together decision-makers from the public and private sectors, including the financial community, development partners, and other relevant stakeholders, to drive energy transition investments.

Selected projects are featured for matchmaking with financial institutions participating in the forum, to establish an engagement that could lead towards a financial investment in the project(s). The CIP is the main channel by which projects are sourced and supported with the preparation of documentation and technical assistance, where applicable, to be presented to investors.

III. Energy Transition Accelerator Financing (ETAF) Platform

Inspired by the successes and lessons learned from the IRENA/ADFD Facility, IRENA worked closely with ADFD to develop a follow-up funding mechanism that opens the door to a broader scope of funding options availed to project developers. This would significantly enhance the leverage potential of the funding availed by each financing partner, shortening the timelines to financial closing and ensuring faster capital deployment for energy transition projects.

ETAF was established to mobilise capital from global financial institutions such as MDBs, development financial institutions (DFIs), and the corporate sector. The primary objective is to expedite the implementation of renewable energy projects and accelerate the energy transition in developing countries. The platform started with an ambition to mobilise USD 1 billion in soft pledges for project investment, which was revised in 2023 to USD 5 billion by 2030. The platform also aims to facilitate investments supporting a minimum of 1.5 GW of renewable energy technologies by 2024, increasing to at least 5 GW by 2030. This will be achieved through backing renewable-supportive infrastructure, including electricity transmission services and storage.

Project pipeline and implementation modalities

Learning from the ADFD Facility, ETAF was set up to optimise IRENA's internal capacity through an agile team of staff and consultants to speed up the projects' initial review and filtering process. Aspects reviewed by the IRENA's ETAF Secretariat were agreed upon, and criteria were set out with the founding partners. ETAF's Secretariat, which has a team of five staff members and consultants, is hosted within IRENA's Project Facilitation and Support Division. Agility is at the heart of this approach, enabling the ETAF to have a shorter processing timeline with an average response time of 45 days from submission to communicating the initial assessment findings. A portfolio of new projects is presented to the ETAF Partners' representatives bi-monthly.

In ETAF's approach to portfolio curation, it was further agreed that projects' due diligence based on the provided pipeline from ETAF's assessment was to remain the role of the funding partners. ETAF's partners also constituted an Executive Committee and A Forum of Partners. The Executive Committee regularly interacts with the ETAF Secretariat regarding operational aspects of the Platform. On the other hand, the Forum of Partners comprises senior staff of the institutions that make up ETAF's financing and de-rising partners. The forum meets biannually to help define ETAF's strategic direction.

ETAF's progress

At the end of 2023, ETAF mobilised USD 4.15 billion in soft commitments from 11 financing partners and three risk-mitigation providers. The platform's call for project submissions was launched at the UNFCCC Conference of Parties in Sharm El Sheikh, Egypt, in 2022 and had 74 projects submitted as of August 2024, with 12.5 GW capacity, aiming to serve 21.4 million people and lowering an estimated 10.4 million tonnes of CO_2E. Of the 74 projects, three projects reached financial close in 2023, while 14 are under consideration by different ETAF funding partners.

Technical Assistance:

IRENA's Project Facilitation and Support division offers a range of support services, such as thorough technical, socioeconomic and financial reviews of projects. It also provides advisory support to project

proponents to enhance viability during the project development stage under the CIP and to improve the bankability of proposals submitted on the ETAF Platform to enable them to secure credit facilities.

The Technical Assistance team also contributes with expertise and input to organise and deliver capacity-building workshops on project financing in collaboration with other teams. The aim is to bolster the renewable energy-related technical skills and project appraising capacity of local financial institutions, to enhance the proposal development capacity of the sponsors, and to enrich the understanding of the renewable energy sector for state actors, enabling them to enact conducive policy instruments.

Conclusions

Over the years, the agency has adapted its project facilitation services to Members keeping in step with the ever-increasing demand for technical assistance, financing and de-risking measures for renewable energy and energy transition projects. By taking these measures and implementing its role and mandate through the CIP and ETAF platforms, the Agency's project facilitation has evolved to address the increasing Members' requests through inclusive yet demand-driven support. By maintaining an agile team, working through platforms and portals and leveraging its partners' skills and experience, the Agency is improving its efficiency and effectiveness in delivering facilitation support for energy transition projects in member states.

Way forward

Project Pipeline Curation through CIP, ETAF with TA support: Both CIP and ETAF will continue to mobilise, assess and support projects in their documentation preparation to deliver pipelines for partners' financing considerations. This work relies on the support from the TA team through capacity-building interventions for the developers, financiers and governments and advisory support for project developers. The TA team will also collaborate with CIP to provide support in terms of content and delivery for the upcoming investment fora in Kenya and Central Asia, and the workshop in St. Kitts and Nevis. APRA country-specific workshops are also being planned to develop the capacity of APRA countries.

Upcoming Investment Forums: The upcoming APRA Forum seeks to mobilise substantial public and private financial resources, backed by technical assistance and capacity building, to close the investment gap and promote green industrialisation and development. The Investment Forum will feature projects mainly from the seven APRA member countries, namely Ethiopia, Ghana, Kenya, Namibia, Rwanda, Sierra Leone, and Zimbabwe. It will also serve as a platform to advance practical solutions and showcase real-world case studies, focusing on both the energy transition and the creation of economic opportunities through industries centred around renewables.

The Central Asia Investment Forum will take place in Baku, Azerbaijan, from 13 to 14 November 2024 during COP29. The Forum will focus on Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan**.** Led by the Government of Azerbaijan, in collaboration with the IRENA, the Forum will convene governments and regional and global stakeholders to accelerate the deployment of renewable energy projects, enhance energy access, and drive energy transition investments in Central Asia.

Communications Strategy - #3xRenewables

1. Objective

The global goal of tripling renewables by 2030 is a strategic priority of IRENA's Communications. #3xRenewables provides an opportunity for the Agency to maintain momentum and elevate visibility on the global stage. #3xRenewables provides an opening to solidify IRENA's position as the leading global authority on renewable energy and the go-to source for credible data, policy guidance, and strategic solutions to achieve the 2030 target, influencing international climate forums, energy conferences, and media discussions, ensuring it remains at the forefront of the global renewable energy transition.

The Role of IRENA

1. **Position IRENA as custodian agency** to track progress towards #3xRenewables
2. **Persuade & influence decision-makers** to drive action towards #3xRenewables
3. **Engage IRENA's Members & partners** in implementation of #3xRenewables
4. **Impact global discourse & raise awareness** of the benefits of #3xRenewables

2. Narrative & Key Messages

The story #3xRenewables is rooted in IRENA's World Energy Transitions Outlook.

IRENA projected the need to triple installed renewable power capacity to over 11 TW globally by 2030 to stay on a 1.5°C aligned pathway.

The opportunity #3xRenewables generate positive impact on climate and environment, jobs and economy, energy security, energy access and gender equality.

Reliable energy access improves health, livelihoods and education through cleaner air, clean water, access to efficient clean cooking among others.

Record progress is not enough to meet #3xRenewables target.

1. A record of 473 GW of renewables were added worldwide in 2023, the largest-ever annual increase in renewables.
2. This unprecedented growth is insufficient to meet the UAE Consensus pledge.
3. Even if last year's record growth of renewables continues until 2030, it falls short of meeting the #3xRenewables target.

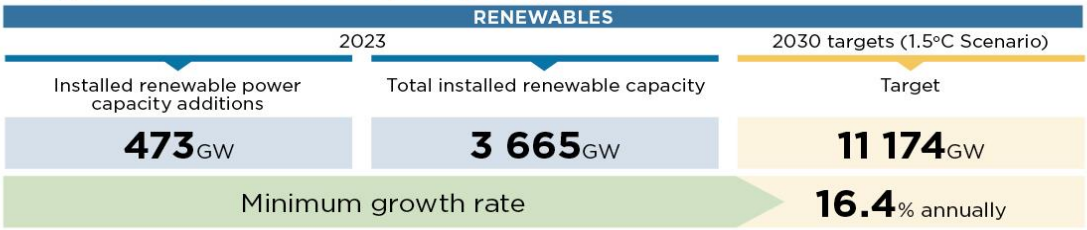
Regions & countries are falling behind. We need a just transition.

1. Renewable growth shows great regional disparities. Majority of growth occurred in China, Europe and North America.
2. Global South is increasingly falling behind, Africa accounted for less than 5% of global growth despite great potential.
3. Sub-Saharan Africa attracted less than 2% of global transition investment 2010-2021.

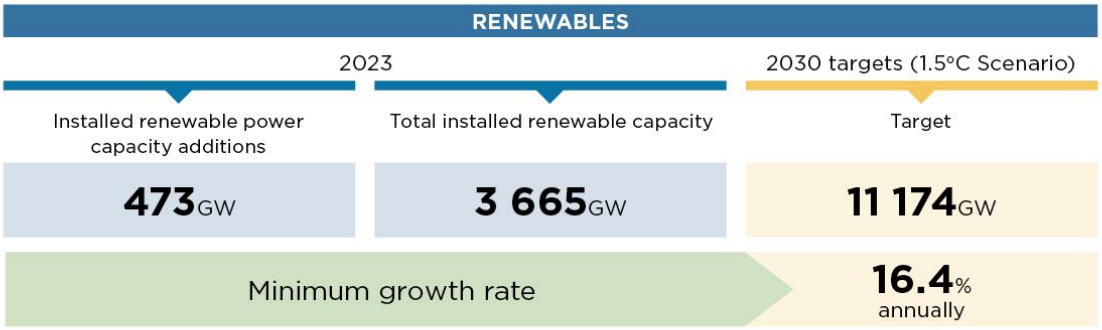
The world needs urgent course correction. Every action and fraction of a degree matters.

1. The global energy transition is off track but #3xRenewables by 2030 is feasible and viable.
2. Solutions exist, but they need commitment, policy support, and large-scale investment.
3. We must overcome systemic barriers in infrastructure, policies and skills. We must strengthen investment and international cooperation.

Progress in Renewable Capacity Deployment



Progress in Renewable Capacity Deployment



3. Multi-Channel Communications Actions

IRENA plays a key role in promoting renewable energy solutions and driving the global transition to a sustainable energy future. For IRENA, a multi-channel communications strategy is critical to engage various stakeholders, including governments & policymakers, industry leaders & corporations, civil society, youth and the general public.

Objectives	Tactics
Position IRENA	» Leverage global events to promote IRENA's tracking progress data COP28, COP29 and others; » Partner with global leads and philanthropies e.g. at Global Renewables Summit; » Advance strategic speakers' placement at high-level forums CEM, G7, G20; » Run a hosted media program at the APRA Investment Forum and IRENA Assembly; » Strengthen media relations with tracking info, exclusives, story pitching, briefings; » Place thought leadership articles, op-eds, policy briefs by senior managers.
Influence decision-makers	» Digitalize tracking progress infographic and disseminate across channels; » Produce innovative digital formats: motion graphic, animations, visuals; » Write features on energy transition enablers and solutions; » Showcase country support and progress through articles & photo stories; » Produce localized content on specific regions, projects, local stories .
Engage stakeholders	» Develop partnership toolkits with tracking content; » Share regular newsletters with tracking updates; » Empower youth as multiplier and engage in tracking discourse at IRENA Youth Forum; » Develop joint communications with partners like private sector UNEZA, AFID; » Inform local stakeholders through outreach activities; » Run a communications campaign promoting #3xRenewables.
Raise awareness	» Produce human impact videos from Global South & disseminate on social media; » Post educational and explainer content across channels; » Build website hub & ticker to track progress; » Create interactive dashboards to make data accessible; » Monitor performance KPIs, website traffic, social media listening, media mentions.

4.Communications Campaign #3xRenewables

IRENA's Communications Teams will run a 3-months digital communications campaign starting in October 2024 to maximize visibility, raise awareness and mobilize action towards #3xRenewables.

'#3xRenewables - for the planet and its people' campaign aims to reinforce advocacy efforts to accelerate the global energy transition and showcase beneficial opportunities of renewables for sustainability, socio-economic development and energy access. Tripling renewable energy capacity by 2030 unlocks the benefits of energy transition for the planet and its people. While global in nature, the campaign will have a strong focus on key markets in the Global South, from Africa, Latin America and Asia.

This campaign will build momentum toward the 2030 target, driving global cooperation and coordinated action to rapidly scale up renewable energy deployment worldwide. It will build on IRENA's WETO and on *Delivering on the UAE Consensus: Tracking progress toward tripling renewable energy capacity and doubling energy efficiency by 2030*, published by IRENA in cooperation with the Global Renewable Alliance and the COP Troika Presidencies of the UAE, Azerbaijan and Brazil in October.

The campaign features a human impact video series, showcasing how renewable energy solutions bring progress, prosperity, and growth to communities in the Global South. Through the exchange of knowledge and lessons learnt, the videos advocate for accelerating renewable deployment on the ground in developing communities. The videos will be thematically aligned with the messaging of the campaign on unlocking positive impacts of energy transition.

While there are no 'magic bullets' or shortcuts available, global action must be focused, disciplined and aligned around key priorities. The campaign will also feature a series of animated explainers and motion graphics on how to overcome the structural barriers impeding progress along five enablers of energy transition including the grid infrastructure, robust policy frameworks, the development of institutional and human capacities, backed by scaled-up financing and strong international cooperation.

The digital communication campaign will be rolled-out across all channels though a dedicated branded campaign webpage, banners and advertisement on social media, and will be accompanied by global media activation on #3xRenewables.

Campaign Objectives

- Increase awareness and drive action to achieve tripling renewable energy capacity by 2030.
- Strengthen IRENA's position as custodian and the tracking agency of global renewable energy efforts.

	Campaign Stream I	Campaign Stream II
1 Content Developing	Create human impact videos from Sub- Saharan Africa, Latin America, and Asia, highlighting how renewables benefit local communities with energy access, jobs, economic growth and improved likelihood.	Develop digital content and motion graphics on priority actions & #3xRenewables enablers to showcase solutions and for ground progress.
2 Multimedia Campaign	Run a multimedia campaign across owned website and social media platforms.	Produce messaging, key visuals and motion graphics videos on key enablers.
3 Social Media	Run a paid social media campaign to push out content to key markets in the Global South.	Run a paid social media campaign in Global North key markets to raise awareness and drive action for increased collaboration in support of Global South.