IRENA
International Renewable Energy Agency

10 December 2025

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Abu Dhabi, 11-12 January 2026

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

Executive Summary

IRENA has effectively executed its Work Programme and Budget 2024-2025, focusing on key activities to address knowledge gaps, inform global discourse, and drive investment towards a renewables-based energy system. IRENA's extensive analyses and reports reveal a robust, yet insufficient, acceleration in the global energy transition, confirming renewables as the dominant source of new power capacity but highlighting critical gaps in achieving 2030 targets. According to the *Delivering on the UAE Consensus* report, the world is "substantially off-track" from meeting the UAE Consensus goals, despite a record 582 gigawatts (GW) of new renewable power capacity added in 2024, marking a 15% increase over the previous year. The challenge is starkly regional; Africa, which added only 4.7 GW, must quadruple its current 70 GW capacity to meet its 300 GW target by 2030, underscoring the highly uneven geographic deployment. Meanwhile, Asia, Europe, and North America accounted for 85.4% of global installed capacity. IRENA's *Renewable Energy Statistics 2025* report confirms that renewable energy has become the primary driver of new power generation capacity. In 2024, the record addition of 582 GW brought the global total to 4 443 GW. This expansion, led by solar and wind, accounted for 91.1% of all new power capacity added globally. *Renewable Energy Statistics 2025* also shows that consistently since 2010, solar and wind energy have been driving the largest growth in renewable electricity, with wind reaching 2 304 TWh and solar 1 624 TWh. The *Renewable Power Generation Costs in 2024* report underscores the economic viability of this transition. It reveals that 91% of newly commissioned utility-scale renewable capacity delivered electricity at a lower cost than the cheapest fossil fuel-based alternative, saving an estimated USD 467 billion in global fossil fuel spending in 2024. The 2025 edition of *Tracking SDG7: The Energy Progress Report* underscores that, despite incremental advances, the global community is not on course to achieve the goal.

The energy transition requires comprehensive and holistic solutions that address both human and technological aspects, as highlighted by IRENA's Renewable energy: A gender perspective (Second edition) report. Although renewables are comparatively more inclusive than the fossil fuel sector, women still face persistent workplace, societal, and educational barriers, holding only 32% of full-time jobs, which is significantly below the global workforce average. Furthermore, the Call to Action on Skilling for the Energy Transition highlights the need for integrating skill development into energy and climate plans to avoid significant workforce gaps in a rapidly evolving sector.

Digitalisation and Artificial Intelligence (AI) are now decisive enablers for the global power system transformation required to meet decarbonisation and the tripling goal for renewables. IRENA's *Digitalisation and AI for power system transformation: Perspectives for the G7* report shows that as electricity's share of final energy consumption is projected to double by 2050, digitalisation is essential to manage the increasing complexity, variability, and distributed nature of power generation. IRENA's 2025 Innovation Day and Innovation Week events served as vital fora for exploring the transformative potential of digitalisation, AI, and other innovative solutions in enhancing grid efficiency and resilience. In the rapidly developing field of green hydrogen, IRENA's regional reports on Central Asia, the South Caucasus and North Africa have provided comprehensive assessments of the potential of these regions to become global hubs for production.

According to IRENA's *Global Landscape of Energy Transition Finance* report global investment in energy transition technologies reached a new record of USD 2.4 trillion in 2024, marking a substantial 20% increase from 2022-2023 levels. Renewable energy attracted the largest share of this capital at USD 807 billion, followed closely by electric vehicles at USD 763 billion. However, the report critically notes that despite investments more than doubling since 2019, they remain heavily concentrated in advanced economies and China, thus, leaving most emerging and developing countries behind. Of the total renewable investment, China received USD 352 billion, while Sub-Saharan Africa received a disproportionately small USD 18 billion. Public funds and stronger multilateral cooperation are required to close the gap. To accelerate the mobilization of investment in developing economies, IRENA actively manages two strategic platforms: the Climate Investment Platform (CIP) and the Energy Transition Accelerator Financing Platform (ETAF).

CIP has successfully supported 133 projects through bespoke technical assistance and tailored advisory support. ETAF's call for project submissions has attracted 108 project proposals to date. Currently, 26 proposals have been recommended to the Platform partners that fulfil the requirements in four assessed dimensions: energy transition potential, implementation readiness, developer track record, and commercial viability. IRENAs work on sustainable energy fuels focuses on their critical role in decarbonising hard-to-abate sectors like aviation, shipping, and heavy industry. The Agency provides roadmaps, policy advice, among others to accelerate the production and deployment of these fuels, while ensuring their long-term environmental and socioeconomic sustainability. Furthermore, on 22 September, the IRENA and ICAO jointly launched Finvest@ETAF, a joint financing platform, designed to support SAF and promote clean aviation energy projects globally.

To translate global commitments into tangible action, IRENA has also focused on analyses and strategic initiatives at the regional and country levels. IRENA's *Regional energy transition outlook: South America* report outlines a Decarbonising Energy Scenario for the region that sees renewable electricity soaring to 98% and requiring USD 13 trillion in total investment from 2025-2050. Achieving this renewables-based transition, which includes massive deployment of solar and wind, is projected to generate substantial socio-economic benefits, leading to a 1.1% increase in annual GDP and the creation of over 12 million energy sector jobs. The *Regional energy transition outlook: European Union* report shows that the bloc is actively leading the global energy transition by implementing ambitious climate targets and key policies to enhance energy security, reduce dependency on fossil fuel imports, and maintain economic competitiveness. The Agency's analysis emphasises that the G20 and an additional 15 "G20+" countries must more than double their annual renewable capacity additions to meet the 2030 tripling target. A key initiative is the Global Coalition for Energy Planning (GCEP), for which IRENA serves as the Secretariat. The inaugural GCEP Summit in June 2025 in Rio successfully positioned the coalition as a platform for bridging the gap between long-term energy planning and investment mobilisation. IRENA continues to provide targeted support to vulnerable regions through initiatives like the Small Island Developing States (SIDS) Lighthouses Initiative and IOREC.

IRENA is actively helping 102 countries strengthen their Nationally Determined Contributions (NDCs). The *2023 Year in Review: Climate-driven Global Renewable Energy Potential Resources and Energy Demand* report highlights the critical link between climate change and renewable energy. The report, *Renewable energy in climate change adaptation: Metrics and risk assessment framework* highlights the role of renewables in climate change adaptation, noting a significant gap in adaptation financing.

The Accelerated Partnership for Renewables in Africa (APRA) has expanded to 10 member countries, with Djibouti, Mozambique and Uganda recently joining. IRENA's new Accelerated Partnership for Renewable Energy in Central Asia (APRECA) aims to accelerate investments and regional cooperation for renewable energy in Central Asia. IRENA unveiled the Accelerated Partnership for Renewable Energy in Southeast Asia (APRESA) at the Singapore–IRENA High-Level Forum during Singapore International Energy Week (SIEW) in October 2025 with a view to supporting acceleration of the clean energy transition in the Southeast Asia region. The SIDS Decarbonisation Forum was held in February to help SIDS address climate change and reduce their reliance on fossil fuels. The Agency's report, *A just energy transition for communities: Large-scale wind and solar projects in Sub-Saharan Africa*, highlights the socio-economic benefits of large-scale renewable energy projects in the region.

IRENA has also strengthened its collaboration with organisations, academia and the private sector to advance the energy transition. The 15th session of the IRENA Assembly convened under the theme "Accelerating the Renewable Energy Transition" took stock of progress and formulated concrete actions to accelerate the worldwide transition. Several ministerial and high-level dialogues addressed critical issues, such as scaling up finance and trade, energy transition pathways in emerging economies, technologies, climate, the specific priorities of SIDS, African and Mediterranean countries, partnerships in Central Asia and Africa, youth and women, *etc.*

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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

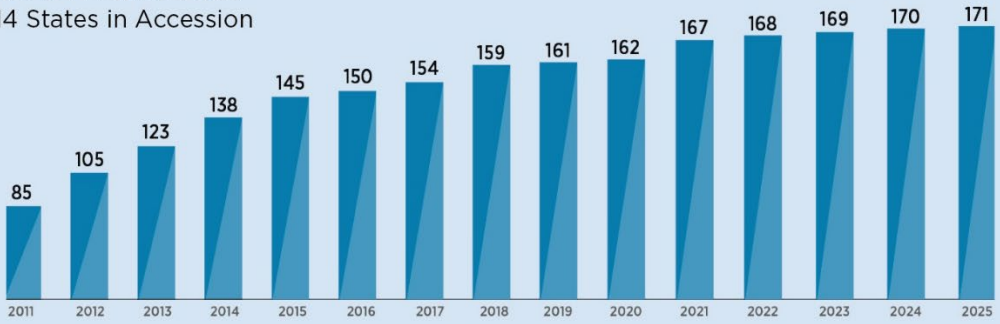
2011

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 15 November, the Agency has 171 Members and 14 States in Accession



15TH ASSEMBLY BUREAU

President: Slovenia

Vice-Presidents:

Costa Rica

Namibia

Türkiye

United Arab Emirates

COUNCIL

21 Members

31st Council
Chair: UAE
Vice-Chair: Togo

32nd Council
Chair: TBC
Vice-Chair: TBC

2 Committees

Administration & Finance
Chair: Dominica
Vice-Chair: UAE

Programme & Strategy
Chair: Italy
Vice-Chair: Zimbabwe

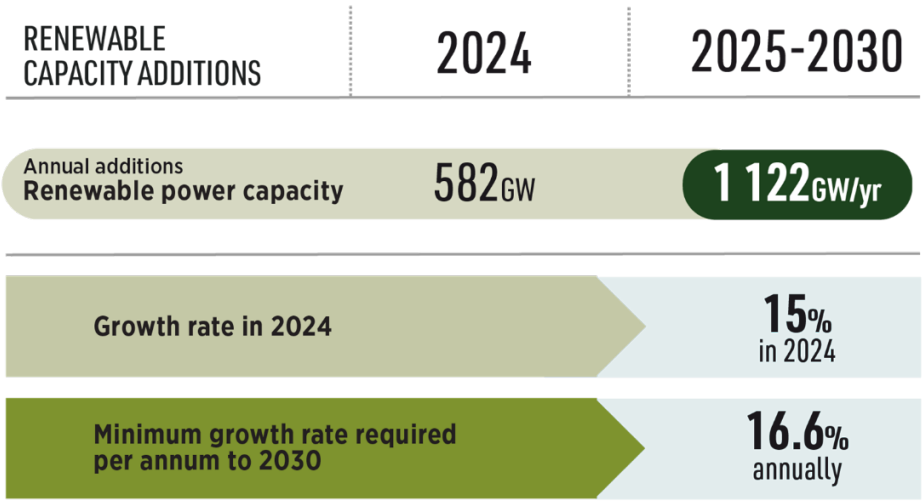
IRENA
International Renewable Energy Agency

Advancing efforts to achieve a net-zero future for all

The current Work Programme and Budget for 2024-2025 has reached its final phase of implementation. Activities during this programmatic cycle were strategically selected to fill knowledge gaps, effectively shape the global energy discourse and accelerate policy action and large-scale investment in renewables-based energy systems globally. This report presents the Agency's programmatic activities conducted since January 2025.

In line with its mandate to track progress on the UAE Consensus goals, IRENA released the 2025 edition of the **Delivering on the UAE Consensus**[1] tracking report during a pre-COP event on 14 October in Belém, Brazil. The analysis shows that while renewable energy sources have firmly established themselves as the primary driver of new power generation capacity growth, the world is still substantially off-track from meeting the UAE Consensus goals. The positive momentum was sustained throughout 2024, with the addition of 582 GW of new renewable power capacity globally, marking a record growth 15% growth over the previous year. This expansion was overwhelmingly led by solar PV, which accounted for 452.1 GW of the total. While the current annual addition rate is critically short of the required 1,122 GW per year to meet the 11.2 TW installed renewable capacity target by 2030 (Figure 1), the record growth suggests that if momentum persists, the world could truly realise the UAE Consensus goals by the deadline. This accelerated growth trajectory underscores and elevates IRENA's central role in guiding this global renewable energy transition

Figure 1: Renewable power growth in 2024



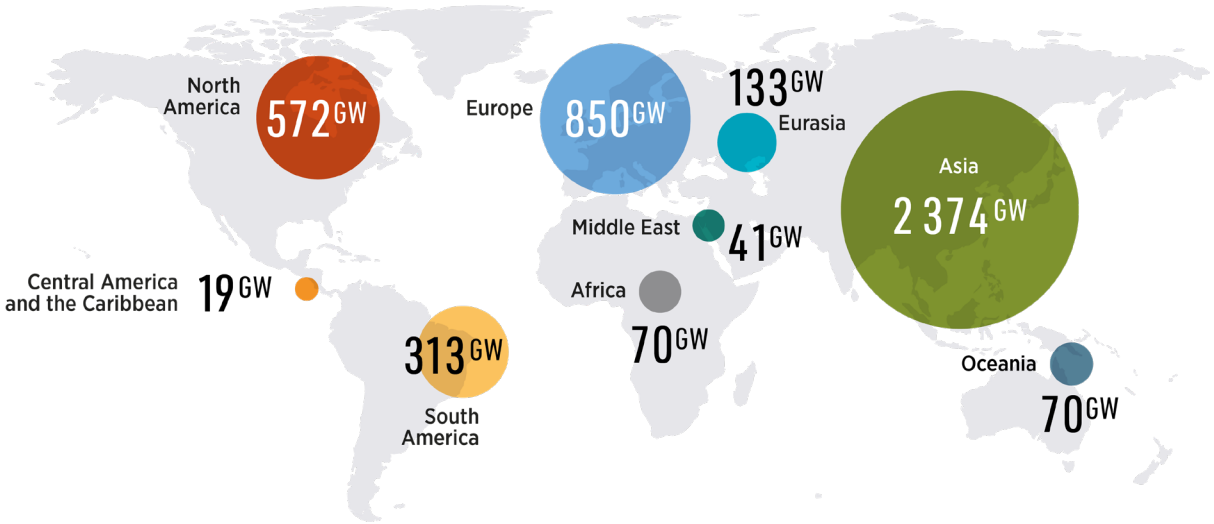
Source: IRENA, COP28 Presidency, COP30 Presidency, Global Renewables Alliance, *Delivering on the UAE Consensus: Tracking progress* (2025)

Regionally, the challenges are most acute in Africa. The region added only 4.7 GW of renewable capacity, bringing its total to 70 GW (Figure 2). To meet the target of 300 GW by 2030, the continent must quadruple its current capacity, necessitating substantial international support and domestic policy reform. This urgent need is framed by the highly uneven geographic deployment of renewables. Asia, Europe and North

[1] Available here.

America collectively accounted for 85.4% of installed renewable power capacity at the end of 2024. Asia alone drove the majority of renewable power additions in 2024 (71%), increasing its total by 413.2 GW to reach 2 374 GW, or 53.4% of global installed capacity, overwhelmingly due to China's 373.6 GW expansion. The report concludes that a paradigm shift in both policy and finance is necessary to align global efforts with the 2030 climate and energy mandates.

Figure 2: Renewable power capacity by region in 2024



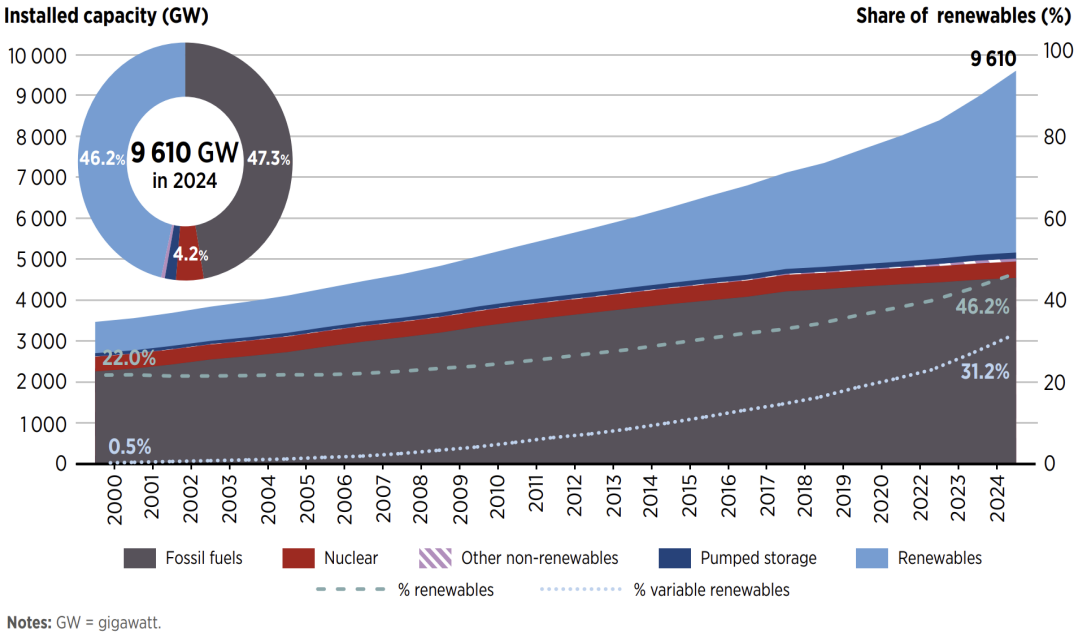
Source: IRENA, COP28 Presidency, COP30 Presidency, Global Renewables Alliance, *Delivering on the UAE Consensus: Tracking progress* (2025)

According to IRENA's **Renewable capacity statistics 2025**[2] report, the substantial additions in 2024 propelled the total global renewable capacity to 4 443 GW or 46.2% of the 9.6 TW of global total capacity including non-renewables.[3] Within this cumulative capacity, solar energy constituted the largest share at 1,866 GW, followed by renewable hydropower at 1 277 GW and wind energy at 1 133 GW. The share of variable renewables (wind and solar) increased to 67.5% of renewable capacity, indicating a shift towards these more intermittent energy sources. Non-renewable sources constituted 5.2 TW (53.8%) of the world's installed power capacity. This non-renewable total is primarily composed of fossil fuels at 4.5 TW (47.3%), with smaller contributions from nuclear energy at 400 GW (4.2%), pumped storage at 150 GW (1.6%), and other non-renewables at 68 GW (0.7%) (Figure 3). Renewable energy additions have accelerated significantly over the past two decades, culminating in an unprecedented peak of 582 GW of new renewable capacity added in 2024. This remarkable growth confirms renewables' dominance in the sector. In 2024, they accounted for 91.1% of all new capacity added globally. In sharp contrast, annual non-renewable capacity additions have either remained flat or decreased, staying below 90 GW annually since 2019 (Figure 4).

[2] Available here. Revised numbers here.

[3] **Note**: This number was revised downwards by 5.3 gigawatts (GW) from what was previously reported in March 2025. This decrease occurred due to downward revisions for hydropower and wind power plants, partly offset by upward revisions for solar and bioenergy power plants.

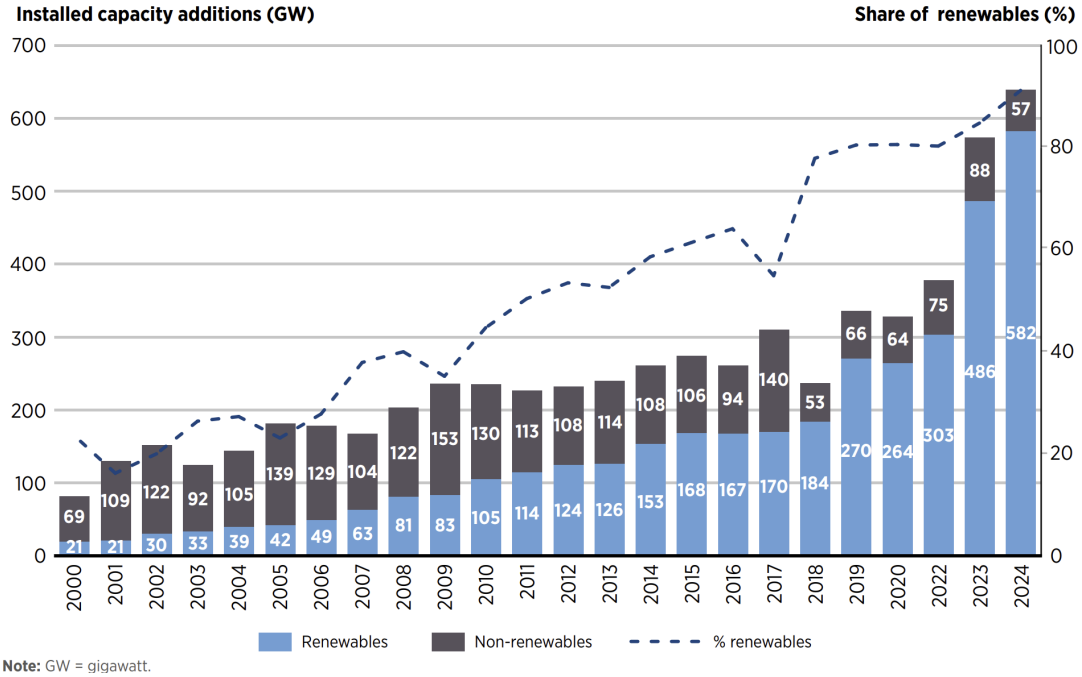
Figure 3: Renewable power capacity growth (GW)



Notes: GW = gigawatt.

Source: IRENA, *Renewable capacity statistics 2025*.

Figure 4: Renewable share of annual power capacity expansion



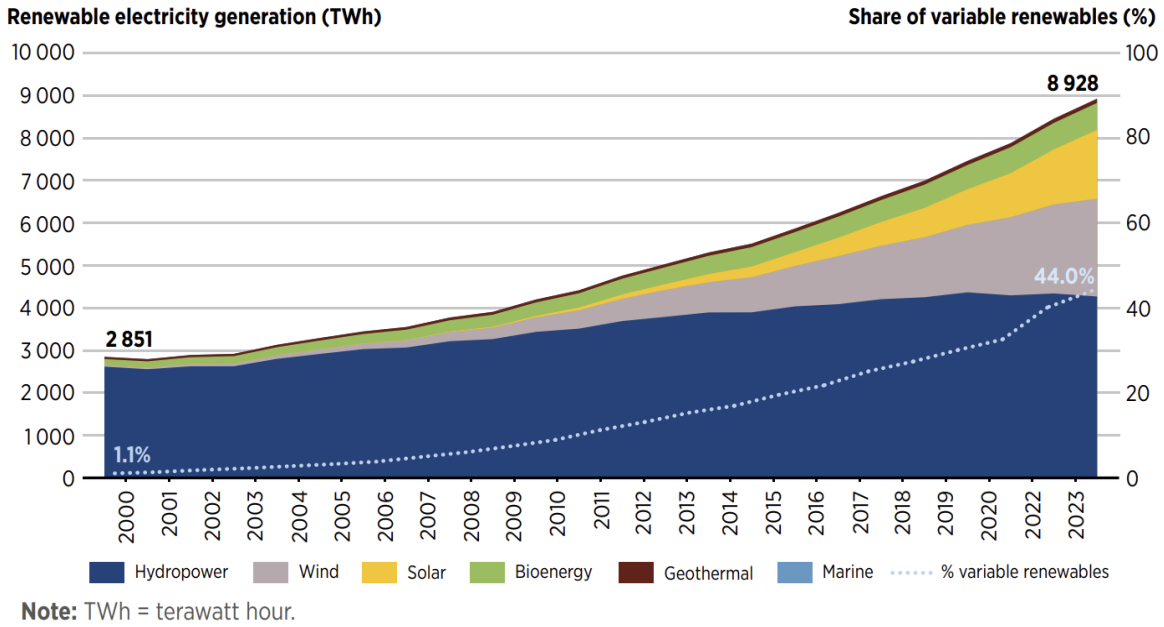
Note: GW = gigawatt.

Source: IRENA, *Renewable capacity statistics 2025*.

IRENA's latest edition of the **Renewable Energy Statistics 2025**[4] report provides the latest detailed national and global data on renewable energy production, trade, and consumption, highlighting evolving trends across sectors and regions. In 2023, electricity generated from renewables reached 8 928 TWh worldwide, accounting for 29.9% and registering a 5.6 % increase from the previous year (Figure 5). In 2023, renewable hydropower remained the largest source of renewable electricity, generating 4 270 TWh, but reported a decrease of 72 TWh (-1.6%) from 2022 levels Consistently since 2010, solar and wind energy are the two renewable energy sources driving the largest growth in renewable electricity, with wind reaching 2 304 TWh and solar 1 624 TWh, and a respective increase of 9.8% and 25.2% since 2022. They were followed by bioenergy, producing 632 TWh; geothermal, contributing 98 TWh and marine energy, producing 1 TWh (Figure 5).

Asia continues to dominate in absolute terms of renewable electricity generation, generating 4 008 TWh in 2023. Europe produced 1 626 TWh, up by 11.4% and driven by increases in hydropower, solar and wind, which offset declines in bioenergy, geothermal and marine energy. North America generated 1 452 TWh – a 2.9% decrease from 2022 – and South America generated 1 009 TWh, showing a 6% increase from 2022 due to an increase across all technologies. Eurasia produced 369 TWh, growing by 1.8% year-on-year, with solar and wind making up for continuous declines in hydropower generation. Africa generated 216 TWh, showing an increase of 4.5% across all sources. Oceania generated 134 TWh, a robust 18.8% increase. The Middle East followed with 62 TWh, representing a substantial growth of 35%. Lastly, Central America and the Caribbean generated 52 TWh – a decrease of 8.0%.

Figure 5: Cumulative renewable electricity generation, 2000 to 2023



Note: TWh = terawatt hour.

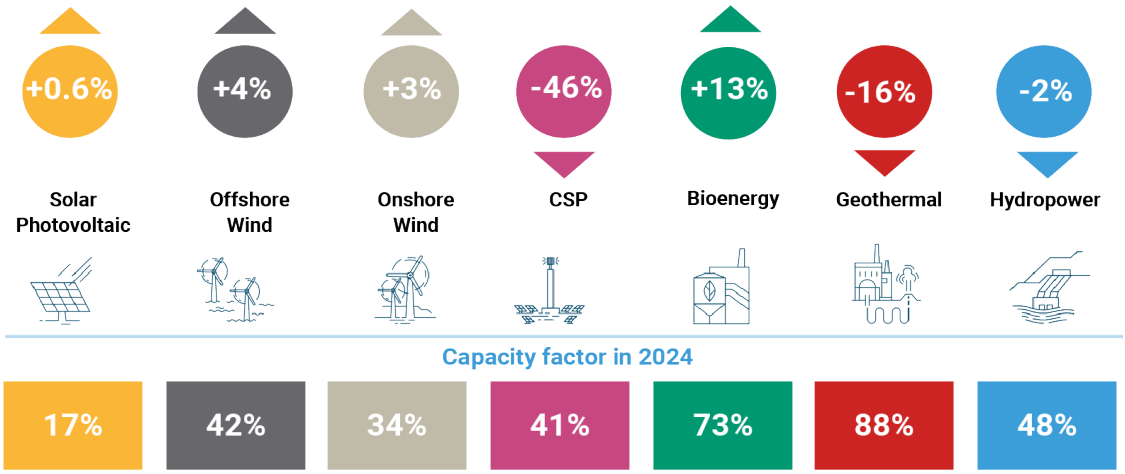
Source: IRENA, *Renewable energy statistics 2025.*

[4] Available here.

Building on this statistical foundation, **Renewable Power Generation Costs in 2024** provides a critical analysis of cost trends by technology and region, offering a data-driven perspective on the economic competitiveness of renewables across global markets. The report reaffirms the economic case for renewables, noting that 91% of newly commissioned utility-scale renewable capacity delivered electricity at a lower cost than the cheapest fossil fuel-based alternative. In 2024 alone, this cost advantage helped avoid an estimated USD 467 billion in fossil fuel spending globally, underscoring renewables' growing role in enhancing energy security, economic resilience, and affordability. While total installed costs for most renewable technologies declined by over 10% compared to 2023, notable exceptions included offshore wind, where costs remained stable, and bioenergy, which saw a 16% increase. Despite these broad cost reductions, a mix of factors—such as financing conditions, capacity factors, and market dynamics—led to a slight increase in the levelised cost of electricity (LCOE) for several technologies: solar PV rose by 0.6%, onshore wind by 3%, offshore wind by 4%, and bioenergy by 13%. In contrast, the LCOE declined sharply for concentrated solar power (CSP) by 46%, geothermal by 16%, and hydropower by 2%, reflecting both technological improvements and project-level efficiencies (Figure 6).

At a special address entitled "A moment of Opportunity: Supercharging the New Energy Era"[5] delivered on 22 July, António Guterres, United Nations Secretary-General, highlighted the potential of renewable energy to address the climate crisis and provide economic benefits worldwide. He emphasised that fossil fuels are "running out of road," citing the IRENA report as further evidence that solar and wind are not just cleaner, but decisively more affordable. He also urged policy makers and industry leaders to redouble their efforts on the clean energy transition to secure a more sustainable and economically sound future.

Figure 6: Global weighted average costs of electricity from newly commissioned utility-scale renewable power technologies in 2024

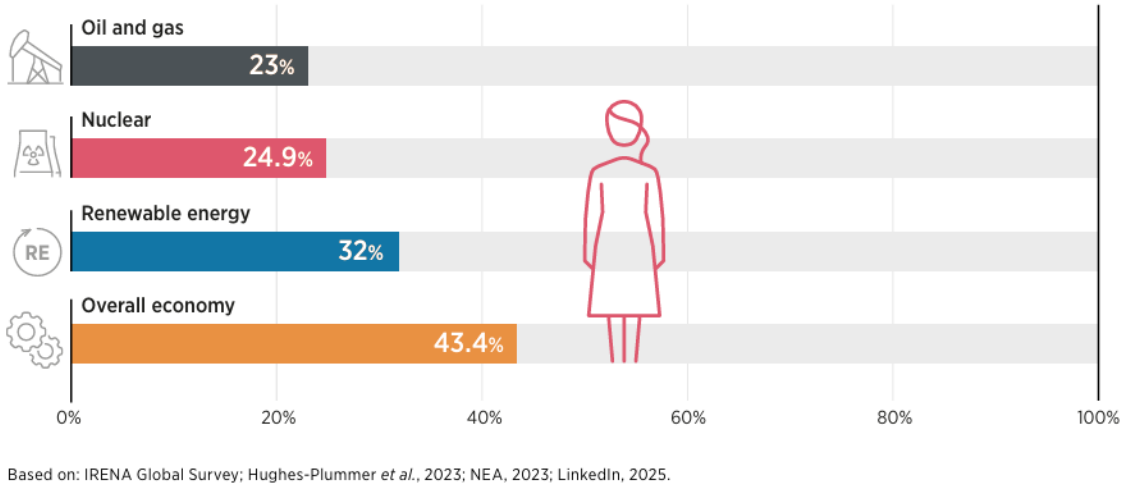


Source: IRENA, *Renewable power generation costs in 2024*, 2025

[55] More information available here.

The human and technological aspects of the energy transition are equally critical. IRENA stresses that solutions must be comprehensive and holistic, not piecemeal. IRENA's **Renewable energy: A gender perspective (Second edition)**[6] report constitutes a major update to the Agency's analysis of the gender dimension and reveals continued imbalances and persistent barriers to greater equity. IRENA's analysis shows that women hold 32% of full-time jobs in the renewable energy sector. This is higher than in oil and gas (23%) or nuclear energy (25%), demonstrating that renewables are comparatively more inclusive. However, this share still falls far short of the global average for women's workforce of 43.4% (Figure 7). The report was released during a well-attended webinar featuring a presentation by the author. Women face workplace, societal, and educational barriers at every stage, growing steeper over time. A forthcoming report will examine the empowerment of women in rural indigenous communities that rely on small-scale hydropower.

Figure 7: Female share of employment across the energy sector and overall economy



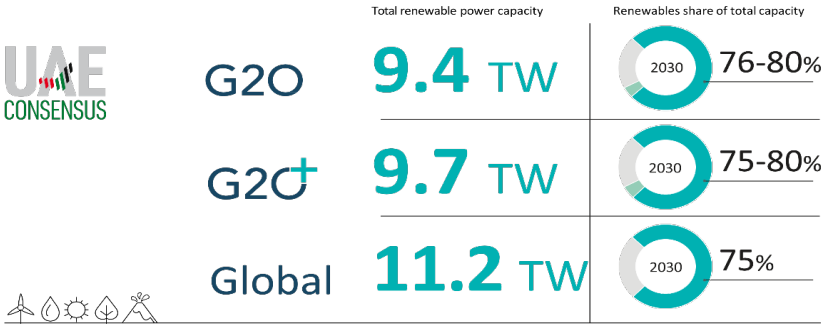
Source: IRENA, *Renewable energy: A gender perspective (Second edition)*, 2025.

Workforce development assumes an increasingly important role if significant skill gaps are to be avoided. IRENA provides leadership on the education and skilling aspects of building a suitable workforce through analytical activities, networking, and engagement with many partners. IRENA's **Call to Action on Skilling for the Energy Transition**[7] aims to accelerate international cooperation and ambitious action on education and workforce development by enhancing awareness of the global skills landscape, inviting diverse stakeholders to share concrete commitments, and showcasing actions to encourage collaborative replication and scaling of initiatives. The Call to Action has identified four priority actions to accelerate skill development, namely, integrate skill development within energy and climate plans and policies; undertake targeted skill development to address current and emerging gaps, establish partnerships to accelerate workforce development and promote skills standards, and integrate renewable energy competencies into curricula.

[6] Available here.
[7] More information available here.

To achieve the global goal of tripling renewable power capacity by 2030, the world's largest emitters of CO_2 emissions in the countries of the Group of 20 (G20) and beyond would need to more than double their annually added installed renewable capacity by 2030. Unveiled at the **Berlin Energy Transition Dialogue (BETD**) on 18 March, IRENA's latest data collection and policy recommendations provide a crucial lens to examine key performance indicators for the 2030 milestone. These insights provide a rigorous assessment of progress toward 1.5°C-aligned transition pathways within the G20, a group of nations of paramount importance given that they account for 80% of global energy consumption and contribute to over 80% of global energy-related CO_2 emissions. This analysis underscores the G20's pivotal role in determining the success or failure of global climate efforts (Figure 8). The dataset presented also assesses the deployment of renewable power capacities and the gap to reach the global tripling target in 15 additional countries from Asia and Central America. These 'G20+' countries would have to provide as much as 80% of the total installed renewable power capacity by 2030.[8]

Figure 8: Total power capacity in G20, G20+ and globally in 2024 compared to 2030 targets



The second APRA Investment Forum, co-hosted by the Government of Sierra Leone and IRENA, was successfully held on 22–23 October 2025 in Freetown, Sierra Leone. The event convened Ministers from APRA member countries, development partners, financiers, and private-sector leaders to accelerate renewable-energy investment and green industrialization across the membership. High-level sessions explored financing frameworks, enabling policies, and the role of critical minerals in advancing just and

[8] Additional countries included in the G20+ analysis are Malaysia, Philippines, Thailand, Vietnam, Cambodia, Lao PDR, Myanmar, Singapore, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama and Belize. G20 data does not include the African Union.

inclusive energy transitions. Technical and matchmaking activities connected project developers with investors, while IRENA and partners provided on-site advisory support through a dedicated Technical Assistance space. The Forum strengthened collaboration among APRA members, advanced a pipeline of bankable projects, and reinforced the ambition of participating countries in driving sustainable energy transitions within the Partnership.

Serving as a flagship component of Climate Week NYC and the high-level opening of the Global Renewables Summit, the **High-Level Session on Renewable Energy Abundance**[9] was held on 22 September in New York, United States of America. The session - strategically held two days prior to the United Nations Climate Summit, where numerous countries would disclose their updated NDCs - successfully convened a distinguished cohort of government leaders, private sector executives, and influential figures from civil society financing. Keynote speakers included the President of the European Commission Ursula von der Leyen, alongside leaders such as the Hon. Prime Minister Philip Davis of the Bahamas; Minister for Climate Change and Energy Chris Bowen of Australia; Brazil's COP30 President-Designate André do Lago; Director-General of IRENA Francesco La Camera, among others. The event highlighted the participants' unified resolve to expedite the implementation of net-zero infrastructure, which could have a profound impact on economic and social frameworks. The leaders concluded that renewables and electrification are transforming the global economy from one of constraint to one of possibility, becoming the foundation for a future where security, affordability, and sustainability drive prosperity and competitiveness.

The acceleration of the energy transition depends on a strong institutional framework and transparent planning. These elements help countries create effective investment strategies, manage risks, build investor confidence, and attract private capital. Additionally, aligning climate and energy planning boosts strategy credibility, essential for accessing climate finance. During the G20 Energy Transition Working Group discussions in 2024, the G20 Brazilian Presidency spearheaded the establishment of the **Global Coalition for Energy Planning (GCEP).** The establishment of GCEP was announced by the G20 Energy Transitions Ministerial Meeting in Foz do Iguaçu, Brazil, in October 2024. The initiative aims to enhance national planning efforts globally by fostering international collaboration, building institutional capacity, and facilitating knowledge exchange. On 11 January 2025, H.E. Alexandre Silveira De Oliveira, Minister of Mines and Energy of Brazil invited IRENA to serve as the Secretariat of the GCEP.

[9] More information available here.

The 1st Energy Planning Summit of the GCEP[10] took place from 3 to 4 June 2025 in Rio de Janeiro, Brazil. The Summit successfully positioned GCEP as the premier global platform dedicated to bridging the critical gap between long-term energy planning and investment mobilisation. The Summit advanced dialogue, showcased finance mechanisms, and presented institutional models to convert long-term energy scenarios into bankable project pipelines. This work was guided by five core principles: promoting transparent energy planning, facilitating knowledge exchange, catalysing investments, encouraging national ownership and leveraging existing partnerships. The Summit initiated an open membership window for countries to join the Coalition between the Rio Summit and the 30th Conference of the Parties (COP30) in Belém, where GCEP's founding membership will be formally announced. To sustain momentum toward COP30, GCEP defined immediate actions: conducting post-Summit debriefings, launching a global membership drive, and preparing a high-level showcase of the Coalition's vision and workplan. This structured approach aims to solidify GCEP's role as a key vehicle for accelerating the global energy transition.

To implement the principles of GCEP on the ground, IRENA continues its extensive range of energy planning capacity-building programmes to support Members in improving their long-term energy planning and modelling. In cooperation with Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and the Senegal Ministry of Petroleum and Energy, IRENA is in the second year of implementation of the Masterplan Development Support Programme. The programme has thus far provided over 350 hours of in-depth training on long-term power and energy sector planning and modelling to 20 experts across all official planning institutions. As a result, the first official cross-divisional energy modelling team was created in Senegal. The team has already developed 12 scenarios, which are being used as a key reference for Senegal's EUR 2.5 billion JETP investment plan. A similar programme is underway in Rwanda, in cooperation with the Danish Energy Agency. These national impacts are scaled up by IRENA-led regional and continental capacity building programmes in Africa, like the Continental Power System Masterplan Programme, which is providing the basis of the Ten-Year Infrastructure Investment Plan, one of the key outcomes of the South African G20 Presidency.

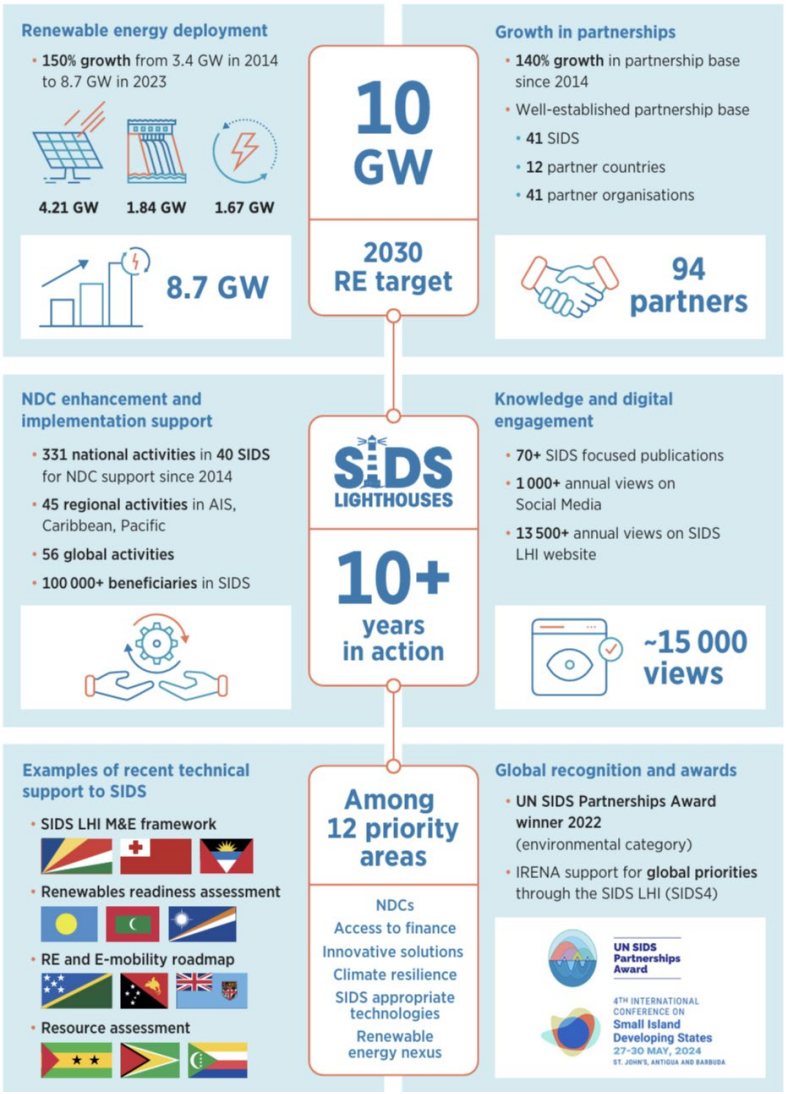
IRENA convened the **6th International Forum on Long-Term Scenarios (LTES) for the Clean Energy Transition** in Bonn, Germany, on 29-30 October 2025**.** The Forum gathered around 80 participants in Bonn and over 500 virtual attendees from government, academia, international organisations, and the private sector. The Forum generated practical insights for national planning institutions on several critical areas on aligning LTES with NDC and LT-LEDS cycles, turning grid-expansion scenarios into investment signals, integrating socioeconomic distributional analysis into just transition strategies, communicating scenario results to decision-makers, embedding modelling tools into permanent planning institutions, and assessing supply-chain and critical-materials risks. The sessions on grid investment planning and just transition have already begun informing initial dialogues with countries and partners on priority topics from the Global Coalition for Energy Planning (GCEP). A session on governing AI in energy planning provided specific governance lessons for responsible adoption, highlighting the need for data-quality and interoperability standards, auditable validation procedures, and clear human-in-the-loop oversight. These technical insights were subsequently utilised in IRENA and GCEP messaging for COP30.

The relentless process of climate change, manifested in increasingly devastating natural disasters, the encroaching threat of sea-level rise and the inherent limitations of national resources, creates a challenging environment for most countries – especially Small Island Developing States (SIDS). Compounding these

[10] More information available here.

issues is SIDS' persistent reliance on fossil fuels, a dependence that exposes them to the volatility of fluctuating costs and geopolitical instability. These multifaceted challenges continue to impede SIDS' progress towards achieving their ambitious climate and renewable energy goals, underscoring the urgent need for enhanced international support and tailored solutions. Despite formidable obstacles, these countries demonstrate remarkable resilience in their quest for a sustainable future. The 2025 edition of the annual report of the Small Island Developing States (SIDS) Lighthouses Initiative, entitled **SIDS Lighthouses Initiative: Progress and way forward**[11]**,** provides an overview of the progress achieved by SIDS in their energy transitions during 2023-2024. Figure 9 provides an overview of the status of the energy transition in SIDS and associated efforts to promote a net-zero future.

Figure 9: Overview of efforts to advance the energy transition in SIDS



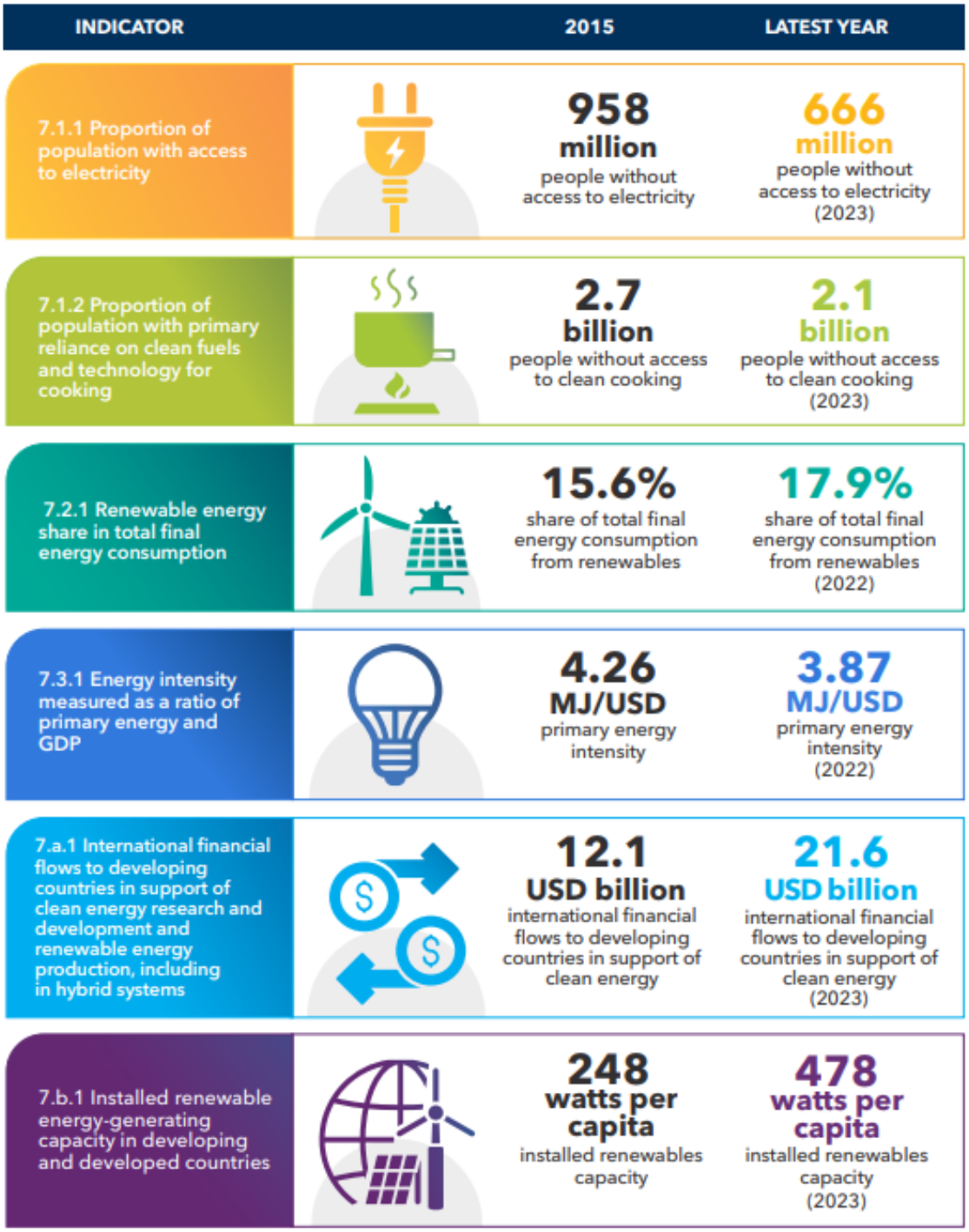
Source: IRENA, *SIDS Lighthouses Initiative: Progress and way forward*, 2024.

[11] Available here.

The 2025 edition of the **Tracking SDG7: Energy Progress Report** [12] underscores that, despite incremental advances, the global community is not on course to achieve universal access to affordable, reliable, sustainable, and modern energy by 2030. As of 2023, 92% of the global population had access to electricity, up from 91% the previous year. Yet 666 million people, predominantly in Sub-Saharan Africa, remain unelectrified, with rural and marginalised populations disproportionately affected. Access to clean cooking continues to lag alarmingly, with 2.1 billion people still reliant on polluting fuels, which threaten health, gender equity, and environmental sustainability. The share of renewables in total final energy consumption reached only 17.9%. While renewable electricity deployment has accelerated—reaching a record-high per capita capacity, progress in the heating and transport sectors remains negligible. International public financial flows for clean energy in developing countries reached USD 21.6 billion in 2023, recovering modestly but remaining concentrated among a few recipients, and were insufficient to meet the needs of the least developed countries (Figure 10). To realise SDG7, the report calls for urgent and coordinated action across governments, development partners, and the private sector to scale up decentralised renewable energy solutions, catalyse clean cooking transitions, dramatically improve energy efficiency, and mobilise significantly more inclusive and grant-based finance.

[12] Available here. The report is jointly produced by IRENA in collaboration with the International Energy Agency (IEA), the United Nations Statistics Division (UNSD), the World Bank and the World Health Organization (WHO).

Figure 10: Primary indicators of global progress towards SDG7



Source: IRENA, *Tracking SDG7: The energy progress report* 2025, 2025.

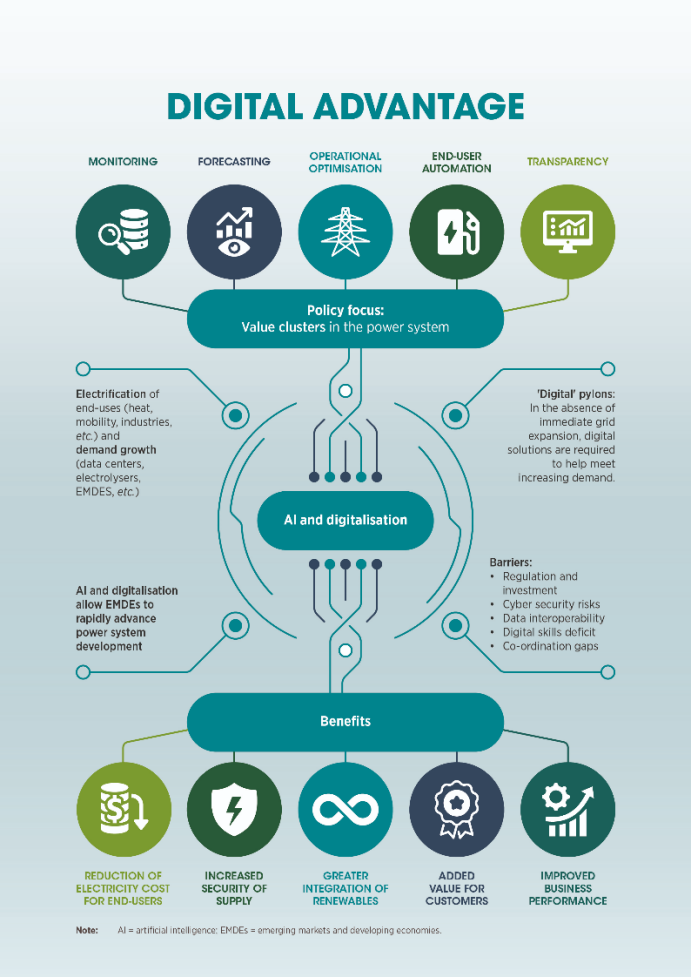
The 6th edition of IRENA's flagship **International Off-Grid Renewable Energy Conference and Exhibition (IOREC)**[13] took place in Gaborone, Botswana, from 24 to 28 February as part of the Southern African Development Community (SADC) Sustainable Energy Week. The event was hosted by the Government of Botswana and organised by IRENA with the support of the SADC Secretariat and SADC Centre for Renewable Energy and Energy Efficiency (SACREEE). IOREC brought together approximately 500 participants, representing government officials, development partners, experts and practitioners from different regions of the world, to discuss how off-grid renewables can help achieve UN Sustainable Development Goal 7, while supporting other sustainable development and climate goals. This edition was themed 'Translating commitments to actions: Off-grid renewables for socio-economic development and climate action' and explored enabling policies, financing schemes, innovative business models and technology applications for scaling up off-grid renewable energy. Emphasis was placed on the nexus between energy access and other key development priorities such as agriculture, food, and health services. The conference agenda also included a demonstration trip to off-grid renewable energy sites in Botswana.

[13] More information here.

Driving innovation and technological solutions

Digitalisation, utilising sensors, smart meters, data platforms, and Artificial Intelligence (AI) applications, is no longer optional but a decisive enabler for the global power system transformation required to meet electrification and decarbonization goals, including the tripling goal. IRENA's **Digitalisation and AI for power system transformation: Perspectives for the G7**[14] shows that as electricity's share of final energy consumption is projected to double by 2050, digitalisation is essential to manage the increasing complexity, variability, and distributed nature of power generation while maintaining service reliability and affordability. IRENA's qualitative framework highlights key benefits of digital solutions, including reduced end-user costs, improved security of supply (e.g., faster outage recovery), greater integration of renewables (reducing curtailment), and improved business performance across the energy value chain through monitoring, forecasting, and operational optimisation. The Group of Seven (G7) has a critical role in addressing barriers, such as data limitations and skills gaps and supporting emerging and developing economies to unlock these benefits, requiring a holistic action agenda focused on data interoperability, digital skills, innovative regulations, and improved stakeholder coordination to achieve a more affordable, secure, and reliable power system worldwide (Figure 11).

Figure 11: Digital advantage



Source: IRENA, *Digitalisation and AI for power system transformation: Perspectives for the G7,* 2025.

[14] Available here.

The fifth annual IRENA **Innovation Day**, focusing on Digitalisation and Artificial Intelligence (AI) for the Energy Transition, was held on January 14 in Abu Dhabi. Continuing a tradition established five years ago to promote the broader adoption of innovative solutions, the event convened policymakers and innovators from around the globe, including AI, the Internet of Things (IoT), Distributed Ledger Technology (DLT), and Digital Twins, to enhance grid efficiency, resilience, and real-time management. Discussions highlighted opportunities by showcasing digital applications that support the goal of tripling renewables and addressing off-grid community needs. Challenges were also identified, such as the realisation of this potential is uneven, with Emerging Markets and Developing Economies (EMDEs) facing limitations in essential data collection. Another challenge is the inherent biases of AI algorithms trained on data from advanced markets.

The **IRENA Innovation Week 2025**,[15] titled "Renewables and digitalisation for a sustainable energy future," convened 300 participants and 100 speakers from 60 countries to emphasise innovation as a catalyst for tripling renewables. It explored Innovation in Infrastructure for tripling renewables, focusing on closing the infrastructure gaps, leveraging digitalisation, and securing supply chains to scale renewable energy deployment worldwide. It also showcased innovations for resilient power systems, productive uses of energy and local value creation, energy communities and bioenergy's role in sustainable economic growth aligned with country priorities. The five key takeaways were that the energy transition requires a systemic perspective, recognises the necessity of digitalisation for energy, places people and communities at the centre, prioritises local value chain development for the Global South, and views energy as a catalyst for inclusive growth.

In Central Asia and the South Caucasus, green hydrogen is poised to be a powerful catalyst for a cleaner energy future. It can help these regions decarbonise industries that are difficult to abate, spur industrial innovation, strengthen their energy security, and build a more diverse and resilient economy. In May 2025, IRENA launched the **Green hydrogen for industrial decarbonisation: Central Asia and the South Caucasus**[16] report assessing drivers and barriers for green hydrogen development across Central Asia and the South Caucasus, offering region-specific recommendations to advance deployment.

IRENA's report on **Enabling Green Hydrogen in North Africa**[17] highlights the region's immense potential to become a global hub for green hydrogen production, underpinned by world-class solar and wind resources, geographic proximity to Europe, and emerging political will across countries such as Morocco, Egypt, Tunisia, Algeria, and Libya. The report emphasises that green hydrogen can serve as a catalyst for sustainable industrialisation, low-carbon economic growth, and regional energy integration, supporting both SDG 7 and SDG 13. However, realising this vision requires overcoming structural challenges, including significant infrastructure needs, water constraints, limited domestic demand, and underdeveloped regulatory and financing frameworks. To unlock bankable projects and attract climate-aligned capital, the report calls for strengthened international cooperation, inclusive investment frameworks, targeted capacity-building, and establishing enabling policy environments that ensure development aligns with a just transition and long-term regional resilience.

[15] More information available here.
[16] Available here.
[17] Available here.

Apart from industry, road transport is a key sector for decarbonisation efforts and the global energy transition. The report **Policies for advancing the renewables-based electrification of road transport**[18] sets out policies that are needed to address barriers and accelerate a renewables-based electrification in road transport. The report covers not only cars but also two and three wheelers, buses and trucks.

IRENA's **Planning and prospects for renewable power: Central Africa**[19] report highlights the region's strong potential as a global green hydrogen hub, leveraging its world-class solar and wind resources and proximity to Europe. This report builds upon the Regional Africa Modelling Analysis and Planning Support Programme (2020-2023), delivered in collaboration with the Central African Power Pool (CAPP), which provided training and developed national and regional generation capacity expansion scenarios. The analysis now urgently calls for strengthened international cooperation, inclusive investment, and the establishment of enabling policy environments to unlock projects, attract capital, and ensure development contributes to a just transition and long-term resilience.

Ensuring the resilience and sustainability of supply chains is vital for advancing green energy, mobility transitions and digitalisation. In partnership with Germany and RFIS Potsdam, IRENA convened high-level expert panels on two key energy security topics from 14 to 16 February at the margins of the Munich Security Conference. The event on **From Mines to Markets: Mineral Supply Chains Amidst Geopolitical Competition and Economic Transition** addressed the challenges of balancing socio-economic and environmental priorities in developed and developing countries. It also explored strategies for future-proofing mineral supply chains against geopolitical shocks and strategies to diversify sources and foster collaborative governance, partnerships, and alliances to secure sustainable supply chains. The event on **Net Zero for Global Security? Navigating the Geopolitical Impacts of the Energy Transition and the Emergence of Global Hydrogen Trade** explored ways to manage the challenges of an increasingly securitised clean transition while further enhancing climate ambition. Discussions focused on avenues for countries to balance economic cooperation, competition, and energy security while investing in climate-friendly technologies to reap the benefits of the energy transition in terms of sustainable development, peace and stability.

The **Empowering Lives and Livelihoods – Renewables for Climate Action (L&L)**[20] initiative, launched at COP28, promotes improved productivity and resilience in the agriculture and health sectors through renewable energy solutions. In January 2025, IRENA renewed the MoU with the Food and Agriculture Organisation of the United Nations (FAO) to advance renewable energy solutions in agrifood systems. In June 2025, an MoU was also signed with the Global Off-Grid Lighting Association (GOGLA) and IRENA is one of the champion partners of their Agri-Energy Coalition. In the health sector, IRENA is a part of the Global Coalition on WASH, water and electricity for healthcare facilities, coordinated by WHO, UNICEF, and World Bank.

For accelerating the deployment of renewables in healthcare, IRENA developed assessments, in cooperation with the Governments and stakeholders of Mali,[21] Mozambique[22] and Zimbabwe[23], proposing tailored solar PV system designs and recommendations towards long-term operations, sustainability and to ensure the successful deployment of decentralised renewable energy (DRE) solutions. In 2025, IRENA completed and published four country reports on DRE for agriculture, namely for Malawi,[24] Nepal,[25] the

[18] Available here.
[19] Available here.
[20] More information available here.
[21] Available here.
[22] Available here.
[23] Available here.
[24] Available here.
[25] Available here.

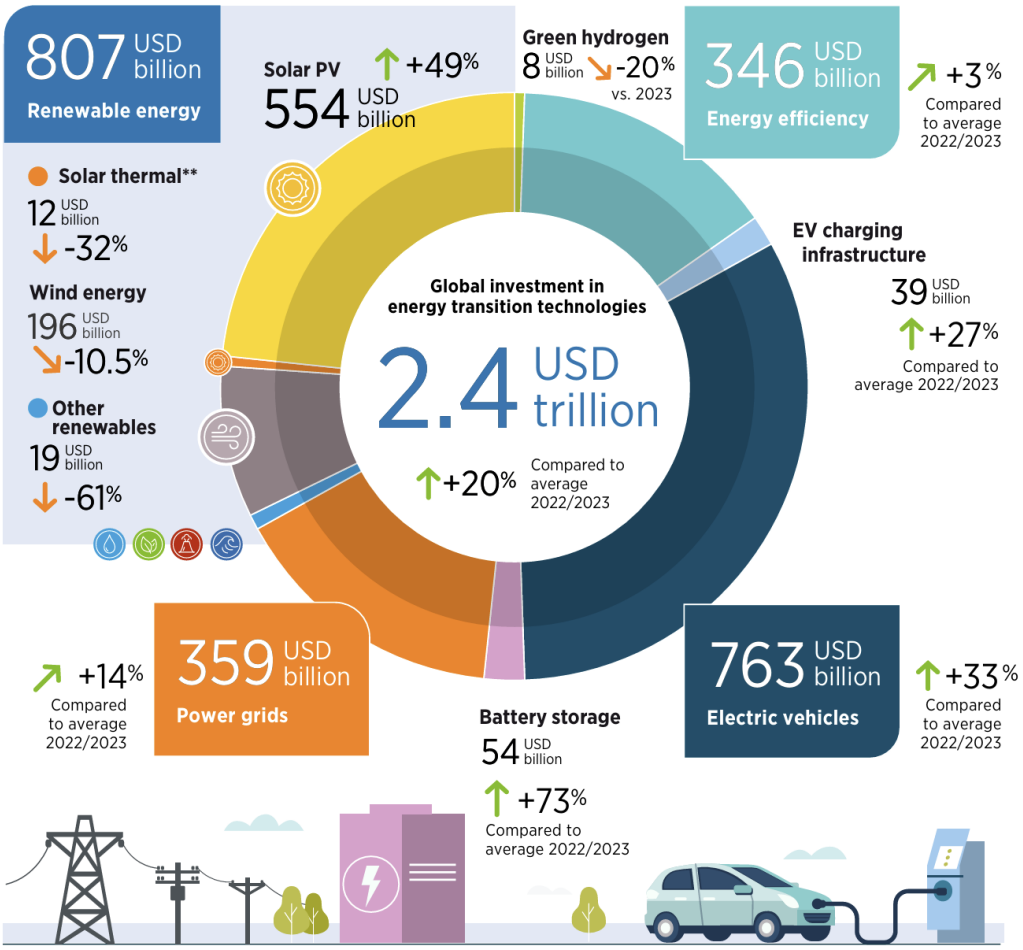
Republic of Guinea,[26] and Zimbabwe.[27] Furthermore, IRENA published in September a report that assessed the opportunities and barriers for deploying DRE solutions to power Mauritania's artisanal fishing value chain,[28] mapping out the most suitable DRE solutions for different segments of the fisheries value chain, using key financial metrics (net present value, internal rate of return) to assess their viability.

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

Investments for a sustainable future

For the fourth time, and produced every biennially, IRENA and the Climate Policy Initiative (CPI) have jointly released the **Global Landscape of Energy Transition Finance.**[29] This comprehensive report provides the most detailed overview of renewable energy investments, analysing trends by technology, end-use, region, type and source of investment (public or private), and financial instrument. The analysis reveals that global investments in energy transition technologies hit a new record of USD 2.4 trillion in 2024, marking a 20% increase from the average annual levels of 2022-23 (Figure 12). Renewable energy attracted the largest investment at USD 807 billion, followed by investments in electric vehicles reaching USD 763 billion. Investments in power grids and energy efficiency received similar substantial amounts of USD 359 billion and USD 346 billion respectively.

Figure 12: Energy transition investment in 2024



Source: IRENA, *Global Landscape of Energy Transition Finance*, 2025.

[29] Available here.

Despite investments more than doubling since 2019, they remain heavily concentrated in advanced economies and China, thus leaving most emerging and developing countries behind (Figure 13). Specifically, out of the USD 807 billion invested in renewable energy, USD 352 billion was directed towards China. In contrast, Europe attracted USD 137 billion and North America and Oceania attracted USD 122 billion. However, Sub-Saharan Africa received disproportionately less, attracting only USD18 billion. Critically, these investments are well below what is required to achieve the 1.5°C Scenario in IRENA's World Energy Transitions Outlook 2024 and UAE Consensus goals. This year, the report expands its coverage to include additional energy transition sectors, such as power grids, energy storage, energy efficiency, green hydrogen and electrification of transport. The analysis also covers investment activity in the upstream manufacturing and mining sectors. The report calls for increased mobilisation of public funds and impact-driven capital, arguing that the current heavy reliance on profit-driven capital is a primary reason developing countries are lagging. Where private finance is insufficient, the public sector must lead, supported by stronger multilateral and bilateral cooperation and scaled-up climate finance.

Figure 13: Renewable energy investment in 2024 by region (USD bn)

Source: IRENA, *Global Landscape of Energy Transition Finance*, 2025.

The acceleration of renewable energy deployment, a cornerstone of global sustainability efforts, is significantly bolstered through IRENA's strategic initiatives: the **Climate Investment Platform (CIP)**[30] and the **Energy Transition Accelerator Financing Platform (ETAF**)[31]. These platforms represent a substantial investment of IRENA's resources and expertise, reflecting the Agency's unwavering commitment to catalysing the energy transition. CIP functions as a dynamic facilitator, connecting project developers with a diverse network of investors and financiers. This vital linkage streamlines the investment process, mitigating risks and unlocking crucial capital for renewable energy projects worldwide. It represents a concerted effort to bridge the gap between ambition and implementation, ensuring that promising renewable energy initiatives receive the necessary financial backing to succeed.

Similarly, the ETAF serves as a powerful mechanism designed to address the unique financial challenges faced by developing economies in their pursuit of sustainable energy futures. Through innovative financing structures and targeted support, ETAF aims to de-risk investments and attract private sector participation, thereby accelerating the deployment of renewable energy technologies in regions where they are most critically needed. IRENA's dedication to these platforms underscores its recognition of the pivotal role that strategic financial interventions play in driving the global energy transition, ensuring that the path towards a sustainable future is not only envisioned but also realised.

CIP has successfully supported 133 projects through bespoke technical assistance and tailored advisory support. Geographically, the pipeline spans 59 projects in Africa, 23 in Asia, three in Europe, 41 in Latin America and the Caribbean, one in North America, four in Oceania and two in the Middle East. Of these, 92 projects have been featured at regional investment forums (Figure 8). Showcasing projects during these forums is a core part of the platform's approach and complements the advisory support provided. It offers project proponents a unique opportunity to present and pitch their projects directly to potential financiers, receive targeted feedback in real time, and refine their proposals to improve bankability. This direct engagement accelerates the matchmaking process and increases the likelihood of securing financing.

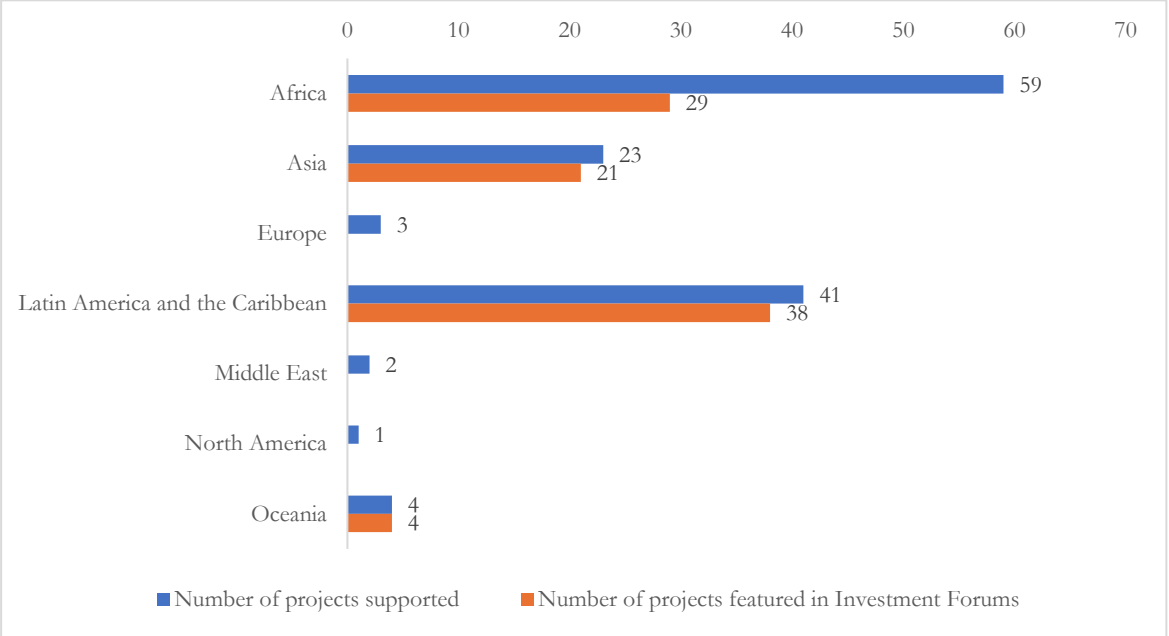
CIP's strategy is focused on capacity-building interventions and extending extensive technical assistance to projects. To that end, the Platform is actively seeking funding for project technical assistance and capacity-building interventions to be mobilised and deployed to eligible projects. Targeting USD 5 million in soft commitments pledged for finalising project development requirements among eligible energy transition projects.

To date, CIP's efforts have been focused on working closely with developers to advance project maturity. While achieving financial close is beyond the platform's direct control, the advisory support and visibility provided through its processes have, as a byproduct, contributed to several supported projects reaching this milestone. Notably, nine renewable energy projects, located in Sub-Saharan Africa (Benin, Nigeria, Zimbabwe), Southeast Asia (Indonesia, Malaysia), Southeast Europe (Albania) and the Caribbean (Dominica), have successfully reached financial close. Together, these projects total 100 MW of installed capacity and have mobilised over USD 176 million in capital.

The **IRENA Investment Fora** are a crucial element in the Agency's strategy to support the mobilisation of investments in energy transitions by bringing 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 showcased for matchmaking with financial institutions participating in the Fora, aiming to establish an engagement that could lead to a financial investment in the project(s). The CIP is the primary channel through which projects are sourced and supported, with the preparation of documentation and, where applicable, technical assistance for presentation to investors.

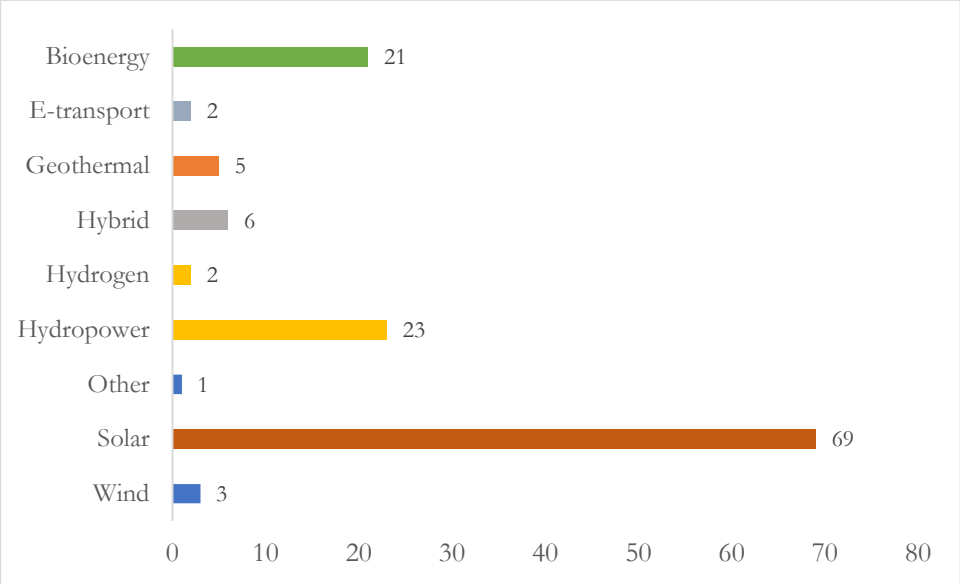
[30] More information here. Please refer to past Progress and Annual reports here for more information here.
[31] More information here. Please refer to past Progress and Annual reports here for more information here.

Figure 14: Number of CIP projects supported and featured in Investment Fora by region



Among projects supported by the Platform, solar dominates, representing just over half of all projects (50.43%) (Figure 15). Hydropower and bioenergy and hydropower follow, accounting for 17.29% and 15.79% of supported projects, respectively. Hybrid projects make up a smaller share at 4.5%, while geothermal energy, wind energy, e-transportation, and hydrogen projects collectively represent less than 4% of the portfolio. The project portfolio is predominantly composed of small- and medium-sized projects, with 46.6% falling within the 0–10 MW range. Projects in the 10–50 MW range account for another 24.8%. At the same time, large-scale projects of 100 MW or more represent only a small fraction of the portfolio, with 11.3% in the 100–500 MW range and just 1.5% exceeding 500 MW+.

Figure 15: Number of projects by technology



The **Energy Transition Accelerator Financing (ETAF) Platform,** led by IRENA,[32] 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 was created with an initial target of mobilising USD 1 billion of capital by 2030, which has been surpassed since December 2024, when the total pledges amounted to USD 4.05 billion. The target has been expanded to USD 5 billion by 2030, with a target of at least 5 GW by 2030. This will be achieved by backing renewable and supportive infrastructure, including electricity transmission services and storage.

The first Forum of Partners meeting of 2025 took place alongside the IRENA Assembly in January and the second in June. Among the topics discussed were the mismatch between projects received by ETAF, which require support to achieve bankability, and the expectations of partners seeking fully-fledged, ready-to-finance projects. The Forum of Partners agreed that ETAF needs to mobilise more technical assistance resources to help projects reach bankability and that partners are expected to be more engaged earlier on in project development. The Agency has been mobilising funding to provide the much-needed facilitation

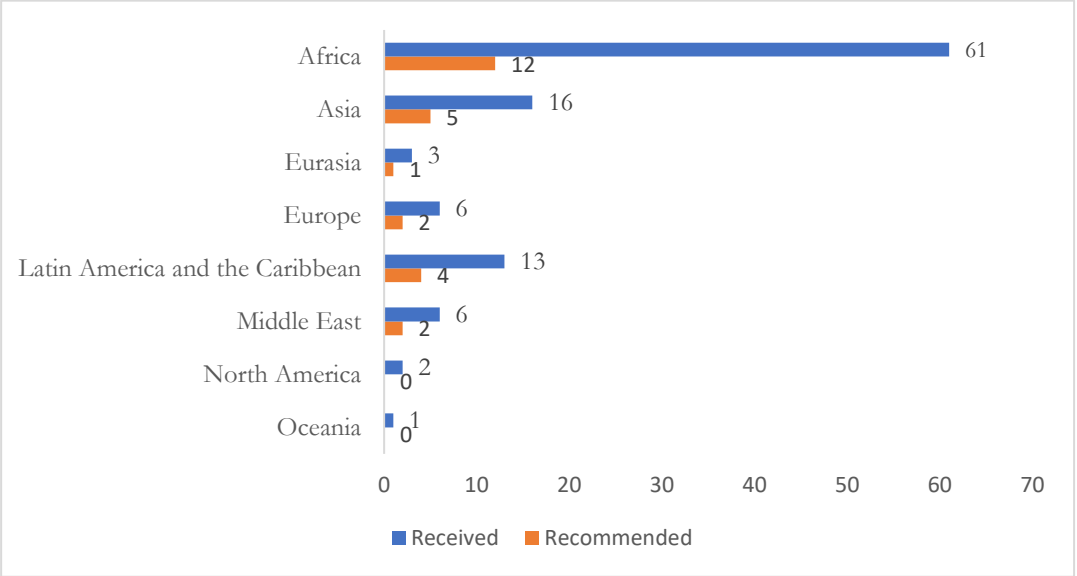
[32] Within the ETAF structure, IRENA acts as the Secretariat and manages the ETAF platform, from project sourcing to financial close.

to close the project development gaps. In November, the ETAF Secretariat held the second Executive Committee meeting of the year, focusing on the project pipeline. Updates were given on the general sourcing and matchmaking progress, and 3 newly accepted projects were introduced and discussed in detail. The session was attended by 13 representatives, from 11 ETAF partner institutions.

Since its launch at COP27, ETAF's call for project submissions has attracted 108 project proposals (Figure 16) to date. The project documents uploaded on the platform have a potential capacity of 8 GW. Thus far, 61 projects submitted (56% of the portfolio) are from countries in Africa.

Currently, 26 proposals have been recommended to the Platform partners that fulfil the requirements in four assessed dimensions: energy transition potential, implementation readiness, developer track record, and commercial viability. The power generation potential of these projects amounts to 3.3 GW, with a total required investment of USD 5.4 billion. Eighteen of the 26 recommended projects have received interest from at least one ETAF Partner, and further engagements are underway with partners, who are reviewing the projects to determine their eligibility for funding commitments. However, the portfolio analysis conducted in 2024 revealed that many projects submitted to the ETAF portal require additional technical assistance to enhance their attractiveness and eligibility for partners' de-risking and financing solutions.

Figure 16: Number of ETAF projects submitted and recommended to partners



Solar PV (utility-scale), hydropower and onshore wind technologies are attracting the most interest from partners. As the ETAF secretariat, IRENA facilitates discussions between developers and ETAF Partners. Several projects are under active matchmaking. For some projects, however, bankability concerns were identified, including limited off-take attractiveness or implementation readiness.

Common reasons why projects are not recommended to ETAF's partners for funding considerations include (i) insufficient project readiness or completeness; ii) inadequate financial structure; iii) project size; iv) insufficient alignment with SDGS; and v) limited track record. During assessments, proponents are allowed to resubmit when the submitted project information is insufficient to recommend it to Partners for their consideration. Four solar PV projects – three in Uzbekistan (897 MW) and one in Comoros (26.3MW), achieved financial close with participation of ETAF partners. These projects will generate enough electricity to power 5.9 million inhabitants while reducing annual CO_2 emissions by more than 1 million tonnes.

To assist developers in preparing high-quality submissions and to support the scaling-up of renewable project financing in developing countries, IRENA hosts dedicated webinars under both the CIP and ETAF initiatives. In June 2025, IRENA organised a webinar focused on submitting bankable renewable energy proposals, with an emphasis on Central Asia, following a Call for Projects targeting Central Asian countries. This online event provided detailed insights into IRENA's project facilitation and support tools, guidance on eligibility criteria and application procedures, and practical tips for submitting investor-ready, bankable proposals.

The session was attended by approximately 30 participants from the public and private sectors across Uzbekistan, Kazakhstan, Tajikistan, Kyrgyzstan, and beyond Central Asia. As a result of these efforts, both CIP and ETAF platforms observed a notable increase in project information submissions from the region.

Project facilitation and support for APRA member countries

To expand its project portfolio, particularly from developing countries, the Agency's facilitation platforms have shown continued growth in projects originating from APRA countries. In total, 11 projects valued at USD 1.7 billion have been supported on the CIP and ETAF platforms in 2025, compared to 29 projects valued at USD 2.3 billion in 2024. In comparison to 2024, the momentum of submissions slowed in the first half of 2025. During this period, the Agency focused on technical assistance, capacity building activities and bilateral matchmaking for the projects in the portfolio to advance with their documentation and readiness for the financing. In-country capacity-building interventions, online webinars and awareness activities are underway to reignite the project submissions with two workshops concluded (Namibia in July and Ethiopia in August) as well as bilateral consultation with renewable energy stakeholders (Ghana in August). These workshops and consultations targeted the private sector, public utilities, government agencies and local financial institutions working with renewable energy projects in APRA countries. The in-country interventions in total brought together more than 100 participants. In Namibia, IRENA is facilitating one of the ETAF partners in appraising a public utility solar PV project expansion for potential financing.

Additional project-focused technical assistance has been provided to APRA countries Ghana, Sierra Leone and Namibia specifically:

- In Ghana IRENA technical assistance support is targeting locally owned mini-grids Engineering Procurement and Construction contracting entities to increase their participation and success rate in the government's mini-grid tenders.
- In Sierra Leone, the Agency has supported the appraisal, access to financing for the expansion of a strategic hydroelectric power dam that will double the existing capacity while optimising the use of the river flows during the high-water flows in the rainy seasons. Additionally, the government is benefiting from the development of a guide for the development of bankable, productive use of renewable energy mini-grids.
- In Namibia, IRENA is facilitating one of the ETAF partners in appraising a public utility solar PV project expansion for potential financing.

Following the first APRA Investment Forum, hosted in Nairobi, Kenya, in 2024, IRENA convened the second APRA Investment Forum in Freetown, Sierra Leone, on 22-23 October 2025.[33] The second APRA Investment Forum comprised of two Pre-Forum days and two main Forum days. On October 20-21, the Pre-Forum sessions focused on technical training and project pitching, led by sponsors and developers.

[33] More information available here.

The closed-door technical training was attended by over 50 participants, while the project pitching session featured 13 developers presenting their projects to a panel of experts. On October 22, the event opened with a high-level ceremony and included a dialogue on energy transition. The final day, October 23, was dedicated to in-depth sessions on renewable energy project development and financing, energy transition, green industrialization, and project facilitation, including matchmaking and an exhibition of projects. A total of 11 projects participated in matchmaking activities, resulting in over 20 bilateral meetings between developers and financiers.

In focus:

2nd APRA Investment Forum update

The second APRA Investment Forum, held from 21 to 23 October 2025 in Freetown, Sierra Leone featured 15 projects from five APRA countries: Djibouti, Rwanda, Sierra Leone, Uganda and Zimbabwe. The projects have an aggregated installed capacity of more than 800 MW and are seeking USD 1.2 billion in funds with an expected leverage of USD 2.5 billion in total investments.

Ethiopia

IRENA has been working closely with project developers in the country to refine and help prepare documentation before engaging with funding partners. This has enabled IRENA to identify gaps and recommend actions to improve the completion of the project development.

Two additional projects are supported by linking them to potential funding opportunities on the ETAF platform. One involves construction of two 100 MW solar PV power plants that are seeking concessional funding from ETAF partners. The second is a 300 MW wind power project valued at USD 600 million working towards achieving financial close in 2025.

Ghana

IRENA, through ETAF, is supporting the Sege Solar PV project developed by Renergy Solar ApS, which has attracted the interest of four ETAF partners. Initially structured as a 20 MW plant, it is now being scaled up to 100 MWp to enhance bankability and impact. Once operational, it is expected to generate over 200,000 MWh annually, displace more than 100,000 tCO_2e, and become one of Ghana's largest renewable power platforms.

In parallel, recent mobilization has identified for support the Afram Plains North and South solar mini-grid portfolio, which will extend electricity access to underserved lakeside and island communities in Ghana.

Sierra Leone

Technical assistance and capacity-building activities are under way to support public and private sector stakeholders in Sierra Leone by delivering a guide for the development of bankable Productive Use of Renewable Electricity (PURE) Mini-girds in the context of Sierra Leone.

Sierra Leone also hosted the second APRA Investment Forum. During the event, a selection of promising projects from APRA member countries was featured, and various funding opportunities were explored to support their development and implementation. Following the forum, coordination between IRENA, the host country and the project developers continues to ensure follow-up actions are in place to advance the financing and execution of the identified projects.

Emerging project facilitation workstreams

In June 2025, IRENA organised the European and Central Asian (ECA) Energy Transition Private Sector Roundtable, bringing together renewable energy project developers to discuss project development and access to financing within the region. The Roundtable took place in Antalya, Türkiye, as part of the ECA Energy Knowledge Forum hosted by the World Bank Group and served as a platform for advancing the implementation of renewable energy and energy efficiency initiatives in the ECA region. The IRENA roundtable panel included project developers from the public sector and public-private partnerships from Azerbaijan, North Macedonia, and Tajikistan, alongside a representative from the International Finance Corporation, working across the ECA region. The session's outcomes included sharing success stories and lessons learned from regional projects, which highlight progress in overcoming development challenges. In addition, IRENA's engagement through bilateral meetings during the forum days with key stakeholders from Armenia, Kazakhstan, Montenegro, North Macedonia, Tajikistan, and others reinforced regional collaboration and identified opportunities to leverage IRENA's project facilitation tools, such as the CIP and ETAF, to accelerate renewable energy projects.

As the operationalisation of the ETAF Platform advances, new streams of sustainable energy solutions are being explored. The platform's agility enables it to respond to emerging opportunities as they mature. Sustainable Aviation Fuels (SAF) remain the most viable option for rapidly reducing aviation emissions, with potential lifecycle reductions of up to 80% compared to conventional fuels. However, SAF deployment faces significant barriers, including limited early-stage capital, fragmented policies, and underdeveloped supply chains; challenges that are particularly acute in developing and emerging markets. High fuel premiums further restrict smaller airlines' participation, slowing the growth of SAF value chains. In 2024, IRENA and the International Civil Aviation Organization (ICAO) signed a memorandum of cooperation to facilitate financing and technical support for clean aviation fuels, including SAF. As part of this collaboration, a dedicated SAF window is being established on the ETAF Platform to assess project bankability, identify gaps, and recommend suitable projects to ETAF partners. Additional support will include training and targeted technical assistance to address bankability challenges identified during assessments.

On 22 September, the IRENA and ICAO jointly launched **Finvest@ETAF.**[34] This initiative is designed to support SAF and clean aviation energy projects globally. The dedicated portal is hosted on IRENA's ETAF platform. Its unveiling was strategically timed just prior to the commencement of the 42nd ICAO Assembly in Montréal. Finvest@ETAF will operate as the unified gateway for project developers seeking investment, efficiently connecting proposals with a global network of public and private financiers. Submissions will undergo a comprehensive, joint screening process conducted by experts from both organisations. This assessment will integrate technical due diligence with a thorough evaluation of investment readiness. Following successful screening, projects will be formally presented to the financing and de-risking partners operating under the broader ETAF Platform.

[34] More information available here.

As the international carbon market landscape evolves, with the operationalisation of the Paris Agreement Crediting Mechanism and growing expectations around high-integrity crediting, carbon markets are increasingly recognised as a key pathway for accelerating global climate action while mobilising much-needed finance for sustainable development. In parallel, interest from Members in how to sustainably leverage such credit mechanisms has been gaining momentum. A growing number of IRENA Members have formally requested IRENA's support to integrate carbon finance into their renewable energy agendas and produce guidance documentation for the same. In 2025, IRENA invested time and resources in creating strategic partnerships and expanding collaborations to increase knowledge on this important topic, with the aim of better assisting its members in transforming their carbon reduction initiatives into financing sources for the implementation of more ambitious energy programmes. New technical assistance streams have therefore been identified and will be further structured and deployed in 2026 to facilitate carbon-finance readiness and ensure that mitigation results from renewable projects are monetised effectively and equitably, under IRENA's project facilitation mandate.

International cooperation and partnerships

IRENA remains committed to in-person engagement with Members to exchange views and enhance strategic collaboration through the organisation of 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 and expedite the ratification and accession processes. Additionally, in recognition of the value of collaborating with intergovernmental organisations, academia and private sector representatives, IRENA has benefited from the knowledge exchange and their expertise and identified and engaged in strategic collaboration to advance the energy transition.

The 15th session of the **IRENA Assembly** convened from 11 to 13 January under the theme "Accelerating the Renewable Energy Transition – The Way Forward" (Energy security, Socio-economic development, and Financing options). Commemorating the 5th World Energy Transition Day, the Assembly united global leaders and energy policy makers to take stock of progress and formulate concrete actions to accelerate the worldwide transition to renewable energy while ensuring alignment with the UAE Consensus, the 2030 Agenda, and the Paris Agreement.

15 Assembly

1524 participants registered

133 Member representatives | **8** States in Accession | **40** Ministers | **263** from international organisations | **3 184** livestream participants

The Opening featured a **High-level Plenary on Accelerating the Energy Transition – The Way Forward** brought world leaders and high-level representatives from organisations and the private sector to engage in in-depth discussions on the multidimensional challenges in accelerating the energy transition and the opportunities to drive prosperity and energy security. Participants also discussed the importance of macroeconomic planning, private finance and international cooperation to scale up finance. Special focus was placed on the different circumstances, needs and priorities of countries and regions, particularly in Africa and the SIDS. In addition, avenues to maximise future COP sessions and the next submission of NDCs to propel a just and inclusive energy transition were explored.

Several Ministerials, High-level Meetings and side events focusing on critical and pertinent issues for the energy transition were held on the Pre-Assembly Day on 11 January and during the Assembly. The **Ministerial Roundtable on Scaling up Finance to Support the Energy Transition in Emerging Markets and Developing Economies** provided a platform to discuss gaps in the current financing architecture to mobilise support from developed to developing countries and the reforms needed for a just energy transition. It is undeniable that there is a need for innovative project funding, especially during the preparation and development stages. The **Ministerial Dialogue on Innovative Sustainable Finance** convened Ministers, policy makers and developers to explore advanced strategies for financing renewable energy development by leveraging innovative financial instruments. The potential of carbon credit markets as a mechanism to incentivise emissions reductions, allowing developers to access financing while countries and companies offset carbon footprints, was highlighted.

While most emerging economies have committed to achieving net-zero greenhouse gas emissions, there is a critical need to scale up energy transition investments in the next six years to 2030. The **High-level Panel on Energy Transition Pathways in Emerging Economies** was convened to discuss net-zero pathways, energy transition strategies and plans for implementing the UAE Consensus and advancing the dialogue on implementing the Global Stocktake outcomes in emerging economies. The emphasis was on the immediate acceleration of the energy transition and how public finances could be leveraged to attract and de-risk private capital. The **High-Level Dialogue on Tripling Impact in Small Island Developing States: Accelerating Renewables, Climate Resilience and Sustainable Development** highlighted the energy transition priorities of SIDS as outlined in the Antigua and Barbuda Agenda for SIDS. The session also focused on resources and strategies needed to scale up the renewables-driven energy transition in SIDS aligned with the Tripling Renewables goal to strengthen climate resilience and sustainability and achieve energy security and independence.

The High-Level Dialogue Accelerated Partnership for Renewable Energy in Central Asia (APRECA) aimed to accelerate renewable energy partnerships in Central Asia and explore scaling up renewables, fostering regional and international cooperation, and strengthening infrastructure aligned with climate goals. Discussions highlighted policy frameworks, investments, and private sector engagement for green industrialisation. The **Ministerial Roundtable Accelerating Africa's Energy Transition and Green Industrialisation Agenda** served to review one year of the Accelerated Partnership for Renewables in Africa (APRA)'s implementation, highlighting evolving national priorities and progress in scaling transformative renewable energy. It also examined the systemic changes required to attract capital and effective arrangements to ensure sustainability.

The **Ministerial Roundtable on Scaling up Finance to Support the Energy Transition in Emerging Markets and Developing Economies** event examined financing gaps and identified necessary reforms for a just energy transition in emerging and developing markets. It also explored avenues to improve coordination through nationally led country platforms, policy reform, and capacity building to unlock private investments. Together with the Sustainable Renewables Risk Mitigation Initiative (SRMI), IRENA hosted a roundtable discussion on **Innovative Renewables Risk Mitigation Instruments** at the sidelines of the 15th IRENA Assembly. The event highlighted the concentration of renewable energy investments in high-income regions and the stark contrast with the minimal support received by lower-income countries. Addressing barriers to private investment, such as regulatory unpredictability and perceived risks, is crucial for achieving global equitable progress in renewable energy adoption. Participants emphasised the need for innovative policy designs and risk mitigation instruments to promote equitable investment in renewable energy, especially in under-represented regions like Africa.

The side event on **Enablers for scaling up trade in green commodities** explored strategies and enabling measures to scale up trade in green hydrogen and hydrogen-derived commodities essential for decarbonising heavy industry and transport. Building on insights from IRENA's joint report with the World trade Organization (WTO) launched at COP29, **Enabling global trade in renewable hydrogen and derivative commodities**, discussions highlighted best practices, regulatory frameworks and international cooperation to foster global markets for green commodities.

IRENA continues to work closely with civil society, private sector companies, industry associations, research institutes and intergovernmental organisations to advance the energy transition through **IRENA's Coalition for Action**. This year's **High-Level Public-Private Dialogue** focused on "Building community support for the energy transition," exploring ways to strengthen community engagement to build trust and support for a just and inclusive energy transition. Participants stressed the importance of empowering local communities and citizens, including indigenous peoples, marginalised groups and vulnerable populations.

Despite this positive momentum and promising future outlook, the current trajectory of offshore wind deployment remains insufficient to meet the ambitious 2030 targets. The **Global Offshore Wind Alliance: Catalysing Inclusive Offshore Wind Growth Through Strategic Partnerships** side event aimed to

foster strategic partnerships, establish a collaborative platform for sharing knowledge, and catalyse innovative financing. The side event on **Energy Transitions across the Mediterranean: Enabling Infrastructure for a Sustainable Future** explored the emerging challenge of meeting evolving energy demands in the region and the urgent imperative to address climate change. The event sought to enhance understanding of the key enabling conditions for renewable energy infrastructure development in the region, strengthen collaboration, and determine a shared vision for a renewables-powered Mediterranean.

The event on **Planning and prospects for renewable power: Central Africa** marked the launch of the report of the same name, which presents the key outcomes of the Central African Power Pool (CAPP) support programme. It revealed the critical role of regional analysis and data-informed scenarios in developing Central Africa's landmark power sector masterplan, stressing that enhancing institutional capacity and promoting collaborative and regional energy planning can lay the groundwork for transformative change. The **Global Coalition for Energy Planning: Shaping the Agenda for Action** event examined priorities for the Global Coalition for Energy Planning (GCEP)'s Agenda for Action, fostering collaboration, capacity building, and best-practice exchange in national energy planning. It explored critical priorities, leveraged existing knowledge networks, connected finance and planning communities, and aligned approaches to strengthen energy planning.

The **SDG7 and climate ambitions through a renewables-based clean cooking** event highlighted the successful integration of renewables-based clean cooking into climate strategies, including NDCs and national targets. It also explored cross-sector collaboration to achieve SDG7 and climate goals while examining finance options to support developing countries. The **Annual Meeting of the Global Geothermal Alliance (GGA)** served to discuss priorities for the Global Coalition for Energy Planning (GCEP)'s Agenda for Action, and fostered collaboration, capacity building and best-practice exchange in national energy planning. Participants also explored critical priorities, leveraged existing knowledge networks, connected finance and planning communities, and aligned approaches to strengthen energy planning.

The **Key Enablers for the Energy Transition: Grid and Storage** event explored the indispensable role of expanded and modernised grid infrastructure, coupled with advanced energy storage solutions, in realising the ambitious targets of the UAE Consensus co-hosted by **IRENA and the Coalition for Action**. The meeting's key messages include scaling up renewable energy, fostering market and policy reforms, and building long-term capacity. IRENA organised the Annual meeting of the **Coalition for Action** to elect the new Steering Group, bringing a wealth of expertise and knowledge from leading organisations such as the Global Women's Network for the Energy Transition (GWNET), RES4Africa, the International Solar Energy Society (ISES), the European Renewables Energies Federation (EREF), Solar Power Europe, the Renewables Grid Initiative (RGI), the World Resources Institute (WRI), and Contemporary Amperex Technology (CATL). In 2024–2025, the Coalition experienced significant growth, receiving over 40 new membership applications, of which 34 were approved. The **Policy Recommendations for Achieving 100% Renewable Energy by 2050** event, co-hosted by **IRENA and the Coalition for Action**, highlighted policy recommendations and strategies to achieve 100% renewable energy by 2050 and examined pathways for phasing out fossil fuels and nuclear, emphasising enabling subsidies, rapid innovation, and overcoming regulatory and financial hurdles. Discussions focused on flexibility, electrification, grid modernisation, energy storage and efficiency.

The event on **Environmental Impacts and Benefits of Renewables** examined the local environmental impacts and benefits of renewable energy projects, exploring solutions and policies to address challenges and maximise benefits. Discussions also highlighted how to assess and minimise negative impacts and identify measures to overcome barriers to increase the adoption of renewables. A side event was dedicated to **Sustainable Aviation Fuels: Launch of the IRENA-ICAO Collaboration** and establishing the ICAO Finvest Hub as a dedicated module of the ETAF Platform. The event featured a fireside chat with

Francesco La Camera, IRENA Director-General, H.E. Mr Juan Carlos Salazar, ICAO Secretary-General and H.E. Mr Sameh El-Hefny, Minister of Civil Aviation, Egypt.

The side event on **Empowering Lives and Livelihoods with Renewables** spotlighted financing solutions for renewable energy in healthcare, focusing on underserved areas. Participants explored best practices and de-risking strategies and encouraged collaboration among governments, the private sector and international partners. Policy frameworks were identified to bolster climate resilience, scale investments and improve cross-ministerial coordination. The side event on **Skilling for Tripling Renewables: Enhancing International Collaboration** aimed to refine principles and galvanise commitments towards accelerating skill-building for tripling renewables. It also aimed to foster international collaboration, supporting shared standards, open curricula and best practices while scaling domestic initiatives aligned with the global call to action.

The **Women in Diplomacy**[35] event explored ways to promote equitable inclusion of women in the integration of AI within the energy sector. Discussions examined workforce, skill development and leadership dynamics in technological transformations, emphasising gender equity as well as the potential of innovative AI-driven solutions to advance social, economic and climate goals, with a particular focus on gender equality. The **IRENA 2025 Legislators Forum** served as a crucial platform for examining legislative strategies that directly support the UAE Consensus targets. Legislators gained valuable insights on incorporating these objectives into their Nationally Determined Contributions (NDCs), overcoming financial obstacles and strengthening regional collaboration.

The sixth edition of **IRENA's Youth Forum**[36] convened from 9 to 16 January 2025, on the sidelines of the 15th IRENA Assembly, and continued to provide space for young people's perspectives on the global energy discourse to be heard through a series of interactive sessions. This year's theme was "Youth for Accelerating a Renewables-powered Energy Transition: Innovation, Action and Impact." This expanded eight-day Forum served to amplify youth voices in global energy policy, enhance their capacity for policy and project development, highlight their role in financing the energy transition, and strengthen networks and partnerships.

IRENA's **Utilities for Net Zero Alliance (UNEZA**) published a report on **Standards and certifications for the energy transition**[37], which highlights the critical role of international standards in unlocking global supply chains, supporting regulatory alignment, and enhancing the scalability of key technologies. Based on this, UNEZA plans to launch a global supply chain initiative that will call for the standardisation of key energy transition equipment, defining a roadmap that considers regional differences. Furthermore, Recognising that building capabilities and talent is a top priority, UNEZA has launched a new **Digital Academy on Net Zero.**[38] This knowledge dissemination platform aims to upskill the workforce, foster collaboration among power utilities worldwide, and will be expanded to provide dedicated capacity building for utilities in the Global South. The Alliance for Industry Decarbonization (AFID) published the **Green**

[35] IRENA, in partnership with the Permanent Mission of the United Arab Emirates, established the **Women in Diplomacy** initiative to enhance the network for diplomats, especially women.
[36] More information available here.
[37] Available here.
[38] More information available here.

hydrogen: A cross-industry dialogue for sustainability[39] report that explores the crucial role of green hydrogen in decarbonising transport, power and industry, and advocating for a global shift towards sustainable energy practices. Highlighting the need for international cooperation, the report calls for standardised definitions, safety standards and regulatory frameworks to accelerate the development and adoption of green hydrogen and sets a goal to establish green hydrogen as an accessible and cost-effective technology option by 2030.

IRENA played a central role at **COP30**, particularly in its capacity as the custodian agency for tracking global progress toward the critical goals of tripling renewable power capacity and doubling energy efficiency by 2030, as mandated by the UAE Consensus. Between 10 and 19 November 2025, IRENA hosted and participated in several key events on critical issues related to promoting the renewables-based energy transition.[40] For example, on 14 November, IRENA held the ministerial-level event, Accelerating Grids Finance: Planning, Principles and Policy Solutions, in response to the Global Mutirão's emphasis on infrastructure modernisation and the COP29 Grid Pledge. In this context, IRENA partnered with the Green Grids Initiative (GGI) and Utilities for Net Zero Alliance (UNEZA) to endorse groundbreaking financing principles. With high-level backing from the World Bank and the Asian Development Bank (ADB), this Ministerial operationalised the "Means of Implementation" section of the final decision, establishing a coordinated framework to mobilise the required USD 1 trillion by 2030 and address the critical bottleneck to global energy security. On 14 November, IRENA convened with UNFCCC and the IEA the event on **Delivering the GST energy goals - Investing in the shift from ambition to action**. This high-level dialogue served as the foundational launchpad for the technical component of the newly established "Global Implementation Accelerator" (GIA). By engaging directly with the World Bank and BNDES, IRENA defined the specific methodologies for investment planning requested in the Global Mutirão decision. This intervention moved the debate from political target-setting to financial execution, positioning the Agency to lead the GIA's mandated information sessions in 2026 by demonstrating how NDCs can be translated into bankable pipelines aligned with the UAE Consensus. On 15 November, IRENA organised the **Bridging Plans to Finance for Energy Transitions event through the Global Coalition for Energy Planning (GCEP),** in collaboration with Ocean Conservancy. The event served to present the technical "how-to" for the newly established Just Transition Mechanism. By demonstrating how Long-Term Energy Scenarios (LTES) act as de-risking instruments, this session directly answered the Article 2.1c mandate to align financial flows. It showcased to development finance institutions that "investment-grade" national planning is the prerequisite for accessing the scaled-up adaptation and mitigation finance called for in the Baku to Belém Roadmap.

[39] Available here.

[40] More information available here.

Promoting the energy transition at the regional level

IRENA's regional outlooks are becoming key instruments to turn global climate ambitions into concrete national and regional action. South America is uniquely positioned to lead the global energy transition, driven by factors including economic opportunity, innovation, energy security, and the urgency of climate change mitigation and is one of the world's most competitive regions for renewable power. IRENA's **Regional energy transition outlook: South America**[41] report provides a comprehensive, quantitative analysis designed to accelerate the region's energy transformation by 2050. The report identifies essential technological pathways, investment and expenditure priorities, and recommended policy actions needed for this shift. The analysis concludes that a rapid, renewables-based transition can generate substantial socio-economic benefits, driving significant GDP growth and employment creation across South America. Specifically, the report outlines IRENA's Decarbonising Energy Scenario (DES) for the continent that envisions the share of renewable electricity generation soaring from 79% in 2023 to 98% by 2050, with solar PV capacity growing from 50 GW to 927 GW and wind capacity expanding to 427 GW. To realise this, massive investment is necessary, totalling USD 13 trillion from 2025-2050, including substantial funds for transmission and distribution infrastructure, which will exceed USD 1.8 trillion by 2050. Beyond electricity, the transition will see bioethanol production nearly triple and clean hydrogen production reach 22 Mt by 2050, supported by 260 GW of electrolyser capacity. According to the analysis, the DES is projected to improve annual GDP by 1.1% and create over 12 million energy sector jobs in the region by 2050. Achieving these goals and realising a 75% reduction in CO_2 emissions requires urgent action, strategic planning, and enhanced regional cooperation to address infrastructure needs and mobilise the necessary USD 500 billion annually for energy transition projects.

IRENA's **Regional energy transition outlook: European Union** [42] report - developed with the European Commission and directly endorsed by Commissioner Jørgensen - takes a close look into the European Union (EU)'s renewables potential and needs and underlines that it stands at a pivotal juncture. Specifically, the EU is actively leading the global energy transition by implementing ambitious climate targets and key policies to enhance energy security, reduce dependency on fossil fuel imports, and maintain economic competitiveness. Despite challenges in decarbonising end-use sectors, the EU aims to boost renewable energy investment and innovation; with renewable power capacity projected to nearly triple by 2030, quadruple by 2040 and quintuple by 2050 compared to 2021 levels, it is urgent to fast-track clean energy deployment and modernise infrastructure The report proposes key priorities for the EU's energy transition such as expanding infrastructure, committing to renewable electrification, furthering market integration and strengthening institutional frameworks, ultimately providing benefits like energy independence and affordability for all EU citizens.

IRENA unveiled the **Accelerated Partnership for Renewable Energy in Southeast Asia (APRESA)** [43] at the Singapore–IRENA High-Level Forum during Singapore International Energy Week (SIEW) in October 2025 with a view to supporting acceleration of the clean energy transition in the Southeast Asia region. Building on the region's growing ambition for accelerating renewable energy deployment and the strong momentum around the ASEAN Power Grid development, APRESA offers a

[41] Available here.
[42] Available here.
[43] More information available here.

platform to support national and regional renewables-based energy transitions, strengthen regional interconnectivity, and stimulate green industrialization and local value creation, fully aligned with the new ASEAN Plan of Action on Energy Cooperation (APAEC) for 2026-2030. The Partnership will constitute a stronger operational framework to enhance the implementation of the APAEC and the IRENA-ASEAN MOU. Main implementation pillars of APRESA include:

i. Strengthening the energy infrastructure and realigning it with energy transition ambitions
ii. Policy, institutional and regulatory frameworks to create conducive investment environment
iii. Enhancing green industrialisation and local value creation, and
iv. Mobilising private sector investments and boosting access to finance

The **Accelerated Partnership for Renewables in Africa (APRA)** continues to rise in prominence among African countries. Uganda joined the Partnership in June 2025, bringing its membership to 10 countries. To date, nine national priority action plans (Djibouti, Ethiopia, Ghana, Kenya, Mozambique, Namibia, Rwanda, Sierra Leone and Zimbabwe) have been completed. In keeping with the plan to commence engagement with Uganda in Q4-2025. IRENA is currently in discussions with the country to organise national consultations to receive input and prepare its action plan.

In Rwanda, IRENA has worked closely under APRA with national stakeholders on a two-phase support that encompasses (1) the update of the Least-Cost Power sector Development Plan (LCPDP) and (2) the comprehensive reinforcement of the long-term planning skills among its energy sector actors, so that scenario development and plan updates can be undertaken domestically. IRENA supported the update of the LCPDP through online and in-country training in December 2024. The updated LCPDP was launched in September 2025. For the second component, IRENA and Rwanda embarked on a comprehensive program involving the organisation of three in-person workshops in Rwanda and one online session, totalling 160 training hours for approximately 15 participants. The participants are being trained on how to develop the MESSAGE-Rwanda model (based on the SPLAT tool), update and improve the representation of technologies in the model, as well as the development and interpretation of scenarios. The second phase started in April 2025 is expected to be completed by Q1-2026.

Working with the Ministry of Energy in Ghana and the Ministry of Energy and Power Development in Zimbabwe, IRENA has initiated a pre-feasibility assessment of project sites earmarked for development by the respective countries. The IRENA site assessment is a cost-effectiveness analysis of these sites, with the aim of supporting the countries in selecting financially viable sites for developing Solar and Wind projects. For Zimbabwe, the final reports were completed in August 2025, and for Ghana, the reports are under finalisation.

IRENA has collaborated with the government of Kenya to develop a training activity focused on designing competitive procurement (auctions). In response to the Kenya APRA Action Plan's activity on "Development of regulations on renewable energy resources, electricity market, build supply and open access". IRENA and the Kenya Petroleum Regulatory Authority (EPRA) organised a national training workshop on Renewable Energy Policy and Auction Design in November 2025.

Ethiopia and Zimbabwe have identified power infrastructure modernisation as an urgent priority in their national APRA action plans. To support this, a capacity-building training focusing on grid flexibility planning measures is proposed. This will enable relevant authorities to design informed strategies for the seamless integration of solar and wind energy into their power systems. The training will utilise the IRENA FlexTool, an open-source modelling tool that identifies optimal flexibility options based on documented expansion plans or scenarios modelled through IRENA's REMAP process. In addition to the training, a flexibility gap report will be developed for Zimbabwe. Engagement with the target countries began in June 2025, with a completion timeline of Q1 2026.

Ghana and Sierra Leone highlighted in their respective APRA action plans the need for support for Improvement of Primary Data and Statistics on Energy Access and GHG Emissions, and the Enhancement of the reliability of Energy and Climate data respectively. In response, IRENA worked with both countries to organise a training in renewable energy statistics to address skills and data gaps related to the collection of off-grid renewable energy statistics, promoting data transparency and dissemination, and developing Monitoring, Reporting and Verification (MRV) material for tracking NDCs and SDGs. The joint training took place in October 2025.

Under the overarching framework of APRA, IRENA aims to support Sierra Leone in improving the bankability of Productive Use Renewable Energy (PURE) mini-grid projects, increasing private sector participation and contributing to the country's electrification and green industrialisation ambitions. The main output would be a developer's guide that enhances the bankability of PURE mini-grids in Sierra Leone. Additionally, the targeted mini-grid developers will be capacitated to adopt and operationalise these methods and tools provided in the guide, ultimately contributing to sustainable socio-economic development in the target country.

Despite contributing minimally to global greenhouse gas emissions, Small Island Developing States (SIDS) are disproportionately impacted by climate change. Key challenges for SIDS include fragile grid networks, geographical barriers to energy transmission, and infrastructure gaps in land and sea transportation. On 20-21 February 2025, IRENA, through the SIDS Lighthouses Initiative, organised together with the Ministry of the Environment of Japan and the Green Climate Fund (GCF), the **SIDS Decarbonisation Forum.** The Forum addressed the urgent need for decarbonisation and climate resilience in SIDS. It focused on innovative solutions to reduce reliance on fossil fuels, enhance renewable energy deployment, and strengthen climate resilience. This event built on efforts since 2015 to promote renewable energy, improve access to climate finance, and share best practices and emerging technologies. Key outcomes included a valuable knowledge exchange on best practices and lessons learned from energy transition efforts in Pacific SIDS, the Maldives and Japan. Discussions covered enabling policy and regulatory frameworks, designing, installing, and operating renewable energy projects, developing bankable project concepts tailored to the SIDS context, and accessing various climate financing, including the Joint Crediting Mechanism. Additionally, participants were introduced to various innovative solutions currently operating in Japan and had the opportunity to visit green hydrogen plants and an agrivoltaics project.

Accessible, reliable and affordable energy plays an essential role in human and economic development for the people of Sub-Saharan Africa, especially in improving livelihoods and access to opportunities. IRENA's **A just energy transition for communities: Large-scale wind and solar projects in Sub-Saharan Africa**[44] report highlights the crucial role of renewables in promising substantial socio-economic gains against the backdrop of a lack of access to electricity that hampers communities' climate resilience, limits their adaptive capacities, and increases their reliance on environmentally harmful energy sources like fossil-based fuels. The report shed light on the risks faced by geographically and socio-economically marginalised communities, noting that the most promising locations for large-scale solar and wind projects in Sub-

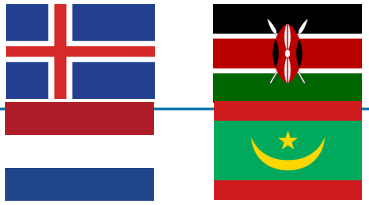
[44] Available here.

Saharan Africa are often in rural areas. Yet, an accelerated roll-out of climate and energy solutions with land-intensive requirements would increase competition for land. Many rural residents' livelihoods rely on the use of land and other natural resources already vulnerable to the impacts of climate change. It examined practices at several large-scale wind and solar projects in sub-Saharan Africa, to explore the benefits communities adjacent to such projects may be able to gain. It also discussed the benefits related to project siting, ownership structures, investments in community development, skill development and employment opportunities, local procurement, and community energy and gender.

Collaborative Frameworks

IRENA's **Collaborative Frameworks (**CFs)[45] (Table 1), originally established in response to Members' requests, continue to provide tangible evidence of the Agency's commitment to strengthening Member engagement and ownership of programmatic outcomes. These platforms enable peer-to-peer collaboration and the exchange of national experiences, challenges and context-specific solutions. Regular engagement with national subject-matter experts plays a crucial role in their success by improving the quality of both discussions and outcomes. Deeper involvement from technical experts is particularly valuable in technology-focused Frameworks. To support this objective, the Secretariat encouraged the involvement of national experts, to build a robust network of subject specialists. In this context, Members were requested to nominate Technical Focal Points - different from those already designated - who could contribute by sharing practical insights and best practices during CF meetings.

Table 1: 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	

[45] More information available here.

On 13 February, the Secretariat invited IRENA Members to submit proposals for topics of interest under each Collaborative Framework. These proposals will be considered for implementation during future CF meetings in 2025 and beyond, contributing to advancing IRENA's programmatic and strategic priorities, as defined by Members.

For the **Collaborative Framework on Critical Materials for the Energy Transition,** the topics include strategic storage challenges, particularly given that many critical materials are difficult or prohibitively expensive to store; pathways to more secure, sustainable, and resilient critical materials value chains in emerging markets and developing countries; secure supply chains for critical material; and life cycle assessment of battery electric vehicles and stationary battery storage, including end-of-life battery management. The 5th meeting of the Collaborative Framework explored the latest technological and policy developments in EV batteries, with a focus on how innovation and circularity can enhance supply chain sustainability. Participants discussed practical solutions to reduce material demand, improve recycling systems, integrate ESG principles into global and regional supply chains as well as local value creation.

The **Collaborative Framework on Enhancing Dialogue on High Shares of Renewables in Energy Systems** also organised a meeting on 22 May[46] to provide an opportunity to share technical insights and strategies for improving the flexibility and stability of power systems through VRE integration. Discussions on grid modernisation included the need to address congestion, ensure frequency stability, and enable greater system resilience through technologies like hyper grids and HVDC. The critical role of AI and cybersecurity was underlined in managing increasingly complex grids, with intelligent systems monitoring and controlling thousands of network points in real time. The 11th meeting of the CF, held on 8 October, was dedicated to "Geothermal Energy and Market Integration: Resilience, Flexibility, and Participation in High-Renewables Systems."

The seventh meeting of the **Collaborative Framework on the Geopolitics of the Energy Transformation** (CF-GET), held on 17 June 2025, addressed interdependencies, supply-chain resilience and strategic infrastructure. Building on discussions at the Berlin Energy Transition Dialogue (BETD) Roundtable, it presented developments under IRENA's 2025 geopolitical work programme, gathered perspectives and enabled exchange to support preparations for a proposed Global Dialogue. The meeting was structured around two thematic focus areas, reflecting the priorities of IRENA's 2025 Work Programme: Segment I: Clean Technology Supply Chains, Critical Materials, and Domestic Transitions; and Segment II: Strategic Infrastructure and Geopolitical Cooperation. Throughout the discussion, Members stressed the importance of regional coordination, harmonised market design, and regulatory alignment to mitigate geopolitical risks and unlock the full potential of strategic infrastructure. Members have identified the role of AI and emerging technologies as well as regional trends and advancements in energy technologies as pertinent topics to be explored.

For the Collaborative Framework on Green Hydrogen, the topics include importation and development of hydrogen derivatives; Offshore hydrogen production; Past, present and future trends in hydrogen use within the transport sector; Harmonised assurance schemes for renewable hydrogen and derivatives in global trade; Clean hydrogen certification to facilitate cross-border trade; and Assessment of hydrogen's impact on employment, the economy, local communities, and broader social dimensions.

For the **Collaborative Framework on Hydropower,** the topics include sustainable and resilient hydropower development with active local community engagement; enhancing financial viability and attracting investment; technological and operational optimisation, including flexibility from hydropower, plant upgrades and small-scale hydro; and pumped hydro storage to balance intermittent renewable energy sources. While solar and wind will provide the bulk of energy in future power systems, hydropower will remain vital for a secure and sustainable supply. In response to the growing need for solutions in systems

[46] More information available here.

dominated by variable renewables, the 10th meeting of the Collaborative Framework on Hydropower, planned for the last quarter of 2025, will focus on the optimal operation of hydropower in such contexts. It will provide a platform for experts to exchange insights and best practices on unlocking hydropower's potential to deliver cost-efficient and resilient systems, with discussions on flexibility, pumped storage, hybridisation with solar and wind, the contribution of small hydropower, and regional integration.

Collaborative Framework on Just and Inclusive Energy Transition

- Continued need for a social tariff for energy (linked to market prices) to support vulnerable consumers and those in energy poverty, especially in light of the European Union's Emissions Trading System for buildings and road transport (ETS2) or comparable national policies. This aims to assist consumers unable to independently participate in the energy transition and provide financial leeway to implement basic energy efficiency measures
- Combining social tariffs with participation in energy communities to engage vulnerable groups in the energy transition
- Strategies for improving reskilling and upskilling of the renewable energy workforce
- Ensuring equitable access to clean energy solutions in underserved and vulnerable communities
- Best practices for integrating social inclusion principles into national and regional energy policies
- The role of emerging technologies and AI
- Impacts of the energy transition on employment in oil and gas-producing countries

Throughout 2025, the **Collaborative Framework on Just and Inclusive Energy Transitions** has been convening a series of thematic deep dives on just energy transitions on topics identified during a consultative meeting, hosted by the co-facilitators. To this end, a peer-to-peer exchange was convened on 5 May[47] to exchange knowledge on governance arrangements that can inform government efforts on planning and policy design for just energy transitions and the importance of data and monitoring. Participants also considered priorities for international cooperation in this space, including the importance of stakeholder engagement and social dialogue, and the centrality of ensuring energy access and affordability, capacity-building and holistic policymaking. The Framework held another meeting on 3 July to showcase insights on unlocking financing for just energy transitions and capture lessons learned from efforts to date that can inform national and international efforts going forward. The next dialogue is scheduled to take place on 9 December and will focus on strategies for benefit sharing, social inclusion and public engagement.

For the **Collaborative Framework on Ocean Energy/Offshore Renewables,** the topics include facilitating access to testing facilities for offshore renewable energy technologies; development of standardised moorings, foundations, and power connections for floating offshore renewables; and offshore infrastructure and the "green ports" concept.

Collaborative Framework on Project Facilitation to Support on-the-ground Energy Transition

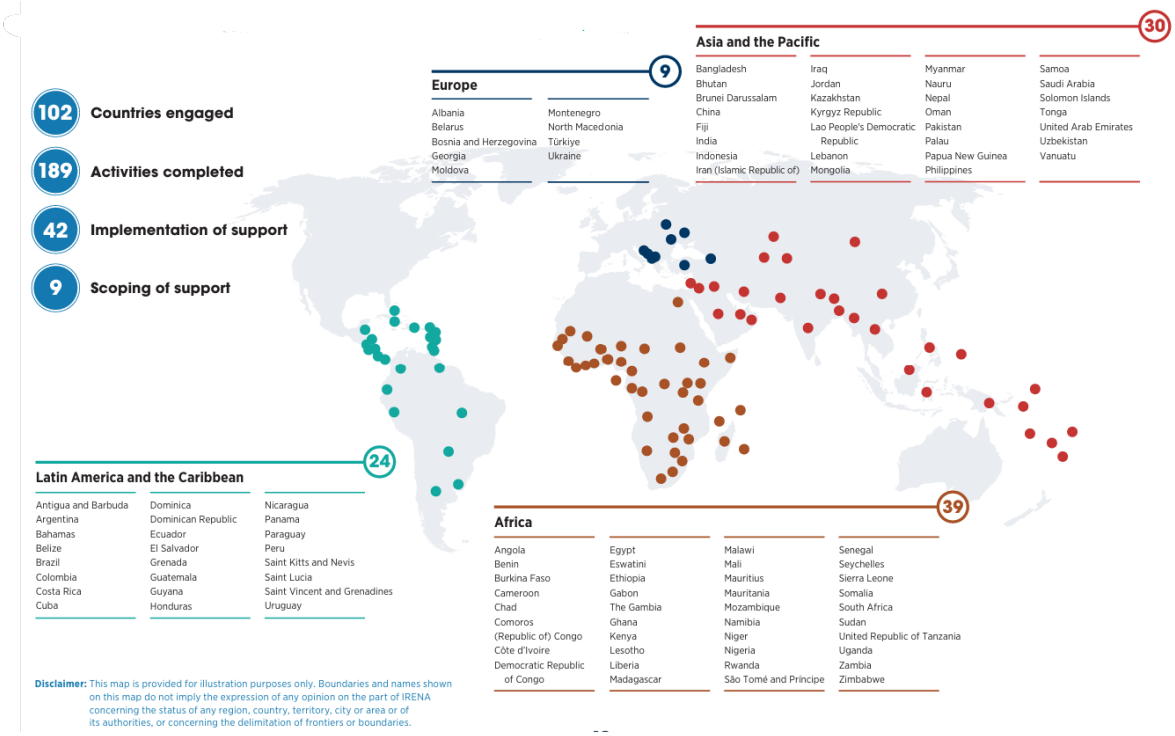
- Attracting capital to develop bankable clean hydrogen and renewable energy projects
- Strengthening public-private partnerships for renewable energy development
- Innovative financing mechanisms to accelerate project deployment
- Addressing regulatory and administrative barriers to project implementation and permitting
- Strategies for financing renewable energy projects
- Challenges of project finance in developing countries
- Supply chain and green industrialisation in the development and financing of RE projects
- Public-private collaboration in renewable energy development
- Global trends in utility-scale renewable energy financing
- Role of international financial institutions (IFIs) in energy transition planning
- Best practices for de-risking renewable energy projects

[47] More information available here.

Targeted climate action

IRENA's Members are demonstrating a growing demand for specialised support from the Agency to strengthen their Nationally Determined Contributions (NDCs) and facilitate their effective implementation. In response, IRENA has actively engaged with 102 countries across all continents, providing technical assistance, policy advice and guidance, resource and technology assessment, and various capacity-building activities. These efforts aim to help Members refine their climate commitments, accelerate the deployment of renewable energy, and integrate clean energy solutions into their broader sustainable development strategies. By fostering collaboration and leveraging its expertise, IRENA plays a crucial role in supporting countries to align their NDCs with global climate objectives, ensuring a just and inclusive energy transition (Figure 17). The supported countries as a whole cover a population of 6 billion and encompass total greenhouse gas emissions of 31 984 million tonnes of carbon dioxide equivalent (Mt CO2-eq).[48] Cumulatively, as of 31 October 2025, IRENA's NDC enhancement and implementation support encompasses 240 activities to meet the needs of IRENA Members, who are the Parties to the 2015 Paris Agreement, in enhancing and implementing their energy transition plans while incorporating these climate action commitments into their NDC submissions. IRENA also contributes to long-term strategies through work packages focused on assessing renewables, technology and innovation, as well as analysing policies, planning and finance. Particularly regarding the support on NDC 3.0 development, IRENA has been engaged in country support in over 35 countries in 2024-25.

Figure 17: IRENA's climate action engagement



[48] Data retrieved from World Bank for population; and EDGAR (Emissions Database for Global Atmospheric Research, 2025) for GHG emissions.

On 3 June, IRENA hosted an online event on **Virtual Dialogue on Energy Transition and Carbon Markets: Perspectives from countries and global partnerships**[49], in collaboration with the Secretariat of the United Nations Framework Convention on Climate Change (UNFCCC). The meeting gathered over 100 participants from IRENA Members and States in Accession, engaged in discussions on the opportunities, challenges, and good practices of market-based instruments for the energy transition. The UNFCCC Secretariat acknowledged the Dialogue as part of the joint capacity-building efforts for implementing Article 6 in its report of Article 6.4[50] at COP30.

Through the **Global Atlas for Renewable Energy Initiative**, IRENA continues to support its Members in assessing their true renewable potential, thereby facilitating the planning and deployment of renewable projects. Recently, IRENA enhanced the Global Atlas datasets by incorporating diverse renewable energy resource and ancillary datasets from leading international institutions and private sector entities, including GEBCO, NOVELTIS, ORNL, OSM, TheWindPower, TU-Delft, UNEP-WCMC, WRI and VORTEX.[51] The Agency has also enhanced the infrastructure of the Global Atlas platform to improve the user experience in screening and assessing renewable potential. At the country-level, IRENA has conducted detailed analyses to map investment opportunities for utility-scale solar and wind areas for Colombia[52] and Georgia.[53] These analyses identify favourable zones for solar PV and onshore wind projects in both countries, along with their associated techno-economic parameters.

IRENA has also supported the Democratic Republic of Congo in assessing the technical and financial potentials for deploying rooftop solar photovoltaic (PV) systems in various cities – Kinshasa,[54] Mbandaka,[55] and Kananga[56] – using the **SolarCity simulator**[57]. A capacity-development meeting was conducted for local stakeholders covering renewable resource assessment, specifically urban solar mapping and financial modelling, with key insights from the analysis. Similar support, focused on NDC implementation, was provided to The Bahamas and Grenada. In The Bahamas, support targeted the Eastern New Providence[58], Northern New Providence[59] and Western New Providence.[60] The simulators for these areas were released to coincide with the Bahamas Annual Energy Summit. In Grenada, the focus areas were St. George's and Grand Anse, Grenville[61] and Hillsborough (Carriacou)[62]. The release of Grenada's simulators was time with CARICOM Energy Month (CEM). Following the release, a capacity development session was conducted to disseminate the tool to local stakeholders.[63]

In addition, IRENA has launched Version 3 of the SolarCity Simulator, introducing new enhancements to support Members in advancing evidence-based energy planning and informed decision-making on rooftop solar PV programmes.[64] This updated version delivers faster access and smoother user experience, enabling the simulator to scale to more cities while supporting multiple simultaneous users. It also introduces several powerful new features such as a building location finder, multiple satellite imagery options for rooftop visualization, editable input fields, and hourly generation profiles for all three case studies, along with several

[49] More information available here.
[50] Available here.
[51] More information here.
[52] Available here.
[53] Available here.
[54] Available here.
[55] Available here.
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[59] More information available here.
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[61] More information available here.
[62] More information available here.
[63] More information available here.
[64] More information here.

other improved functionalities. These upgrades were developed in direct response to feedback received from Member States and users.

At the utility-scale, and under Accelerated Partnership for Renewables in Africa (APRA), IRENA has assisted Zimbabwe in assessing the technical and financial viability of ten solar parabolic trough collector (PTC) sites designated for utility-scale project development, with a combined potential installed capacity of 1.9 GW. Using industry-standard methodologies, IRENA delivered a comprehensive pre-feasibility analysis report to the country. The findings included a recommendation to reconsider the location of one site due to its low energy yield and limited financial prospects.

For the second year in a row, IRENA, in partnership with the European Centre for Medium-Range Weather Forecasts (ECMWF) and the World Meteorological Organization (WMO), produced the second edition of the **Year in Review: Climate-driven Global Renewable Energy Potential Resources and Energy Demand** [65] report examining the links between climate change and renewable energy. The report emphasises the urgent need for enhanced tools, knowledge and policies that integrate climate science with energy innovation, promote a shift to diverse energy portfolios for security, and establish flexible market structures for clean power systems. It also underscores the importance of integrating climate insights into energy planning to improve reliability, anticipate demand peaks, and strengthen infrastructure resilience. Furthermore, it accentuates the importance of regional collaboration and localised solutions in balancing supply-demand dynamics, optimising cross-border energy flows and building resilient energy infrastructures.

The escalating frequency and severity of extreme weather events, fuelled by climate change, pose significant threats to the integrity and reliability of renewable energy systems globally. IRENA's report on **Quality infrastructure for renewables facing extreme weather** [66] highlights the emergence of robust quality infrastructure (QI) as a vital cornerstone for combating these challenges. It also highlights that QI can secure the resilience and performance of renewable energy assets through coordinated standards, testing, certification, and continuous monitoring. By integrating QI measures throughout the project lifecycle—from design and construction to operation—developers can effectively mitigate risks and enhance infrastructure durability against harsh environmental conditions. In addition, the report underlines that economic analyses consistently demonstrate that the long-term benefits of QI outweigh implementation costs and calls on policy makers to promote and enforce rigorous QI practices to future-proof renewable projects against escalating climate risks. This way, they can ultimately safeguard both energy security and financial viability.

IRENA's **Renewable energy in climate change adaptation: Metrics and risk assessment framework** [67] report highlights the critical role of renewable energy in climate change adaptation, emphasising its ability to reduce greenhouse gas emissions, enhance resilience, and support sustainable development. It notes that while global climate finance flows reached USD 1.3 trillion annually in 2021-2022, adaptation finance remains insufficient at USD 63 billion, far below the estimated USD 212 billion needed annually by 2030 for developing countries. Using the impact chain method, the report demonstrates how renewable energy can mitigate risks, such as increased energy demand and greenhouse gas emissions from desalination, as illustrated in the Canary Islands case study. For instance, desalination powered by renewable energy could reduce risk scores by up to two-thirds under high-emission scenarios (RCP8.5). The report calls for expanded pilot projects, improved metrics, and synergistic approaches to quantify the benefits of renewable energy-based adaptation, while urging enhanced investment and collaboration to close the adaptation finance gap and foster a climate-resilient future.

[65] Available here.
[66] Available here.
[67] Available here.

Communications, outreach and engagement

IRENA continues to amplify its impact through outreach and communication activities. Since the beginning of 2025, IRENA has been referenced in over 38605 media articles in 58 languages across 178 countries. IRENA mentions in top-tier news outlets and agencies such as Reuters, Forbes, AP, Bloomberg, etc. grew substantially, increasing by 9.3% compared to the same period in 2024.

This growth was driven by strategic positioning of IRENA's work and messages as well as collaboration with international organisations and partners to promote IRENA's reports and events. For example, the annual Renewable Power Generation Costs in 2024 report, released in July 2025 and cited in the United Nations Secretary-General's special 'Moment of Opportunity' climate address, was mentioned 1066 times in 19 languages across 77 countries within its first two weeks from launch, 6 times more and in twice as many countries compared to the previous edition. The report continues to be regularly cited by top-tier news outlets, underscoring the effectiveness of high-level collaboration in promoting IRENA's flagship products.

To enhance the visibility of IRENA's work among its diverse membership, the Agency expanded its hosted media programme for the 15th IRENA Assembly. The programme gives an opportunity for international journalists, particularly from developing countries, to attend and cover the IRENA Assembly. The 2025 programme included 24 journalists from 19 countries. Their coverage resulted in 91 varied media pieces, including articles, podcasts, and broadcasts, an almost 20% increase compared to 2024. A hosted media programme activity was equally deployed for the APRA Investment Forum in Sierra Leone in October. In total, 28 media features were generated across the 10 APRA countries.

More than 2.9 million people visited the IRENA website since 1 January 2025, generating over 5.45 million pageviews. The highest number of active users came from China, the United States, India, Germany and the United Kingdom. The traffic peak days were marked by significant events, such as the flagship publication releases of the Renewable Capacity Statistics in 2025 report, attracting over 48000 views, resulting in more than 28000 report downloads to date. The related press release was read by 25000 people placing it as the most-read news item of the year, followed by news released on Renewable Power Generation Costs in 2024 and Delivering on the UAE Consensus: Tracking progress toward tripling renewable energy capacity and doubling energy efficiency by 2030.

The innovative interactive content types keep user engagement high and boost the dissemination of publications. The digital versions of five flagship publications cumulatively attracted over 39000 people, adding up to the direct IRENA report downloads of over 277000. The most read visual story summarising 2024 achievements in renewable energy registered over 8000 views. In May 2025, IRENA launched its new podcast series called All Things Renewable. 20 podcast episodes have been released to date, featuring a series of interviews with experts, guided by insights from IRENA's research and activities to present IRENA data and findings, and showcase how renewables are transforming economies, powering communities, and driving sustainable development. The series has garnered 2150 total plays across all podcast platforms to date, with over 1500 coming from Spotify.

IRENA's social media audience continued to expand, with LinkedIn reaching 263410 followers, reflecting a 10.7% increase. On X, the Agency's audience increased to 140731 followers, and Instagram recorded 10.7% growth reaching 19313 followers. The growth was largely driven by the implementation of thematic weeks across all IRENA channels, which present complex renewable energy topics in an accessible and engaging manner. Additional momentum came from extensive, real-time coverage of IRENA Innovation Week in June through videos, graphics, and photography. The successful launches of flagship reports, Renewable Power Generation Costs in 2024 in July, and Renewable Capacity Statistics 2025 report in March and Delivering on the UAE Consensus: Tracking progress toward tripling renewable energy capacity and

doubling energy efficiency by 2030 in October and Global energy transition finance in 2024 in November were accompanied by social media campaigns featuring dedicated digital assets such as videos, infographics and animations to further drive social media engagement and expand reach. A similar approach was employed during other key events such as COP30.

In addition, IRENA's newsletter subscribers reached 144230 by 15 November 2025, representing a 3.6% increase since the beginning of the year. Countries with the most subscribers included the Netherlands, USA and Ireland.

IRENA Insights,[68] the short, focused webinars showcasing key insights from teams across the Agency, have long established themselves as vital tools for sharing expertise and fostering dialogue on the energy transition. This year's first webinar took place on 4 February and discussed key findings from IRENA's 2024 **Sustainable aviation fuels in Southeast Asia: A regional perspective on bio-based solutions** report that evaluated Southeast Asia's sustainable aviation fuels production potential using sustainable feedstock across various pathways**.** The webinar on 11 February focused on the findings from the latest edition of IRENA's report series **Renewable Energy and Jobs – Annual Review 2024**. On 6 March, IRENA organised a webinar on Green **Hydrogen: the importance of developing a robust quality infrastructure ecosystem**, to share the key findings and recommendations on building and strengthening QI systems from the report jointly prepared by IRENA and the German Metrology Institute on A Quality Infrastructure Roadmap for Green Hydrogen. The event on 11 March focused on **Green Hydrogen: the importance of developing a robust quality infrastructure ecosystem,** presenting the findings of the report on A Quality Infrastructure Roadmap for Green Hydrogen. The webinar held on 25 March highlighted findings from IRENA's report titled **A just energy transition for communities: Large-scale wind and solar projects in Sub-Saharan Africa** that explored the potential inherent community benefits from some large-scale wind and solar projects in Sub-Saharan Africa. On 22 July, the webinar on **Empowering Lives and Livelihoods: Decentralised renewable energy solutions for agriculture in Nepal** presented an overview of the initiative, and dived into key findings from IRENA's assessment report, presenting solutions specific to four agri-food value chains. The webinar **Reaching Zero with Renewables: Aluminium Industry**, held on 29 July, explored challenges and opportunities in reducing emissions from aluminium production, particularly highlighting the role that renewable energy can play in facilitating the industry's transition. On 2 September, IRENA Insights held a webinar to present the key findings of the **Renewable Power Generation Costs in 2024: Key Findings and Insights** report, providing an opportunity to deepen understanding of the economics shaping the global shift to renewables, as well as the opportunities and challenges. The webinar on **Participatory Processes for Energy Planning: A Practical Toolkit** showcased the insights and practical implementation guidance contained in the namesake report. The webinar on **Enabling Trade in Green Hydrogen and Derivative Commodities: A Cross-Mediterranean Perspective** highlighted the enabling conditions required for developing international green hydrogen markets, emphasising that cross-Mediterranean trade is essential for decarbonisation. The **Decarbonising hard-to-abate industrial sectors with renewables: Enablers and recommendations** webinar presented the Innovations for the Renewable Energy Transition (IFRET) digital toolkit, launched by IRENA with the European Commission's support, to provide guidance, pathways, and recommendations for decarbonising challenging hard-to-abate industrial sectors. The webinar on **Analysis of the Potential for Green Hydrogen and Related Commodities Trade** explored the techno-economic potential for trading green hydrogen and its associated commodities, leveraging the insights from the report of the same name.

IRENA's Policy Talks[69] are a series of webinars that provide a forum to exchange experiences and best practices in policy design and implementation. On 14 May, the first Policy Talk in 2025 was held, titled

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

Green hydrogen for industrial decarbonisation of Central Asia and the South Caucasus. The event presented findings from the newly launched IRENA report and included a discussion with regional experts to share challenges, opportunities and learnings. Drawing from IRENA's report on **Policies for advancing the renewables-based electrification of road transport**, the first webinar in 2025 was held on 17 June to present policies and examples addressing barriers and promoting the renewables-based electrification of road transport in different contexts.

Effective functioning of the organisation

To deliver on its mandate, the Agency 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 the Secretariat'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. The Agency continues to innovate in its processes and practices to remain responsive to the dynamic nature of its programmatic work.

Information and Communications 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, *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 maintaining and enhancing the Executive dashboard, ERP and other online tools for collaboration and knowledge sharing. Some initiatives related to Artificial Intelligence and a framework for its use in the Agency are ongoing.
- Enabler of developing 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 are implemented.
- Pillar of organisational resilience and compliance through implementing the cybersecurity management framework and the business resilience plan. For example, several enhancements to the network performance and security have been implemented.

Procurement

The Agency has continued to implement its administration of cost-effective procurement processes 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, UNGM and disseminated to the vendors registered with IRENA's vendors' database.

From 1 January until 15 November 2025, more than 345 procurement contracts and agreements for goods and services were awarded with a total value of USD 4.2 M. Furthermore, 54 newly registered vendors were added during the same period. The Procurement Section vendor database has also increased in recent years to reach more than 1092 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 15 November 2025, the Agency facilitated the travel of staff and Members' representatives, receiving 709 travel requests and 271 services for 22 workshops. The section continues to provide facility management services for the IRENA Headquarters and staff. This is a crucial function that contributes to a healthy and productive work environment while delivering ongoing, day-to-day services to staff. As part of these ongoing services, General Services continues exploring further enhancement measures for Health and Safety to provide a better work environment for staff.

Institutional Indicators

The new Monitoring and Evaluation (M&E) Framework includes Institutional Indicators on key performance indicators that are critical for showing the impact of the Agency's work at the institutional level. These include Human Resources, Ethics training, Staff Welfare, Financial Resources and Governing Body Meetings. The analysis below presents data from the M&E framework as well as analysis from the work undertaken since the beginning of the year.

Human Resources

During the biennium, the work of Human Resources spanned administrative, operational, and strategic activities. Significant effort was 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 continues 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 2025, 21 vacancies (core and project, including Interns and Associate Professionals) have been announced. Out of 93 core posts, 79 are filled or under recruitment (68 filled and eleven under active recruitment), and 14 are vacant. The 68 staff members in core posts are from 42 nationalities, with 50% being women and 50% being men. There are also 113 project posts that are currently filled or under recruitment (107 filled and six under active recruitment (Table 3). The combined core and project posts comprise a total of 175 staff members (Figure 18), representing 76 nationalities, with 47% female and 53% male staff. Tables 4 and 5 show the loaned personnel as well as the seconded personnel, funded by voluntary contributions.

Figure 18: Staff Status as of 15 November 2025

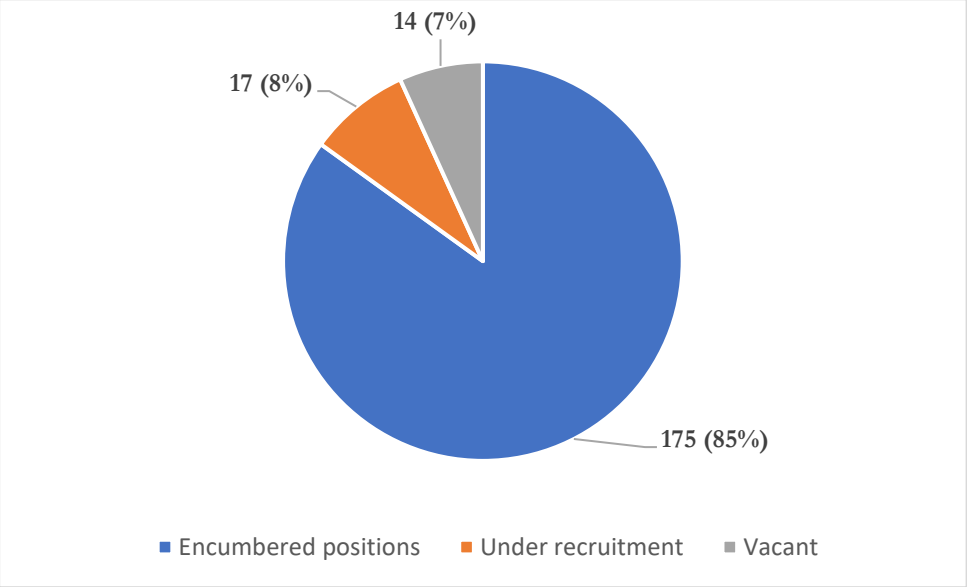


Table 2: Filled/under recruitment: Core and Project posts by level as of 15 November 2025

Level	Filled or Under Recruitment	Total
ASG	1	1
D-2	1	1
D-1	6	6
P-5	21	23
P-3/4	67	76
P-2/1	58	58
Sub-total Professional and above	154	165
General Services	38	41
Total	192	206

Table 3: Loaned personnel as of 15 November 2025

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
CEP	Loaned Officer – Partnerships (SNAM)	Italy
PFS	Loaned Officer – ENI	Italy

Table 4: Seconded Officers (Voluntary Contributions) as of 15 November 2025

Division	Title	Seconded from
CEP	Programme Officer - Geothermal	Iceland
CEP	Programme Officer	Republic of Korea
KPFC	(JPO) Associate Programme Officer	Germany
PFS	(JPO) Associate Programme Officer	Germany
CEP	(JPO) Associate Programme Officer	Germany
IITC	Programme Officer, Technology & Innovation	Japan

In the new M&E system, the Institutional Indicator on Human Resources includes two sub-indicators. One is on workforce gender parity, which reports on the gender ratio at IRENA disaggregated (a) institution-wide, and (b) at senior management level (ASG, D2, D1, P5 and P4). The second sub-indicator is the geographic distribution of IRENA's staff by country for all three duty stations.

In terms of workforce gender parity institution-wide, Table 6 shows that IRENA employed 84 female and 95 male staff members in 2022. In 2023, the numbers remained relatively stable, with 85 female and 101 male staff members, amounting to 186 IRENA staff. The trend continued in 2024, with 81 female and 92 male staff members, totalling 179 staff members. In 2025, the number dropped to 175, split to 82 female and 93 male staff members.

In senior management, gender parity is evident in the highest posts (ASG, D2, D1), but there were more male than female staff members holding P5 and P4 posts in both biennia. In 2025, there has been a slight increase in male staff members compared to female among the D1 to P4 levels.

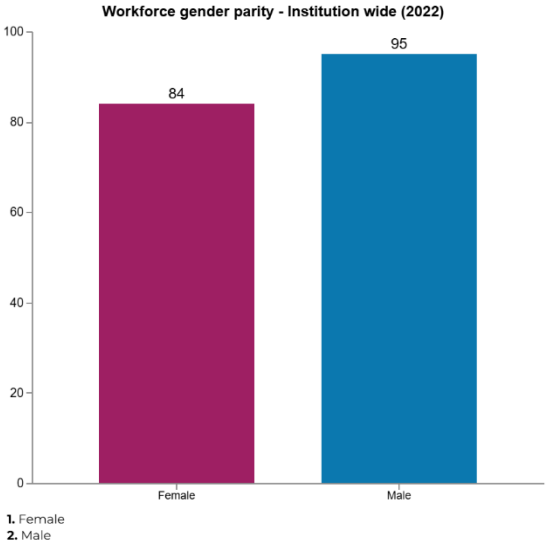
Table 5: Workforce gender parity, 2022-2025

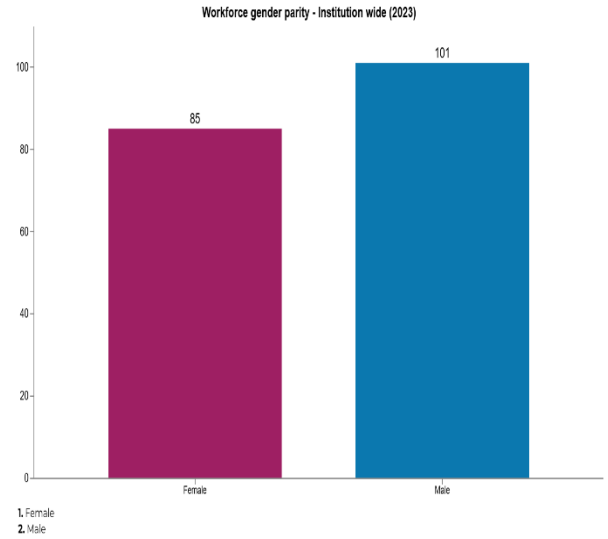
Workforce gender parity - Institution wide (2022-2023)

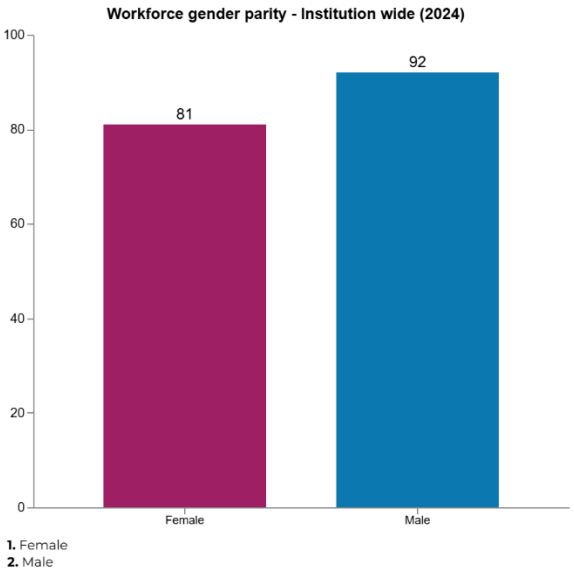
Baseline biennium	Female	Male	Total
2022	84	95	179
2023	85	101	186

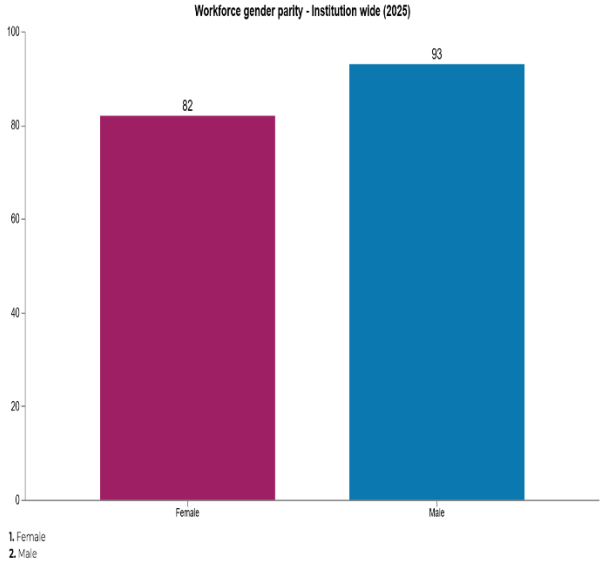
Workforce gender parity - Institution wide (2024-2025)

Target biennium	Female	Male	Total
2024	81	92	173
2025	82	93	175



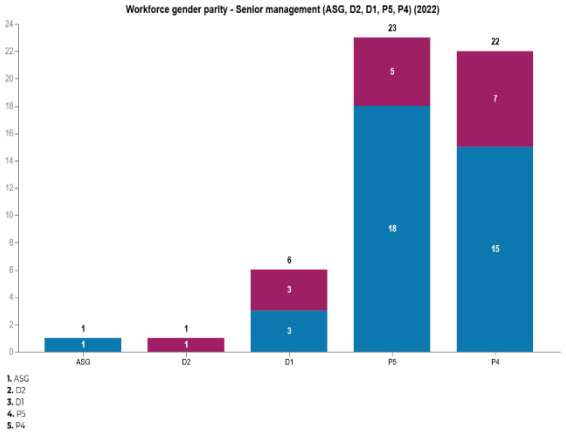


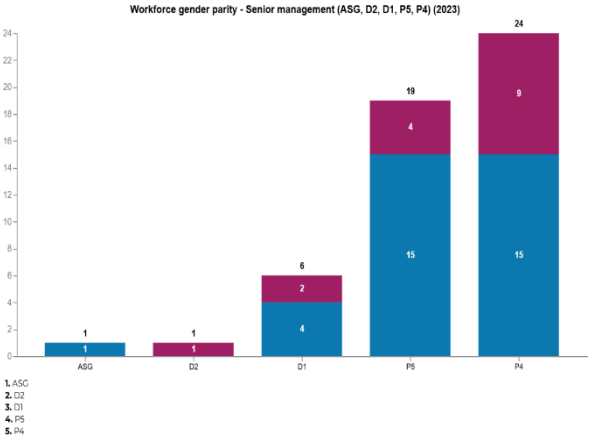




Workforce gender parity - Senior management (ASG, D2, D1, P5, P4) (2022-2023)

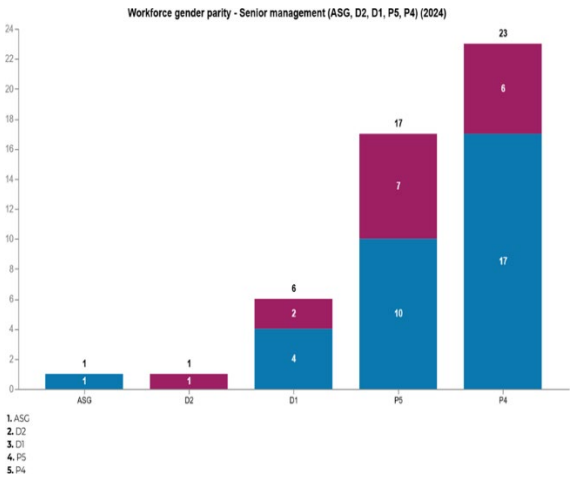
Year	Gender	ASG	D2	D1	P5	P4	Total
2022	Female		1	3	5	7	16
2022	Male	1		3	18	15	37
2023	Female		1	2	4	9	16
2023	Male	1		4	15	15	35

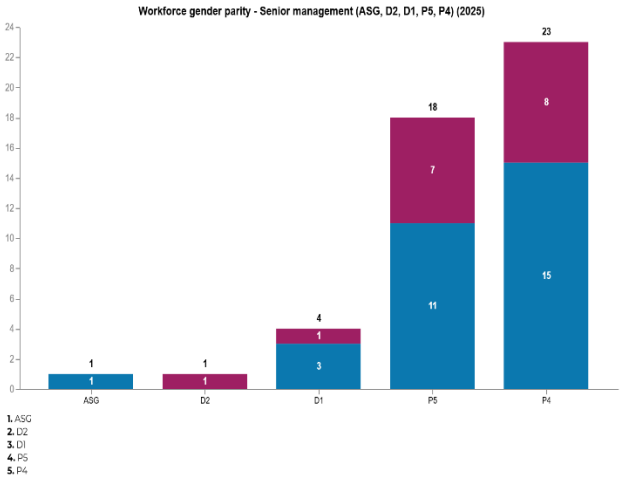




Workforce gender parity - Senior management (ASG, D2, D1, P5, P4) (2024-2025)

Year	Gender	ASG	D2	D1	P5	P4	Total
2024	Female		1	2	7	6	16
2024	Male	1		4	10	17	32
2025	Female		1	1	7	8	17
2025	Male	1		3	11	15	30





Regarding the geographic distribution of staff, Table 7 shows minor year-over-year fluctuations since 2022. In 2022, IRENA employed 179 people, with the majority from Europe (50), followed by Asia (49), Africa (30), and Latin America and the Caribbean (17). By 2023, the total workforce increased to 189 staff members, with a slight shift in regional representation. Asia became the largest source region with 54 staff members, followed closely by Europe (50). The numbers for Africa (34) and Latin America and the Caribbean (17) also increased slightly or remained stable. During the 2022-23 biennium, the predominant countries of origin were: Africa: Kenya, Egypt, Tunisia, and Sudan; Asia: India, Pakistan, and China; Europe: Germany and Italy; Latin America and the Caribbean: Brazil and Colombia.

In 2024, staff numbers dropped to 176, with the majority originating from Europe (53), followed by Asia (43) and Africa (35). As of 15 November 2025, the staff's geographical distribution has remained relatively stable. The list of major contributing countries is generally consistent with the 2022-2023 biennium, with the notable addition of South Africa to the predominant countries of origin.

Table 6: Geographic staff distribution

Workforce by region (2022-2023)

Region	2022	2023
Africa	30	34
Asia	49	54
Eurasia	5	5
Europe	50	50
Latin America and the Caribbean	17	17
Middle East	13	14
North America	11	11
Oceania	4	4
Total	**179**	**189**

Workforce by region (2024-2025)

Region	2024	2025
Africa	35	38
Asia	43	45
Eurasia	5	4
Europe	53	53
Latin America and the Caribbean	16	14
Middle East	14	14
North America	7	6
Oceania	3	1
Total	**176**	**175**

Workforce by region (2022-2023)

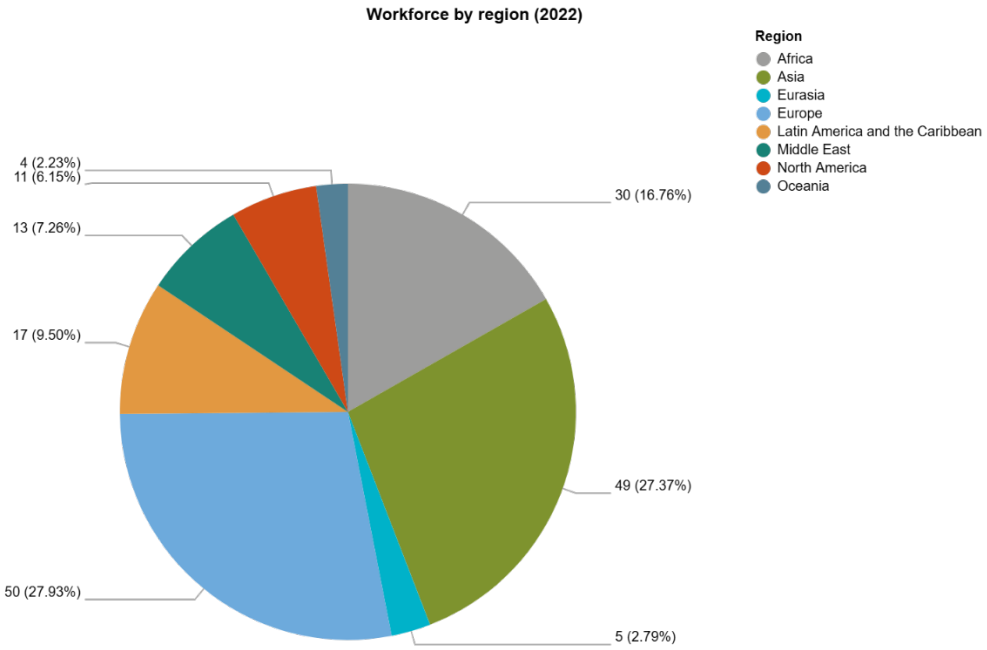
Region	2022	2023
Africa		
Benin	1	1
Cameroon	1	1
Cote d'Ivoire	1	
Djibouti	1	2
Egypt	3	3
Eswatini		1
Gabon		1
Gambia	1	1
Ghana	1	1
Kenya	6	4
Mali		1
Mauritius	1	1
Nigeria	2	2
Rwanda		1
Senegal	1	1
South Africa	1	3
Sudan	4	4
Tunisia	3	3
Uganda	1	1
United Republic of Tanzania	1	1
Zimbabwe	1	1
Asia		
Afghanistan	1	1
Bangladesh		1
China	6	6
India	15	14
Indonesia	2	3
Japan	3	3
Kyrgyzstan	1	1
Malaysia	2	3
Maldives	1	1
Nepal	2	2
Pakistan	7	9
Philippines	3	4
Republic of Korea	3	2
Sri Lanka	1	2
Tajikistan	2	2
Eurasia		
Russian Federation	1	1
Türkiye	4	4
Europe		
Austria	2	1
Belgium	1	2
Bulgaria	1	2
Croatia		1
France	4	4
Germany	8	8

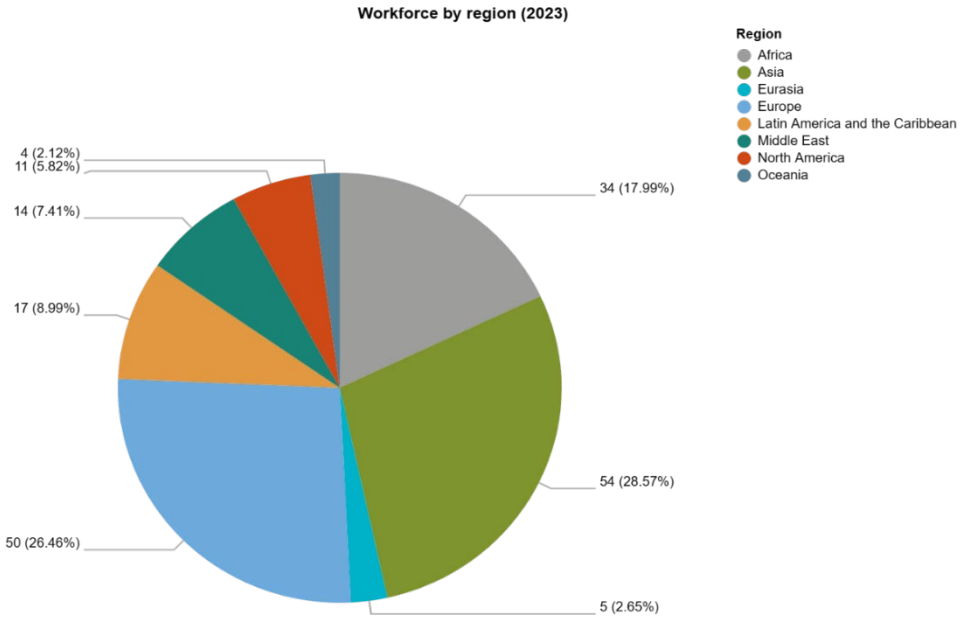
Hungary	1	1
Ireland	2	2
Italy	6	5
Lithuania	2	2
Netherlands	2	2
Poland	1	1
Portugal	1	1
Romania	2	2
Serbia	2	2
Slovakia	1	
Slovenia	1	1
Spain	3	3
Ukraine	1	1
United Kingdom and Northern Ireland	7	8
Latin America and the Caribbean		
Argentina	1	1
Brazil	3	5
Colombia	2	2
Costa Rica	2	1
El Salvador	1	1
Guatemala	2	1
Jamaica	1	1
Panama	1	1
Peru	1	1
Trinidad and Tobago	3	3
Middle East		
Iraq	1	1
Jordan	5	5
Lebanon	4	4
State of Palestine *	1	2
Yemen	2	2
North America		
Canada	3	4
Mexico	3	3
United States of America	5	4
Oceania		
Australia	2	1
Fiji	1	1
New Zealand	1	2
Total	**179**	**189**

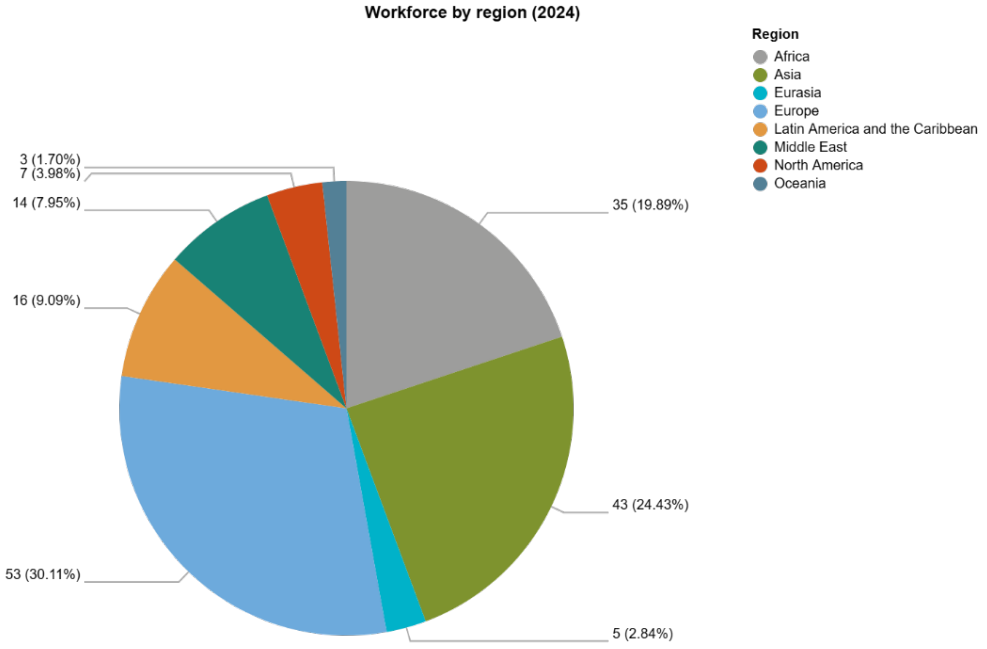
Workforce by region (2024-2025)

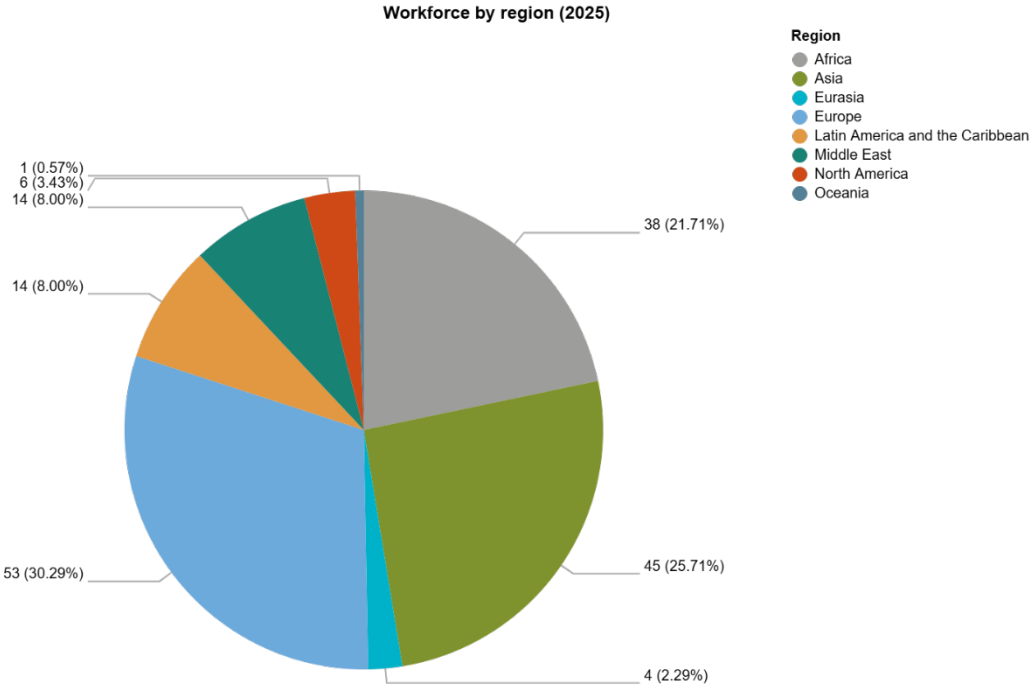
Region	2024	2025
Africa		
Benin	1	1
Djibouti	1	1
Egypt	3	3
Eswatini	1	1
Gabon	1	1
Gambia	1	1
Ghana	1	1
Kenya	4	4
Mali	1	1
Mauritius	1	1
Niger	1	1
Nigeria	2	2
Rwanda	1	2
Senegal	1	1
South Africa	3	4
Sudan	4	5
Togo	1	1
Tunisia	3	3
Uganda	1	2
United Republic of Tanzania	1	
Zimbabwe	2	2
Asia		
Afghanistan	1	1
Bangladesh	1	1
China	3	3
India	14	15
Indonesia	1	1
Japan	2	2
Kyrgyzstan	1	1
Malaysia	3	2
Nepal	2	3
Pakistan	7	7
Philippines	4	4
Republic of Korea	1	1
Sri Lanka	1	1
Tajikistan	2	2
Uzbekistan		1
Eurasia		
Russian Federation	1	2
Türkiye	4	2
Europe		
Austria	1	1
Belgium	2	2
Bosnia and Herzegovina		1
Bulgaria	2	2
Croatia	1	1
France	3	4
Germany	9	10
Greece	1	1
Iceland	1	1
Ireland	2	2
Italy	5	5

Lithuania	2	2
Netherlands	2	2
Poland	1	1
Portugal	1	1
Romania	3	3
Serbia	2	2
Slovenia	1	1
Spain	5	2
Sweden	1	1
United Kingdom and Northern Ireland	8	8
Latin America and the Caribbean		
Argentina	1	1
Brazil	4	4
Colombia	3	2
Costa Rica	1	1
El Salvador	1	1
Guatemala	1	1
Jamaica	1	1
Panama	1	1
Peru	1	
Trinidad and Tobago	2	2
Middle East		
Iraq	1	1
Jordan	6	6
Lebanon	3	3
State of Palestine *	2	2
Yemen	2	2
North America		
Canada	4	3
Mexico	2	1
United States of America	1	2
Oceania		
Fiji	1	
New Zealand	2	1
Total	**176**	**175**


Workforce by region (2022)
Region
Africa
Asia
Eurasia
Europe
Latin America and the Caribbean
Middle East
North America
Oceania
4 (2.23%)
11 (6.15%)
13 (7.26%)
17 (9.50%)
50 (27.93%)
5 (2.79%)
49 (27.37%)
30 (16.76%)


Workforce by region (2023)
Region
Africa
Asia
Eurasia
Europe
Latin America and the Caribbean
Middle East
North America
Oceania
4 (2.12%)
11 (5.82%)
14 (7.41%)
17 (8.99%)
50 (26.46%)
5 (2.65%)
54 (28.57%)
34 (17.99%)


Workforce by region (2024)
Region
Africa
Asia
Eurasia
Europe
Latin America and the Caribbean
Middle East
North America
Oceania
3 (1.70%)
7 (3.98%)
14 (7.95%)
16 (9.09%)
53 (30.11%)
5 (2.84%)
43 (24.43%)
35 (19.89%)


Workforce by region (2025)
Region
Africa
Asia
Eurasia
Europe
Latin America and the Caribbean
Middle East
North America
Oceania
1 (0.57%)
6 (3.43%)
14 (8.00%)
14 (8.00%)
53 (30.29%)
4 (2.29%)
45 (25.71%)
38 (21.71%)

Ethics training completion

This Institutional indicator shows the completion rate of the mandatory Ethics training. In 2023 and 2024, all incoming staff members received ethical training. As of 15 November 2025, Ethics training had been completed for 100% of newly recruited staff members (Table 8).

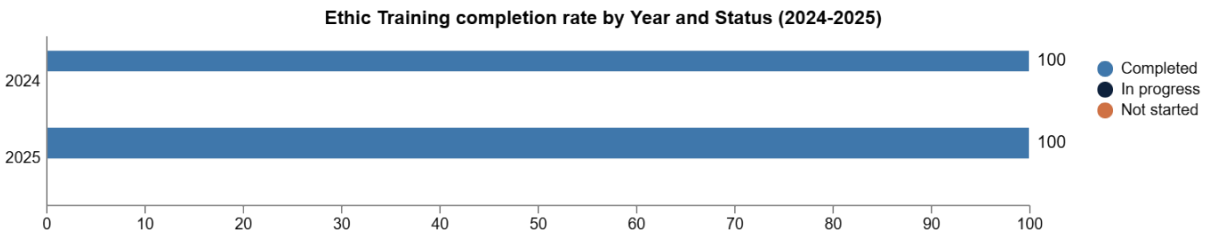
Table 7: Institutional Indicator – Ethics training completion, 2023-2025

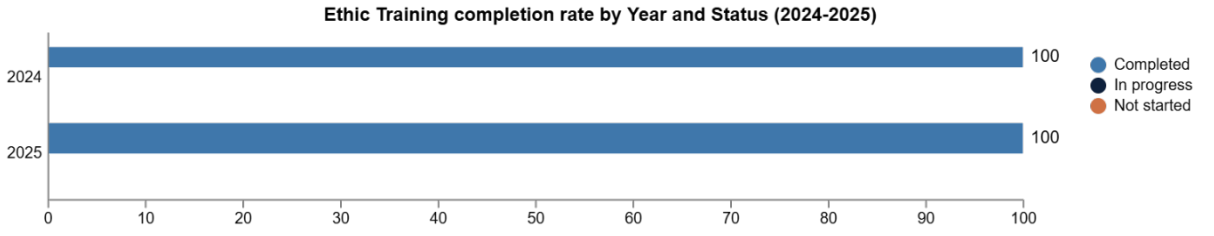
Completion rate of mandatory Ethics training (2022-2023)

Baseline biennium	Completed %	In progress %	Not started %
2023	100		

Completion rate of mandatory Ethics training (2024-2025)

Target biennium	Completed %	In progress %	Not started %
2024	100		
2025	100		





Staff welfare

The Institutional Indicator on Staff Welfare requires periodic surveys, which will be carried out by the Agency.

Financial resources

IRENA's 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 the preparation of IRENA's budget, reporting processes, and administration of core and voluntary contributions through budgeting and control services, as well as the provision of forecast information and preparation of financial reports for management, governing bodies, and donors.

The Agency's 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.

Biennial budget overview

Table 9 presents an overview of IRENA's assessed contributions (core budget) and core non-assessed contributions for the current biennium. Tables 10 to 16 outline the budget utilisation by programmatic division, including the Office of the Director General and the Administration and Management Services unit, for the biennium as well.

Table 8: 2024-2025 Biennium Budget utilisation by funding source (thousand USD)

	2024-2025 Biennium Budget	Utilisation as of 15 Nov 2025	
		Commitment and Expenses	Proportion of 2024-2025 Biennium Budget
Assessed Contributions (Core Budget)	**44,778**	**42,324**	**95%**
Core Non-Assessed UAE Contribution:			
UAE Support	5,000	4,499	90%
Governing Body Meetings	3,200	3,164	99%
IT Infrastructure Support	920	858	93%
Subtotal	**9,120**	**8,520**	**93%**
Core Non-Assessed Germany Contribution:			
Innovation and Technology Centre	10,890	10,414	96%
Subtotal	**10,890**	**10,414**	**96%**
Total Core Non-Assessed	**20,010**	**18,935**	**95%**
Grand Total	**64,788**	**61,259**	**95%**

*In addition to Core Non-assessed contributions, UAE and Germany provide annual in-kind contributions of approximately USD 5.4 million and USD 1.9 million respectively.

Table 9: 2024-2025 Biennium Budget Utilisation by division (thousand USD)

Division	2024-2025 Biennium Budget	Utilisation as of 15 Nov 2025	
		Commitment and Expenses	Proportion of 2024-2025 Biennium Budget
Country Engagement and Partnerships	8,426	7,862	93%
IRENA Innovation and Technology Centre	10,890	10,414	96%
Knowledge, Policy and Finance Centre	10,500	10,078	96%
Project Facilitation and Support	3,421	3,242	95%
Office of the Director-General	18,288	17,558	96%
Administration and Management Services	13,263	12,104	91%
Grand Total	**64,788**	**61,259**	**95%**

Table 10: 2024-2025 Biennium Budget Utilisation, Country Engagement and Partnerships Division (thousand USD)

Object of expenditure	2024-2025 Biennium Budget	Utilisation as of 15 Nov 2025	
		Commitment and Expenses	Proportion of 2024-2025 Biennium Budget
Staff costs*	**5,014**	**4,922**	**98%**
Total Non-Staff Costs	**3,412**	**2,940**	**86%**
Project & Seconded Personnel, Interns and Consultants**	2,235	2,166	97%
Contractual Services	606	359	59%
General Operating Expenditures	179	127	71%
Travel of Staff	61	50	82%
Programme and Expert Meetings	317	239	75%
Furniture and Equipment	14	-	0%
Grand Total	**8,426**	**7,862**	**93%**

*Includes re-allocation of USD 191,250 from "Programme and Expert Meetings"
**Includes re-allocation of USD 48,106 from "Programme and Expert Meetings"

Table 11: 2024-2025 Biennium Budget Utilisation, IRENA Innovation and Technology Centre (thousand USD)

Object of expenditure	2024-2025 Biennium Budget	Utilisation as of 15 Nov 2025	
		Commitment and Expenses	Proportion of 2024-2025 Biennium Budget
Staff costs	**4,668**	**4,648**	**100%**
Total Non-Staff Costs	**6,222**	**5,767**	**93%**
Project & Seconded Personnel, Interns and Consultants	4,166	3,995	96%
Contractual Services*	1,123	1,066	95%
General Operating Expenditures	333	259	78%
Travel of Staff	258	207	80%
Programme and Expert Meetings**	242	238	98%
Furniture and Equipment	100	3	3%
Grand Total	**10,890**	**10,414**	**96%**

*Includes re-allocation of USD 60,000 from "Project & Seconded Personnel, Interns and Consultants"
**Includes re-allocation of USD 15,000 from "Contractual Services"

Table 12: 2024-2025 Biennium Budget Utilisation, Knowledge, Policy and Finance Centre (thousand USD)

Object of expenditure	2024-2025 Biennium Budget	Utilisation as of 15 Nov 2025	
		Commitment and Expenses	Proportion of 2024-2025 Biennium Budget
Staff costs	**5,285**	**5,249**	**99%**
Total Non-Staff Costs	**5,214**	**4,829**	**93%**
Project & Seconded Personnel, Interns and Consultants	3,948	3,842	97%
Contractual Services	890	706	79%
General Operating Expenditures	193	140	72%
Travel of Staff	80	66	83%
Programme and Expert Meetings	88	73	83%
Furniture and Equipment	15	2	15%
Grand Total	**10,500**	**10,078**	**96%**

Table 13: 2024-2025 Biennium Budget Utilisation, Project Facilitation and Support Division (thousand USD)

Object of expenditure	2024-2025 Biennium Budget	Utilisation as of 15 Nov 2025	
		Commitment and Expenses	Proportion of 2024-2025 Biennium Budget
Staff costs	**2,497**	**2,437**	**98%**
Total Non-Staff Costs	**924**	**805**	**87%**
Project & Seconded Personnel, Interns and Consultants*	528	527	100%
Contractual Services	216	132	61%
General Operating Expenditures	72	51	71%
Travel of Staff	102	96	94%
Furniture and Equipment	6	-	0%
Grand Total	**3,421**	**3,242**	**95%**

*Includes re-allocation of USD 15,000 from "Staff costs"

Table 14: 2024-2025 Biennium Budget Utilisation, Office of the Director-General (thousand USD)

Object of expenditure	2024-2025 Biennium Budget	Utilisation as of 15 Nov 2025	
		Commitment and Expenses	Proportion of 2024-2025 Biennium Budget
Staff costs	**9,553**	**9,119**	**95%**
Total Non-Staff Costs	**8,735**	**8,440**	**97%**
Project & Seconded Personnel, Interns and Consultants	4,162	4,090	98%
Contractual Services*	3,086	3,002	97%
General Operating Expenditures	378	326	86%
Travel of Staff**	912	870	95%
Programme and Expert Meetings	188	147	78%
Furniture and Equipment***	9	4	45%
Grand Total	**18,288**	**17,558**	**96%**

*Includes re-allocation of USD 125,700 from "Project & Seconded Personnel, Interns and Consultants" and "Programme and Expert Meetings"
**Includes re-allocation of USD 341,726 from "Project & Seconded Personnel, Interns and Consultants"
***Includes re-allocation of USD 4,300 from "Contractual Services"

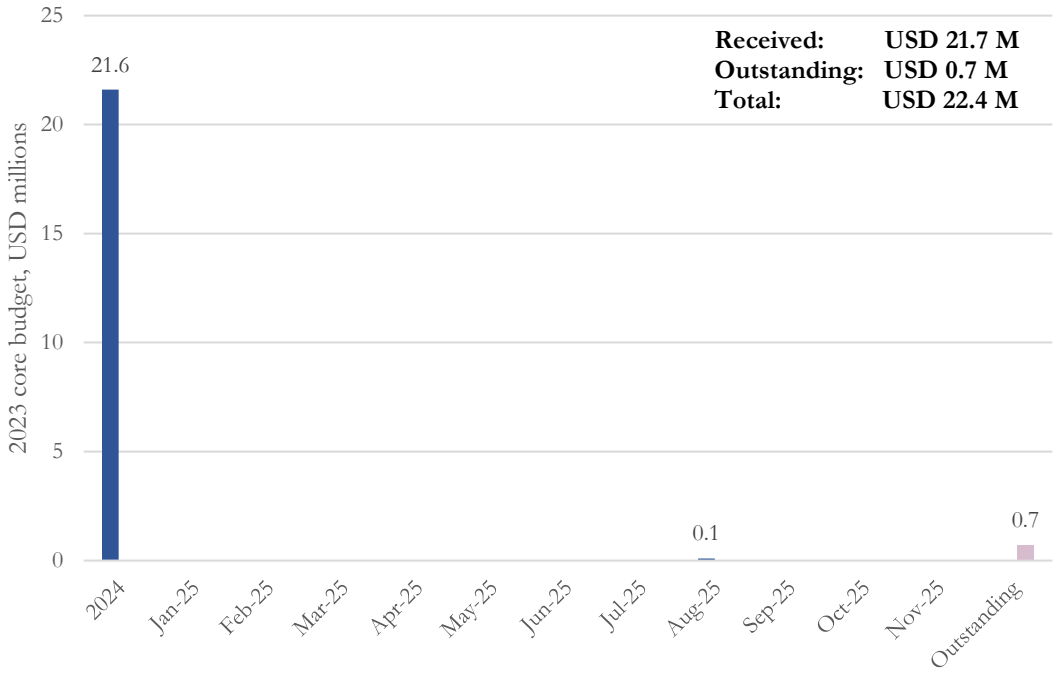
Table 15: 2024-2025 Biennium Budget Utilisation, Administration and Management Services (thousand USD)

Object of expenditure	2024-2025 Biennium Budget	Utilisation as of 15 Nov 2025	
		Commitment and Expenses	Proportion of 2024-2025 Biennium Budget
Staff costs	**8,824**	**8,824**	**100%**
Total Non-Staff Costs	**4,439**	**3,280**	**74%**
Project & Seconded Personnel, Interns and Consultants	1,869	1,577	84%
Contractual Services	550	322	58%
General Operating Expenditures	1,807	1,259	70%
Travel of Staff	13	4	31%
Furniture and Equipment*	200	119	59%
Grand Total	**13,263**	**12,104**	**91%**

*Includes re-allocation of USD 9,060 from "General Operating Expenditures" and USD 83,800 from "Contractual Services"

Figures 19 and 20 show the Received and outstanding assessed contributions for the 2024 and 2025 core budgets, respectively. Figures 21 and 22 show the Number of Members with received and outstanding contributions to the 2024 and 2025 core budget, respectively.

Figure 19: Received and outstanding assessed contributions for 2024 core budget (million USD, as of 15 November 2025)



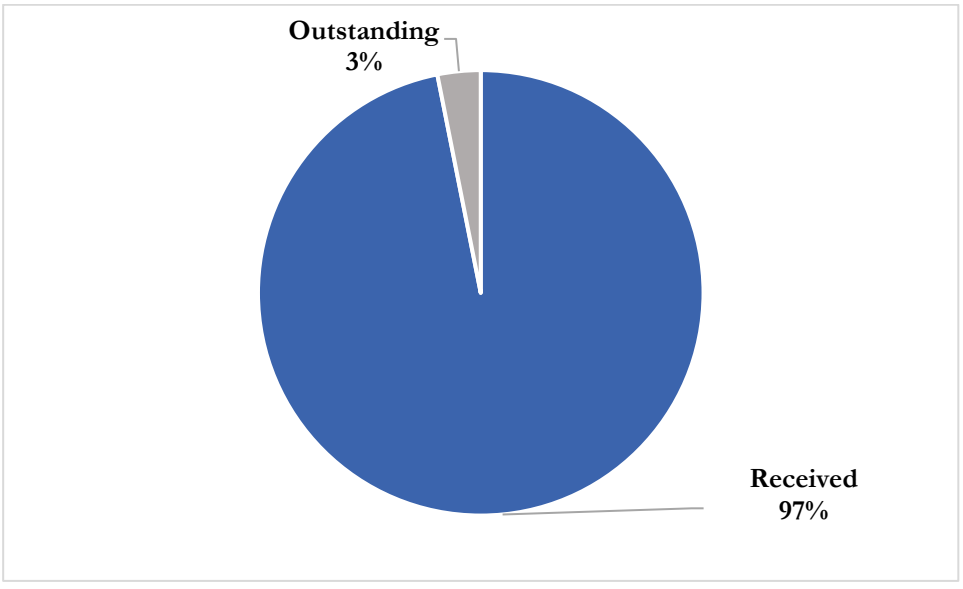
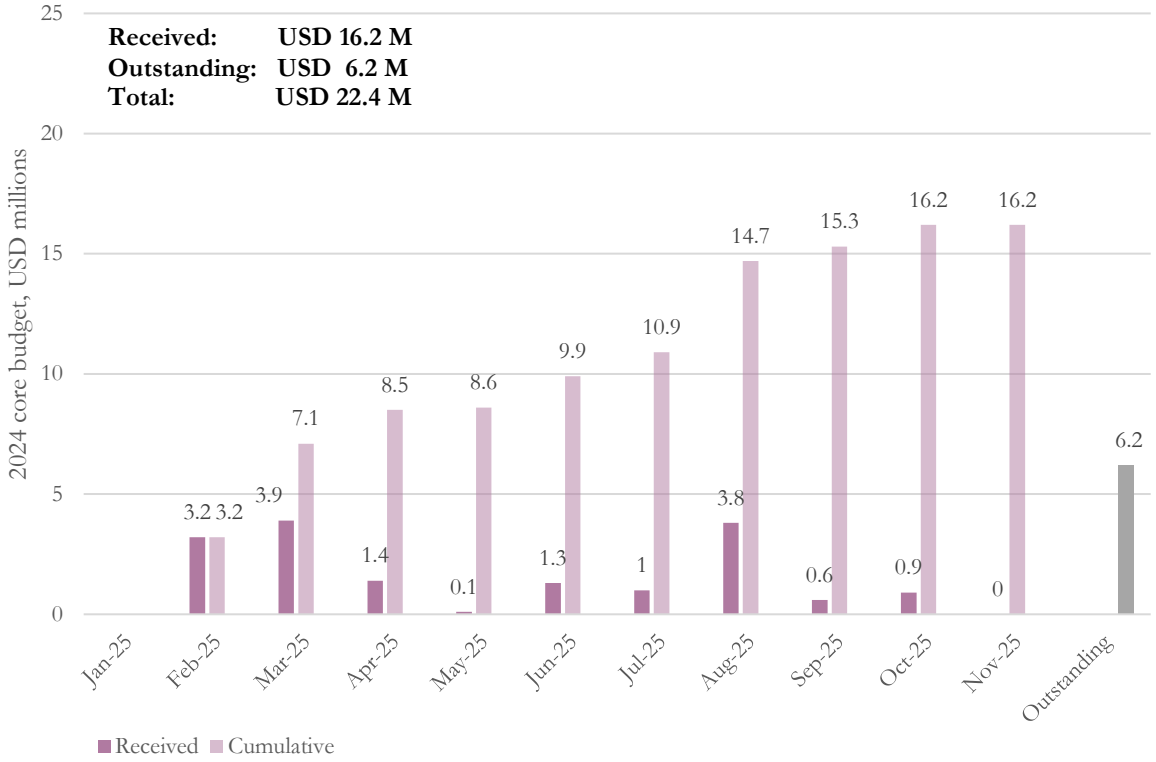


Figure 20: Received and outstanding assessed contributions for 2025 core budget (million USD, as of 15 November 2025)



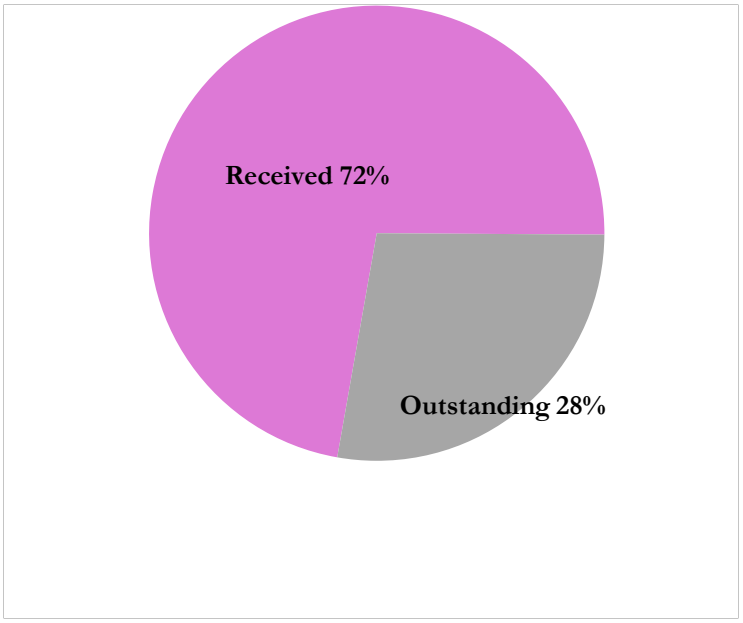


Figure 21: Number of Members with received and outstanding contributions to the 2024 core budget (15 November 2025)

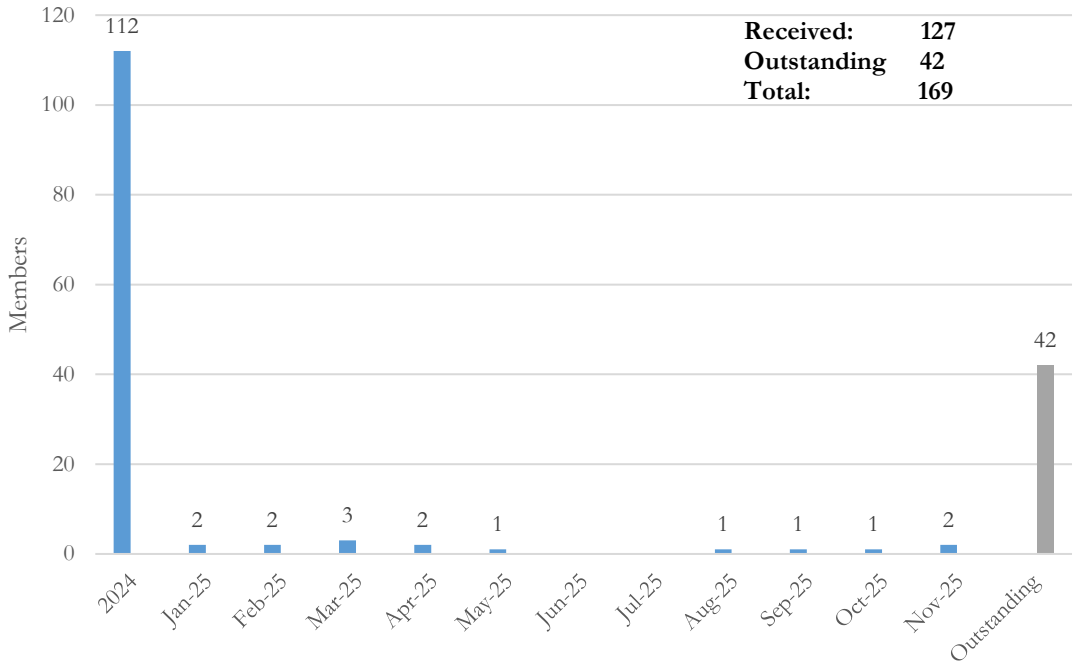
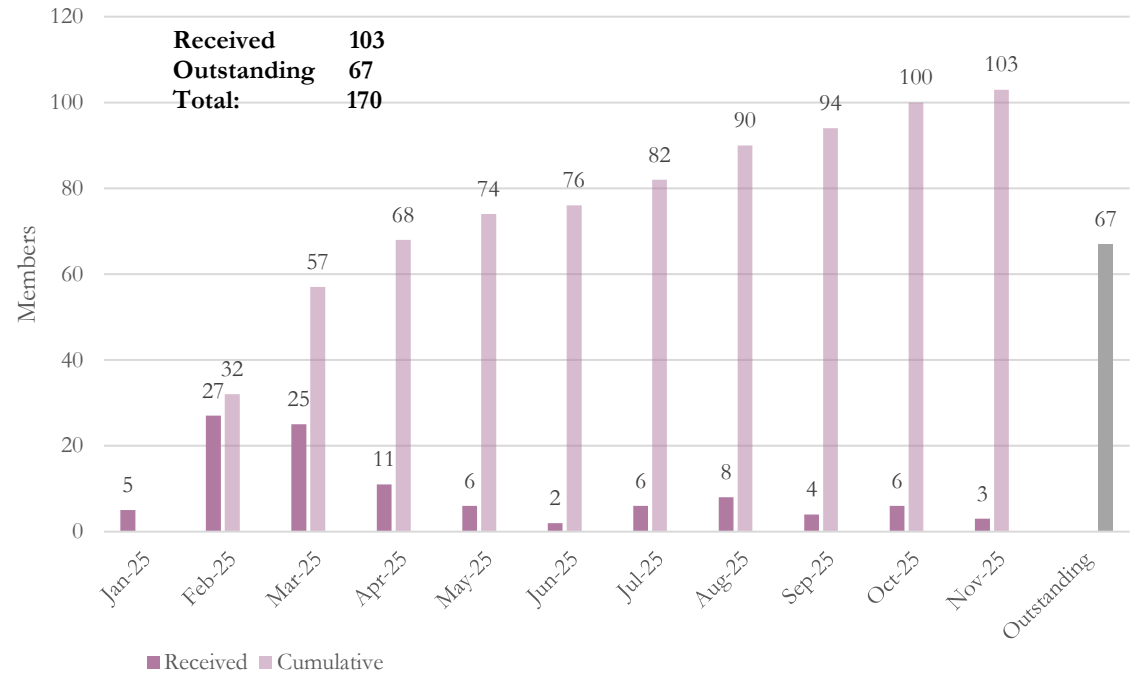


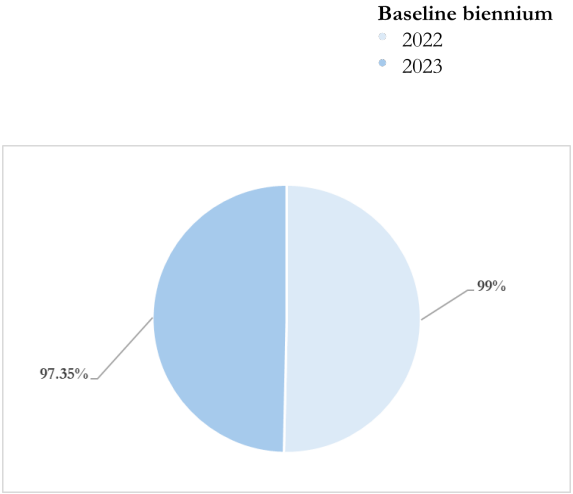
Figure 22: Number of Members with received and outstanding contributions to the 2025 core budget (15 November 2025)



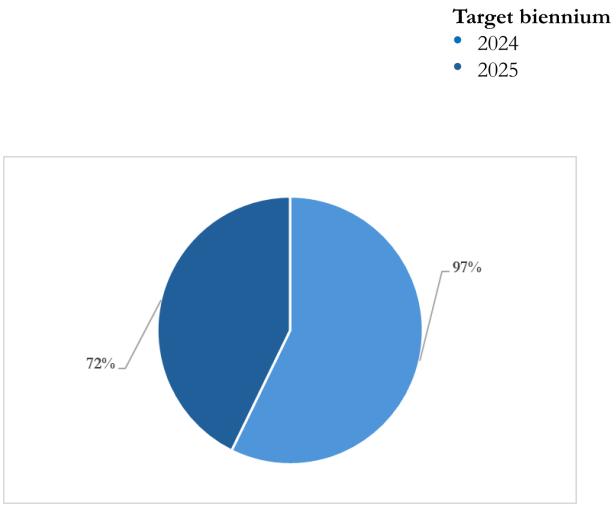
The Monitoring and Evaluation framework includes two institutional indicators under Financial Resources. Together, these indicators provide an overview of the stability and diversification of the funding available to implement the Medium-Term Strategy. The first indicator monitors core contributions, reflecting the proportion of assessed contributions received from Members against the annual Scale of Assessment. The second indicator captures voluntary contributions mobilised to support programmatic delivery under the Medium-Term Strategy. In 2022, the ratio of payments realised by Members according to the annual Scale of Assessment was 98.64% and in 2023, it reached 97.35% (Table 17). In 2024, the ratio was close to the previous years, reaching 96.55%. However, as of 15 November, the ratio is merely 72.03%.

Table 16: Core contributions

Baseline biennium	Ratio of payments realised by Members according to the Annual Scale of Assessment
2022	98.64%
2023	97.35%



Target biennium	Ratio of payments realised by Members according to the Annual Scale of Assessment
2024	96.55%
2025	72.03%



Voluntary Contributions

Table 18 shows the Core non-assessed contributions, voluntary contributions and the Fund for Developing Countries representatives from 1 January to 15 November.

Table 17: Core Non-Assessed Contributions

Core Non-Assessed Contributions

as of 15 November 2025, in USD

Budgeted Voluntary Contributions

	2024-2025	
	Committed	**Received**
Germany		
IRENA Innovation and Technology Centre	**10,890,000**	**10,890,000**
United Arab Emirates (UAE)		
UAE Support	5,000,000	5,000,000
Governing Body Meetings	3,200,000	3,200,000
IT Infrastructure Support	920,000	920,000
Subtotal UAE Contributions	**9,120,000**	**9,120,000**

Total Budgeted Voluntary Contributions	**20,010,000**	**20,010,000**

Other Voluntary Contributions

	2024-2025	
Donor	**Committed**	**Received**
Canada	519,776	212,103
China*	540,000	-
European Union - Mediterranean RE and Clean Tech Plan	223,982	223,982
Germany	2,720,475	2,720,475
Iceland	922,404	922,404
Italy	106,045	106,045
Japan	2,557,942	2,557,942
Republic of Korea	1,103,497	613,581
United Arab Emirates	4,021,391	4,021,391
United Kingdom of Great Britain and Northern Ireland	113,181	113,181
Total	**12,828,693**	**11,491,104**

*The commitment amount reflects the revisions made to the budget as agreed with the donor.

Other Voluntary Contributions - Non-Members

	2024-2025	
Donor	**Committed**	**Received**
Islamic Development Bank	25,000	25,000
United Nations Office for Project Services (UNOPS)	227,605	176,822
OPEC Fund for International Development	400,000	400,000
World Bank	163,500	109,000
Total	**816,105**	**710,822**

Multi-Year Voluntary Contributions

Donor	**Multi-Year Commitments**	**Received prior to 2024**	**Received during 2024-2025**
Belgium (Government of the Walloon Region)*	4,368,744	2,104,331	2,264,413
Denmark	21,936,645	5,224,278	6,071,524
European Union	9,239,260	3,294,752	350,467
Germany	393,320	-	106,822
Kingdom of the Netherlands	800,320	400,160	200,080
Norway	2,709,538	-	1,900,125
United Arab Emirates	300,000	-	300,000
Total	**39,747,827**	**11,023,521**	**11,193,431**

* Commitment amount revised in line with donor contributions received.

Multi-Year Voluntary Contributions - Non-Members

Donor	**Multi-Year Commitments**	**Received prior to 2024**	**Received during 2024-2025**
China Renewable Energy Engineering Institute	299,787	-	-
Deutche Gessellschaft fur Internationale Zussamenarbeit GmbH	795,085	231,982	499,526
Global Energy Alliance for People and Planet*	2,544,130	1,204,666	-
Physikalisch-Technische Bundesanstalt	552,049	280,899	271,150
Open Society Foundations	2,000,000	-	-
United Nations Environment Programme	542,192	-	406,644

United Nations Development Programme**	6,265,000	1,984,714	-
Total	**12,698,456**	**3,702,261**	**1,177,319**

*Following delays in disbursement and evolving donor priorities, the Grant Agreement with GEAPP was partially terminated for undisbursed funds and revised in mutual consultation. The term was extended to 31 August 2026, with the remaining USD 0.42 m redirected to high-impact initiatives, including COP30, productive uses of energy in Africa, and the Universal Access Coalition (UAC) for LAC.

**The MoU between IRENA and UNDP was established to facilitate joint activities aligned with shared programmatic priorities. As UNDP's funding for this partnership did not materialise, no activities were implemented under this agreement which expired on 18 June 2025.

Fund for Developing Countries Representatives

	2024-2025	
Donor	**Committed**	**Received**
Austria	61,993	61,993
Germany	155,777	63,291
United Arab Emirates (UAE)	686,000	686,000
Total	**903,770**	**811,284**

Table 19 lists the current IRENA donors providing voluntary contributions by entity and area of work as of 15 November 2025 for the current biennium.

Table 18: IRENA Donors (2024-2025), as of 15 November 2025

	**Austria**	Fund for Developing Countries (FDCR)
	**Government of the Walloon Region, Belgium**	Deployment of renewable energy and decentralised renewable energy with a focus on Francophone Africa (2022-2024). Deployment of renewable energy and decentralised renewable energy with a focus on Francophone Africa (2025-2026)
	**Canada** **Ministry of Natural Resources**	Global Initiative for Transitioning Remote Communities to Renewable Energy - Phase II G7 Discussions and Digital Solutions Report
	**China** **China Renewable Energy Engineering Institute**	Environmental Impacts and Benefits of Renewable Energy
	**Denmark** **Ministry of Foreign Affairs**	2023-2027 support
	**European Commission** **DG ENER** **DG NEAR**	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. Conditions and obstacles for the development and integration of renewable energy sources in the Eastern Partner countries.

		Mediterranean Renewable Energy and Clean Tech plan.
	DG INTPA	Regional Energy Transition Outlooks in Africa, Latin America and the Caribbean.
	**Germany**	
	Federal Ministry for Economic Affairs and Climate Action	Support for Tripling Renewables, Green Hydrogen, and Renewable Energy Skills – among other projects
	Physikalisch-Technische Bundesanstalt (PTB)	Quality Infrastructure for Green Hydrogen
	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH	Senegal's Clean Energy Transition Accelerating the Energy Transition in Africa
	Federal Ministry for Economic Affairs and Energy (BMWE)	Tripling Renewables, LTES and Risk Mitigation Project Fund for Developing Countries (FDCR)
	**Iceland**	Iceland–IRENA Strategic Partnership on Geothermal Applications Technical Assistance Programme (TAP) – Geothermal Energy in ODA Countries
	**Italy**	Italy's G7 Presidency 2024 Italy–IRENA Educational Programme for Youth Climate Leaders
	**Japan**	
	Ministry of Agriculture, Forestry and Fisheries (MAFF)	Biomass Strategy for Sustainable Bioenergy Production
	Ministry of Economy, Trade and Industry (METI)	Energy Storage, Renewables in Africa, ASEAN Collaboration, and other initiatives Energy Data for WETO, Digitalisation, and Power Sector Transformation
	Ministry of Foreign Affairs (MOFA)	Support the Activities of APRA Member Countries

	**Kingdom of the Netherlands** **Ministry of Foreign Affairs**	Geopolitics of the Energy Transition
	**Norway** **Norwegian Agency for Development Cooperation (Norad)**	Support for IRENA's Work Programmes 2024–2027 and Medium-term Strategy 2023–2027
	**Republic of Korea** **Korea Energy Agency (KEA)**	Workshop on 'Tripling renewable power by 2030'
	**United Arab Emirates**	Alliance for Industry Decarbonisation (AFID) Support IRENA's presence at COP29 Technical and advisory services support to UAE UNFCCC submissions NDC 3.0 and BTR development and implementation support for IRENA member countries IRENA Warehouse Utilities on Net Zero Alliance (UNEZA) Fund for Developing Country Representatives (FDCR) Empowering Lives and Livelihoods: Renewables for Climate Action IRENA's Education and Skills Development Activities IRENA's Youth Engagement Strategy IRENA COP30 Pavilion and Tracking Report Launch
	**United Kingdom of Great Britain and Northern Ireland**	Breakthrough Agenda Support

	Global Energy Alliance for People and Planet	Advancing Renewable Energy Transitions in LMICs
	NDC Partnership **United Nations Office for Project Services (UNOPS)**	Create enabling mechanisms for the transmission of information with entities responsible for the NDC - Energy sector to the MRV System in Ecuador. Create enabling mechanisms for the transmission of information with entities responsible for promoting eco-citizenship and energy efficiency in Benin
	OPEC Fund for International Development	ETAF Project Facilitation and Support Facility support.
	Open Society Foundations	Empowering Lives and Livelihoods Accelerating renewable energy across key industrial sectors
	Rockefeller Brothers Fund	Acceleration Partnership for Renewables in Africa
	United Nations Environmental Programme	Unlocking short- and long-term solutions for green and resilient energy in Ukrainian cities
	World Bank	IRENA Contribution to 2023-2024 SDG 7 Tracking Report IRENA Contribution to 2025 SDG 7 Tracking Report

As directed by its Membership, IRENA continues to diversify its resource base by seeking extra-budgetary support. In 2024-25, IRENA received a total of USD 25,383,960 through voluntary contributions.

In the M&E framework, the voluntary contributions[70] are presented by Biennium and Multiyear agreements and are disaggregated by Member and Non-Member partners, highlighting both the scale and breadth of the Agency's external funding partnerships. It should be noted that Biennium Voluntary Contributions (VCs) refer to funding agreements that support activities within a single Work Programme and Budget cycle. They may extend briefly for implementation or closure but remain classified as Biennium VCs when their resources and results are tied to that cycle. Furthermore, Multiyear Voluntary Contributions (VCs) refer to funding agreements that span more than one Work Programme and Budget cycle, providing predictable support and enabling continuity across multiple biennia under the Medium-Term Strategy.

Table 19: Voluntary Contributions portfolio, 2022-2025

Indicator	Amount (USD)	Share of Total
Biennium VC - Member	20,689,519	32%
Multiyear VC - Member	36,178,021	56%
Biennium VC - Non-Member	1,256,605	2%
Multiyear VC - Non-Member	6,643,779	10%
Total VC Portfolio	**64,767,925**	**100%**

[70] All amounts reflect the total contractual value. Where agreements are in other currencies, figures are shown in USD using the applicable rate at the time of signature or receipt.

Biennium VC - Member

	Biennium	Year Signed	Country	Project Identifier	Total Contract Value	
2022	2022-2023	2022	Belgium	Flemish Government - Fund for Developing Countries Representatives (FDCR)	USD	12,533
	2022-2023	2022	European Commission	Innovation to Foster the Renewable Energy Transition (IFRET)	USD	1,064,963
	2022-2023	2022	Germany	BMWK - Accelerating the deployment of green hydrogen	USD	252,688
	2022-2023	2022	Germany	BMWK - WETO Report 2023 and LTES	USD	877,086
	2022-2023	2022	Japan	METI - Various projects	USD	509,259
	2022-2023	2022	United Arab Emirates	Fund for Developing Countries Representatives (FDCR)	USD	100,000
	2022-2023	2022	United Kingdom	COP26 activities under the Glasgow Breakthrough Agenda	USD	124,665
2023	2022-2023	2022	United Arab Emirates	UAE Foster Clean Cooking Solutions and RE Entrepreneurship	USD	2,362,000
	2022-2023	2023	United Arab Emirates	UAE Communication Strategy for COP28	USD	672,475
	2022-2023	2023	Australia	Breakthrough Agenda report & Benchmark cost model of the solar PV supply chain	USD	263,659
	2022-2023	2023	Belgium	Flemish Government - Fund for Developing Countries Representatives (FDCR)	USD	13,078
	2022-2023	2023	Germany	BMWK - CEM Workstream Transforming Solar Supply Chains	USD	53,135
	2022-2023	2023	Germany	BMWK - WETO Report 2024, LTES, Youth Engagement, and Capacity Building	USD	1,177,673
	2022-2023	2023	Japan	MAFF - Biomass Strategy for Sustainable Bioenergy Production	USD	230,590
	2022-2023	2023	Japan	METI - Various projects	USD	509,259
	2022-2023	2023	Luxembourg	Work Programme 2022-2023 support	USD	16,060

	2022-2023	2023	United Arab Emirates	Warehouse 2024-2025	USD	51,729
	2022-2023	2023	United Kingdom	Breakthrough Agenda Report 2023	USD	124,794
2024	2024-2025	2024	United Arab Emirates	Support IRENA's presence at COP29	USD	392,000
2024	2024-2025	2024	United Arab Emirates	Fund for Developing Countries Representatives (FDCR) + Warehouse	USD	743,174
2024	2024-2025	2024	Austria	Fund for Developing Countries Representatives (FDCR)	USD	61,993
2024	2024-2025	2024	European Commission	Mediterranean Renewable Energy and Clean Technology Plan (MEDIRECT)	USD	223,982
2024	2024-2025	2024	Germany	Fund for Developing Countries Representatives (FDCR)	USD	63,291
2024	2024-2025	2024	Germany	BMWK - Various projects	USD	1,405,785
2024	2024-2025	2024	Italy	Italy's G7 Presidency in 2024	USD	63,627
2024	2024-2025	2024	Italy	IRENA-Italy Educational Programme for Youth Climate Leaders	USD	42,418
2024	2024-2025	2024	United Kingdom*	Breakthrough Agenda Power Sectoral Facilitator activities	USD	113,181
2024	2024-2025	2024	United Arab Emirates	Utilities for Net Zero Alliance (UNEZA)	USD	300,000
2024	2024-2025	2024	Japan	METI - Various projects	USD	509,259
2024	2024-2025	2024	United Arab Emirates	NDC 3.0 and BTR Support	USD	1,625,000
2024	2024-2025	2024	United Arab Emirates	Alliance for Industry Decarbonization (AFID)	USD	300,000
2024	2024-2025	2024	United Arab Emirates	Empowering Lives and Livelihoods: Renewables for Adaptation & Global Climate Action Awards	USD	900,000
2025	2024-2025	2025	Canada*	Remote Communities to Renewable Energy - Phase II	USD	351,887
2025	2024-2025	2025	Canada*	G7 Discussions and Digital Solutions Report	USD	167,889

	2024-2025	2025	Germany	BMWE - Tripling Renewables, LTES and Risk Mitigation Project	USD	371,469
	2024-2025	2025	Germany	BMWE - Fund for Developing Countries (FDCR)	USD	92,486
	2024-2025	2025	Belgium	Walloon Region - Regional scenarios, DRE, RETOs, IW 2025, clean cooking, healthcare electrification, and ETAF/CIP	USD	1,175,082
	2024-2025	2025	Japan	METI - Various projects	USD	509,259
	2024-2025	2025	Japan	MOFA - Support the activities of APRA member countries	USD	1,438,848
	2024-2025	2025	United Arab Emirates	IRENA Education Skill	USD	480,000
	2024-2025	2025	United Arab Emirates	Youth Engagement Activities for 2025-2026	USD	817,185
	2024-2025	2025	United Arab Emirates	Warehouse	USD	60,033
	2024-2025	2025	United Arab Emirates	IRENA COP30 Pavilion and Tracking Report Launch	USD	290,000

Biennium VC - Non-Member

	Biennium	Year Signed	Organisation	Project Identifier	Total Contract Value	
2022	2022-2023	2022	United Nations Office for Project Services (UNOPS)	Climate Vulnerable Forum (CVF)	USD	250,000
	2022-2023	2022	United Nations Development Programme (UNDP)	Market Transformation for Sustainable Rural Housing in Uzbekistan	USD	65,000
2023	2022-2023	2023	International Bank for Reconstruction and Development (IBRD)	IRENA Contribution to 2023 SDG 7 Tracking Report	USD	54,500
2024	2024-2025	2024	Korea Energy Agency (KEA)	Tripling Renewable Power by 2030	USD	71,000
	2024-2025	2024	OPEC Fund for International Development	ETAF project facilitation and support facility	USD	400,000
2025	2024-2025	2025	United Nations Office for Project Services (UNOPS)	NDC - Energy sector to the MRV System in Ecuador	USD	157,822
	2024-2025	2025	International Bank for Reconstruction and Development (IBRD)	IRENA Contribution to 2023-2024 SDG 7 Tracking Report	USD	109,000
	2024-2025	2025	United Nations Office for Project Services (UNOPS)	NDC - Promoting eco-citizenship and energy efficiency in Benin	USD	69,783
	2024-2025	2025	International Bank for Reconstruction and Development (IBRD)	IRENA Contribution to 2025 SDG 7 Tracking Report	USD	54,500
	2024-2025	2025	Islamic Development Bank (IsDB)	Energy Access and Energy Planning Support activities	USD	25,000

Note: The table reflects Voluntary Contributions where funding was received. A partnership agreement for USD 4,000,000 was signed with the United Nations Development Programme (UNDP) in 2022; however, the funds were not received due to shifting priorities on the donor's side and thus it is not included in the financial totals above.

Multiyear VC - Member

	Biennium	Year Signed	Country	Project Identifier	Total Contract Value	
2022	2022-2023	2022	Belgium *	Walloon Region - ODA-related activities, Francophone Africa	USD	3,193,656
2022	2022-2023	2022	European Commission*	RETO in Africa and LAC	USD	6,391,476
2022	2022-2023	2022	Netherlands*	Geopolitics of Energy Transformation	USD	800,320
2023	2022-2023	2023	Denmark*	IRENA support 2023-2027	USD	21,936,645
2024	2024-2025	2024	Iceland	Iceland-IRENA Strategic Partnership	USD	922,404
2024	2024-2025	2024	Norway*	Various projects	USD	2,709,538

*For contributions denominated in other currencies (e.g. Danish Krone), USD amounts are initially estimated using the UN operational exchange rate at the time of agreement. Upon receipt, figures are updated based on the actual USD amount received using the prevailing exchange rate at the time of transfer.

Multiyear VC - Non-Member

	Biennium	Year Signed	Organisation	Project Identifier	Total Contract Value	
2022	2022-2023	2022	Physikalisch-Technische Bundesanstalt (PTB)	Quality Infrastructure for Green Hydrogen	USD	552,049
2023	2022-2023	2023	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH	Senegal's clean energy transition and develop a Power Sector Masterplan	USD	399,933
2023	2022-2023	2023	Global Energy Alliance for People and Planet	Advancing Renewable Energy Transitions in LMICs	USD	1,204,666
2023	2022-2023	2023	Open Society Foundation	Empowering Lives and Livelihoods	USD	1,000,000
2023	2022-2023	2023	Rockefeller Brothers Fund	Accelerated Partnership for Renewables in Africa (APRA)	USD	250,000
2025	2024-2025	2025	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH	BMZ - Accelerating the Energy Transition in Africa	USD	395,152
2025	2024-2025	2025	Open Society Foundation (OSF)	Accelerating renewable energy across key industrial sectors	USD	2,000,000
2025	2024-2025	2025	China Renewable Energy Engineering Institute (CREEI)	Environmental impacts and benefits of solar PV (analysis, case studies, policy dialogue)	USD	299,787
2025	2024-2025	2025	United Nations Environment Programme (UNEP)	Unlocking short- and long-term solutions for green and resilient energy in Ukrainian cities	USD	542,192

Footnote: The 'Non-Member' category includes both non-governmental partners and government-mandated entities that channel contributions on behalf of IRENA Member States

Governing Body Meetings

The last Institutional indicator measures the engagement of Members during Governing Body Meetings. It also monitors the inclusiveness of Governing Body Meetings, notably, through the Fund for Developing Country Representatives. Table 21 shows that during the baseline biennium 2022-23, 129 Members plus two States in Accession attended the 12th Assembly, whereas 142 Members, six States in Accession and three Observer States attended the 13th session of the IRENA Assembly. Eleven Members were sponsored to participate in the 12th session in 2022, whereas 42 Members benefited from FDCR in 2023. In 2024, the 14th Assembly was convened in two segments, namely Part I, which was virtual and Part II, which was held in person. 130 and 134 Members participated in Part I and Part II, respectively. 38 Members had the opportunity to attend part II through the FDCR. Finally, 134 Members, as well as eight States in Accession and one Observer State, attended the 15th Assembly, with the participation of 37 Members funded through the FDCR.

Council participation has remained consistent in recent years. In 2024, the average number of Members participating in Council meetings was 109, whereas in 2025, the average number reached 120 Members. It should be mentioned though that the Council meetings in 2025 were held in a hybrid format, which facilitated the participation of more countries. FDCR has also been supporting the participation of Members during Council meetings. Four Members were sponsored in 2022 and seven in 2023. In 2024, IRENA sponsored the participation of nine Members, whereas in 2025, thirteen Members were sponsored to attend the 29th and 30th meetings of the Council.

Table 20: Number of participants in Governing Body Meetings, 2022-2025

Number of members participating in Assembly Meetings (2022-2023)

Baseline biennium	Members	States in Accession	Observer States	Total
2022				
12A	129	2		131
2023				
13A	142	6	3	151

Number of members participating in Assembly Meetings (2024-2025)

Baseline biennium	Members	States in Accession	Observer States	Total
2024				
14A (I)	126	3	1	130
14A (II)	131	2	1	134
2025				
15A	134	8	1	143

Number of FDCR sponsored members participating in Assembly Meetings (2022-2023)

Baseline biennium	Members
2022	
12A	11
2023	
13A	42

Number of FDCR sponsored members participating in Assembly Meetings (2024-2025)

Baseline biennium	Members
2024	
14A	38
2025	
15A	37

Number of Members participating in Council Meetings (2022-2023)

Baseline biennium	Council Members	Council Member Alternate	IRENA Members (for Council mtgs)	States in Accession	Observer States	Total
2022						
23C	19	8	70	6	2	105
24C	17	9	67	5	2	100
2023						
25C	21	9	59	4	2	95
26C	20	10	67	3	2	102

Number of Members participating in Council Meetings (2024-2025)

Baseline biennium	Council Members	Council Member Alternate	IRENA Members (for Council mtgs)	States in Accession	Observer States	Total	Alternate Council Members
2024							
27C	20	11	68	3	1	103	
28C	18	12	80	4	1	115	
2025							
29C	20	9	88	3	1	121	
30C	18		85	4	2	119	10

Number of FDCR sponsored Members participating in Council Meetings (2022-2023)

Baseline biennium	Council Members	Council Member Alternate	IRENA Members (for Council mtgs)	Total
2022				
23C	2		1	3
24C	1			1
2023				
25C	2		1	3
26C	2	2		4

Number of FDCR sponsored Members participating in Council Meetings (2024-2025)

Baseline biennium	Council Members	Council Member Alternate	Total
2024			
27C	2	1	3
28C	4	2	6
2025			
29C	7		7
30C	6		6

Monitoring and Evaluation

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 22).

Table 21: 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.

IRENA has finalised the development of a comprehensive monitoring and evaluation (M&E) framework that enables the tracking and reporting of discernible and traceable impact of IRENA's activities. It has been an extensive process, and to ensure optimal delivery as well as transparency and ownership, a whole-of-agency approach was adopted. All divisions were actively involved in identifying baseline data and defining targets for 2024 and 2025. In addition, teams were engaged in in-depth discussions and provided substantive input to the setting of definitions and breakdown lists to ensure a common understanding and consistency of work across the Agency. As planned, the Matrix of Implementation of the Work Programme and Budget in the Annual report has been replaced with the new M&E system.

As the 2024-2025 biennium is coming to an end, IRENA is finalising the process of fully transitioning the Secretariat into the new M&E system. Regarding the development of the Work Programme and Budget for the next biennium, the Secretariat developed the key activities by first mapping them against the Intermediate Outcomes of the Results-based Framework to ensure alignment.

Monitoring and evaluating the impact of the Agency's work will be an ongoing process. Already during this process, it was deemed necessary to make several adjustments to definitions, to relocate indicators from Outputs to Cross-cutting Impact Indicators and Immediate Outcomes, and to create new Output subcategories. The adjusted M&E Framework can be found in Annex 1. As the Agency begins to implement the new M&E system, it is expected that further adjustments and fine-tuning may be necessary to enhance the system, thereby ensuring that IRENA's impact is more accurately reflected.

In the new IRENA M&E, Outputs are divided under four activities as per the IRENA Theory of Change. These include Knowledge generation, Convening activities and partnerships (knowledge sharing), Capacity building and technical assistance services, and Project facilitation. Each Activity includes several Outputs with focused indicators on the various areas of work. The section below presents an analysis of the Agency's work in this biennium compared to the previous one, which serves as the baseline. It should be noted that, since this is a new Framework, data for some indicators had not been systematically collected previously. IRENA is in the final stages of implementing the necessary processes to collect and analyse the required data.

Activity: Knowledge generation

Output 1.1 covers Knowledge products (analytical reports, guides, statistics, data, energy scenarios, *etc.*) generated on priorities across all sectors.

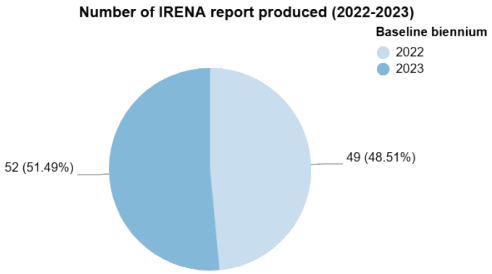
Indicator 1.1.1 provides the Number of knowledge products produced annually, disaggregated by topic, type of publication and language for translated publications. Table 23 shows that in the 2022-2023 biennium, IRENA produced 104 IRENA reports, with 22 focusing on 'technology', 18 on 'country engagement', 16 on 'policy' and ten on 'outlook'. Overall, IRENA produced 266 knowledge products, including IRENA reports, partnership reports (14), technical advisory and other knowledge products (99), and technical papers (4). Forty-nine reports were translated into ten languages, namely, Arabic, Chinese, French, German, Italian, Japanese, Portuguese, Russian, Spanish and Other. Nine reports were translated into Chinese, French, and Spanish, followed by Arabic and Russian, and five were translated into both languages.

The target number of IRENA reports to be produced in the current biennium is 115. As of 15 November, the Agency had produced 30 IRENA reports in 2025, and overall, 76 IRENA reports in the biennium. The majority (21) are dedicated to technology, followed by country engagement (10), policy (9), and outlooks (8). IRENA also produced seven reports on project facilitation and another seven on socio-economic impact. Across all formats, IRENA has produced 222 publications, including IRENA reports, partnership reports (32), and technical advisory and other knowledge products (74). Forty publications have been translated into ten languages, namely, Arabic, Chinese, English, French, German, Italian, Japanese, Portuguese, Russian, and Spanish. Nine reports were translated into French, followed by six in Spanish and five in Arabic.

Table 22: Number of knowledge products produced annually, 2022-2025

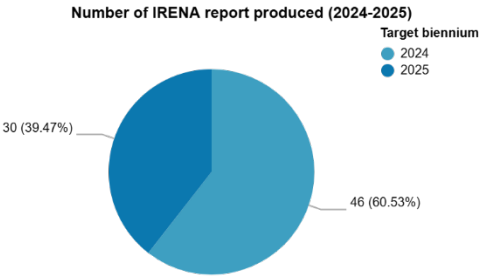
Number of IRENA reports produced (2022-2023)

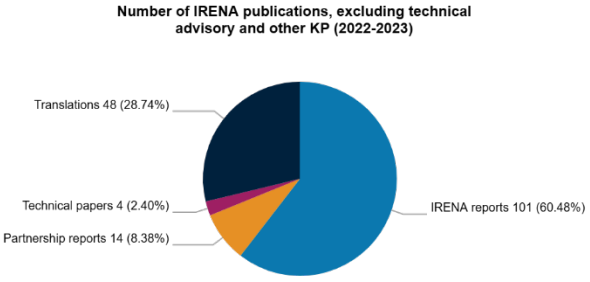
Baseline biennium	Number of IRENA reports produced
2022	49
2023	52
Total	101

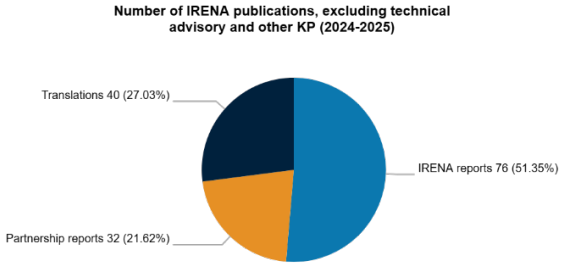


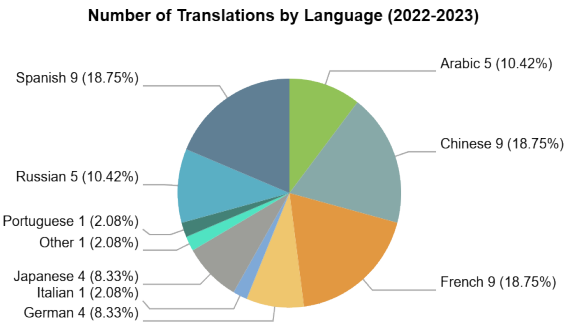
Number of IRENA reports produced (2024-2025)

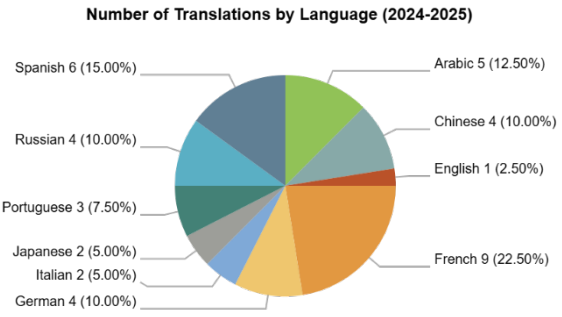
Target biennium	Number of IRENA reports produced
2024	46
2025	30
Total	76









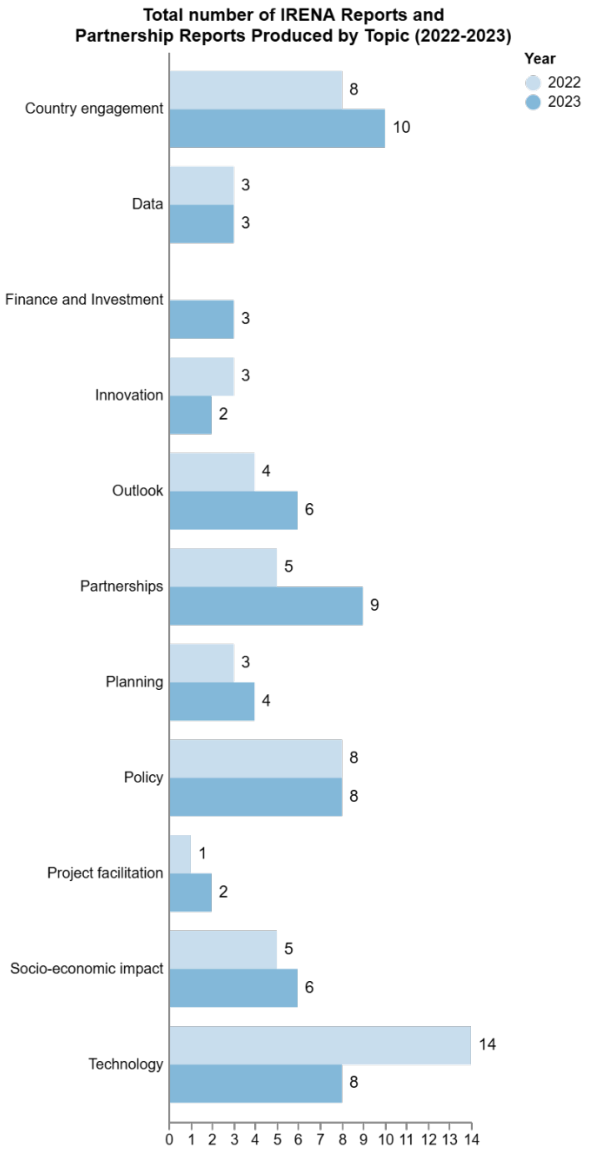


Knowledge products by type and topic (2022-2023)

Type of Publication	2022	2023	Number of knowledge products produced
IRENA reports	**49**	**52**	**101**
Country engagement	8	10	18
Data	3	3	6
Finance and Investment		3	3
Innovation	3	2	5
Outlook	4	6	10
Planning	3	4	7
Policy	8	8	16
Project facilitation	1	2	3
Socio-economic impact	5	6	11
Technology	14	8	22
Partnership reports	**5**	**9**	**14**
Partnerships	5	9	14
Technical advisory and other knowledge products	**50**	**48**	**98**
Country engagement	17	1	18
Data	4		4
Documents		1	1
Finance and Investment	1		1
Outlook	1		1
Partnerships	24	41	65
Planning	3	2	5
Policy		1	1
Project facilitation		1	1
Technology		1	1
Technical papers	**4**		**4**
Policy	2		2
Technology	2		2
Translations	**32**	**16**	**48**
Country engagement	2		2
Innovation	1	2	3
Outlook	10		10
Partnerships	6	1	7
Planning	1	1	2
Policy	4	2	6
Project facilitation		1	1
Socio-economic impact		1	1
Technology	8	8	16
Total	**140**	**125**	**265**

Knowledge products by type and topic (2024-2025)

Type of Publication	2024	2025	Number of knowledge products produced
IRENA reports	**46**	**30**	**76**
Country engagement	4	6	10
Data	4	2	6
Finance and Investment	1		1
Innovation	1	2	3
Outlook	5	3	8
Planning	2	2	4
Policy	7	2	9
Project facilitation	4	3	7
Socio-economic impact	4	3	7
Technology	14	7	21
Technical advisory and other knowledge products	**42**	**32**	**74**
Data		1	1
Documents	6	2	8
Finance and Investment	1		1
Innovation	1	3	4
Outlook	1	2	3
Partnerships	28	18	46
Planning	2	2	4
Policy		2	2
Project facilitation	2		2
Technology	1	2	3
Translations	**39**	**1**	**40**
Country engagement	2		2
Data	2		2
Outlook	18		18
Partnerships	5		5
Planning		1	1
Policy	1		1
Project facilitation	3		3
Technology	8		8
Partnership reports	**11**	**21**	**32**
Partnerships	11	21	32
Total	**138**	**84**	**222**


Total number of IRENA Reports and Partnership Reports Produced by Topic (2022-2023)
Year
2022
2023
Country engagement
8
10
Data
3
3
Finance and Investment
3
Innovation
3
2
Outlook
4
6
Partnerships
5
9
Planning
3
4
Policy
8
8
Project facilitation
1
2
Socio-economic impact
5
6
Technology
14
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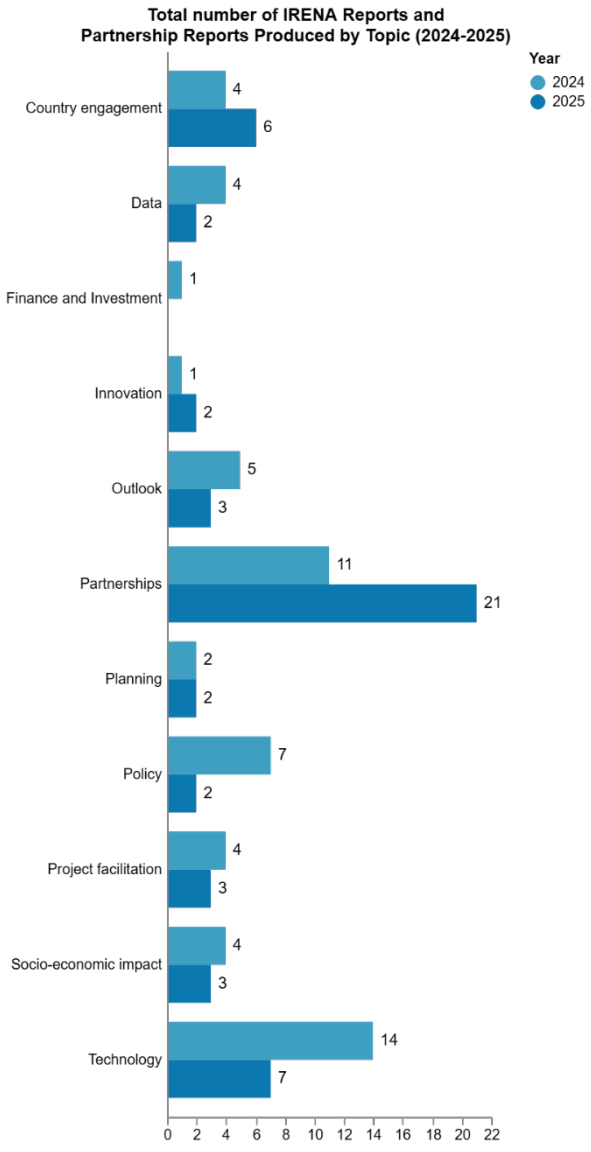

Total number of IRENA Reports and Partnership Reports Produced by Topic (2024-2025)
Year
2024
2025
Country engagement
4
6
Data
4
2
Finance and Investment
1
Innovation
1
2
Outlook
5
3
Partnerships
11
21
Planning
2
2
Policy
7
2
Project facilitation
4
3
Socio-economic impact
4
3
Technology
14
7
0 2 4 6 8 10 12 14 16 18 20 22

Indicator 1.1.2 presents the Number of times knowledge products are downloaded and viewed, specifically all publications accessed via the IRENA website. The indicator is disaggregated by number of downloads, views and topic. It should be noted that, given the high volume of data for this indicator, it is not feasible to present past data comprehensively. However, IRENA is in the process of setting up a system to collect, process, and present data for both previous and upcoming periods.

Table 24 shows that there were 390 000 publication downloads in 2023, 425 930 downloads in 2024, and 277 671 downloads by 15 November 2025. In 2023, the top three IRENA publications with the most downloads were the World Energy Transitions Outlook 2023, followed by the Renewable power generation costs in 2022, and the Delivering on the UAE Consensus reports. An examination of the reports' topics reveals that finance and investment, technology, and outlooks constituted the three main areas of interest in 2023. The top three downloaded IRENA reports in 2024 include Renewable energy statistics 2024 (12 946), the Renewable power generation costs in 2023 (12 467) and the World Energy Transitions Outlook 2024 (11 440). As of 15 November, the most downloaded reports in 2025 are the Renewable capacity statistics 2025 (28 672), the Renewable power generation costs in 2023 (28 553), and the Renewable power generation costs in 2024 report (22 370). Considering the number of downloads in the current biennium, data and technology are the two most popular topics.

In 2023, the IRENA website attracted 5 000 000 views, which reached 5 900 00 in 2024, marking an 18% increase. There have been 5 457 086views of the IRENA website by 15 November 2025. The drop in reported figures reflect an improved methodology, achieved by detecting and excluding bot traffic. Additionally, IRENA has been producing informational videos that promote its work. In 2023, IRENA produced 84 videos that reached 96 in 2024. As of 15 November, IRENA produced 128 videos.

Table 23: Number of times knowledge products are downloaded and viewed, 2022-2025

Number of times knowledge products are downloaded and viewed (2022-2023)

Baseline Year	IRENA website Visit - # users	IRENA website - # views	IRENA publications downloads	# Video produced
2023	1500000	5000000	390000	84

Number of times knowledge products are downloaded and viewed (2024-2025)

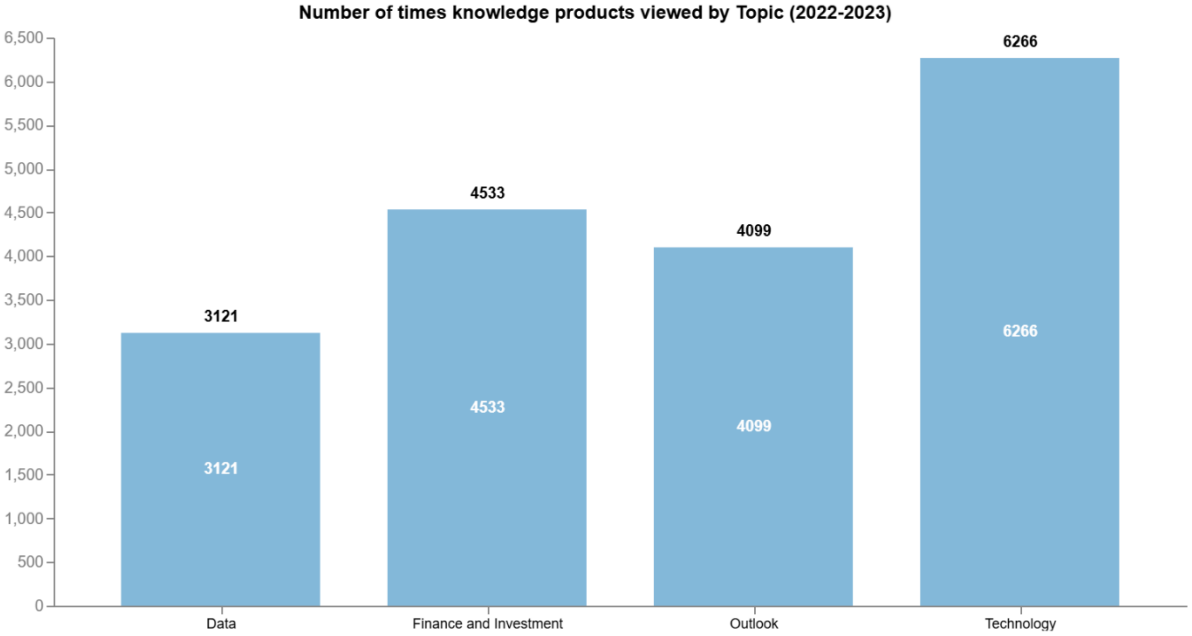
Target Year	IRENA website Visit - # users	IRENA website - # views	IRENA publications downloads	# Video produced
2024	2000000	5900000	425930	96
2025	2907460	5457086	277671	128

List of IRENA reports with most downloads and views - Baseline biennium (2022-2023)

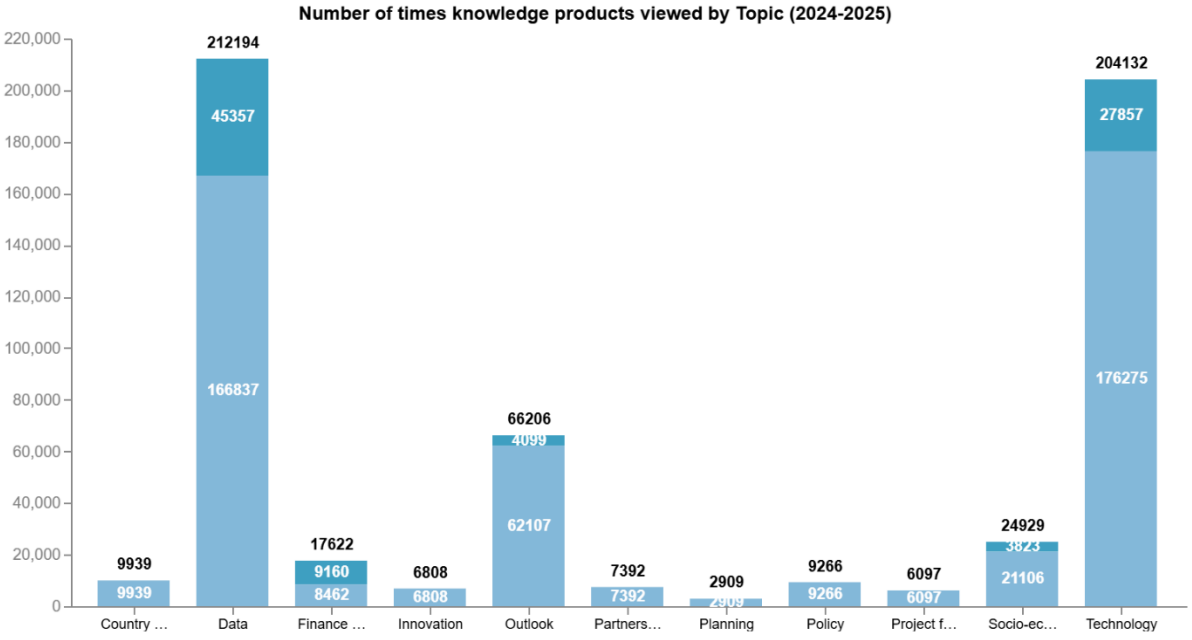
Release Year	Title	Topic	Downloads	Views
2023	World Energy Transitions Outlook 2023	Finance and Investment	2106	4533
2023	Renewable Power Generation Costs in 2022	Technology	1865	6266
2023	Delivering on the UAE Consensus: Tracking progress toward tripling renewable energy capacity and doubling energy efficiency by 2030 (2023 edition)	Outlook	1732	4099
2023	Renewable Energy Statistics 2023	Data	1312	3121

List of IRENA reports with most downloads and views - Target biennium (2024-2025)

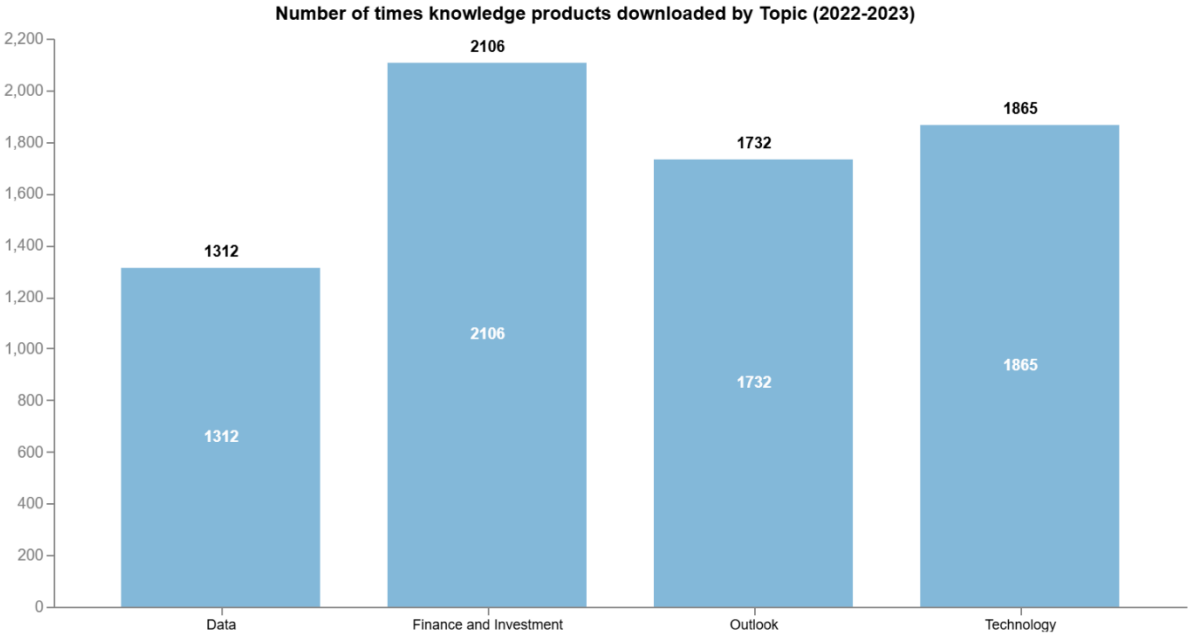
Release Year	Title	Topic	Downloads	Views
2025	Renewable capacity statistics 2025	Data	28672	48632
2025	Renewable Power Generation Costs in 2023	Technology	28553	65931
2025	Renewable Power Generation Costs in 2024	Technology	22370	47004
2025	Renewable energy statistics 2024	Data	20016	47718
2025	Renewable energy statistics 2025	Data	16212	28193
2024	Renewable Energy Statistics 2024	Data	12946	32020
2024	Renewable Power Generation Costs in 2023	Technology	12467	25841
2025	World Energy Transitions Outlook 2024	Outlook	11440	20017
2025	Renewable capacity statistics 2024	Data	8104	17892
2025	Renewable energy and jobs: Annual review 2024	Socio-economic impact	5663	14064
2024	World Energy Transitions Outlook 2024	Finance and Investment	5474	9160
2025	World Energy Transitions Outlook 2023: 1.5°C Pathway	Outlook	4908	12696
2024	Renewable Capacity Statistics 2024	Data	4719	8717
2025	Renewable Power Generation Costs in 2022	Technology	3987	13538
2025	Delivering on the UAE Consensus: Tracking progress toward tripling renewable energy capacity and doubling energy efficiency by 2030	Outlook	3917	9711
2025	Analysis of the potential for green hydrogen and related commodities trade	Technology	3685	6989
2025	Renewable energy benefits: Leveraging local capacity for concentrated solar power	Project facilitation	2645	6097
2025	Green hydrogen cost reduction	Technology	2546	2984
2025	Delivering on the UAE Consensus: Tracking progress toward tripling renewable energy capacity and doubling energy efficiency by 2030	Outlook	2529	8622
2025	2023 Year in Review: Climate driven Global Renewable Energy Potential Resources and Energy Demand	Country engagement	2463	7235
2025	Renewable energy statistics 2023	Data	2440	9711
2024	Delivering on the UAE Consensus: Tracking progress toward tripling renewable energy capacity and doubling energy efficiency by 2030 (2024 edition)	Outlook	2436	4099
2024	Off-grid Renewable Energy Statistics 2024	Data	2237	4620



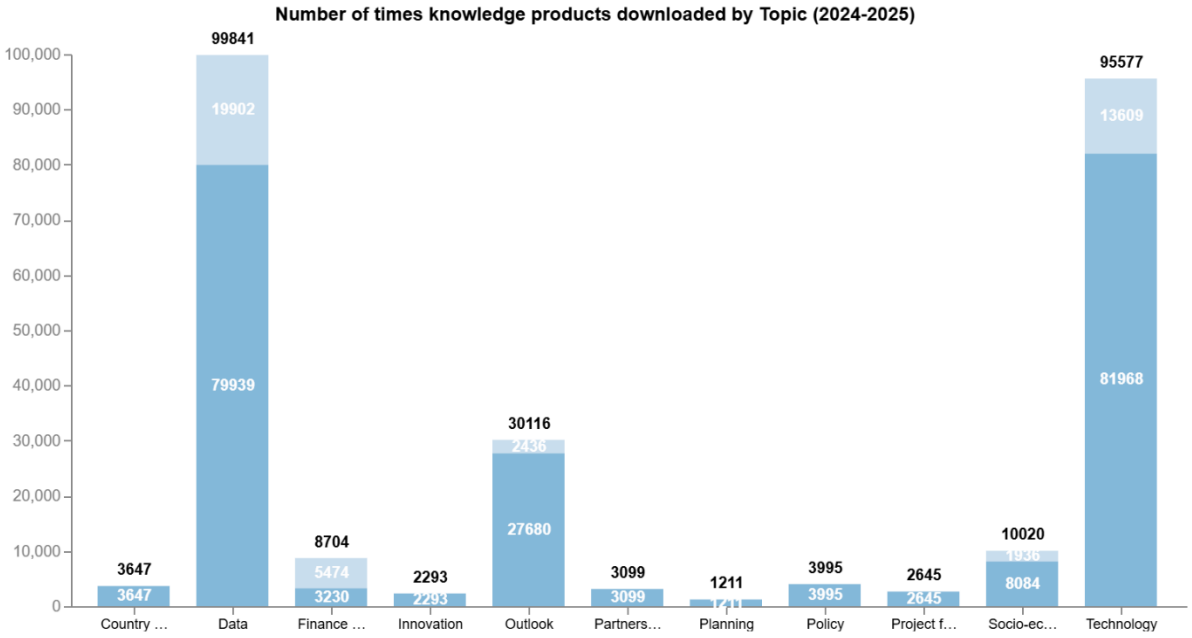
1. Data
2. Finance and Investment
3. Outlook
4. Technology



1. Country engagement
2. Data
3. Finance and Investment
4. Innovation
5. Outlook
6. Partnerships
7. Planning
8. Policy
9. Project facilitation
10. Socio-economic impact
11. Technology



1. Data
2. Finance and Investment
3. Outlook
4. Technology



1. Country engagement
2. Data
3. Finance and Investment
4. Innovation
5. Outlook
6. Partnerships
7. Planning
8. Policy
9. Project facilitation
10. Socio-economic impact
11. Technology

Indicator 1.1.3 presents Social media followers by platform, disaggregated by geography and social media platform. The aggregate number of social media followers has been steadily growing owing to the communications and media campaigns undertaken. In 2022, IRENA had 7 455 008 followers. In 2023, however, IRENA improved its methodology to filter out bots, resulting in a corrected follower count of 821 276, which better reflected the actual audience. Following this correction, the number increased, reaching 855 732 by the end of 2023 and 887 023 by 15 November 2025.

Zooming into the social media platforms, IRENA's Facebook followers increased from 457 427 in 2022 to 462 825 in 2023 but have experienced a slight decline in 2024 to 458 729 in 2024. By 15 November, the number was slightly reduced reaching 452 160 (Table 25). Linkedin is the social media platform with increasing IRENA followers. In 2022, there were 160 234 followers, reaching 206 503 in 2023, marking a 29% increase. The number of followers rose to 238 418 in 2024, a 15% increase. By 15 November, IRENA had accumulated 263 410 followers on Linkedin, marking a 10.49% increase. Most followers are located in the United Kingdom and Northern Ireland, France and India. IRENA had 127 347 followers on X in 2022, which reached 136 613 in 2023 (7.23 % increase). The number of followers increased in 2024, reaching 140 254 (2.67 % increase). In the first six months of 2025, the number has slightly decreased to 139 889 but by 15 November, it rose again reaching 140 731 followers (0.34 % increase). The top three countries with the most IRENA followers on X are the United States of America, Nigeria and France. The number of IRENA followers on Instragram has also steadily increased from 15 335 in 2023, to 18 331 in 2024 and 19 313 in 2025. Indonesia, India and the United Arab Emirates have the most IRENA followers on Instagram.

IRENA has also been monitoring the media's coverage of its work. In 2022, there were 49 200 media mentions (articles) in 49 languages across 161 countries of IRENA's work. 2023 witnessed a considerable increase in media mentions as the number reached 67 100 in 58 languages across 177 countries. The following year, there was a drop in media mentions; however, the geographic representation remained similar, with media mentions in 56 languages across 173 countries. In the first eleven months of 2025, IRENA's work was mentioned 38 605 times in 58 languages across 178 countries.

IRENA is also undertaking strategic stakeholder outreach, which has yielded positive results. The number of IRENA email subscribers rose from 71 407 people in 2022 to 82 679 in 2023, an increase of 15.79%. The number of subscribers jumped to 145 961 in 2024; a significant 76.54% increase compared to the previous year. By 15 November, IRENA had witnessed a slight decrease of 1.19%, with the number of subscribers dropping to 144 230. In 2025, the countries with the most subscribers are the United States of America, the United Arab Emirates and the United Kingdom and Northern Ireland. The number of emails/newsletters coming out has been relatively stable, with 86 emails sent in 2022, 95 emails in 2023, and 93 emails in 2024. Ninety-two emails had been by 15 November 2025.

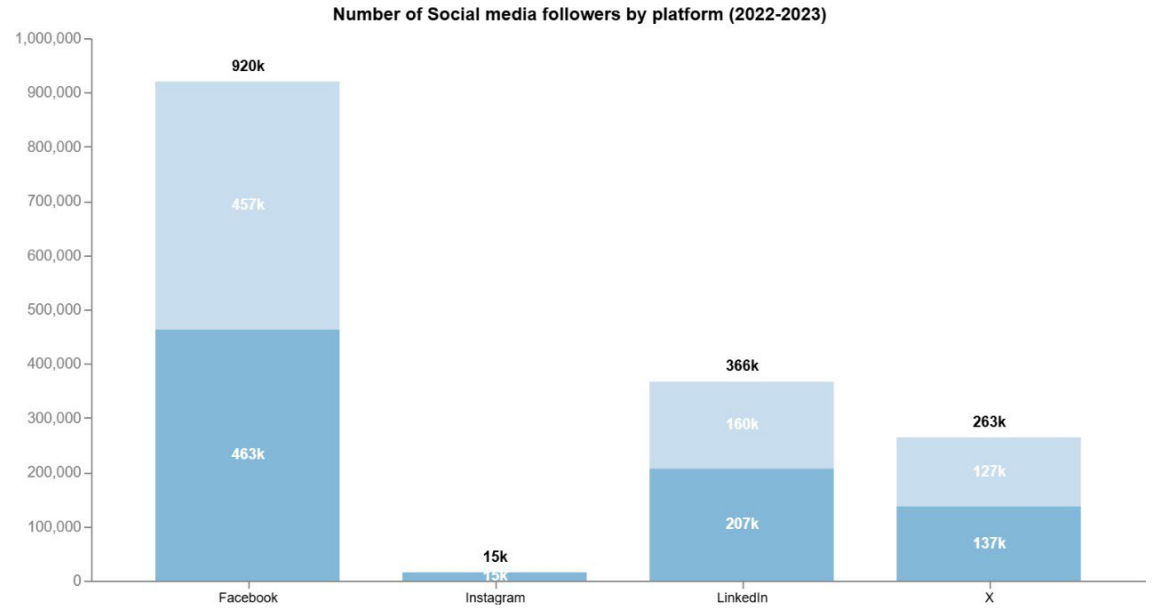
Table 24: Social media followers by platform, 2022-2025

Social media followers by platform (2022-2023)

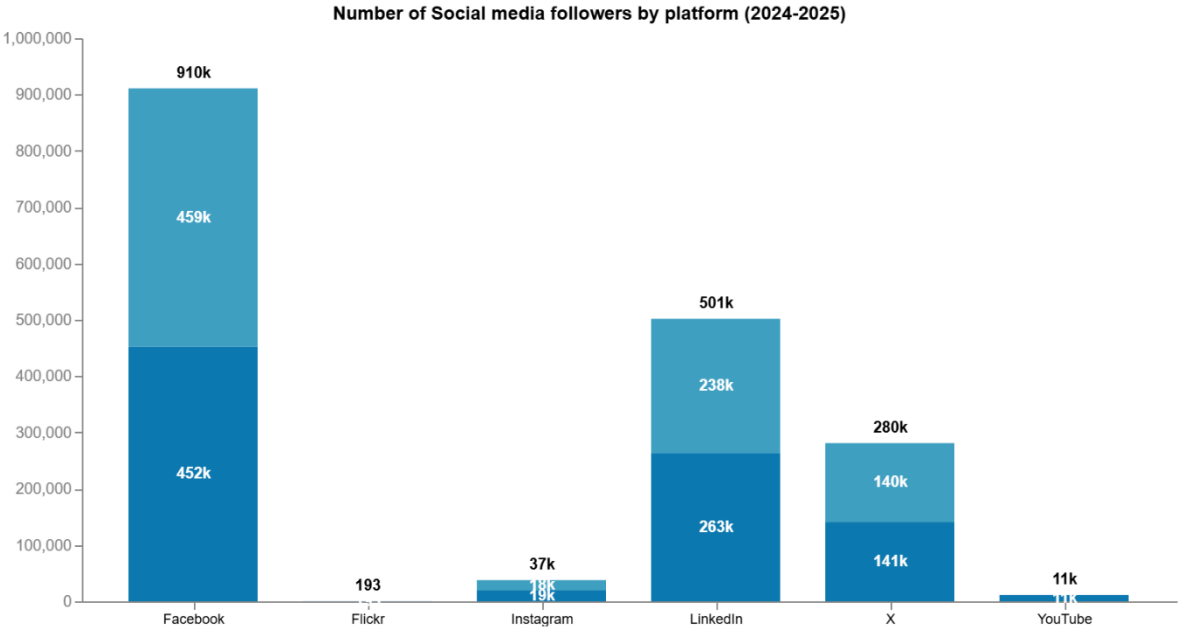
Baseline biennium	Number of followers
2022	745008
2023	821276

Social media followers by platform (2024-2025)

Target biennium	Number of followers
2024	855732
2025	887023

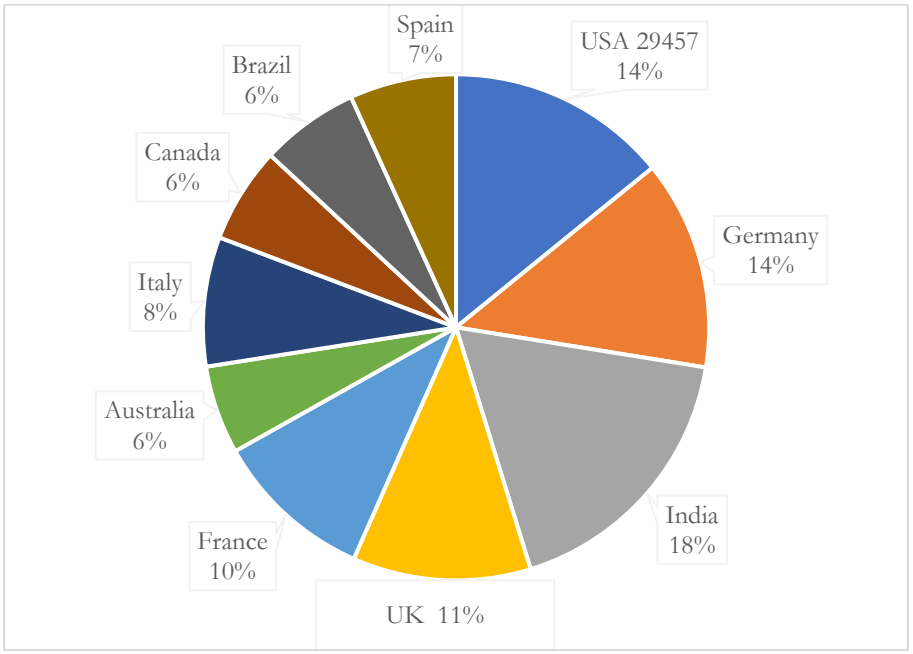


1. Facebook
2. Instagram
3. LinkedIn
4. X



1. Facebook
2. Flickr
3. Instagram
4. LinkedIn
5. X
6. YouTube

Top 10 countries of social media followers



Media coverage & consultations Baseline biennium (2022-2023)

Baseline Year	Number of media mentions (articles)	Languages	Countries
2022	49200	49	161
2023	67100	58	177

Media coverage & consultations Target biennium (2024-2025)

Baseline Year	Number of media mentions (articles)	Languages	Countries
2024	40300	56	173
2025	38605	58	178

Stakeholder Outreach - Baseline biennium (2022-2023)

Baseline Year	Number of Emails/newsletters sent	Number of subscribers	% of annual increase in subscribers
2022	86	71407	
2023	95	82679	15.79

Stakeholder Outreach - Target biennium (2024-2025)

Baseline Year	Number of Emails/newsletters sent	Number of subscribers	% of annual increase in subscribers
2024	93	145961	76.54
2025	92	144230	-1.19

Activity: Convening activities and partnerships (knowledge sharing)

Output 2.1 covers the global and regional fora and consultations IRENA convened with stakeholders (national entities, policy makers, partner institutions, MDBs, IFIs, the private sector, project developers, NGOs, academia *etc.*) aimed at advancing key areas (technical and non-technical) that support energy transition

Indicator 2.1.1 presents the Number of events organised/convened by IRENA, disaggregated by geography, type of event, topic and stakeholder group. Table 26 shows that in 2022-23, IRENA organised 306 events, with the majority (130) being side events. Most events explored topics that affected more than one country (77%), followed by African (19%) and Asian (18%) countries. The events mainly focused on country engagement (32.79%), followed by events on policy (43) and socio-economic issues (42). Accordingly, the primary stakeholder group were countries (226).

In the current biennium, IRENA has convened 350 meetings with 163 being side events. The focus of most events has been on multiple countries and regions (72%), followed by Africa (10%). Similarly, country engagement is the main topic (26%), followed by policy (15%) and socio-economic impact (11%). As anticipated, the primary stakeholder group is countries (222).

In 2023, the Director-General convened 221 bilateral meetings and the Deputy Director-General 77 bilateral meetings, with country representatives (183) and international and regional organisations (34). Out of the 298 meetings, 78 discussed topics pertinent to more than one country, while 61 focused on European countries, 60 focused on Asian countries, another 29 on African countries and 27 on Middle Eastern countries. To-date the Director-General and the Deputy Director-General have had 496 bilateral meetings, predominantly with country representatives (332), and international and regional organisations (56). The majority of the meetings focused on issues pertinent to European countries (129), followed by topics affecting several regions (104), as well as issues related to Asian countries (86), Latin American and Caribbean countries (56) ad African (39).

Table 25: Number of events organised/convened by IRENA, 2022-2025

Number of events organised/convened - Baseline biennium (2022-2023)

Baseline biennium	Number of events
2022	154
2023	152
Total	306

Number of events organised/convened - Target biennium (2024-2025)

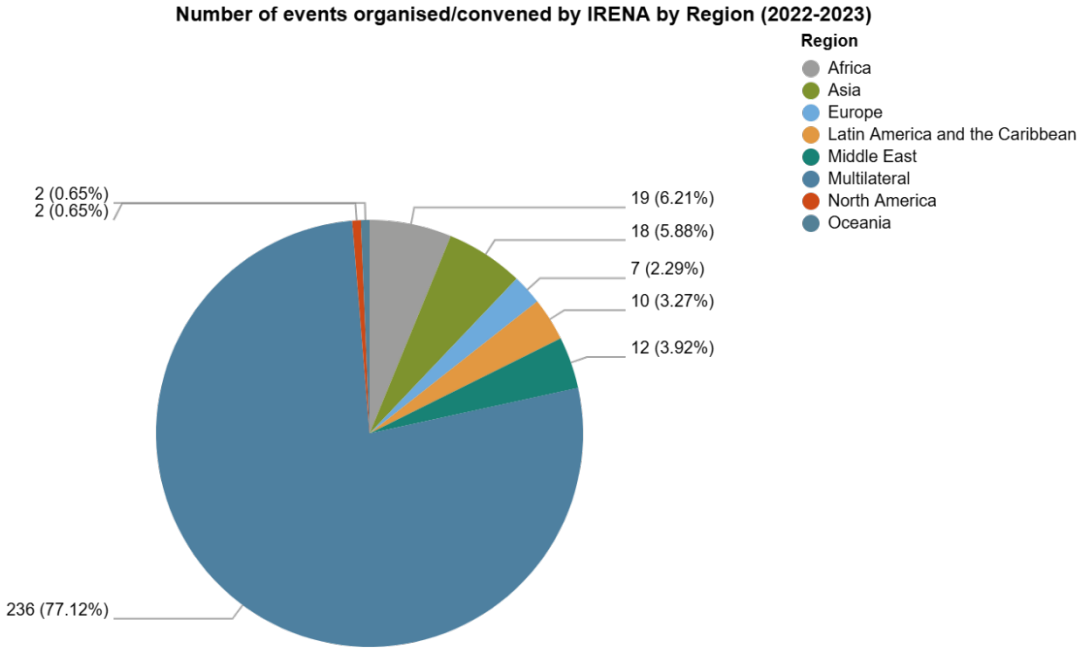
Target biennium	Number of events
2024	170
2025	180
Total	350

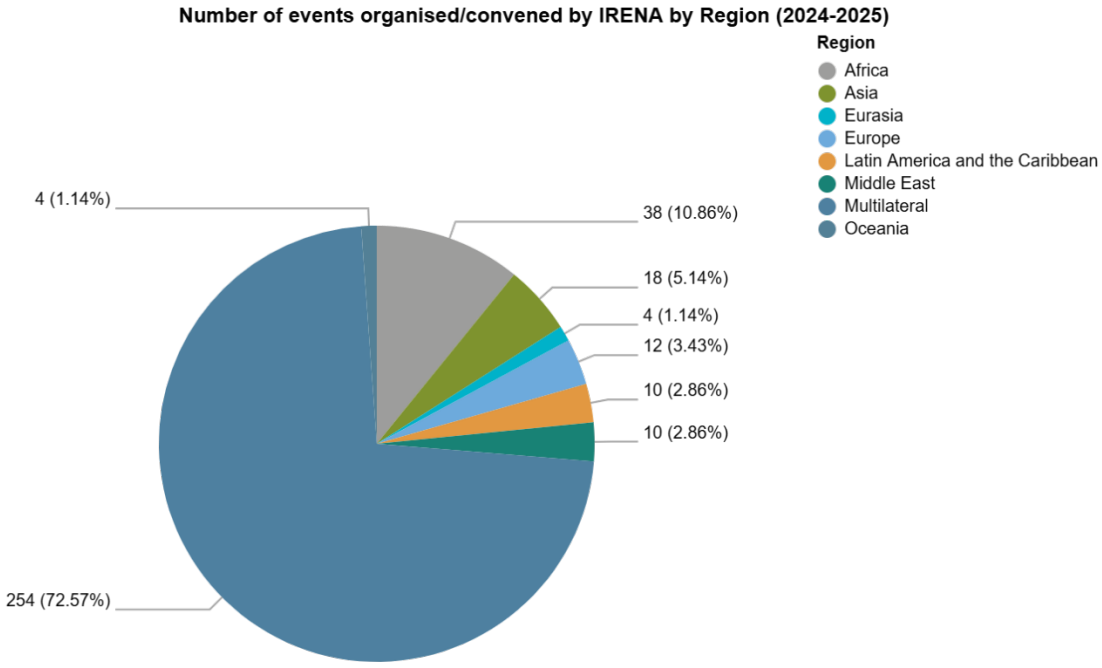
List of region and events (2022-2023)

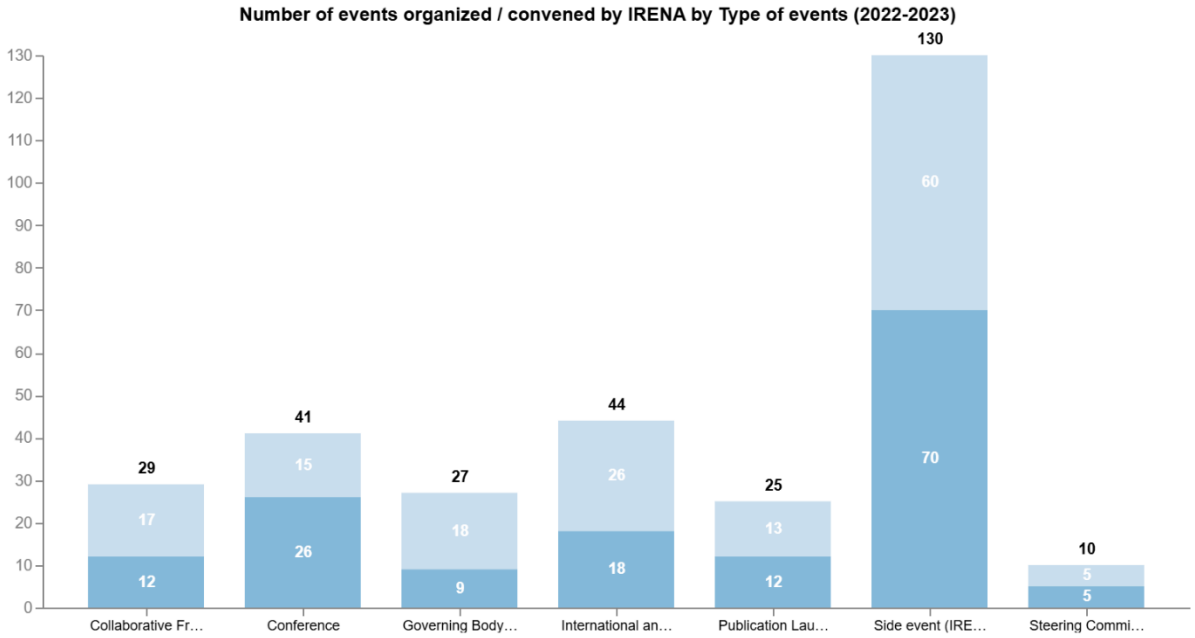
Region	Number of events
Africa	**19**
Cote d'Ivoire	1
Egypt	2
Kenya	1
Namibia	1
Nigeria	1
Rwanda	1
Seychelles	1
Sierra Leone	1
Multilateral	10
Asia	**18**
China	3
Indonesia	4
Kyrgyzstan	1
Malaysia	2
Multilateral	8
Europe	**7**
Bosnia and Herzegovina	1
Germany	1
Switzerland	1
United Kingdom and Northern Ireland	1
Multilateral	3
Latin America and the Caribbean	**10**
Barbados	1
Colombia	1
Honduras	1
Saint Vincent and the Grenadines	1
Uruguay	1
Multilateral	5
Middle East	**12**
Iraq	1
Saudi Arabia	1
United Arab Emirates	5
Multilateral	5
Multilateral	**236**
Multilateral	236
North America	**2**
Canada	2
Oceania	**2**
Multilateral	2
Total	**306**

List of region and events (2024-2025)

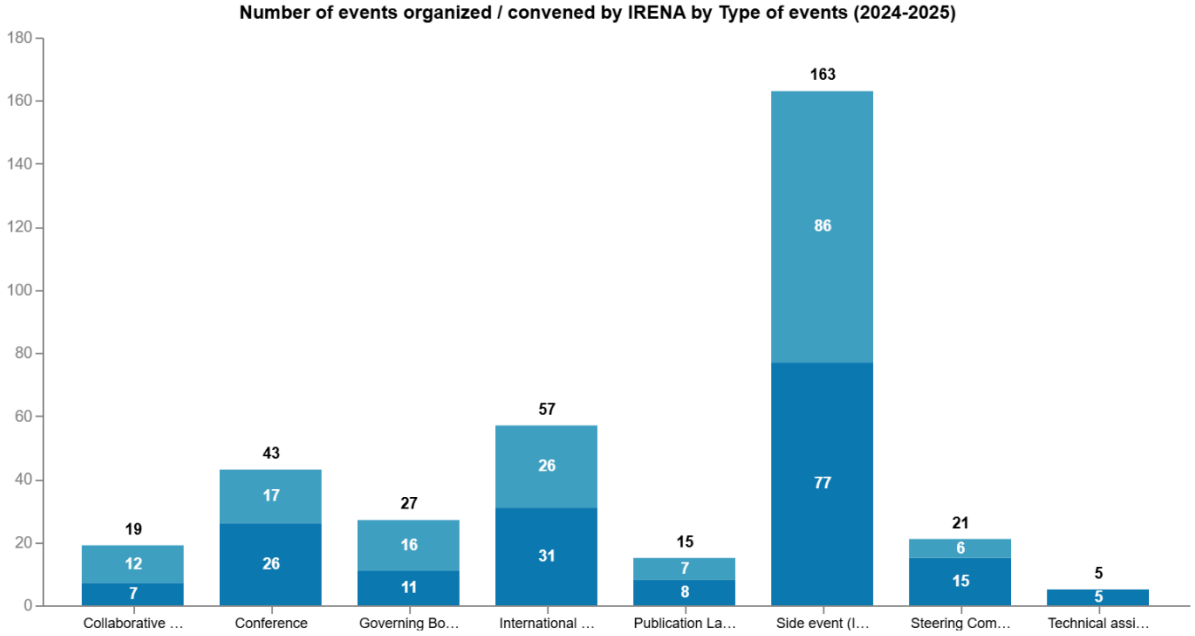
Region	Number of events
Africa	**38**
African Union	3
Djibouti	1
Ethiopia	2
Ghana	3
Kenya	1
Mozambique	2
Rwanda	3
Senegal	1
Somalia	1
South Africa	1
Tunisia	3
United Republic of Tanzania	1
Zimbabwe	1
Multilateral	15
Asia	**18**
China	2
Indonesia	1
Nepal	2
Philippines	1
Thailand	1
Multilateral	11
Eurasia	**4**
Azerbaijan	2
Türkiye	1
Multilateral	1
Europe	**12**
Cyprus	1
Germany	3
Ukraine	1
Multilateral	7
Latin America and the Caribbean	**10**
Barbados	1
Belize	1
Chile	1
Grenada	1
Panama	1
Multilateral	5
Middle East	**10**
Iraq	1
United Arab Emirates	7
Multilateral	2
Multilateral	**254**
Multilateral	254
Oceania	**4**
Solomon Islands	2
Multilateral	2
Total	**350**


Number of events organised/convened by IRENA by Region (2022-2023)
Region
Africa
Asia
Europe
Latin America and the Caribbean
Middle East
Multilateral
North America
Oceania
2 (0.65%)
2 (0.65%)
19 (6.21%)
18 (5.88%)
7 (2.29%)
10 (3.27%)
12 (3.92%)
236 (77.12%)

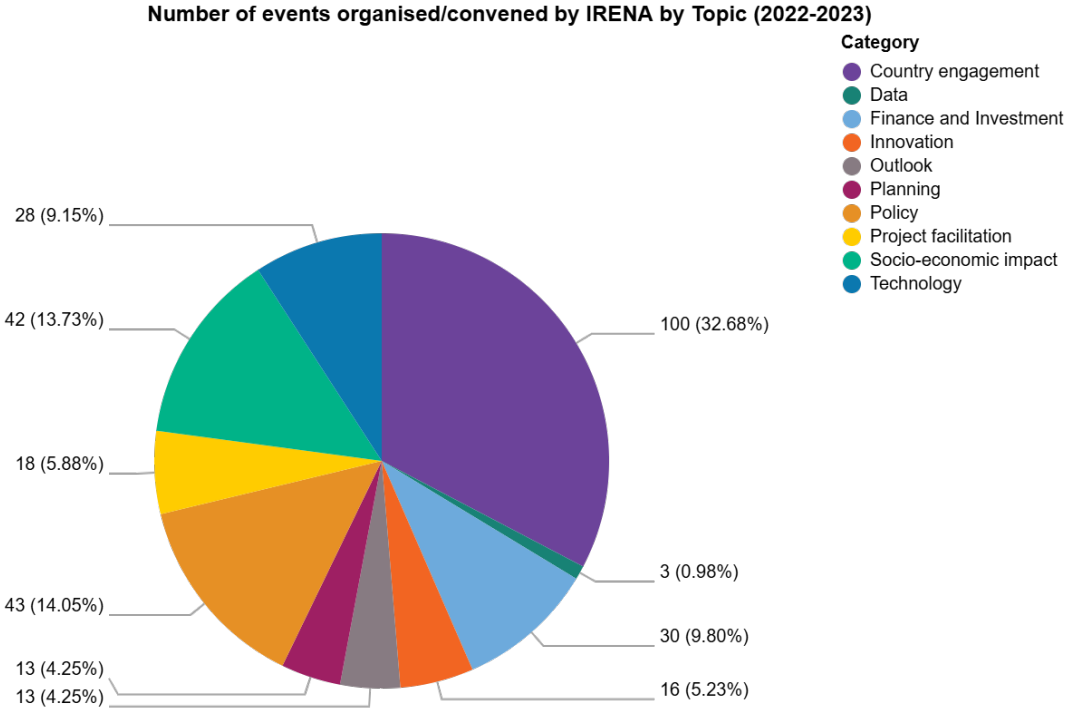

Number of events organised/convened by IRENA by Region (2024-2025)
Region
Africa
Asia
Eurasia
Europe
Latin America and the Caribbean
Middle East
Multilateral
Oceania
4 (1.14%)
38 (10.86%)
18 (5.14%)
4 (1.14%)
12 (3.43%)
10 (2.86%)
10 (2.86%)
254 (72.57%)

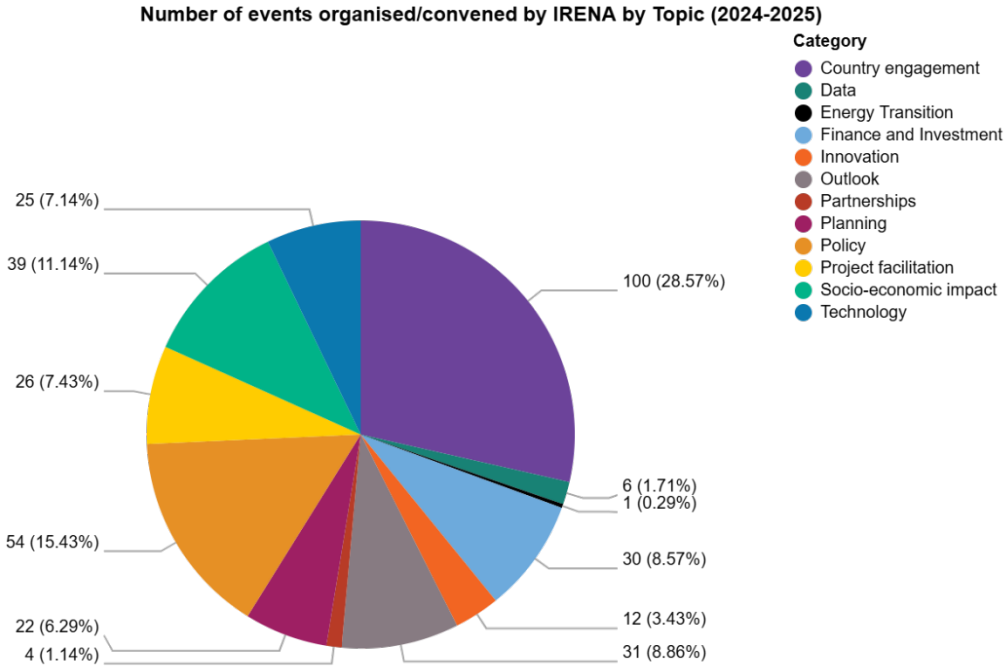


1. Collaborative Framework meetings
2. Conference
3. Governing Body Meetings
4. International and Regional Fora
5. Publication Launch
6. Side event (IRENA as main lead or co-lead)
7. Steering Committee, Advisory Group or Board Meetings



1. Collaborative Framework meetings
2. Conference
3. Governing Body Meetings
4. International and Regional Fora
5. Publication Launch
6. Side event (IRENA as main lead or co-lead)
7. Steering Committee, Advisory Group or Board Meetings
8. Technical assistance


Number of events organised/convened by IRENA by Topic (2022-2023)
Category
Country engagement
Data
Finance and Investment
Innovation
Outlook
Planning
Policy
Project facilitation
Socio-economic impact
Technology
28 (9.15%)
42 (13.73%)
18 (5.88%)
43 (14.05%)
13 (4.25%)
13 (4.25%)
100 (32.68%)
3 (0.98%)
30 (9.80%)
16 (5.23%)

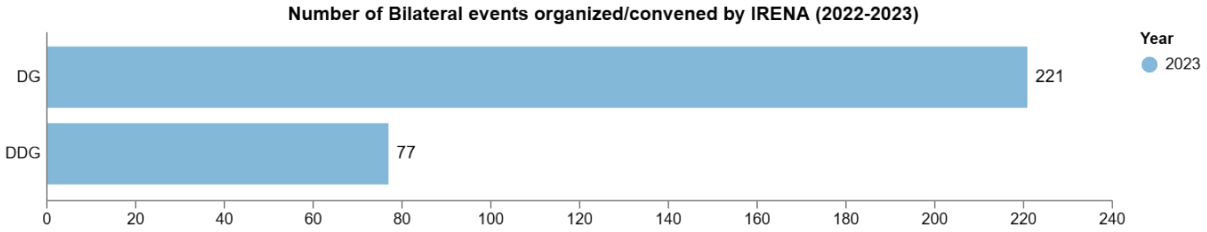

Number of events organised/convened by IRENA by Topic (2024-2025)
Category
Country engagement
Data
Energy Transition
Finance and Investment
Innovation
Outlook
Partnerships
Planning
Policy
Project facilitation
Socio-economic impact
Technology
25 (7.14%)
39 (11.14%)
26 (7.43%)
54 (15.43%)
22 (6.29%)
4 (1.14%)
100 (28.57%)
6 (1.71%)
1 (0.29%)
30 (8.57%)
12 (3.43%)
31 (8.86%)

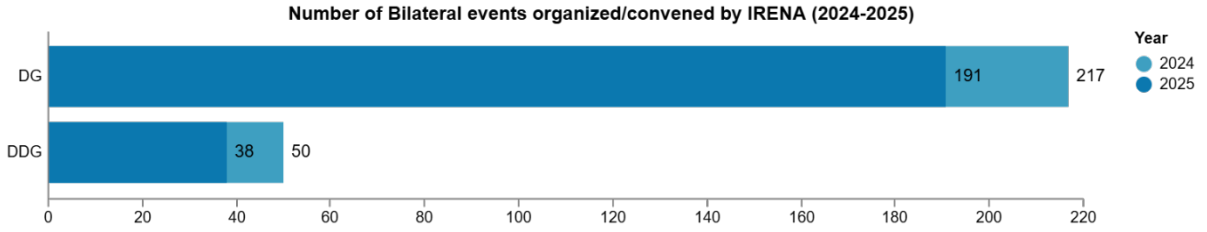
Number of events organised/convened by IRENA by Stakeholder group (2022-2023)

Stakeholder Group	2022	2023	Total
Academia, Research Institutions, Think Tanks	3	1	4
Civil Society and NGOs	5	12	17
Commercial financing institutions		1	1
Countries (Government and National Bodies)	127	99	226
Developers (public and private)	1	3	4
Development Financing Institutions	1	2	3
Impact financing, angel investors		1	1
International and Regional Organisations	1		1
Media	1		1
Multilateral Development Bank	3	6	9
Other	5	10	15
Philanthropic Organizations, Foundations and Trusts		1	1
Private sector, including industry associations	3	11	14
United Nations, including Agencies, Funds and Programmes	4	5	9
Total	154	152	306

Number of events organised/convened by IRENA by Stakeholder group (2024-2025)

Stakeholder Group	2024	2025	Total
Academia, Research Institutions, Think Tanks	4	5	9
Civil Society and NGOs	5	6	11
Countries (Government and National Bodies)	129	93	222
Developers (public and private)	5	4	9
Development Financing Institutions	1	1	2
International and Regional Organisations	4	10	14
Multilateral Development Bank	3	6	9
Other	11	48	59
Private sector, including industry associations	7	3	10
United Nations, including Agencies, Funds and Programmes	1	4	5
Total	170	180	350





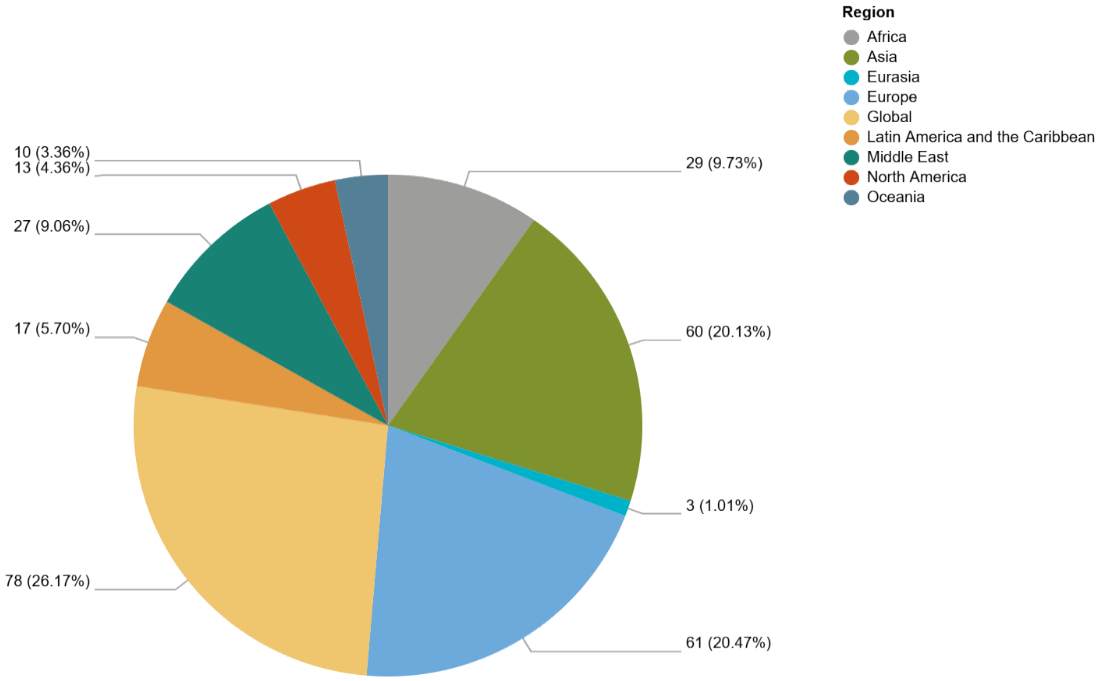
Number of Bilateral events organised/convened by IRENA by Stakeholder group (2022-2023)

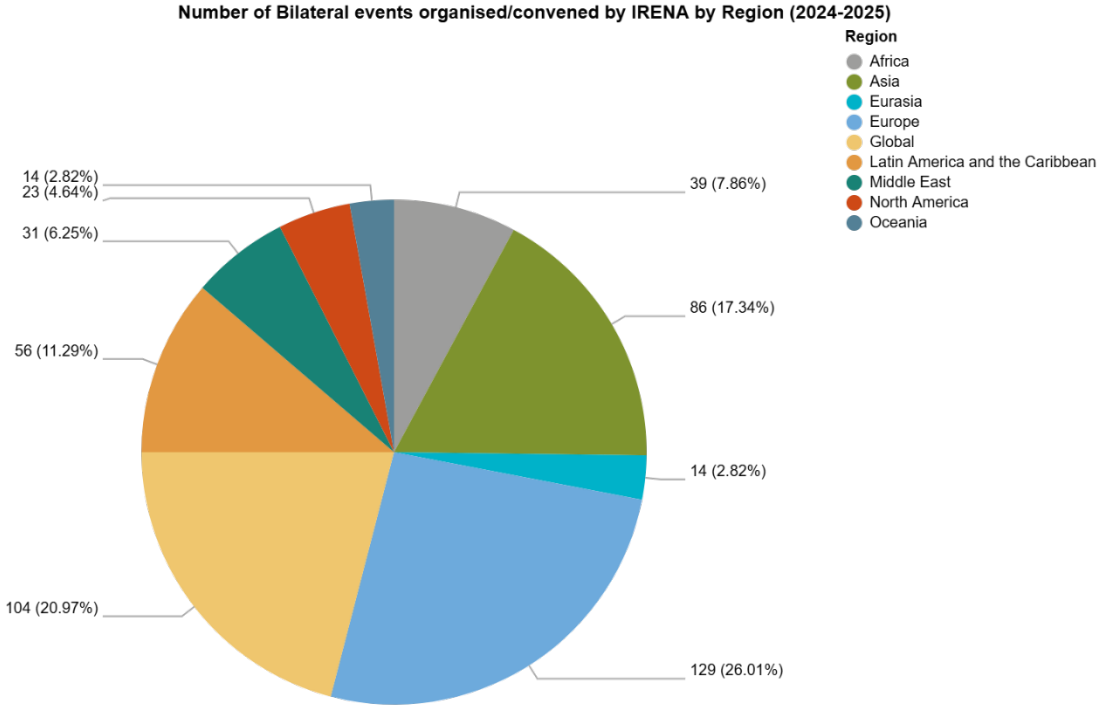
Stakeholder Group	2023	Total
Academia, Research Institutions, Think Tanks	6	6
Civil Society and NGOs	6	6
Commercial financing institutions	3	3
Countries (Government and National Bodies)	183	183
Development Financing Institutions	5	5
Impact financing, angel investors	2	2
International and Regional Organisations	34	34
Multilateral Development Bank	12	12
Philanthropic Organizations, Foundations and Trusts	8	8
Private sector, including industry associations	24	24
United Nations, including Agencies, Funds and Programmes	15	15
Total	298	298

Number of Bilateral events organised/convened by IRENA by Stakeholder group (2024-2025)

Stakeholder Group	2024	2025	Total
Academia, Research Institutions, Think Tanks	9	2	11
Civil Society and NGOs	2	2	4
Commercial financing institutions	1	1	2
Countries (Government and National Bodies)	170	162	332
Development Financing Institutions	1		1
International and Regional Organisations	27	29	56
Multilateral Development Bank	9	4	13
Other		1	1
Philanthropic Organizations, Foundations and Trusts	6	4	10
Private sector, including industry associations	20	11	31
United Nations, including Agencies, Funds and Programmes	22	13	35
Total	267	229	496

Number of Bilateral events organised/convened by IRENA by Region (2022-2023)




Number of Bilateral events organised/convened by IRENA by Region (2024-2025)
Region
Africa
Asia
Eurasia
Europe
Global
Latin America and the Caribbean
Middle East
North America
Oceania
39 (7.86%)
86 (17.34%)
14 (2.82%)
129 (26.01%)
104 (20.97%)
56 (11.29%)
31 (6.25%)
23 (4.64%)
14 (2.82%)

Indicator 2.1.2. presents the Number of participants in events convened by IRENA. The indicator is disaggregated by focus country and region as well as by stakeholder group that attended the meetings. Table 27 shows that more than 10 000 people attended events organised by IRENA in 2022-23. The primary stakeholder group that benefited from the events were country representatives from national governments and national bodies (76%). Most participants attended governing body meetings, followed by conferences.

In the current biennium, the number of participants attending IRENA events jumped to 17 000 mainly due to an increased number of online events - for example some governing body meetings were hybrid - that facilitated the participation of more people. Similarly, most people participated in governing body meetings, and the main stakeholder group comprised of country representatives (52%).

Output 2.2: IRENA participated in international fora to discuss and present cutting-edge analysis on energy-transition

Indicator 2.2.1 covers the Number of international fora in which IRENA made a presentation or had a similar contribution, and it is disaggregated by geography and topic. Table 26 shows that in the 2022-23 biennium, IRENA participated in 705 international events, with 372 focusing on multiple regions, 143 on Europe, 70 on Asia and 53 on Africa. In both years, the most popular topic of discussion was country engagement (194), followed by technology (115), policy (99), and finance and investment (99).

In the current biennium, IRENA has participated in 611 events organised by other entities as of 15 November. Similarly, most of IRENA's discussions on issues affecting multiple regions (285), whereas 127 focused on European issues, 72 on Asian and 57 on African-related topics. Country engagement (153), finance and investment (111), policy (83), and technology (71) were the most pertinent issues discussed.

Table 26: Number of international fora in which IRENA made a presentation, 2022-2025

Number of International FORA - Baseline biennium (2022-2023)

Baseline biennium	Number of international FORA
2022	403
2023	302
Total	705

Number of International Fora - Target biennium (2024-2025)

Target biennium	Number of international FORA
2024	324
2025	287
Total	611

Number of International Fora by Region (2022-2023)

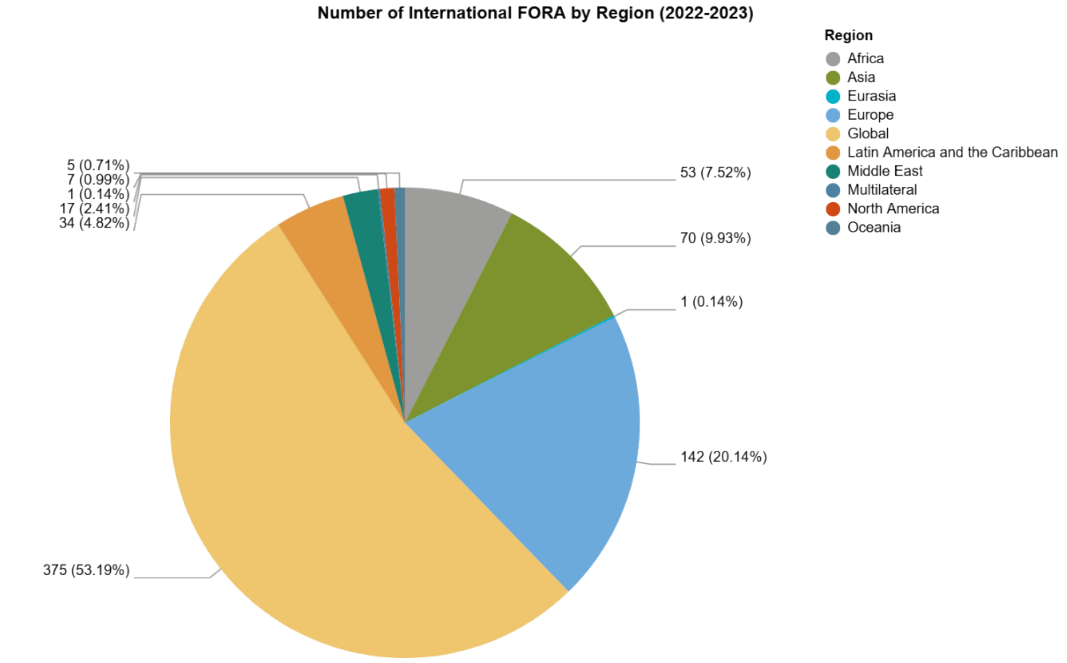
Region	Number of International Fora
Africa	**53**
Algeria	2
Egypt	5
Ethiopia	2
Ghana	1
Guinea	1
Kenya	3
Malawi	1
Mauritania	1
Morocco	1
Mozambique	1
Senegal	1
Togo	1
Uganda	1
United Republic of Tanzania	2
Multilateral	30
Asia	**70**
Bhutan	1
Brunei Darussalam	2
China	7
India	12
Indonesia	7
Japan	4
Kazakhstan	1
Malaysia	2
Nepal	1
Pakistan	1
Republic of Korea	4
Thailand	3
Turkmenistan	1
Uzbekistan	2
Viet Nam	2
Multilateral	20
Eurasia	**1**
Georgia	1

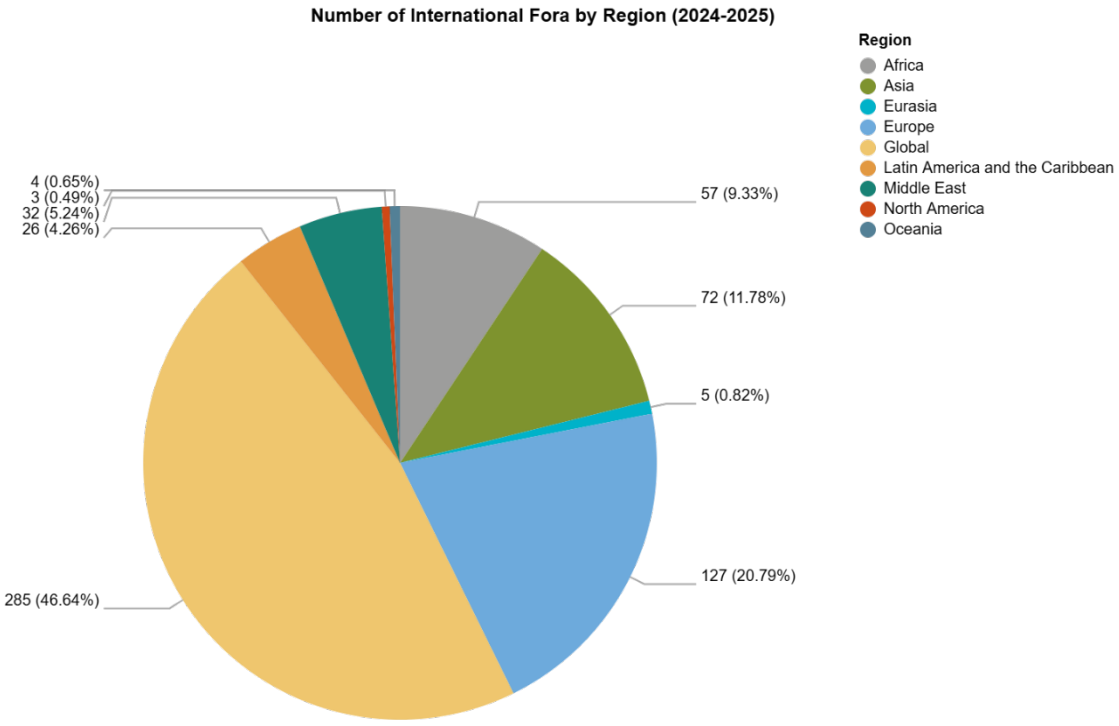
Europe	**143**
Austria	6
Belgium	11
Czechia	4
Denmark	1
Estonia	1
European Union (28)	1
France	3
Germany	35
Hungary	1
Italy	8
Latvia	1
Monaco	1
Netherlands	9
North Macedonia	1
Norway	1
Poland	2
Portugal	1
Slovakia	2
Slovenia	1
Spain	6
Sweden	2
Switzerland	2
Ukraine	2
United Kingdom and Northern Ireland	12
Multilateral	29
Global	**372**
France	1
Multilateral	371
Latin America and the Caribbean	**34**
Antigua and Barbuda	1
Brazil	7
Chile	2
Colombia	3
Panama	2
Uruguay	1
Multilateral	18
Middle East	**18**
Iraq	1
Israel	1
Qatar	1
Saudi Arabia	1
United Arab Emirates	9
Multilateral	5
Multilateral	**1**
Multilateral	1
North America	**7**
Canada	3
Mexico	2
United States of America	2
Oceania	**6**
Australia	2
Multilateral	4
Total	**705**

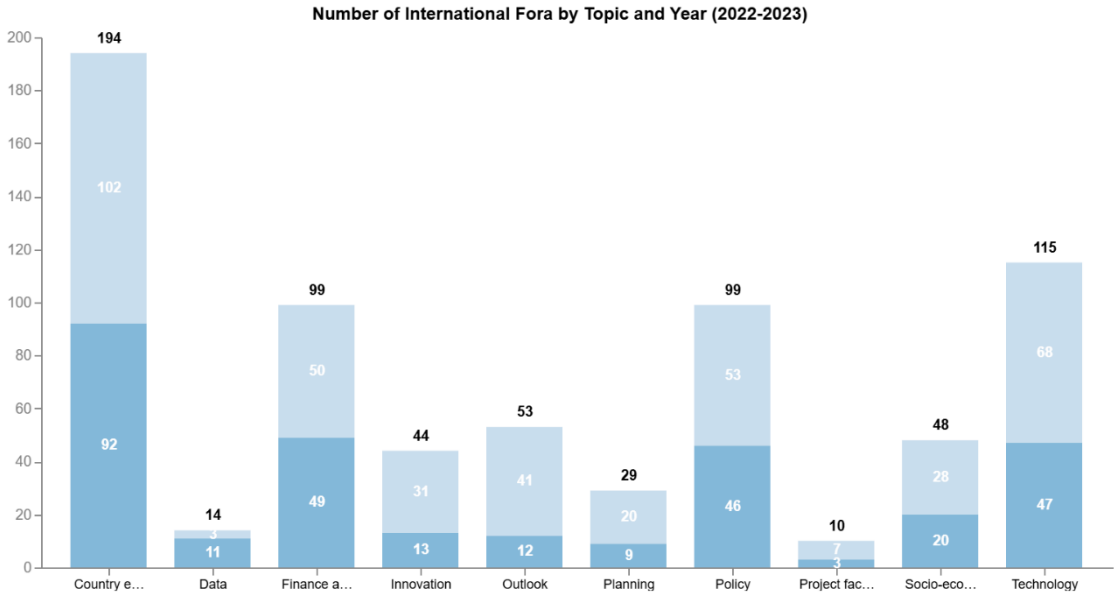
Number of International Fora by Region (2024-2025)

Region	Number of International Fora
Africa	**57**
African Union	2
Algeria	1
Angola	1
Cote d'Ivoire	1
Egypt	6
Ethiopia	2
Ghana	4
Kenya	2
Malawi	1
Morocco	1
Mozambique	1
Namibia	1
Niger	1
Nigeria	1
Rwanda	3
Senegal	1
Sierra Leone	5
South Africa	3
Tunisia	2
United Republic of Tanzania	2
Multilateral	16
Asia	**72**
Afghanistan	3
China	10
India	11
Indonesia	1
Japan	1
Kazakhstan	3
Malaysia	2
Mongolia	1
Nepal	1
Pakistan	1
Philippines	2
Republic of Korea	4
Singapore	2
Tajikistan	1
Thailand	2
Uzbekistan	4
Multilateral	23
Eurasia	**5**
Azerbaijan	2
Russian Federation	2
Türkiye	1

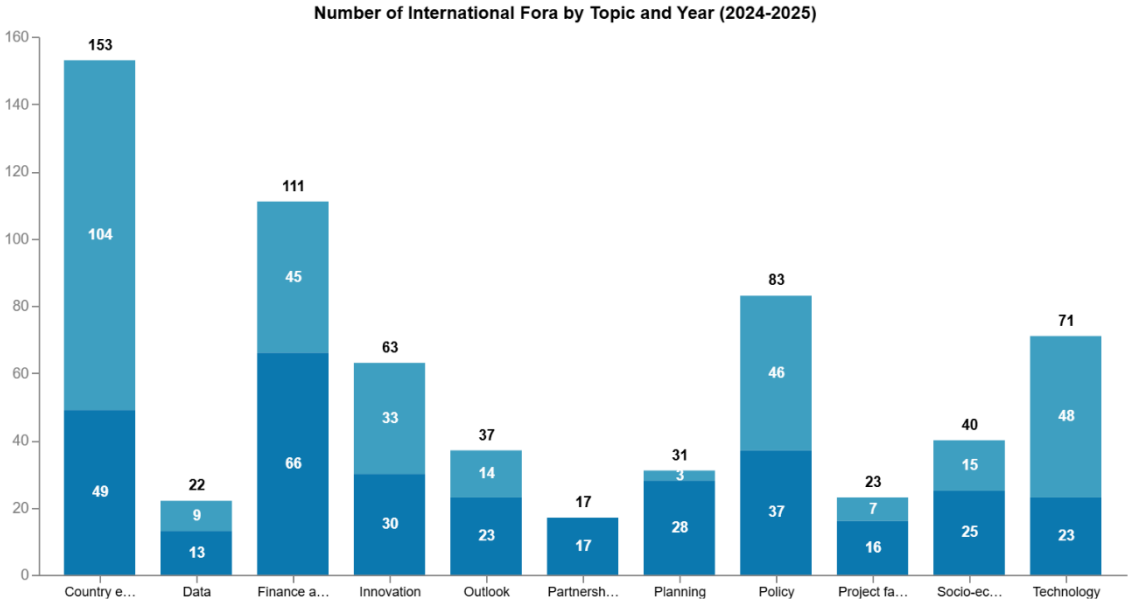
Europe	**127**
Austria	6
Belgium	18
Bulgaria	1
Croatia	1
Cyprus	1
Denmark	3
European Union (28)	6
France	7
Georgia	1
Germany	27
Greece	3
Iceland	1
Italy	6
Luxembourg	1
Malta	1
Netherlands	9
Norway	1
Republic of Moldova	2
Serbia	2
Slovenia	1
Spain	1
Sweden	1
Switzerland	1
Ukraine	6
United Kingdom and Northern Ireland	9
Multilateral	11
Global	**285**
United Arab Emirates	1
Multilateral	284
Latin America and the Caribbean	**26**
Brazil	6
Chile	2
Colombia	2
Costa Rica	3
Cuba	1
Dominican Republic	2
El Salvador	2
Guatemala	1
Peru	1
Uruguay	1
Multilateral	5
Middle East	**32**
Bahrain	1
Egypt	1
Iran (Islamic Republic of)	1
Jordan	1
Kuwait	1
Lebanon	2
Oman	1
Qatar	2
United Arab Emirates	17
Multilateral	5
North America	**3**
United States of America	3
Oceania	**4**
Australia	1
Tonga	1
Vanuatu	1
Multilateral	1
Total	**611**


Number of International FORA by Region (2022-2023)
Region
Africa
Asia
Eurasia
Europe
Global
Latin America and the Caribbean
Middle East
Multilateral
North America
Oceania
5 (0.71%)
7 (0.99%)
1 (0.14%)
17 (2.41%)
34 (4.82%)
53 (7.52%)
70 (9.93%)
1 (0.14%)
142 (20.14%)
375 (53.19%)


Number of International Fora by Region (2024-2025)
Region
Africa
Asia
Eurasia
Europe
Global
Latin America and the Caribbean
Middle East
North America
Oceania
4 (0.65%)
3 (0.49%)
32 (5.24%)
26 (4.26%)
57 (9.33%)
72 (11.78%)
5 (0.82%)
127 (20.79%)
285 (46.64%)



1. Country engagement
2. Data
3. Finance and Investment
4. Innovation
5. Outlook
6. Planning
7. Policy
8. Project facilitation
9. Socio-economic impact
10. Technology



1. Country engagement
2. Data
3. Finance and Investment
4. Innovation
5. Outlook
6. Partnerships
7. Planning
8. Policy
9. Project facilitation
10. Socio-economic impact
11. Technology

Output 2.3: IRENA's partnerships with and between organisations are improving cooperation and leveraging of synergies

Indicator 2.3.1 covers the Number of partnerships actively operating since 2022 and is disaggregated by Type of partnership and Topic. The biennium 2022-2023 was used as a baseline. Partnerships are divided into two broad categories: bilateral partnerships with governments, organisations, or the private sector, and multilateral partnerships, which encompass initiatives or cooperation platforms. Table 27 shows that IRENA had 119 bilateral partnerships in 2022 and 2023. IRENA entered into 13 multilateral partnerships in 2022 and added three more in 2023, reaching a total of 16. The top four topics of the partnerships in the baseline biennium include policy, country engagement, technology and finance and investment for both bilateral and multilateral partnerships.

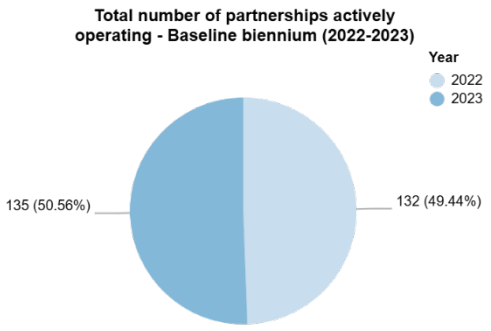
IRENA aims to improve the quality and depth of its partnerships, and based on experience, it has set a target of 110 bilateral partnerships per year and 16 multilateral ones. By 2024, ten bilateral partnerships and one multilateral had been concluded, dropping to 99 and 105, respectively. By 15 November 2025, another four bilateral agreements had been concluded, bringing the total to 103. The number of multilateral partnerships increased by two, reaching 17. In 2023-23, the majority of partnerships were bilateral focusing on policy and technology issues. In the current biennium, the focus has shifted towards socio-economic impact, country engagement and partnerships. Country engagement now dominates, followed by policy, socio-economic impact, finance and investment, and technology.

Through its multilateral partnerships, IRENA endeavours to engage with a multitude of partners from different sectors. In the previous biennium, IRENA engaged with 1,418 partners, mainly focusing on policy (588) as well as finance and investment (472). In the current biennium, the total as increased to 1,629, with most partners working on partnerships (572), finance and investment (507), and policy (241).

Table 27: Number of partnerships actively operating, 2022-2025

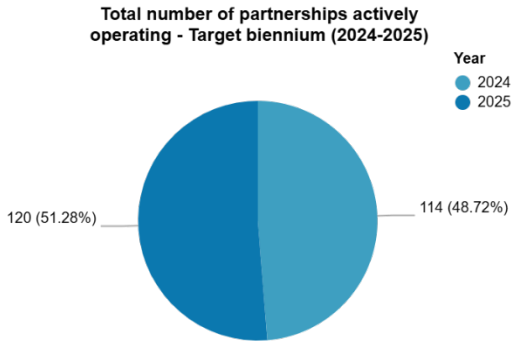
Number of partnerships actively operating - Baseline biennium (2022-2023)

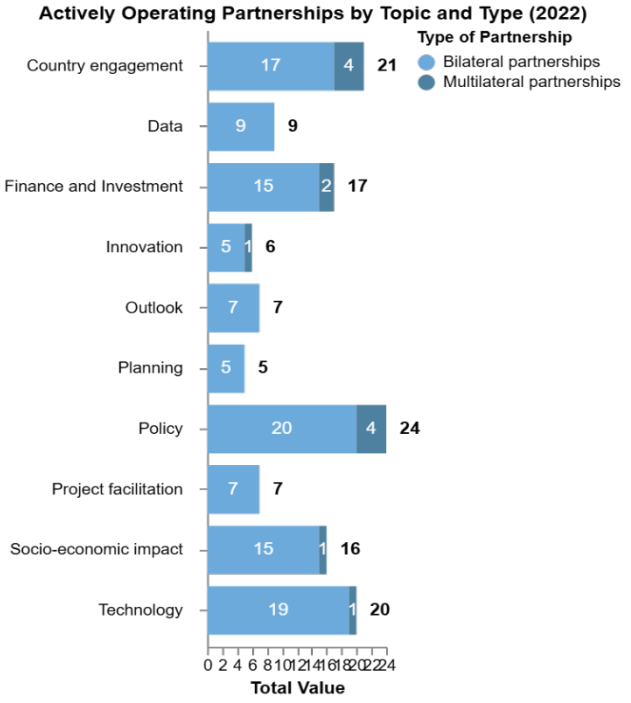
Baseline biennium	Bilateral Partnerships	Multilateral Partnerships	Total number of partnerships actively operating
2022	119	13	132
2023	119	16	135

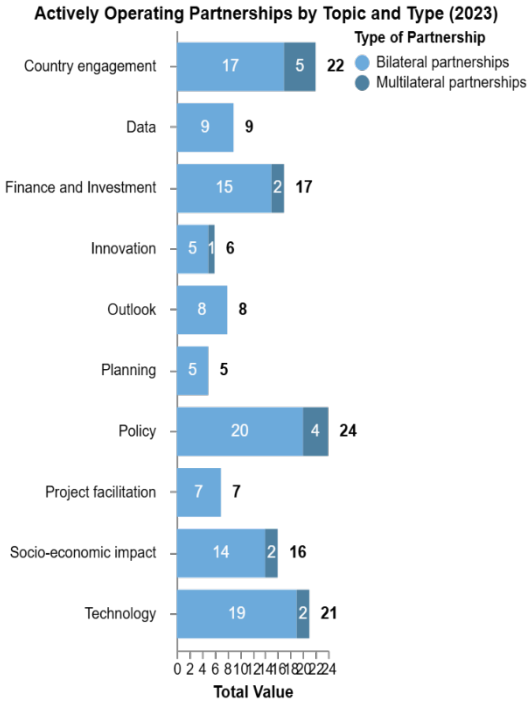


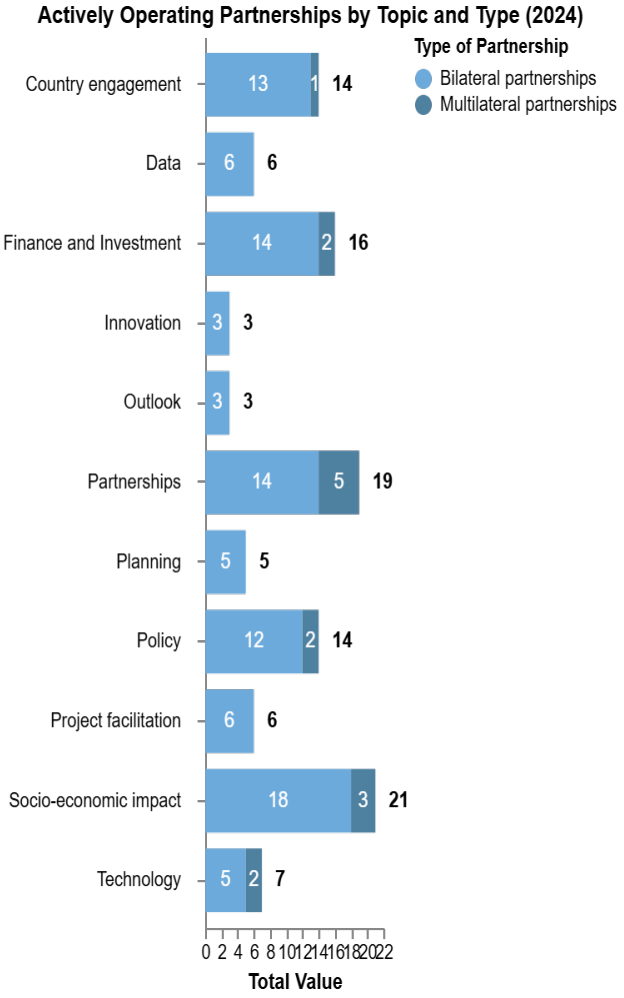
Number of partnerships actively operating - Target biennium (2024-2025)

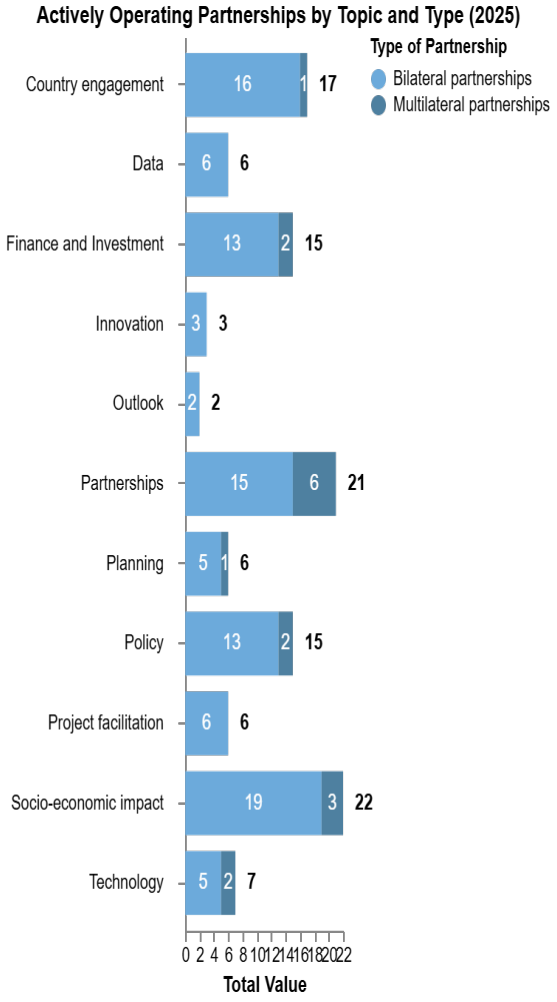
Target biennium	Bilateral Partnerships	Multilateral Partnerships	Total number of partnerships actively operating
2024	99	15	114
2025	103	17	120

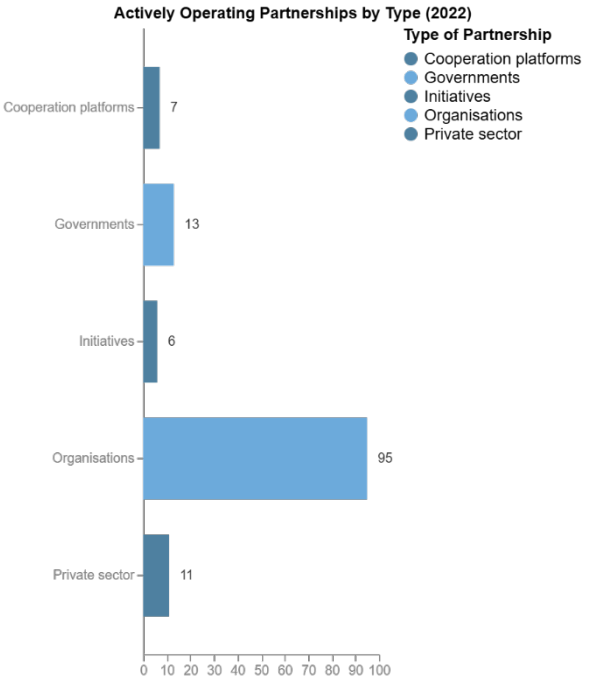


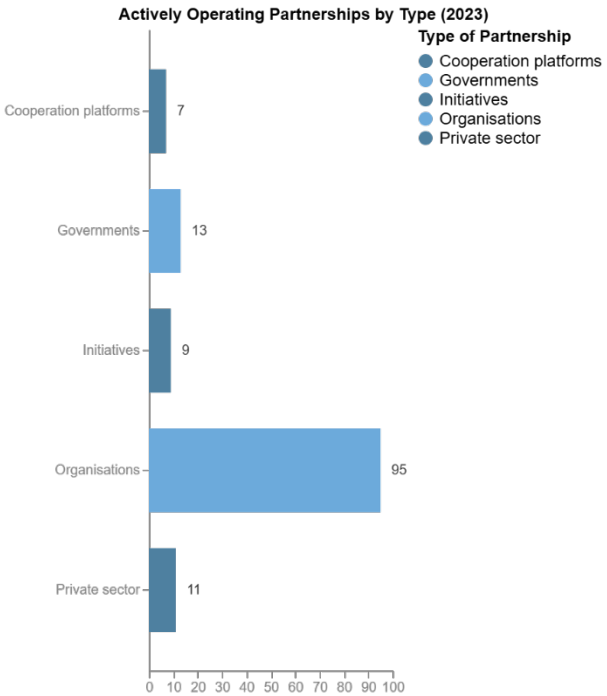


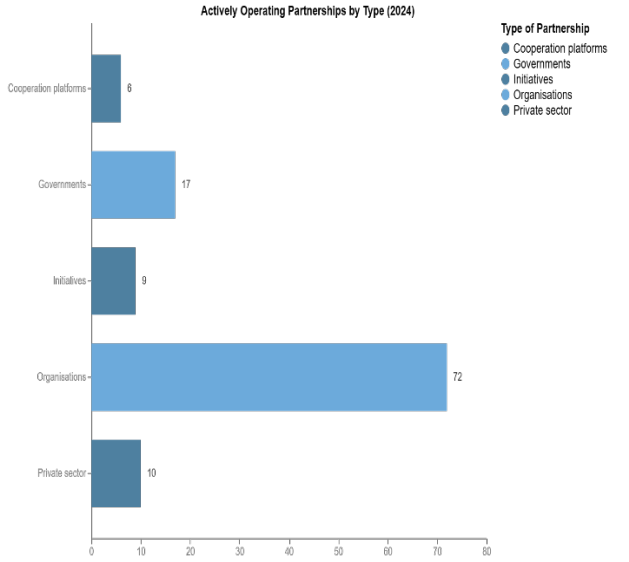


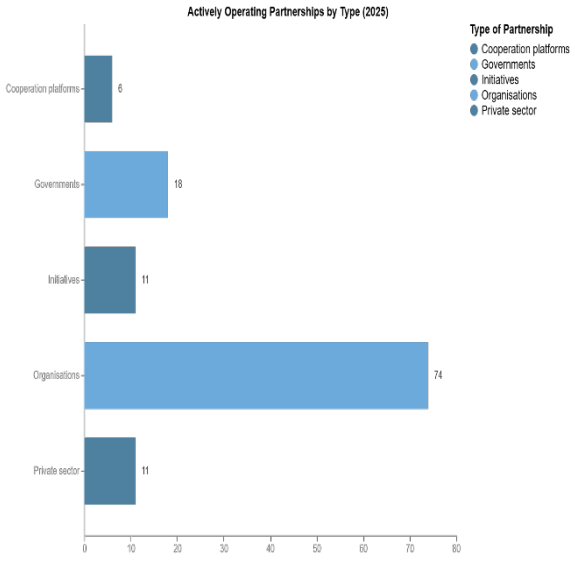

Actively Operating Partnerships by Topic and Type (2024)
Type of Partnership
Bilateral partnerships
Multilateral partnerships
Country engagement
Data
Finance and Investment
Innovation
Outlook
Partnerships
Planning
Policy
Project facilitation
Socio-economic impact
Technology
13 1 14
6 6
14 2 16
3 3
3 3
14 5 19
5 5
12 2 14
6 6
18 3 21
5 2 7
0 2 4 6 8 10 12 14 16 18 20 22
Total Value

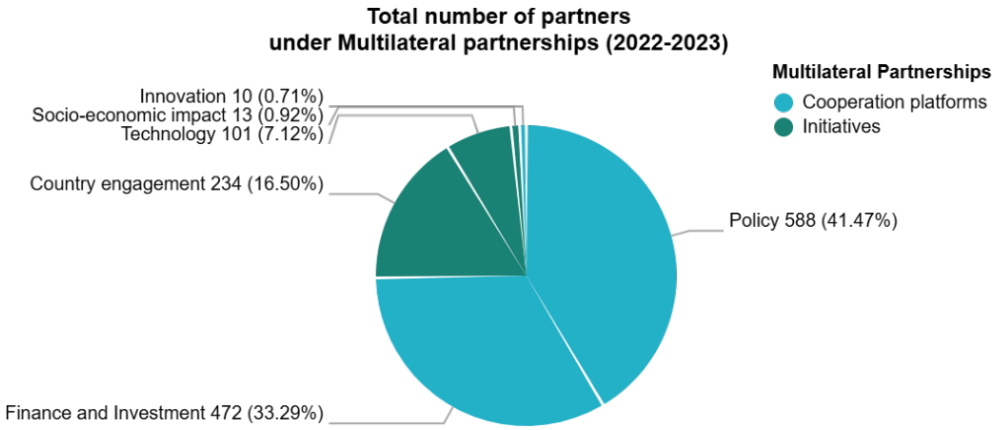

Actively Operating Partnerships by Topic and Type (2025)
Type of Partnership
Bilateral partnerships
Multilateral partnerships
Country engagement
Data
Finance and Investment
Innovation
Outlook
Partnerships
Planning
Policy
Project facilitation
Socio-economic impact
Technology
16 1 17
6 6
13 2 15
3 3
2 2
15 6 21
5 1 6
13 2 15
6 6
19 3 22
5 2 7
0 2 4 6 8 10 12 14 16 18 20 22
Total Value

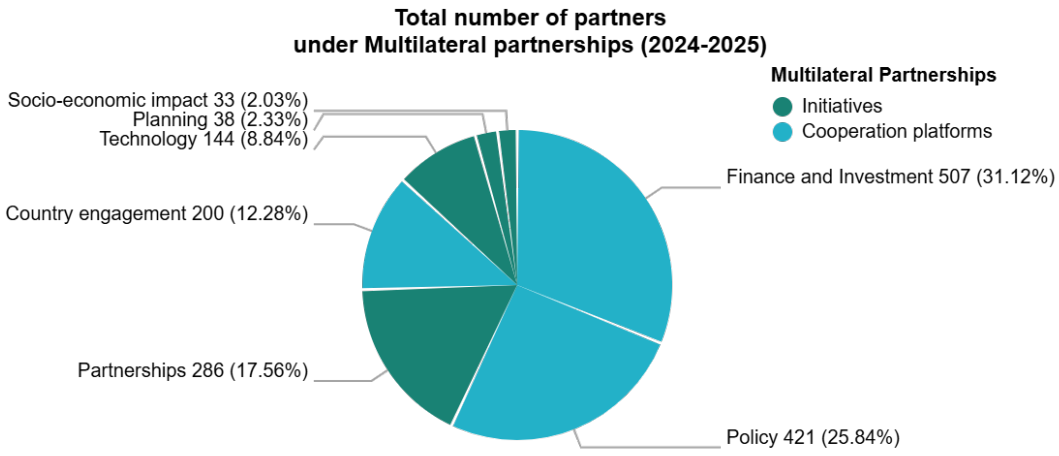

Actively Operating Partnerships by Type (2022)
Type of Partnership
Cooperation platforms
Governments
Initiatives
Organisations
Private sector
Cooperation platforms
Governments
Initiatives
Organisations
Private sector
7
13
6
95
11
0 10 20 30 40 50 60 70 80 90 100


Actively Operating Partnerships by Type (2023)
Type of Partnership
Cooperation platforms
Governments
Initiatives
Organisations
Private sector
Cooperation platforms
Governments
Initiatives
Organisations
Private sector
7
13
9
95
11
0 10 20 30 40 50 60 70 80 90 100


Actively Operating Partnerships by Type (2024)
Type of Partnership
Cooperation platforms
Governments
Initiatives
Organisations
Private sector
Cooperation platforms
Governments
Initiatives
Organisations
Private sector
6
17
9
72
10
0
10
20
30
40
50
60
70
80


Actively Operating Partnerships by Type (2025)
Type of Partnership
Cooperation platforms
Governments
Initiatives
Organisations
Private sector
Cooperation platforms
Governments
Initiatives
Organisations
Private sector
6
18
11
74
11
0
10
20
30
40
50
60
70
80


Total number of partners
under Multilateral partnerships (2022-2023)
Multilateral Partnerships
Cooperation platforms
Initiatives
Innovation 10 (0.71%)
Socio-economic impact 13 (0.92%)
Technology 101 (7.12%)
Country engagement 234 (16.50%)
Policy 588 (41.47%)
Finance and Investment 472 (33.29%)


Total number of partners
under Multilateral partnerships (2024-2025)
Multilateral Partnerships
Initiatives
Cooperation platforms
Socio-economic impact 33 (2.03%)
Planning 38 (2.33%)
Technology 144 (8.84%)
Country engagement 200 (12.28%)
Partnerships 286 (17.56%)
Finance and Investment 507 (31.12%)
Policy 421 (25.84%)

Activity: Capacity building and technical assistance services

Output 3.1 presents the Countries assisted in the development and implementation of energy transition strategies.

Indicator 3.1.1 covers the Number of Members receiving technical assistance from IRENA for their transition-related strategies. The indicator is disaggregated by geography and topic. During the baseline biennium 2022-20, eighteen Members received technical assistance, accounting for 23 individual requests (Table 28). The majority of the requests received were from African countries, followed by countries in Latin America and the Caribbean, and Asia. The requests were predominantly related to country engagement and project facilitation. IRENA also received two multilateral requests for technical assistance for Arab countries (1), Pacific countries (1) and one with global focus. In the current biennium, IRENA received requests for support from 27 Members, accounting for 41 individual requests. The majority of individual requests received were from African countries, followed by those from countries in Latin America and the Caribbean, and Asia. An additional six requests were related to more than one country. Similarly, the requests' focus has predominantly been on country engagement and project facilitation.

Table 28: Number of Members receiving technical assistance, 2022-2025

Number of members receiving technical assistance - Baseline biennium (2022-2023)

Baseline biennium	Number of members receiving technical assistance
2022	7
2023	16

Number of members receiving technical assistance - Target biennium (2024-2025)

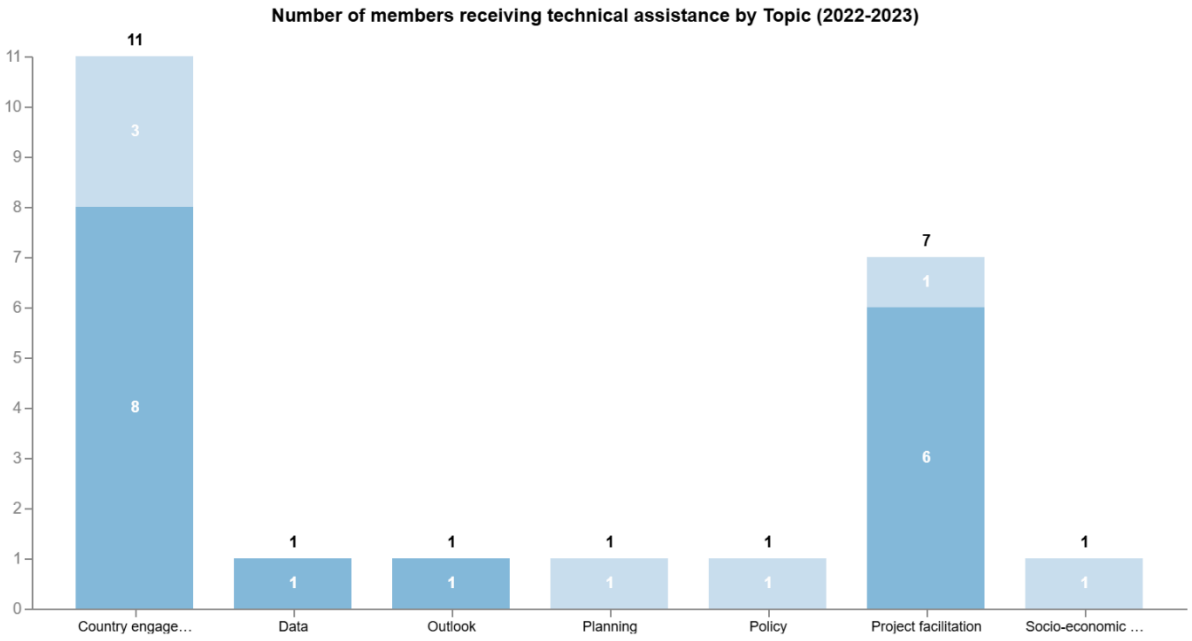
Baseline biennium	Number of members receiving technical assistance
2024	22
2025	24

Number of members receiving technical assistance by Region (2022-2023)

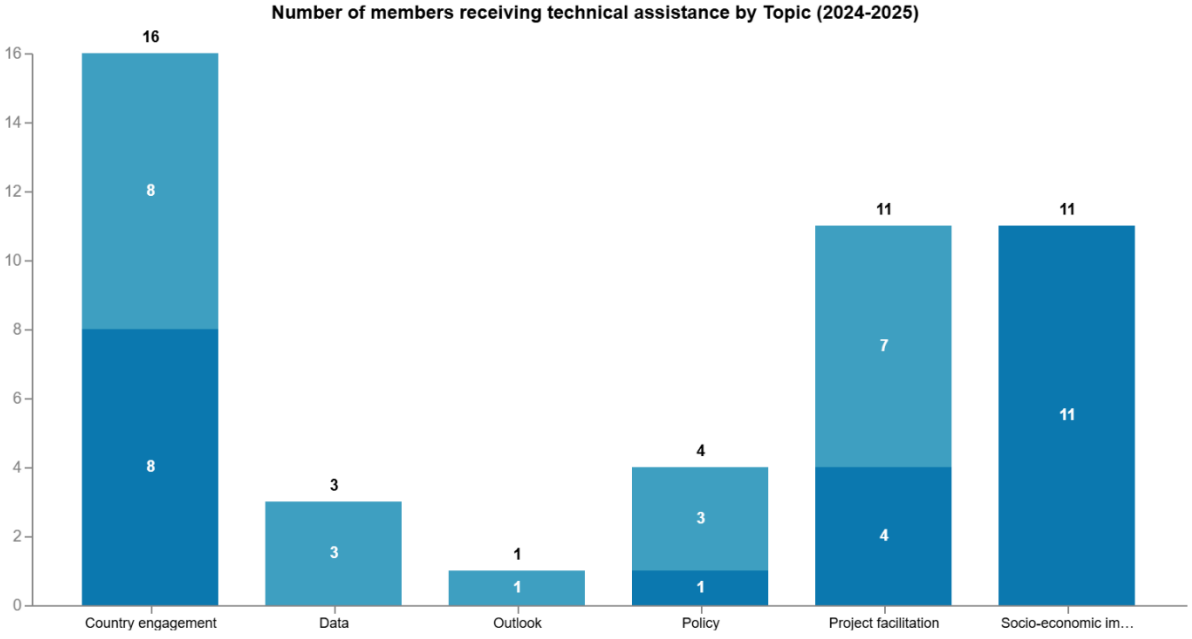
Region	2022	2023	Number of members receiving technical assistance
Africa			**9**
Burkina Faso		1	1
Mali		1	1
Mauritius	1		1
Sao Tome and Principe		2	2
Senegal		2	2
Somalia		1	1
Sudan		1	1
Asia			**3**
Kyrgyzstan	1		1
Mongolia		1	1
Uzbekistan		1	1
Europe			**1**
Bosnia and Herzegovina	1		1
Global			**1**
Multilateral	1		1
Latin America and the Caribbean			**4**
El Salvador		1	1
Honduras	1	1	2
Saint Kitts and Nevis		1	1
Middle East			**1**
Multilateral	1		1
Oceania			**4**
Multilateral		1	1
Solomon Islands	1	2	3
Total	**7**	**16**	**23**

Number of members receiving technical assistance by Region (2024-2025)

Region	2024	2025	Number of members receiving technical assistance
Africa			**28**
African Union		1	1
Angola	1		1
Burkina Faso	1		1
Chad	1		1
Comoros	1		1
Ghana		1	1
Guinea	1	1	2
Malawi	1	1	2
Mali		1	1
Mauritania	1	1	2
Mauritius	1		1
Morocco		1	1
Mozambique		1	1
Multilateral	1		1
Rwanda		1	1
Sao Tome and Principe	1		1
Senegal	1		1
Sierra Leone		2	2
Somalia	1	1	2
Zimbabwe	2	2	4
Asia			**4**
Indonesia		1	1
Nepal		2	2
Papua New Guinea		1	1
Eurasia			**3**
Georgia	2	1	3
Global			**1**
Multilateral	1		1
Latin America and the Caribbean			**6**
Belize	1		1
Brazil		1	1
Colombia		1	1
Grenada		1	1
Guyana	1		1
Multilateral	1		1
Middle East			**3**
Iraq	1	2	3
Oceania			**1**
Fiji	1		1
Total	**22**	**24**	**46**



1. Country engagement
2. Data
3. Outlook
4. Planning
5. Policy
6. Project facilitation
7. Socio-economic impact



1. Country engagement
2. Data
3. Outlook
4. Policy
5. Project facilitation
6. Socio-economic impact

Indicator 3.1.2 covers the Number of capacity-building events held and counts the events where IRENA has supported entities in developing and strengthening their skills. During 2022-2023, IRENA organised 97 capacity-building events. Table 29 shows that the majority focused on issues affecting several regions and countries (37), followed by capacity building events benefiting African countries (20), Asian countries (16) and Latin American and the Caribbean (15). The top three topics of interest are country engagement (45), finance and investment (15) and policy (11) (Table 31).

In the current biennium, IRENA has organised 47 capacity building events. The majority of the events focused on Africa (19), followed by capacity building events with a global focus (13). Similarly, twelve capacity building events focused on country engagement, followed by nine events on technology, seven on socio-economic impact as well as four on finance and investment and four on energy planning.

Table 29: Number of capacity building events held, 2022-2025

Number of capacity building events held - Baseline biennium (2022-2023)

Baseline biennium	Number of capacity building events held
2022	65
2023	32

Number of capacity building events held - Target biennium (2024-2025)

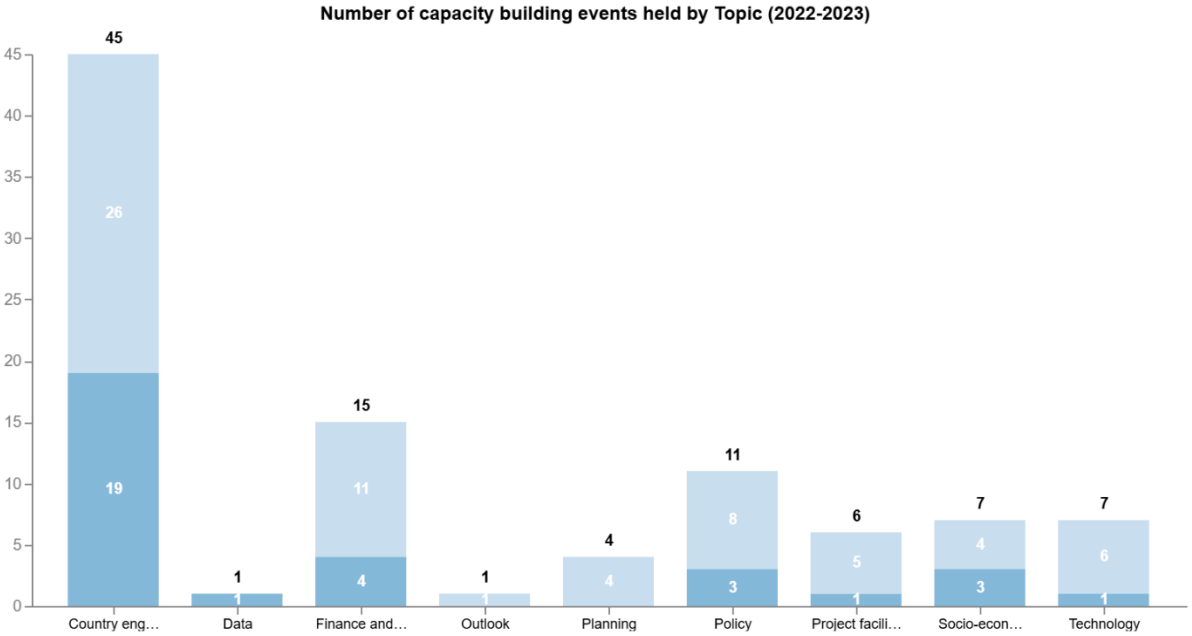
Target biennium	Number of capacity building events held
2024	20
2025	27

Number of capacity building events held by Region (2022-2023)

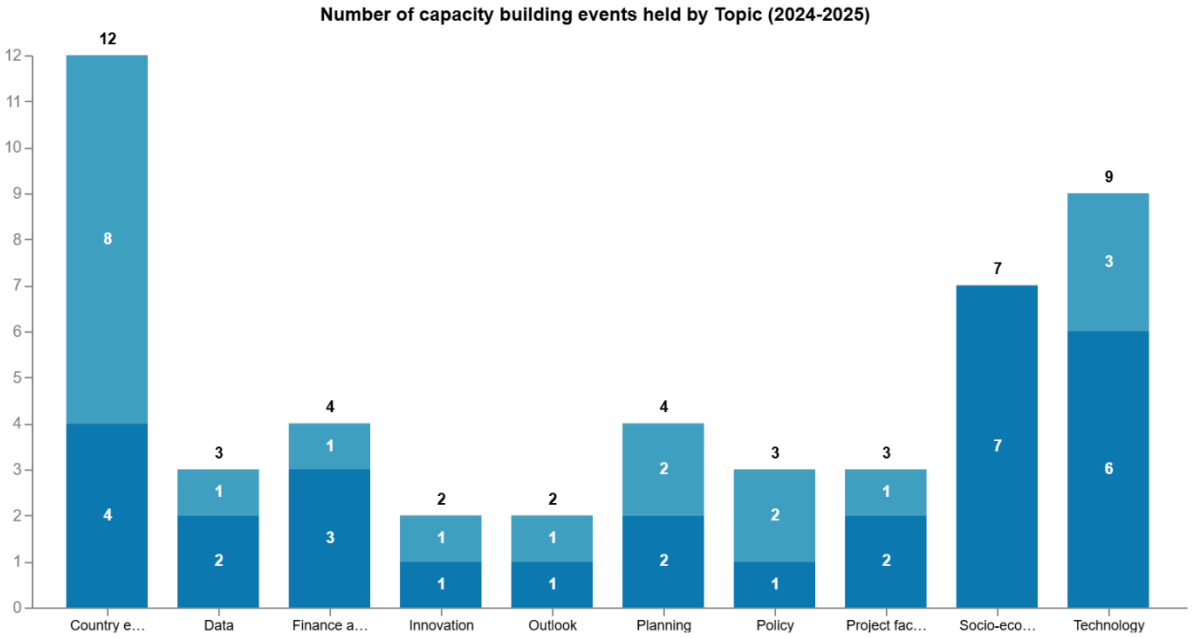
Region	2022	2023	Number of members receiving technical assistance
Africa			**20**
Cameroon	2		2
Lesotho		1	1
Mozambique	1		1
Multilateral	8	3	11
Senegal		3	3
Tunisia	1	1	2
Asia			**16**
Indonesia	1		1
Kyrgyzstan	2		2
Mongolia	2	1	3
Multilateral	2	7	9
Uzbekistan		1	1
Europe			**3**
Bosnia and Herzegovina	1		1
Republic of Moldova		1	1
Ukraine		1	1
Global			**37**
Multilateral	28	9	37
Latin America and the Caribbean			**15**
Argentina	1		1
Barbados		1	1
Grenada	4		4
Multilateral	5	1	6
Paraguay	1		1
Saint Lucia	1		1
Uruguay		1	1
Middle East			**4**
Iraq	2		2
Multilateral	2		2
Oceania			**2**
Multilateral	1	1	2
Total	**65**	**32**	**97**

Number of capacity building events held by Region (2024-2025)

Region	2024	2025	Number of members receiving technical assistance
Africa			**19**
African Union		3	3
Egypt		1	1
Kenya	1		1
Mozambique		1	1
Multilateral	5	1	6
Rwanda		2	2
Senegal	1		1
Sierra Leone		1	1
Uganda		2	2
United Republic of Tanzania		1	1
Asia			**3**
Indonesia		1	1
Nepal	1	1	2
Eurasia			**1**
Türkiye		1	1
Europe			**4**
Denmark	1		1
European Union (28)	1		1
Georgia	2		2
Global			**13**
Multilateral	5	8	13
Latin America and the Caribbean			**1**
Grenada		1	1
Latin America and the Caribbean, Global			**1**
Chile		1	1
Middle East			**5**
Iran (Islamic Republic of)	1		1
Iraq	1	1	2
Multilateral	1		1
United Arab Emirates		1	1
Total	**20**	**27**	**47**



1. Country engagement
2. Data
3. Finance and Investment
4. Outlook
5. Planning
6. Policy
7. Project facilitation
8. Socio-economic impact
9. Technology



1. Country engagement
2. Data
3. Finance and Investment
4. Innovation
5. Outlook
6. Planning
7. Policy
8. Project facilitation
9. Socio-economic impact
10. Technology

Indicator 3.1.3 presents the Number of people trained and is disaggregated by geography, stakeholder group and topic. IRENA trained more than 403 people in 2022 and 417 in 2023, the majority participating in training on issues relevant to multiple countries and regions (Table 30).

In 2024, IRENA trained more than 398 people and in 2025 the number reached 474 people. People from multiple countries and regions have benefited from IRENA trainings thus far. Country engagement is the primary focus of training in both biennia. IRENA is working on systematising the collection of participants' numbers to improve reporting.

Table 30: Number of people trained, 2022-2025

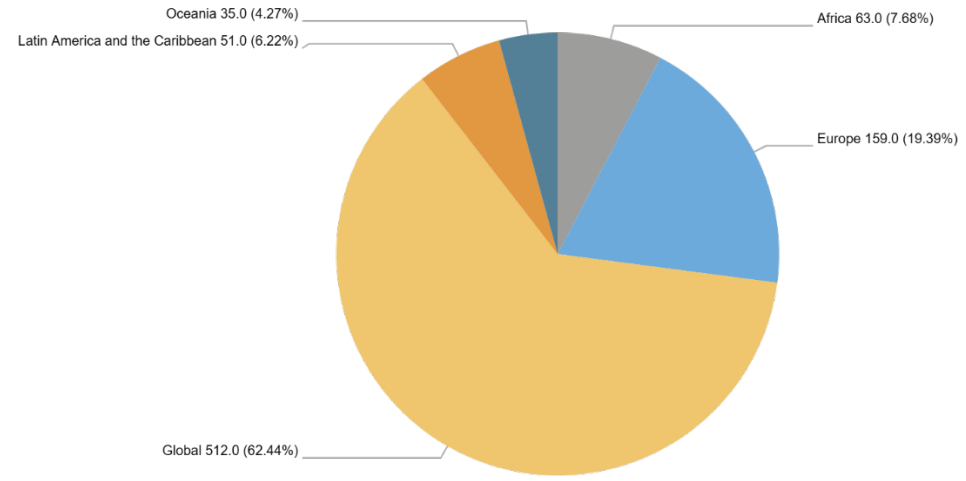
Number of people trained - Baseline biennium (2022-2023)

Baseline biennium	Number of people trained
2022	403
2023	417

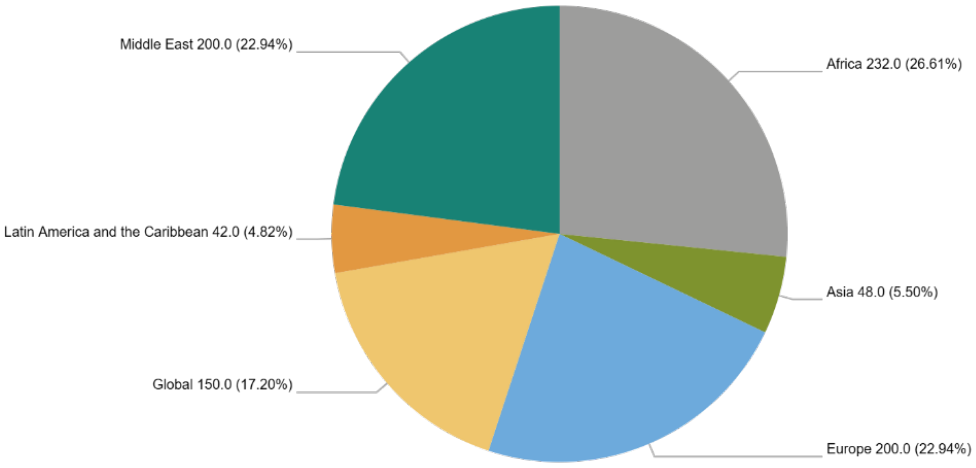
Number of people trained - Target biennium (2024-2025)

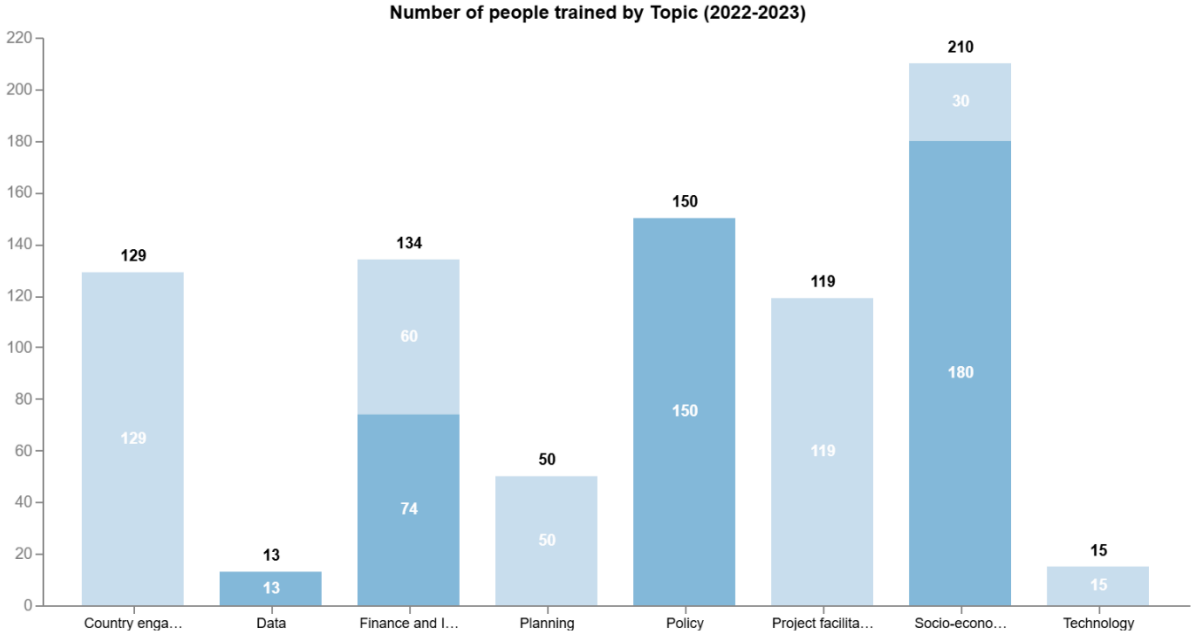
Target biennium	Number of people trained
2024	398
2025	474

Number of people trained by Region (2022-2023)

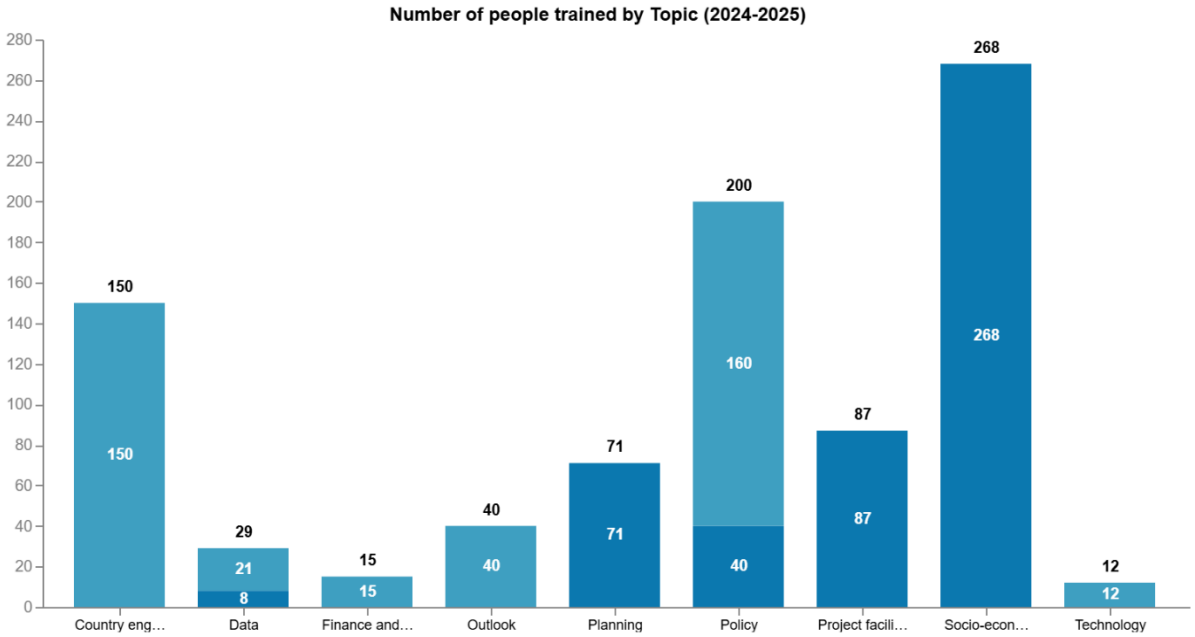


Number of people trained by Region (2024-2025)





1. Country engagement
2. Data
3. Finance and Investment
4. Planning
5. Policy
6. Project facilitation
7. Socio-economic impact
8. Technology



1. Country engagement
2. Data
3. Finance and Investment
4. Outlook
5. Planning
6. Policy
7. Project facilitation
8. Socio-economic impact
9. Technology

1. Countries (Government and National Bodies)
2. Other
3. Developers (public and private)
4. Civil Society and NGOs
5. Academia, Research Institutions, Think Tanks

1. Countries (Government and National Bodies)
2. Academia, Research Institutions, Think Tanks
3. Developers (public and private)
4. government, private sector, academia, civil society, and other international organisations
5. Private sector, including industry associations

Output 3.2: Data and analysis provided to stakeholders mostly coming as direct requests and information loop of knowledge dissemination

Indicator 3.2.1 presents the Number of requests for information/inquiries received by IRENA from Members. This data had not been systematically collected prior to 2024. Table 31 presents the requests received by various government entities from IRENA Members and States in Accession in 2024 and 2025, with the exception of requests by a regional Australian government entity that was first registered in 2023 with a focus on innovation. In the current biennium, IRENA received 224 requests for information and assistance, the majority have been received by African Members (61), followed by Members from the Latin America and the Caribbean region (48) and Asia (40). The requests focused on country engagement (1132), policy (29), technology (19) and project facilitation (12). Notably, the majority of requests have been received by Ministries (203).

Table 31: Number of requests for information/inquiries, 2022-2025

Number of requests for information/inquiries - Baseline biennium (2022-2023)

Baseline biennium	Number of requests for information/inquiries
2023	1

Number of requests for information/inquiries - Target biennium (2024-2025)

Target biennium	Number of requests for information/inquiries
2024	58
2025	166

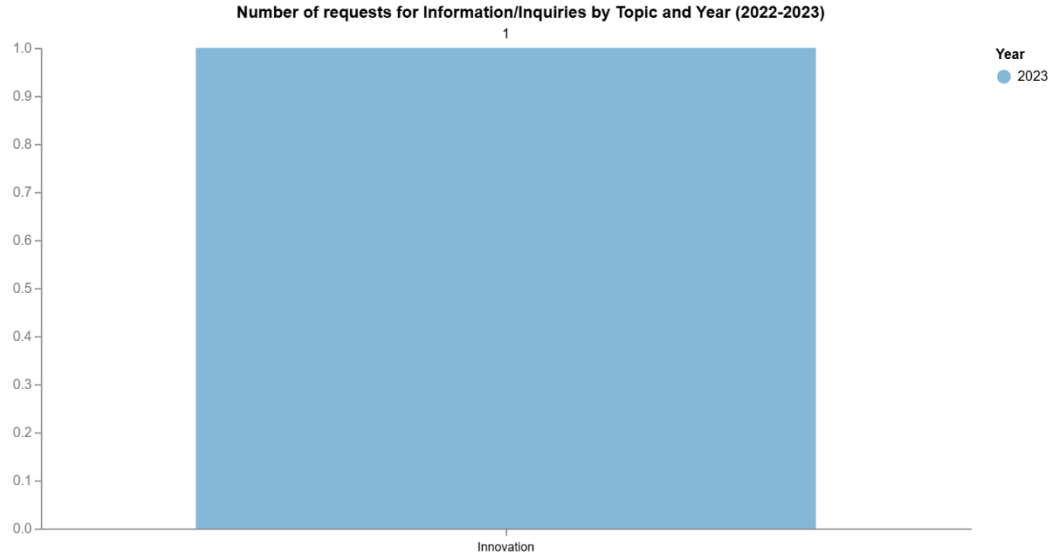
Number of requests for information/inquiries (2022-2023)

Region	Number of Requests
Oceania	1
SPC, Australia	1
Total	**1**

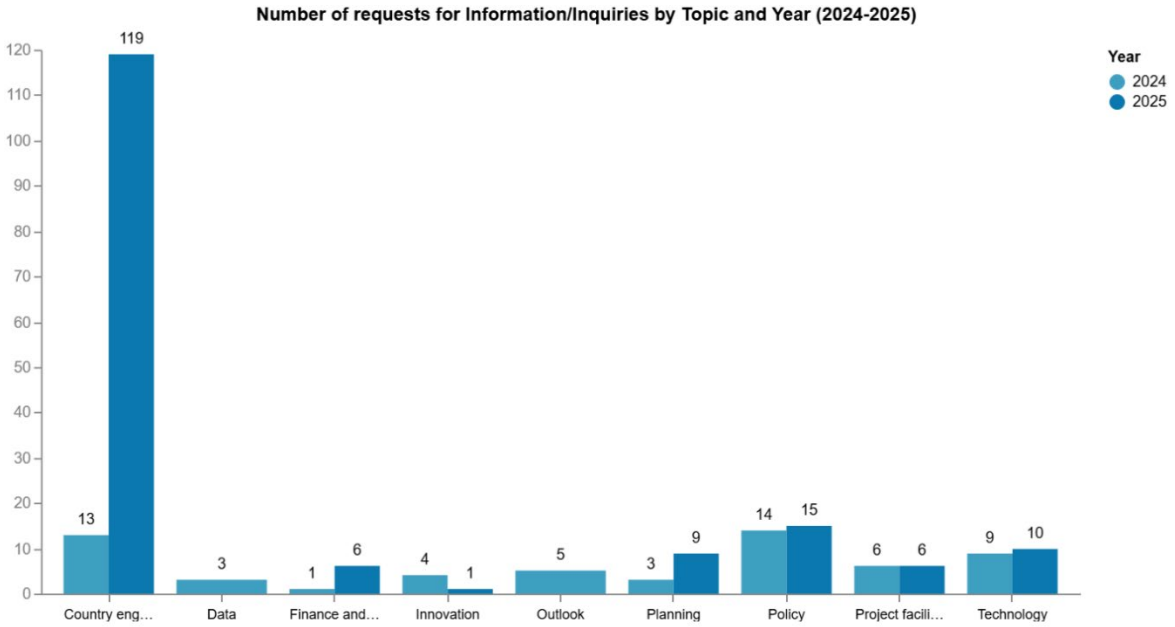
Number of requests for information/inquiries (2024-2025)

Region	Number of Requests
Africa	**61**
Angola	3
Cabo Verde	4
Chad	4
Comoros	3
Cote d'Ivoire	1
Ethiopia	1
Gambia	1
Ghana	2
Guinea	4
Guinea Bissau	1
Kenya	1
Malawi	2
Mauritania	3
Mauritius	2
Mozambique	1
Namibia	3
Niger	3
Nigeria	3
Sao Tome and Principe	1
Senegal	4
Seychelles	1
South Africa	8
Uganda	3
United Republic of Tanzania	1
Zimbabwe	1
Asia	**40**
Bangladesh	1
Brunei Darussalam	3
IORA	1
Kazakhstan	6
Kyrgyzstan	10
Maldives	1
Maldives	1
Nepal	2
Pakistan	1
Philippines	2
Tajikistan	12
Eurasia	**5**
Azerbaijan	4
Türkiye	1

Europe	**31**
Albania	3
Bosnia and Herzegovina	2
Cyprus	1
European Union (28)	3
Malta	2
Portugal	1
Republic of Moldova	15
Russian Federation	4
Latin America and the Caribbean	**48**
Antigua and Barbuda	6
Bahamas	1
Brazil	2
Cayman Islands	1
Colombia	2
Cuba	1
Dominican Republic	4
El Salvador	5
Grenada	14
Guatemala	4
Haiti	1
Honduras	1
OECS	1
OECS commission	1
Peru	1
Trinidad and Tobago	1
Turks and Caicos Islands*	1
Vanuatu	1
Middle East	**11**
Iraq	3
Israel	1
Lebanon	3
United Arab Emirates	4
Oceania	**28**
Fiji	3
Kiribati	13
Papua New Guinea	1
SPC, Australia	2
Solomon Islands	1
Tonga	8
Total	**224**

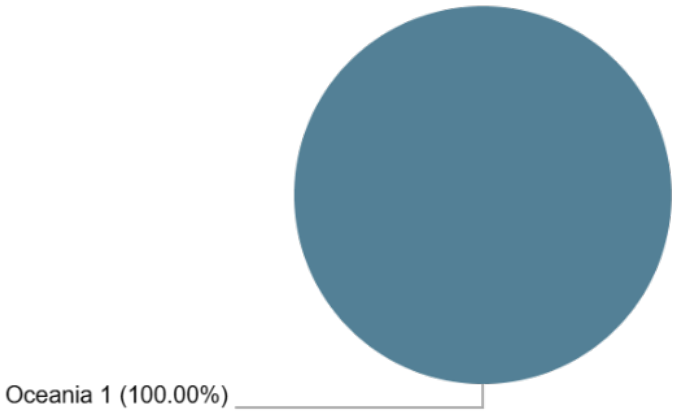


1. Innovation

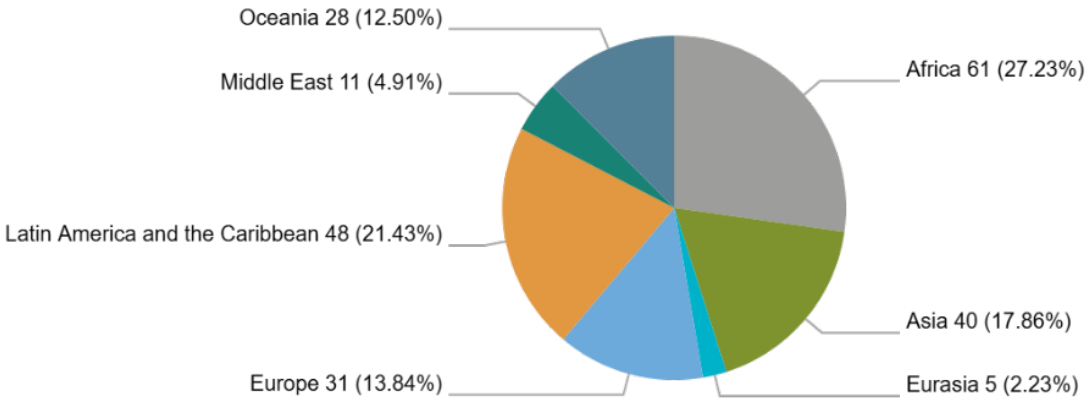


1. Country engagement
2. Data
3. Finance and Investment
4. Innovation
5. Outlook
6. Planning
7. Policy
8. Project facilitation
9. Technology

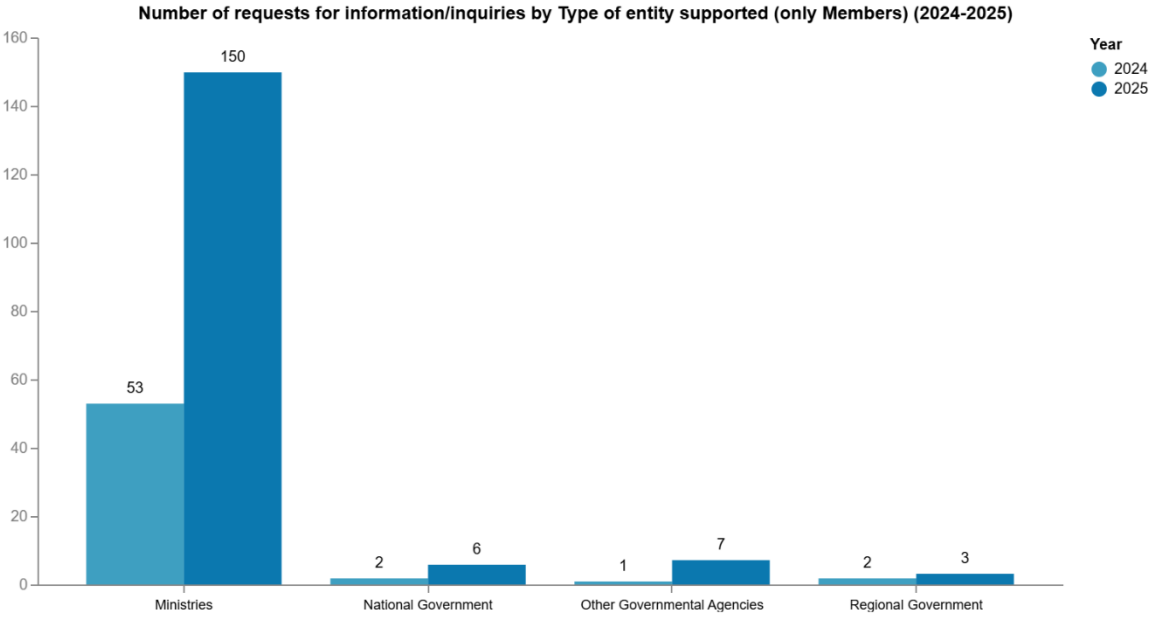
Requests for information/inquiries by Region (2022-2023)



Requests for information/inquiries by Region (2024-2025)



1. Regional Government



1. Ministries
2. National Government
3. Other Governmental Agencies
4. Regional Government

Activity: Project facilitation

Output 4.1: Developers used IRENA's platforms (*e.g.* CIP, ETAF) to submit projects looking for funding opportunities. The targets associated with the indicators below are considered conditional, influenced by a range of external and internal factors. These indicators are not solely within IRENA's control and are subject to contextual variables, including funding flows, stakeholder demand, and project maturity. As such, achieving these targets should be interpreted within the framework of plausible contribution.

Indicator 4.1.1 presents the Number of projects registered for funding opportunities through CIP and ETAF. Table 32 shows that 89 projects were registered for funding opportunities in 2022 and 90 projects in 2023. In 2022-23, the majority of the projects were located in Africa (34%), whereas 25% were in Asian countries and 17% in Latin America and the Caribbean. 2024 saw a slight increase in the number of projects, reaching 96. By 15 November 2025, 136 projects were registered, reaching a total of 232 in the biennium; 56% of the projects are in African countries, followed by 69% in Asian. In the previous biennium, 48 projects were in the 0-10 MW capacity range and 44 in the 10-50 MW range. Meanwhile, 30 projects were estimated at the 100-500 MW capacity range, and another 32 projects fell under the "Other" category. It should be noted that the "Other" technology category refers to projects that cannot be measured through output in MW, such as e-mobility, infrastructure or energy-efficient systems. In the current biennium, 75 projects are in the 0-10MW range, followed by 56 projects in the 10-50 MW range, and 43 projects under the Other category.

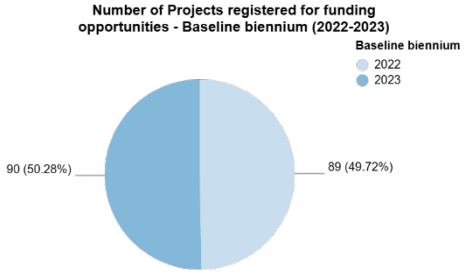
In terms of project cost, 40 projects were in the USD 10-50 million range, while 39 projects were in the USD 100-500 million range, and 33 projects were in the USD 500+ million range in 2022-23. In contrast, the majority of the projects (79) fall under the USD 10-50 million range, followed by 59 projects in the USD 0-5 million category in 2024-25. With regard to the project thematic area, the dominant area is electricity generation in both periods. In the previous biennia, solar energy dominated with 34.64% of the projects, followed closely by bioenergy (19.56%), and the Other category (16.2%). In the 2024-25 period, solar (51.25%) remains the main technology of choice, followed by bioenergy (9.91%) and Other (7.33%).

Lastly, it should be noted that this indicator is inherently demand-driven and relies on expressions of interest from developers and country-level stakeholders, and fluctuations are expected across reporting periods. Regional Investment Forums are an important driver of project registrations. These events and selected region(s) will impact the IRENA project facilitation support applications through CIP and ETAF.

Table 32: Number of projects registered for funding opportunities, 2022-2025

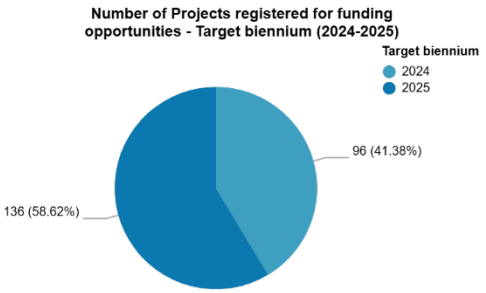
Number of Projects registered for funding opportunities - Baseline biennium (2022-2023)

Baseline biennium	Number of Projects registered for funding opportunities
2022	89
2023	90
Total	179



Number of Projects registered for funding opportunities - Target biennium (2024-2025)

Target biennium	Number of Projects registered for funding opportunities
2024	96
2025	136
Total	**232**

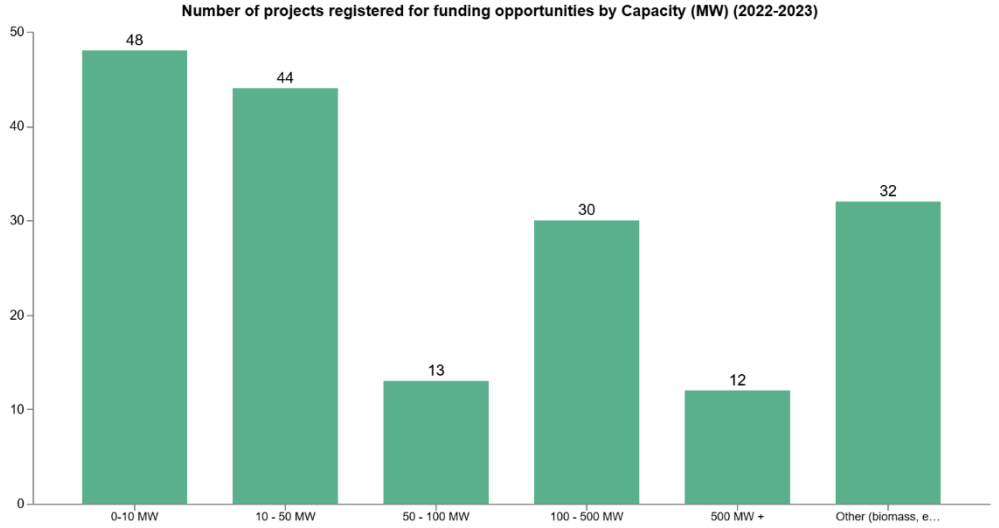


Number of Projects registered for funding opportunities by Region (2022-2023)

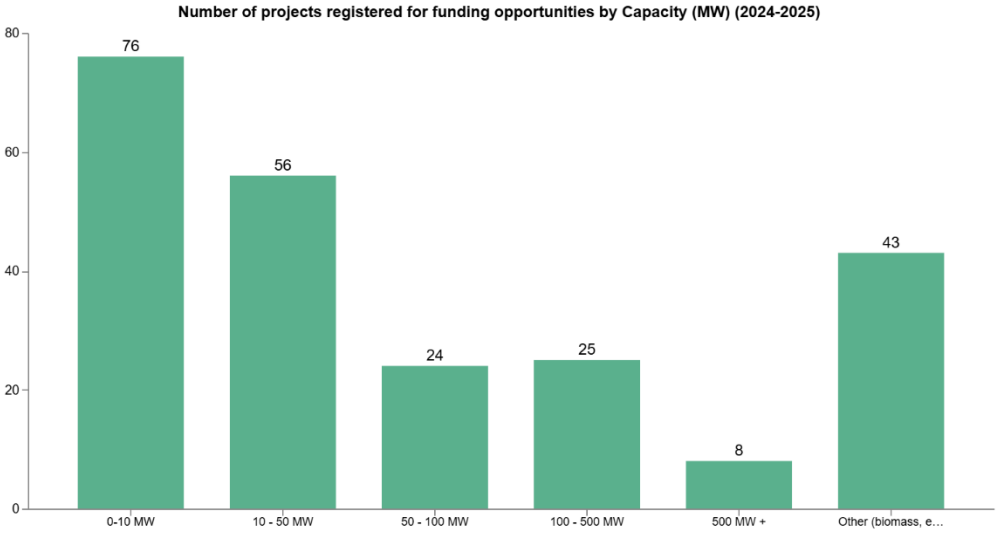
Region	2022	2023	Total
Africa	34	27	61
Asia	31	14	45
Eurasia	2	6	8
Europe	9	6	15
Latin America and the Caribbean	4	27	31
Middle East	3	7	10
North America	5	2	7
Oceania	1	1	2
Total	89	90	179

Number of Projects registered for funding opportunities by Region (2024-2025)

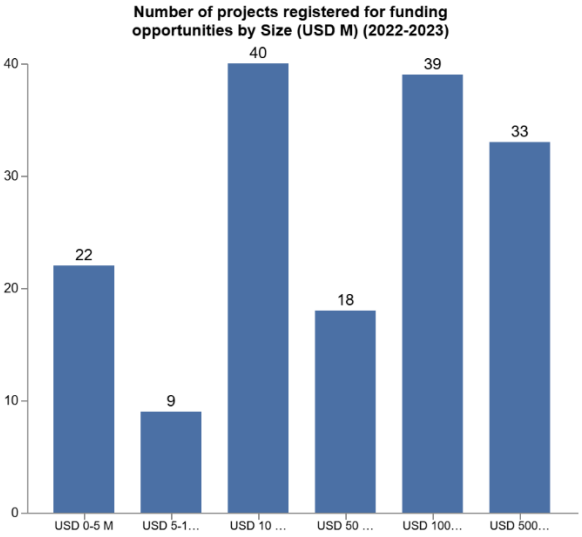
Region	2024	2025	Total
Africa	72	58	130
Asia	5	64	69
Eurasia	4		4
Europe	4	2	6
Latin America and the Caribbean	5	9	14
Middle East	2	2	4
North America	4	1	5
Total	96	136	232



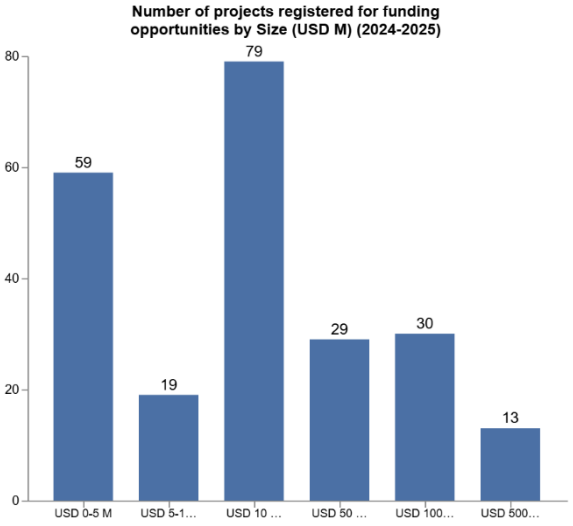
1. 0-10 MW
2. 10 - 50 MW
3. 50 - 100 MW
4. 100 - 500 MW
5. 500 MW +
6. Other (biomass, e-mobility etc.)



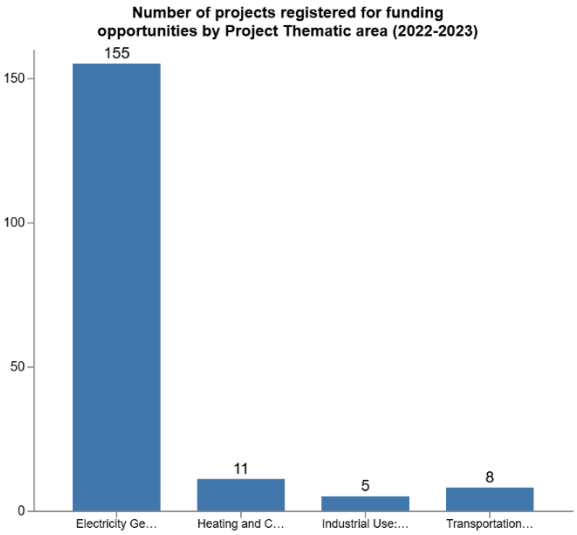
1. 0-10 MW
2. 10 - 50 MW
3. 50 - 100 MW
4. 100 - 500 MW
5. 500 MW +
6. Other (biomass, e-mobility etc.)



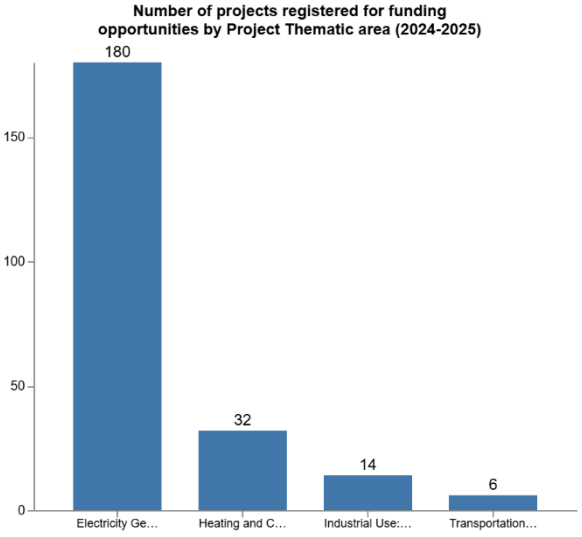
1. USD 0-5 M
2. USD 5-10 M
3. USD 10 - 50 M
4. USD 50 - 100 M
5. USD 100 - 500 M
6. USD 500 M +



1. USD 0-5 M
2. USD 5-10 M
3. USD 10 - 50 M
4. USD 50 - 100 M
5. USD 100 - 500 M
6. USD 500 M +

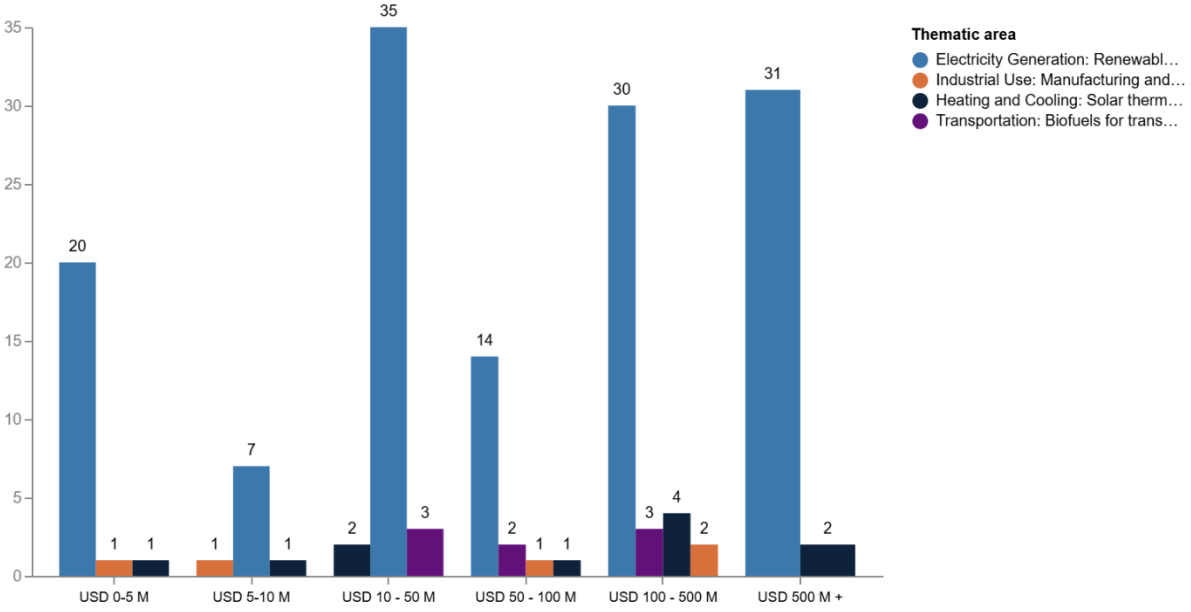


1. Electricity Generation: Renewable power plants.
2. Heating and Cooling: Solar thermal, geothermal heat pumps.
3. Industrial Use: Manufacturing and processing industries.
4. Transportation: Biofuels for transport, and electric vehicle infrastructure.



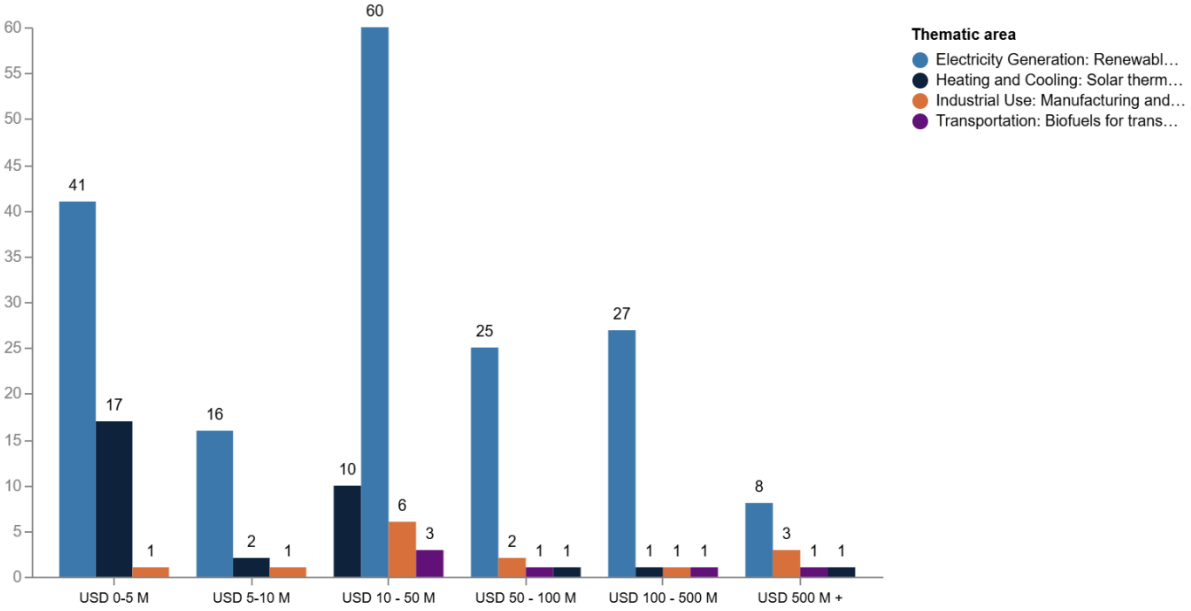
1. Electricity Generation: Renewable power plants.
2. Heating and Cooling: Solar thermal, geothermal heat pumps.
3. Industrial Use: Manufacturing and processing industries.
4. Transportation: Biofuels for transport, and electric vehicle infrastructure.

Number of projects registered for funding opportunities by Size (USD M) and Project Thematic area (2022-2023)

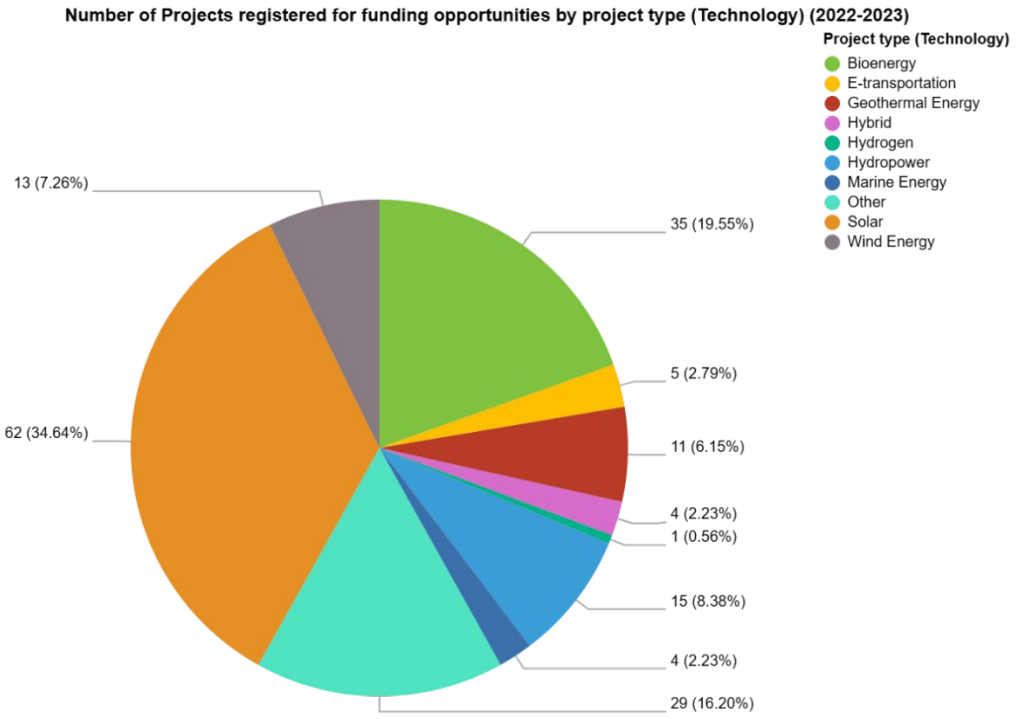


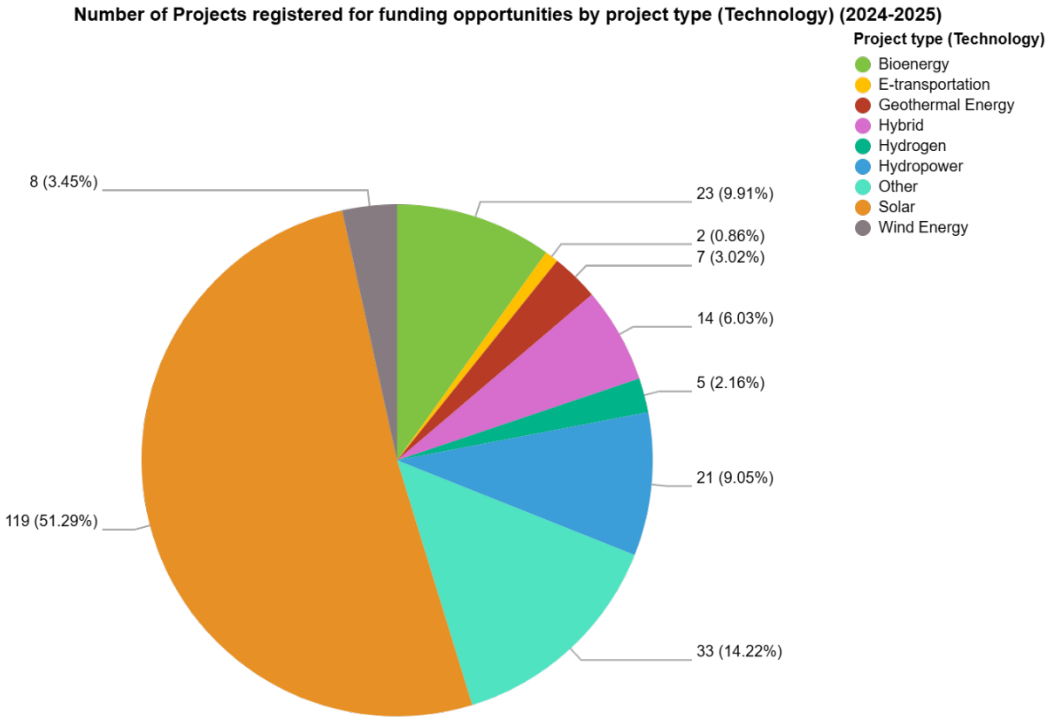
1. USD 0-5 M
2. USD 5-10 M
3. USD 10 - 50 M
4. USD 50 - 100 M
5. USD 100 - 500 M
6. USD 500 M +

Number of projects registered for funding opportunities by Size (USD M) and Project Thematic area (2024-2025)



1. USD 0-5 M
2. USD 5-10 M
3. USD 10 - 50 M
4. USD 50 - 100 M
5. USD 100 - 500 M
6. USD 500 M +


Number of Projects registered for funding opportunities by project type (Technology) (2022-2023)
Project type (Technology)
Bioenergy
E-transportation
Geothermal Energy
Hybrid
Hydrogen
Hydropower
Marine Energy
Other
Solar
Wind Energy
13 (7.26%)
35 (19.55%)
5 (2.79%)
62 (34.64%)
11 (6.15%)
4 (2.23%)
1 (0.56%)
15 (8.38%)
4 (2.23%)
29 (16.20%)


Number of Projects registered for funding opportunities by project type (Technology) (2024-2025)
Project type (Technology)
Bioenergy
E-transportation
Geothermal Energy
Hybrid
Hydrogen
Hydropower
Other
Solar
Wind Energy
8 (3.45%)
23 (9.91%)
2 (0.86%)
7 (3.02%)
14 (6.03%)
5 (2.16%)
21 (9.05%)
119 (51.29%)
33 (14.22%)

Output 4.2: Projects facilitated, and Project Information Documents (PIDs) prepared through IRENA's project facilitation services

Indicator 4.2.1 presents the Number of projects receiving IRENA's project facilitation services. Table 33 shows that in 2022, 50 projects received project facilitation services, which increased to 81 in 2023. In 2024, IRENA provided project facilitation services to 56 projects, and by 15 November 2025, 21 projects benefited from the services. Of the 131 projects in the 2022-23 biennium, 45 were located in the Latin America and Caribbean region, followed by Africa (38) and Asia (34). For the 2024-2025 biennium, 53 of the projects are in Africa, followed by Latin America and the Caribbean (9). In terms of capacity, the majority of the projects in the baseline biennium were within the 0-10 MW range (50), whereas in the current one they are in the 10-50 MW range (23).

In terms of size, most projects in both biennia are in the USD 10-50 million range, with 32 projects in the previous and 28 projects in the current biennium. In 2022-23, this was followed by USD 100-500 million (28 projects) and USD 0-5 million (23 projects). In the current biennium, there are fifteen projects in the USD 100-500 million and twelve projects in the USD 50-100 million range. Electricity generation: renewable power plants are the most attractive thematic area for the projects in both biennia. Private companies also seem to be the primary developer category for 80 projects in 2022-23 and 52 projects in 2024-25. In the previous biennia, they were followed by public and then public-private joint ventures. Lastly, solar power is the preferred technology in both biennia (45% in 20223-23 and 48% in 2024-25), followed by hydropower and bioenergy.

It should be noted that the delivery of advisory support is conditional on the number of registrations, project eligibility and readiness, and technical, regulatory, and financial maturity. Furthermore, internal human resource capacity constrains the ability to meet advisory demand. As such, the indicator is tracked considering supply-side (staff availability) and demand-side (project maturity) dynamics. Variability in results is expected and does not necessarily reflect underperformance but more likely contextual limitations.

Table 33: Number of projects receiving IRENA's project facilitation services, 2022-2025

Number of projects receiving project facilitation - Baseline biennium (2022-2023)

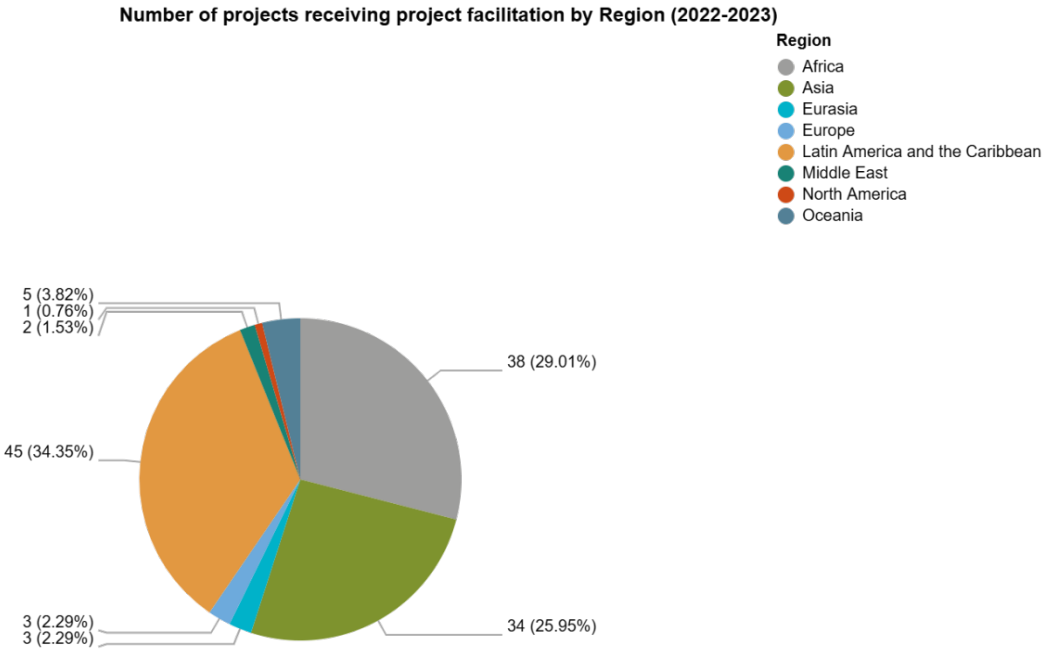
Baseline biennium	Number of project receiving project facilitation
2022	50
2023	81
Total	131

Number of projects receiving project facilitation - Target biennium (2024-2025)

Target biennium	Number of project receiving project facilitation
2024	56
2025	21
Total	77

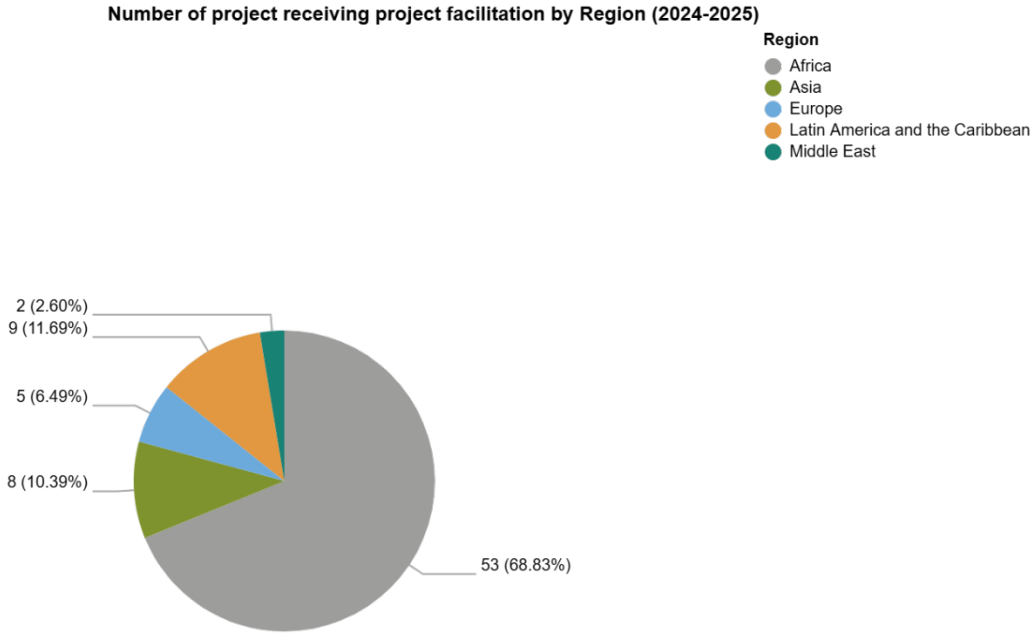
Number of projects receiving project IRENA facilitation by Region (2022-2023)

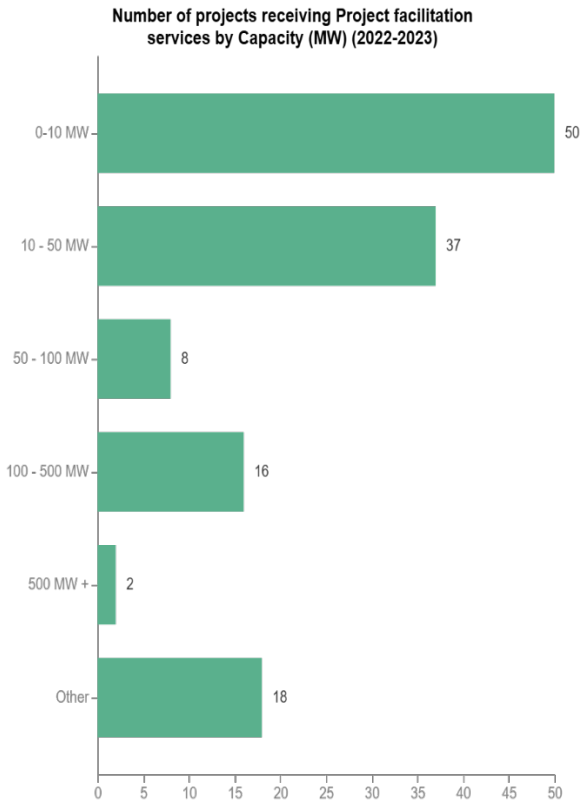
Region	2022	2023	Total
Africa	17	21	38
Asia	25	9	34
Eurasia		3	3
Europe	1	2	3
Latin America and the Caribbean	2	43	45
Middle East		2	2
North America		1	1
Oceania	5		5
Total	50	81	131

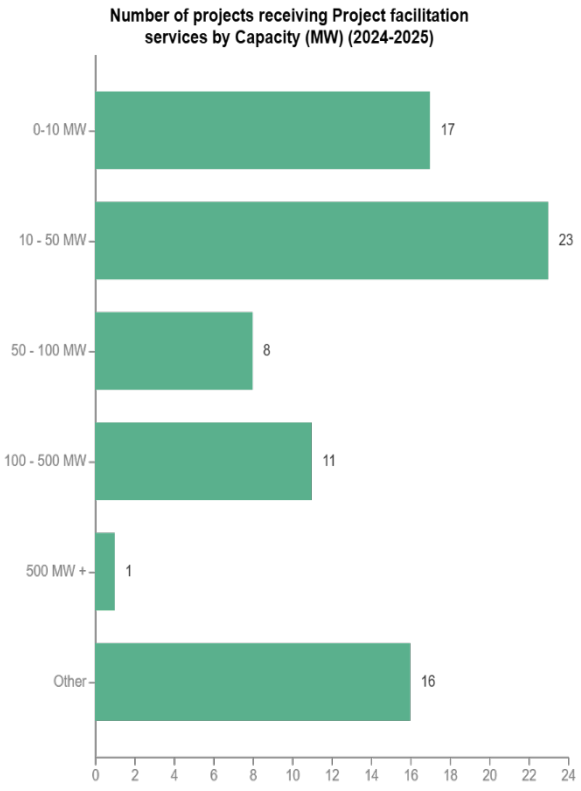


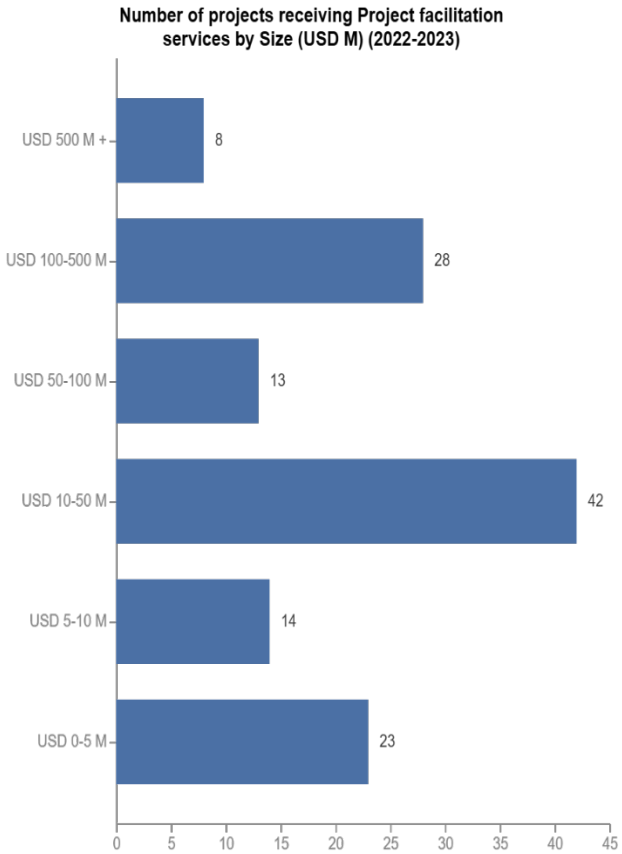
Number of projects receiving project IRENA facilitation by Region (2024-2025)

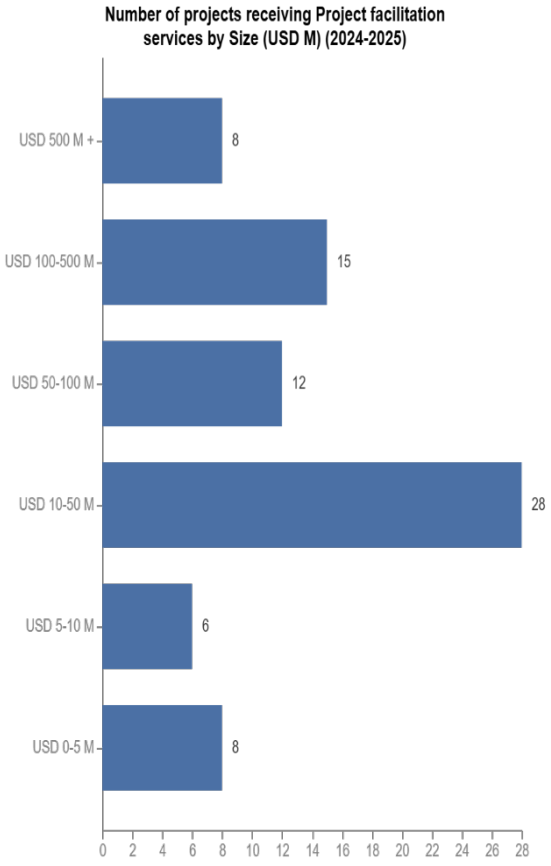
Region	2024	2025	Total
Africa	44	9	53
Asia	2	6	8
Europe	4	1	5
Latin America and the Caribbean	5	4	9
Middle East	1	1	2
Total	56	21	77

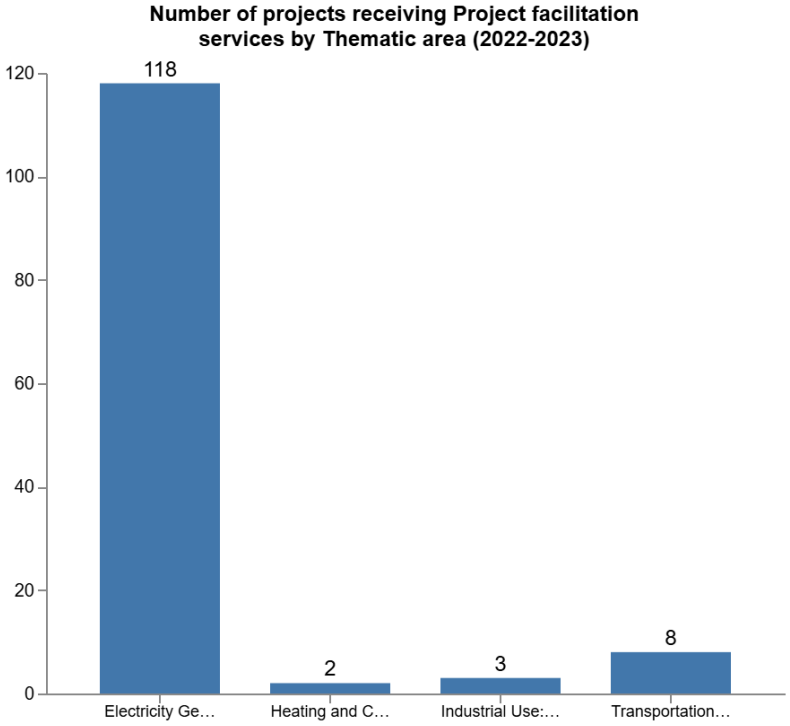



Number of projects receiving Project facilitation services by Capacity (MW) (2022-2023)
0-10 MW
10 - 50 MW
50 - 100 MW
100 - 500 MW
500 MW +
Other
50
37
8
16
2
18
0 5 10 15 20 25 30 35 40 45 50

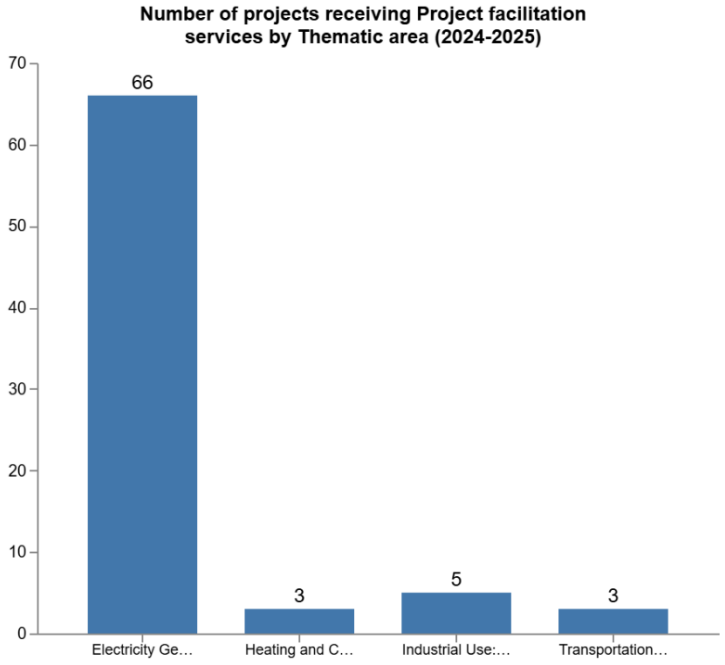

Number of projects receiving Project facilitation services by Capacity (MW) (2024-2025)
0-10 MW
10 - 50 MW
50 - 100 MW
100 - 500 MW
500 MW +
Other
17
23
8
11
1
16
0 2 4 6 8 10 12 14 16 18 20 22 24


Number of projects receiving Project facilitation services by Size (USD M) (2022-2023)
USD 500 M +
USD 100-500 M
USD 50-100 M
USD 10-50 M
USD 5-10 M
USD 0-5 M
8
28
13
42
14
23
0 5 10 15 20 25 30 35 40 45

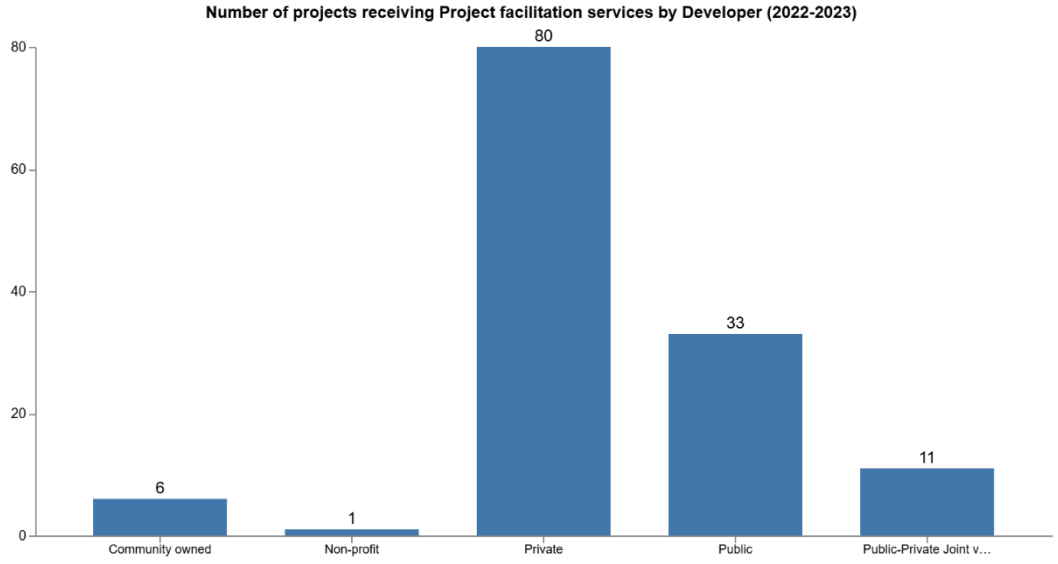

Number of projects receiving Project facilitation services by Size (USD M) (2024-2025)
USD 500 M +
USD 100-500 M
USD 50-100 M
USD 10-50 M
USD 5-10 M
USD 0-5 M
8
15
12
28
6
8
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28



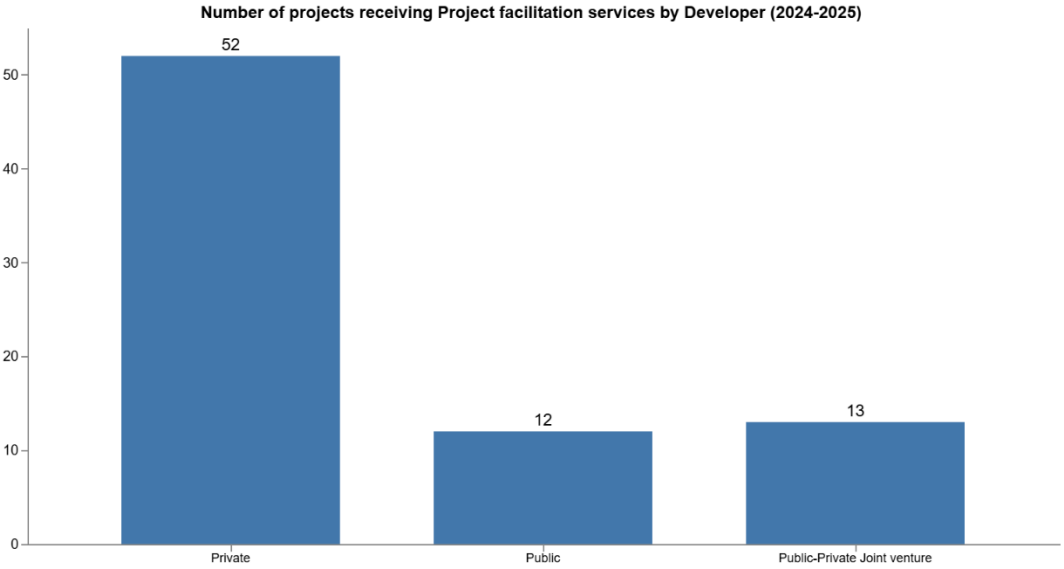
1. Electricity Generation: Renewable power plants
2. Heating and Cooling: Solar thermal, geothermal heat pumps
3. Industrial Use: Manufacturing and processing industries
4. Transportation: Biofuels for transport, and electric vehicle infrastructure.



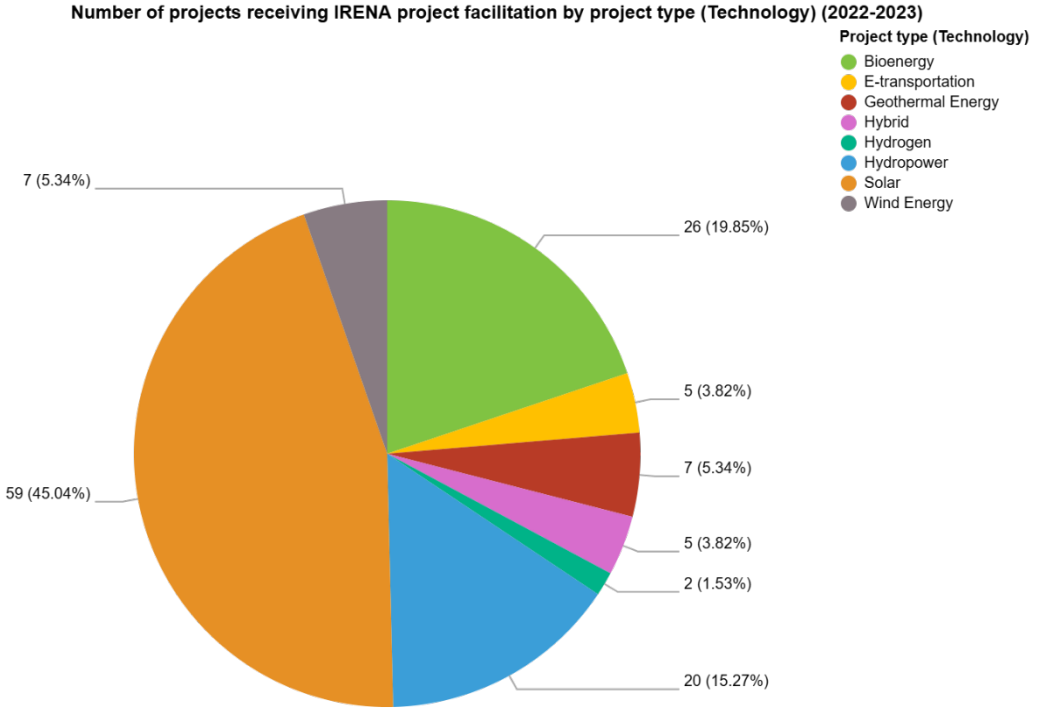
1. Electricity Generation: Renewable power plants
2. Heating and Cooling: Solar thermal, geothermal heat pumps
3. Industrial Use: Manufacturing and processing industries
4. Transportation: Biofuels for transport, and electric vehicle infrastructure.

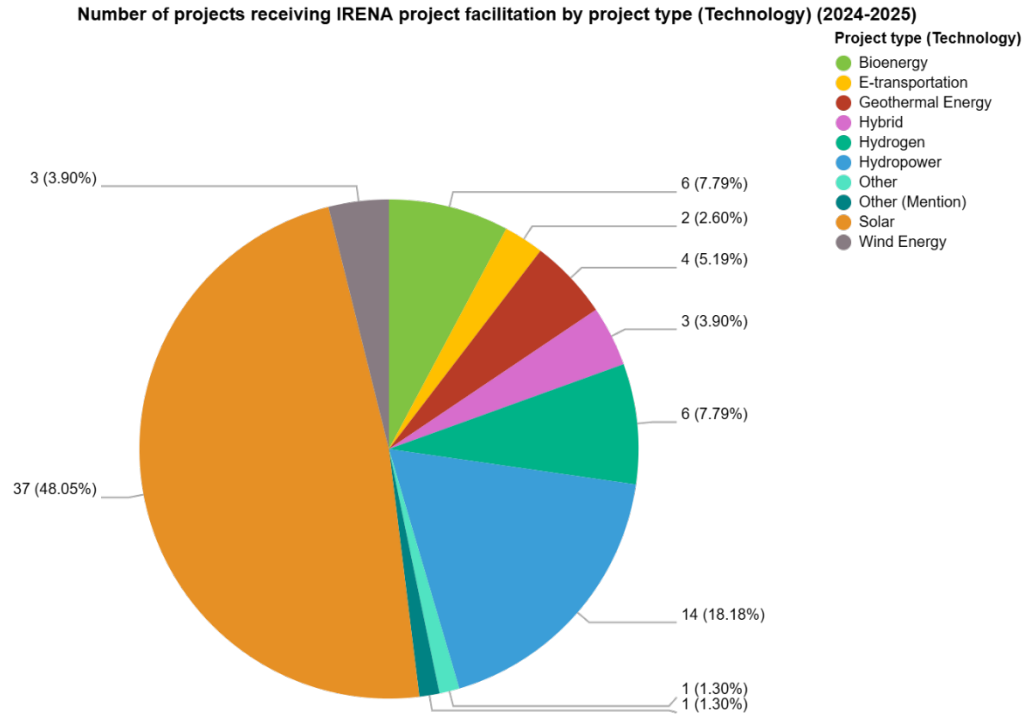


1. Community owned
2. Non-profit
3. Private
4. Public
5. Public-Private Joint venture



1. Private
2. Public
3. Public-Private Joint venture


Number of projects receiving IRENA project facilitation by project type (Technology) (2022-2023)
Project type (Technology)
Bioenergy
E-transportation
Geothermal Energy
Hybrid
Hydrogen
Hydropower
Solar
Wind Energy
7 (5.34%)
26 (19.85%)
5 (3.82%)
7 (5.34%)
59 (45.04%)
5 (3.82%)
2 (1.53%)
20 (15.27%)


Number of projects receiving IRENA project facilitation by project type (Technology) (2024-2025)
Project type (Technology)
Bioenergy
E-transportation
Geothermal Energy
Hybrid
Hydrogen
Hydropower
Other
Other (Mention)
Solar
Wind Energy
3 (3.90%)
6 (7.79%)
2 (2.60%)
4 (5.19%)
3 (3.90%)
6 (7.79%)
37 (48.05%)
14 (18.18%)
1 (1.30%)
1 (1.30%)

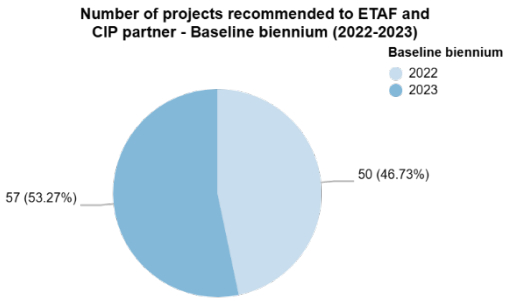
Indicator 4.2.2 shows the Total number of projects recommended to ETAF and CIP partners. Table 34 shows that the number of projects recommended to ETAF and CIP partners in the 2022-23 biennium was similar, with 50 projects in 2022 and 57 in 2023. Latin America and the Caribbean had the most projects (38%), followed by Asia (32%) and Africa (21%). In 2024, 34 projects were recommended, with most (29) located in Africa. Fourteen projects have been recommended by 15 November 2025, mostly in Africa (13). In the previous biennium, 31 projects were in the USD 10-50 million range, followed by 20 in the USD 100-500 million range and 19 projects in the USD 0-5 million range. In the current biennium, thirteen projects fell within the USD 10-50 million range, followed by eleven projects in the USD 100-500 million range and another eight in the USD 0-5 and USD 50-100 million ranges. In both biennia, projects in the 0-10 MW range attracted most attention, followed by projects in the 10-50 MW range. As expected, electricity generation is the primary project thematic area for both periods. Likewise, private developers are the primary developer category for 61 projects in 2022-23 and 28 projects in 2024-25. In 2022-23, most projects were solar (48%), followed by bioenergy (19%) and hydropower (19%). Similarly, solar projects (50%) dominate in 2024-25, followed by hydropower (14.58%), hydrogen (9%), bioenergy (8.33%) and hybrid (8.33%).

It should be noted that projects must meet a minimum technical and financial viability threshold to be recommended or introduced. The assumption underpinning this output is that supported projects will progress through the development cycle sufficiently to reach the recommendation stage. Where this assumption does not hold, the indicator may not be achieved within the reporting cycle due to delays or project gaps.

Table 34: Total number of projects recommended to ETAF and CIP partners, 2022-2025

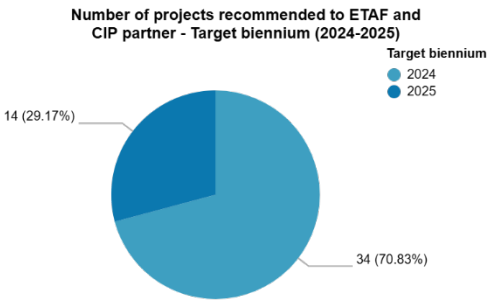
Number of projects recommended to ETAF and CIP partner - Baseline biennium (2022-2023)

Baseline biennium	Number of projects recommended to ETAF and CIP partner
2022	50
2023	57
Total	107



Number of projects recommended to ETAF and CIP partner - Target biennium (2024-2025)

Target biennium	Number of projects recommended to ETAF and CIP partner
2024	34
2025	14
Total	48

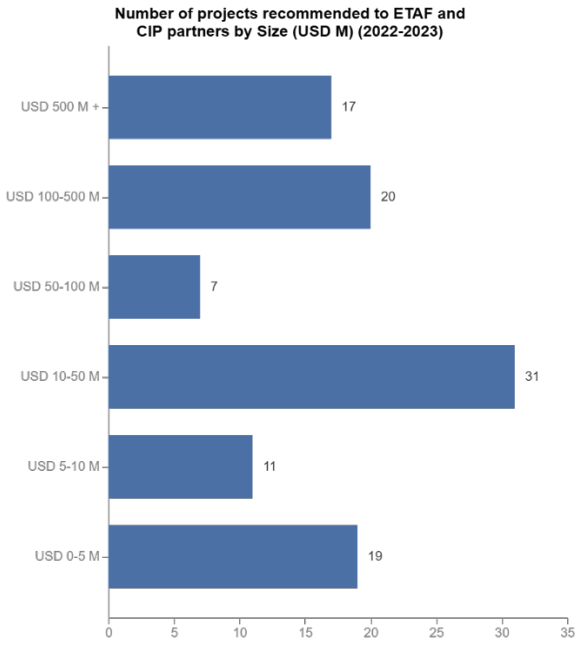


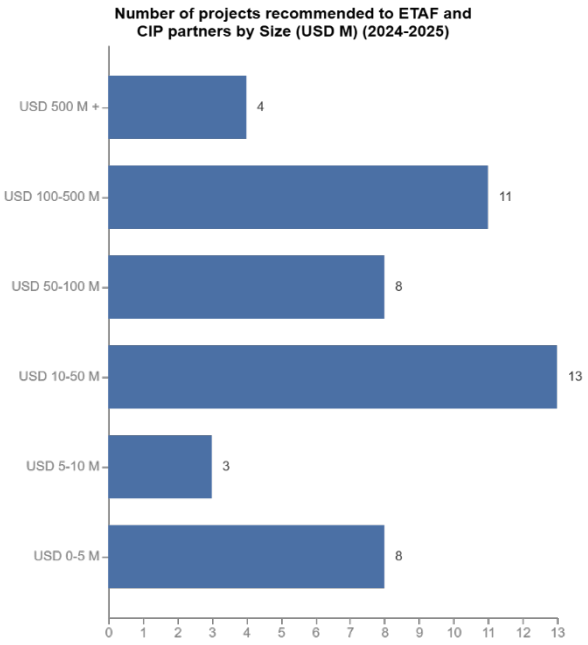
Number of projects recommended to ETAF and CIP partner by Region (2022-2023)

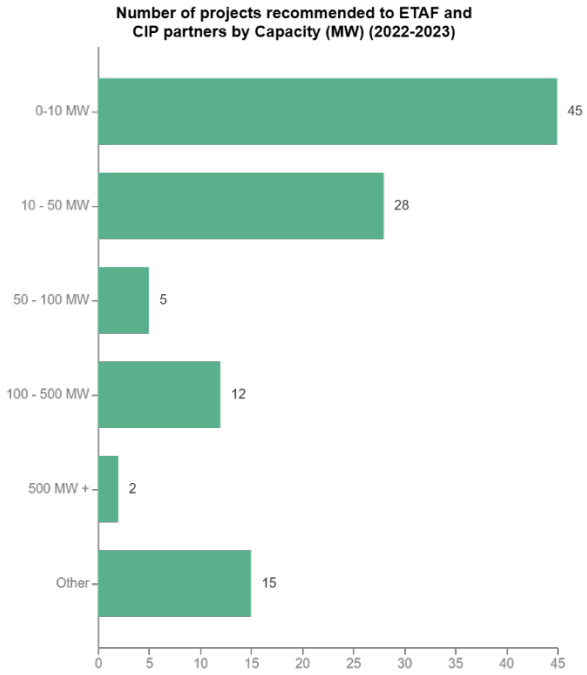
Region	2022	2023	Total
Africa	17	5	22
Asia	25	9	34
Europe	1	1	2
Latin America and the Caribbean	2	39	41
Middle East		2	2
North America		1	1
Oceania	5		5
Total	50	57	107

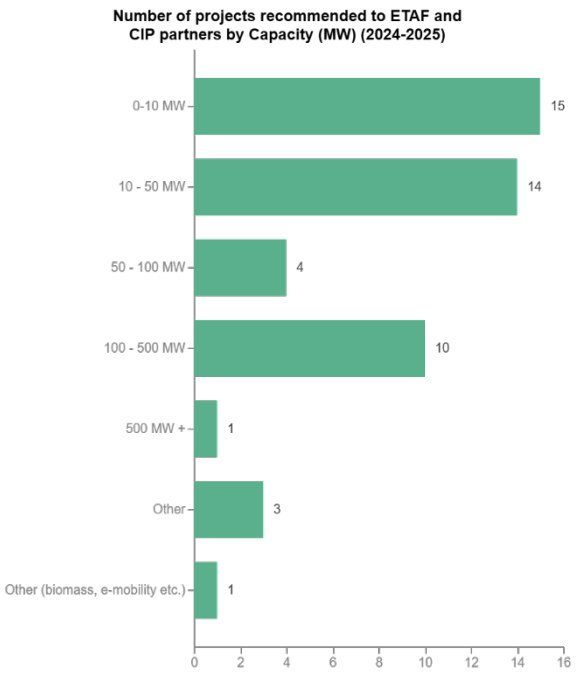
Number of projects recommended to ETAF and CIP partner by Region (2024-2025)

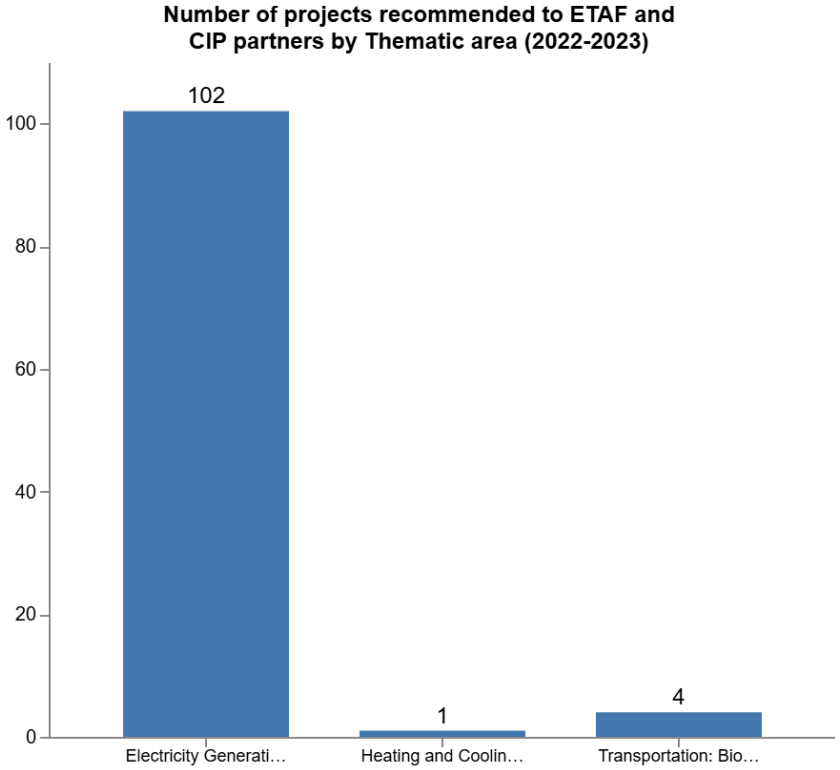
Region	2024	2025	Total
Africa	29	13	42
Eurasia	1		1
Europe	1		1
Latin America and the Caribbean	3	1	4
Total	34	14	48


Number of projects recommended to ETAF and CIP partners by Size (USD M) (2022-2023)
USD 500 M +
17
USD 100-500 M
20
USD 50-100 M
7
USD 10-50 M
31
USD 5-10 M
11
USD 0-5 M
19
0 5 10 15 20 25 30 35

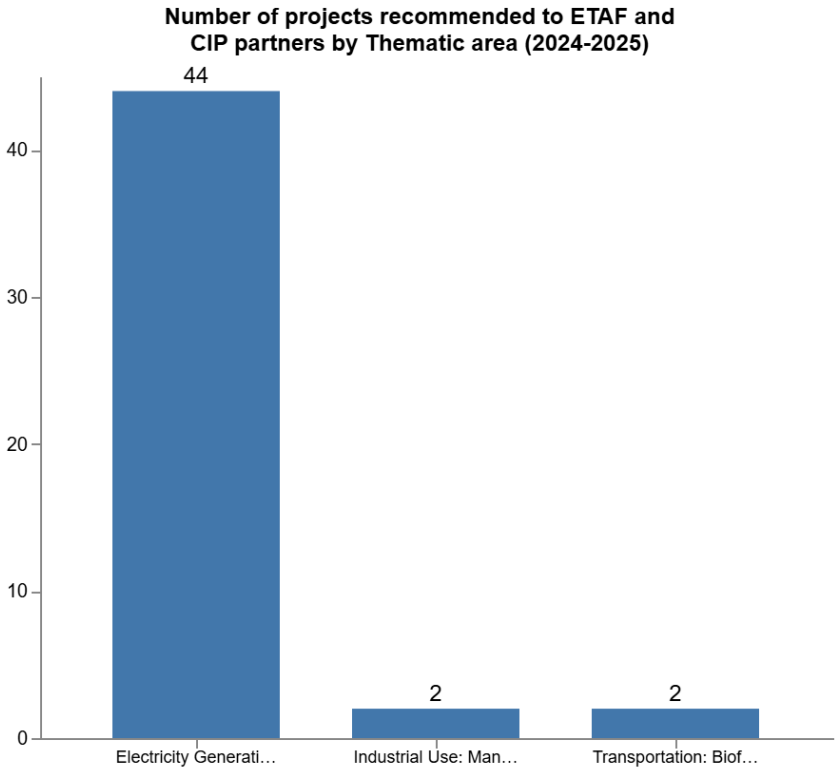

Number of projects recommended to ETAF and CIP partners by Size (USD M) (2024-2025)
USD 500 M +
4
USD 100-500 M
11
USD 50-100 M
8
USD 10-50 M
13
USD 5-10 M
3
USD 0-5 M
8
0 1 2 3 4 5 6 7 8 9 10 11 12 13


Number of projects recommended to ETAF and CIP partners by Capacity (MW) (2022-2023)
0-10 MW
45
10 - 50 MW
28
50 - 100 MW
5
100 - 500 MW
12
500 MW +
2
Other
15
0 5 10 15 20 25 30 35 40 45

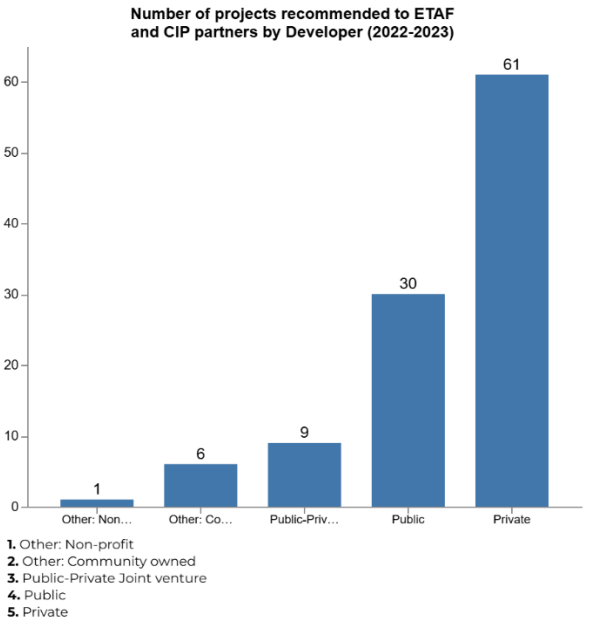

Number of projects recommended to ETAF and CIP partners by Capacity (MW) (2024-2025)
0-10 MW
15
10 - 50 MW
14
50 - 100 MW
4
100 - 500 MW
10
500 MW +
1
Other
3
Other (biomass, e-mobility etc.)
1
0 2 4 6 8 10 12 14 16

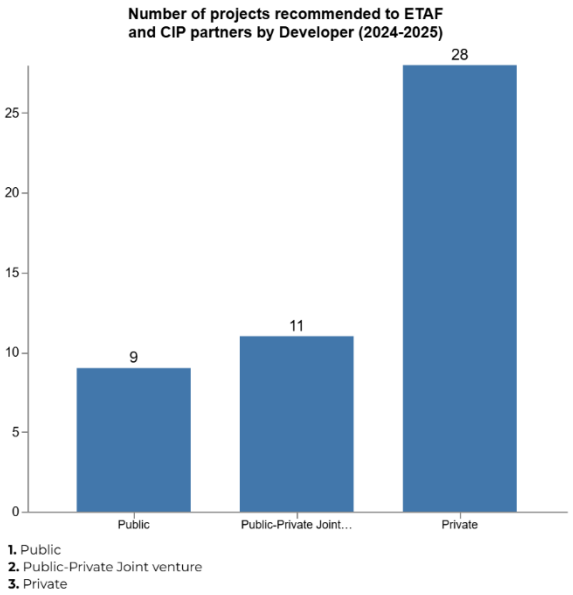


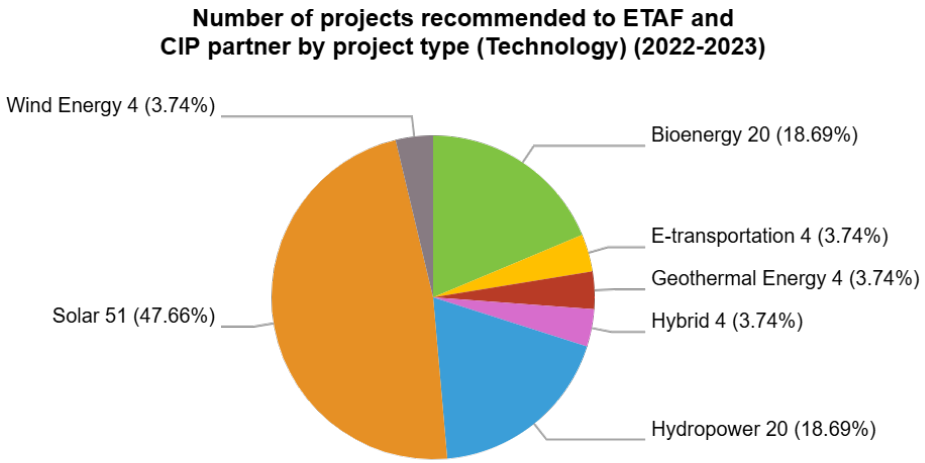
1. Electricity Generation: Renewable power plants.
2. Heating and Cooling: Solar thermal, geothermal heat pumps.
3. Transportation: Biofuels for transport, and electric vehicle infrastructure.

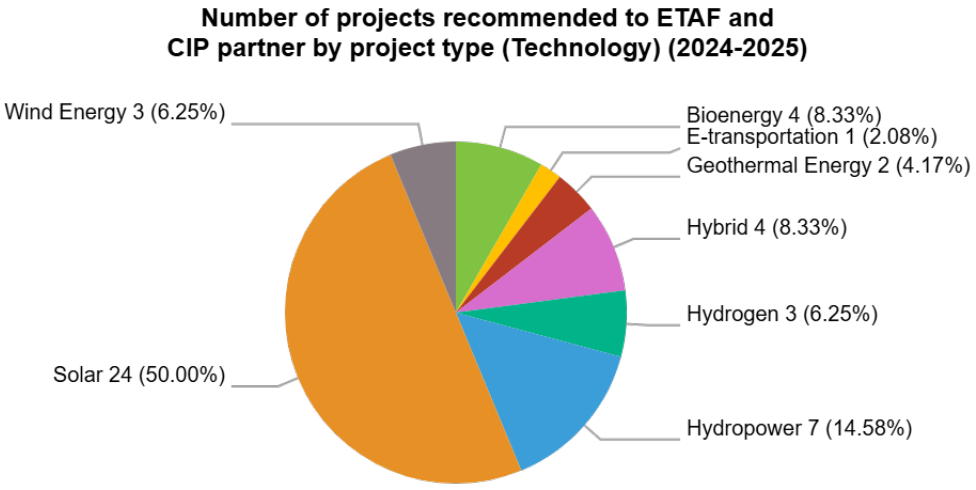


1. Electricity Generation: Renewable power plants.
2. Industrial Use: Manufacturing and processing industries.
3. Transportation: Biofuels for transport, and electric vehicle infrastructure.


Number of projects recommended to ETAF and CIP partners by Developer (2022-2023)
60
50
40
30
20
10
0
1
6
9
30
61
Other: Non...
Other: Co...
Public-Priv...
Public
Private
1. Other: Non-profit
2. Other: Community owned
3. Public-Private Joint venture
4. Public
5. Private


Number of projects recommended to ETAF and CIP partners by Developer (2024-2025)
25
20
15
10
5
0
9
11
28
Public
Public-Private Joint...
Private
1. Public
2. Public-Private Joint venture
3. Private


Number of projects recommended to ETAF and CIP partner by project type (Technology) (2022-2023)
Wind Energy 4 (3.74%)
Bioenergy 20 (18.69%)
E-transportation 4 (3.74%)
Geothermal Energy 4 (3.74%)
Solar 51 (47.66%)
Hybrid 4 (3.74%)
Hydropower 20 (18.69%)


Number of projects recommended to ETAF and CIP partner by project type (Technology) (2024-2025)
Wind Energy 3 (6.25%)
Bioenergy 4 (8.33%)
E-transportation 1 (2.08%)
Geothermal Energy 2 (4.17%)
Hybrid 4 (8.33%)
Hydrogen 3 (6.25%)
Solar 24 (50.00%)
Hydropower 7 (14.58%)

Output 4.3: Regional workshops and investment forums conducted by IRENA that gathered policy makers, energy stakeholders, project developers and financial institutions.

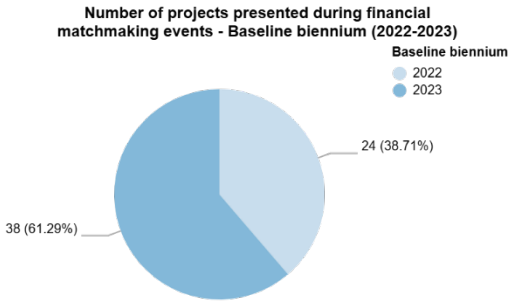
Indicator 4.3.1 shows the Number of projects presented during financial matchmaking events. Table 35 shows that IRENA presented 24 projects in 2022 and 38 projects in 2023 to relevant stakeholders during dedicated matchmaking meetings. Close to 60% of the projects were located in Latin America and the Caribbean, followed by projects in Asia (31%). Meanwhile, 25 projects were presented in 2024 and 14 projects in 2025 - all located in African countries. In the previous biennium. 17 projects were within the USD 0-5 million range, followed by 16 projects in the USD 10-50 million range and 11 projects in the USD 100-500 million range. Conversely, eleven projects presented in 2024 were in the USD 10-55 million range, followed by ten in the USD 100-500 million range. The vast majority of projects (40) were within the 0-10 MW capacity range, followed by 10 projects in the 10-50 MW range in 2022-203. Equally, most projects (13) were in the 0-10 MW and 10-50 MW ranges in 2024-25. As anticipated, electricity generation was the attractive project thematic area in both biennia. An almost equal number of projects were presented by both private (28) and public (25) developers in the previous biennium. Conversely, in 2024-25, 24 projects were presented by private and nine projects by public-private ventures. Solar has been the predominant technology in both biennia, followed by hydropower.

The same assumptions apply here. Projects must meet a minimum technical and financial viability threshold to be recommended or introduced. The assumption underpinning this output is that supported projects will progress through the development cycle sufficiently to reach the recommendation stage. Where this assumption does not hold, due to delays or project gaps, the indicator may not be achieved within the reporting cycle.

Table 35: Number of projects presented during financial matchmaking events, 2022-2025

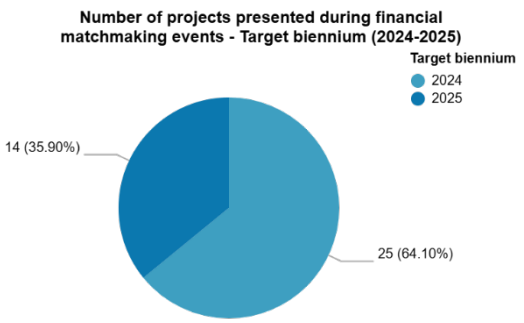
Number of projects presented during financial matchmaking events - Baseline biennium (2022-2023)

Baseline biennium	Number of projects presented during financial matchmaking event
2022	24
2023	38
Total	62



Number of projects presented during financial matchmaking events - Target biennium (2024-2025)

Target biennium	Number of projects presented during financial matchmaking event
2024	25
2025	14
Total	39

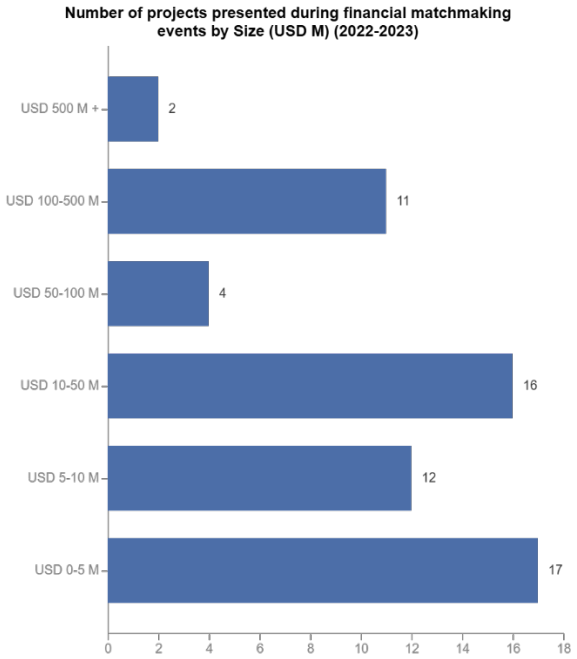


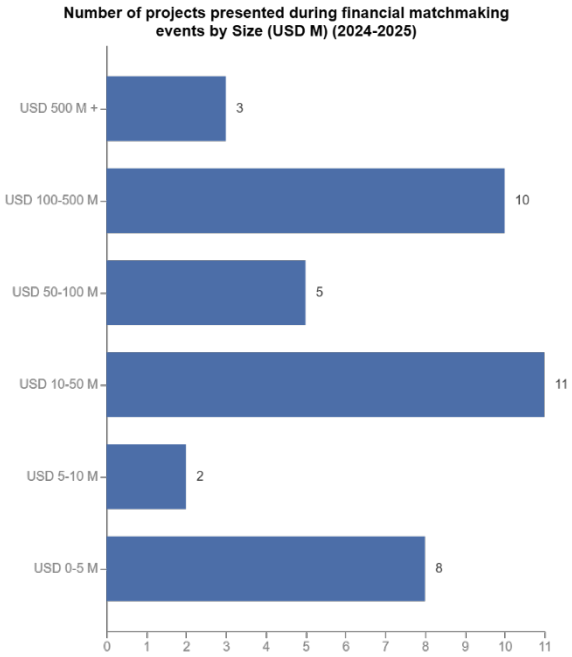
Number of projects presented during financial matchmaking events by Regions (2022-2023)

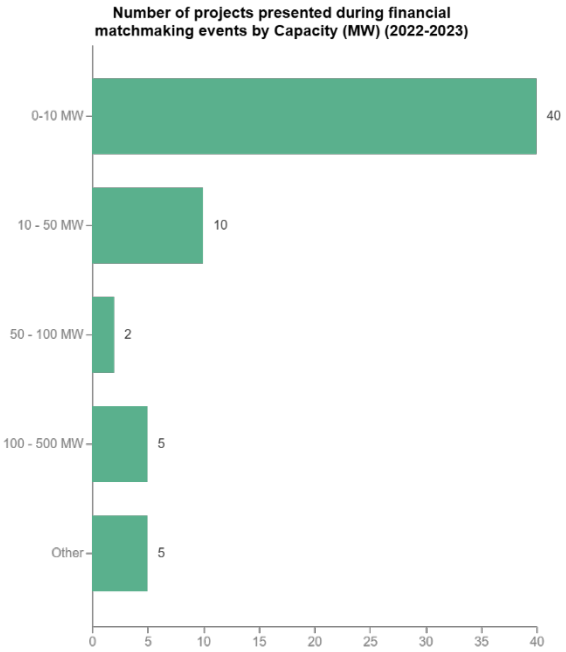
Region	2022	2023	Total
Africa	1		1
Asia	19		19
Latin America and the Caribbean		36	36
North America		1	1
Oceania	4	1	5
Total	24	38	62

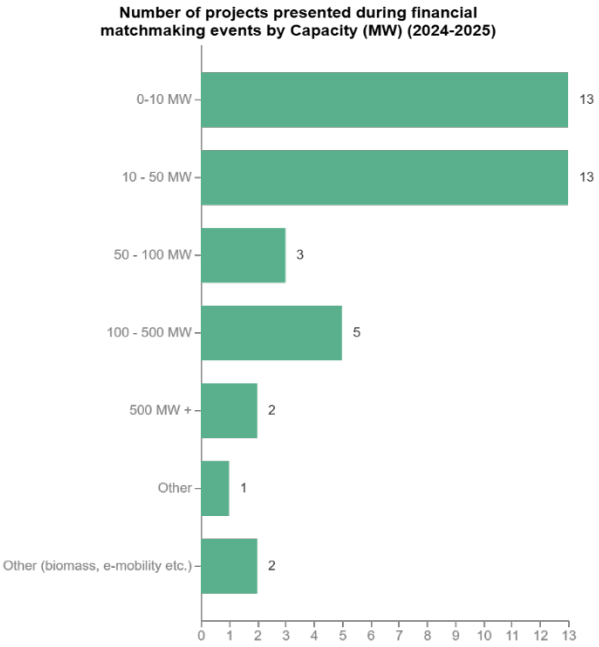
Number of projects presented during financial matchmaking events by Regions (2024-2025)

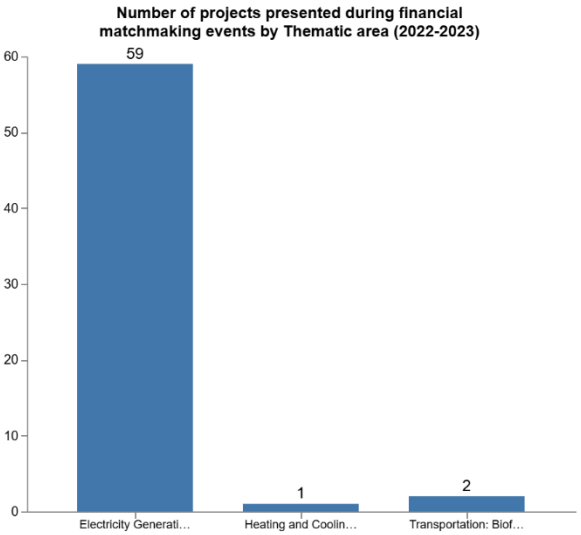
Region	2024	2025	Total
Africa	25	14	39
Total	25	14	39



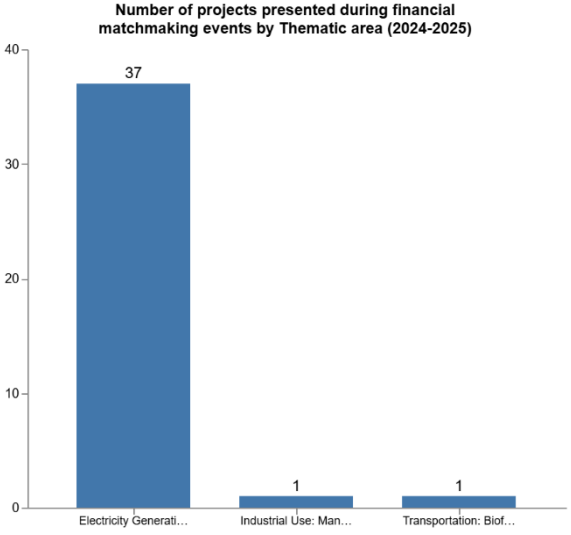




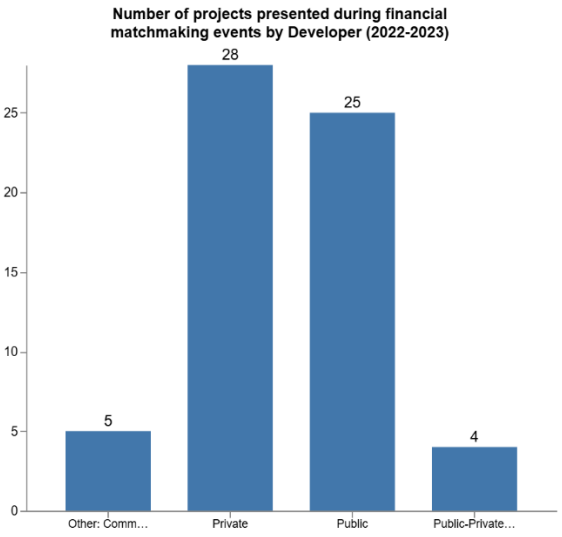




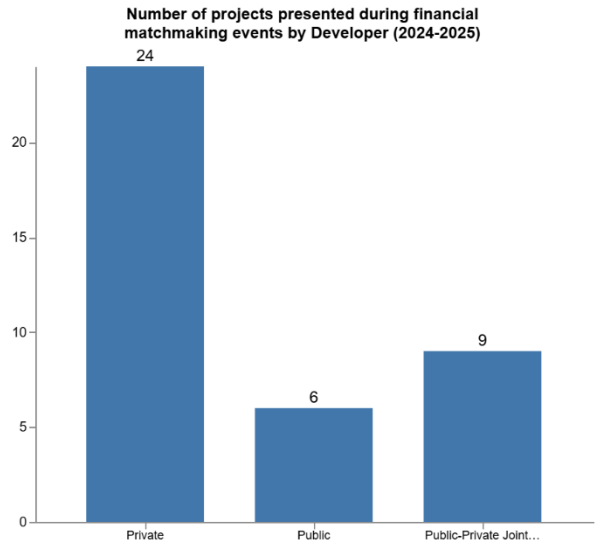
1. Electricity Generation: Renewable power plants.
2. Heating and Cooling: Solar thermal, geothermal heat pumps.
3. Transportation: Biofuels for transport, and electric vehicle infrastructure.



1. Electricity Generation: Renewable power plants.
2. Industrial Use: Manufacturing and processing industries.
3. Transportation: Biofuels for transport, and electric vehicle infrastructure.



1. Other: Community owned
2. Private
3. Public
4. Public-Private Joint venture



1. Private
2. Public
3. Public-Private Joint venture