

Twenty-first meeting of the Council Abu Dhabi, 25-26 May 2021 25 April 2021

# Progress Report of the Director-General on the Implementation of the Work Programme and Budget for 2020-2021

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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





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



### **11<sup>TH</sup> ASSEMBLY BUREAU**

President: Spain

Vice-President: Albania

Vice-President: Costa Rica

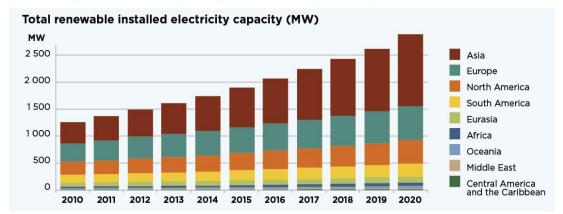
Vice-President: Ghana

Vice-President: India

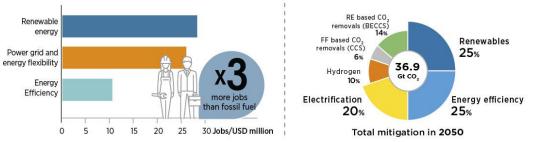




# **ENERGY TRANSITION AT A GLANCE**

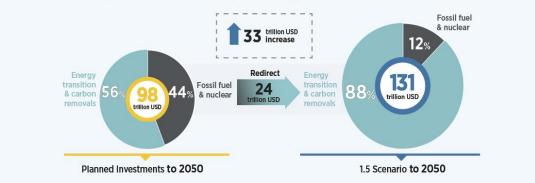


Number of jobs created for each USD million spent

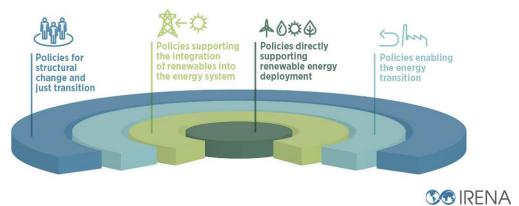


Six components of the energy transition strategy

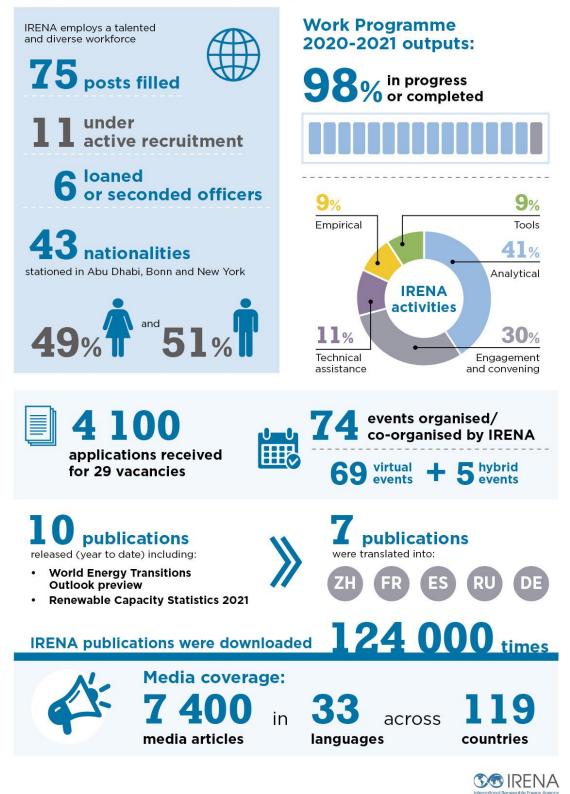
New investment priorities: renewables, efficiency, electrification and infrastructure



#### Enabling policy framework for a just energy transition



# SECRETARIAT AT A GLANCE



# **Progress to Date**

This Report provides an account of the progress IRENA has made in the implementation of the Work Programme and Budget for 2020-2021 since last update provided to Members in the Annual Report in January 2021. The overview of the multidimensional work the Agency has undertaken this year thus far is proof that the Agency's commitment to the realisation of its Work Programme remains undeterred even during these difficult times.

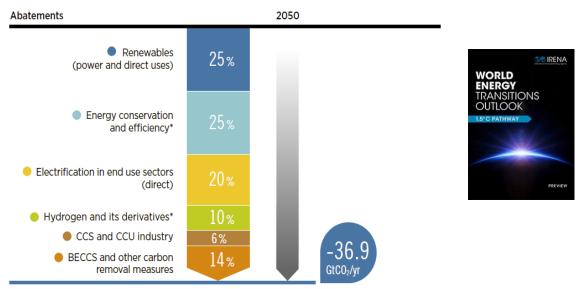
At the Berlin Energy Transition Dialogue in March 2021, IRENA presented a preview of the **World Energy Transitions Outlook (WETO)**<sup>1</sup> report, outlining a concrete set of actions for a just, inclusive and orderly transition towards a renewables-based future aligned with the 1.5°C climate ambition. The report stressed that the window of opportunity is getting increasingly narrow and it is therefore imperative that

our actions in the next few years are aligned with this goal. As such, it guides policymakers through the vital policies, investments and transformative technologies areas where accelerated improvement is necessary to maximise impact. The full report will be released in June 2021 and will delve into the main components outlined here in more depth, along with socio-economic impacts of the transition, policy recommendations and financing sources.



IRENA's *Outlook* prioritises technologies available today that can be deployed at scale by 2030, and calls for accelerating their deployment, while innovating for a net-zero energy future. Critically, the preview of WETO identifies the six main components of the  $CO_2$  emissions abatement (Figure 1), with renewables, electrification and energy efficiency being the main pillars of the energy transition, for a carbon neutral future. According to the report, significant elimination of emissions is feasible with the use of established technologies. WETO considers that the electrification of end use sectors, utilising renewables, will be instrumental in the transition, and highlights hydrogen as significant energy carrier by 2050.

To achieve this, WETO calls for USD 24 million of the planned investments to be redirected away from fossil fuels towards transitional fuels and an additional USD 33 trillion over the planned investments, for a total of USD 131 trillion through 2050. Moreover, investing in the transition will create three times more jobs than fossil fuels, for each million dollars of spending, thus, delivering comprehensive socio-economic benefits, in terms of jobs and overall welfare, with the most direct impact on the energy sector.



### Figure 1: Main components of the energy transition strategy

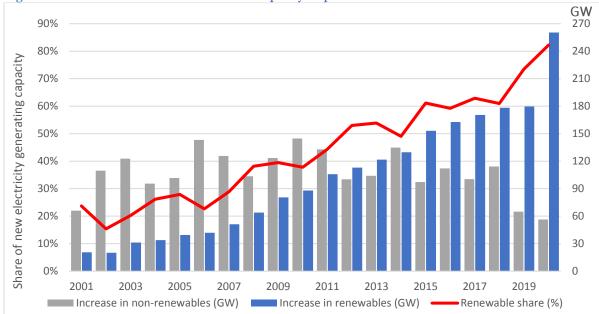
Source: *World Energy Transitions Outlook*, Preview, 2021 CCS = carbon capture and storage; CCU = carbon capture and utilisation; BECCS = Bioenergy with CCS

<sup>&</sup>lt;sup>1</sup> Preview available <u>here</u>.

#### **IRENA** in the News



The latest edition of IRENA's *Renewable Capacity Statistics 2021*<sup>2</sup> showed that the global renewable generation capacity experienced a 10.3% increase in 2020, amounting to 2,799 gigawatts (GW). As such, the world added more than 260 GW of renewables exceeding expansion in 2019 by close to 50%, despite the economic slowdown. This is the biggest expansion in recent years and well above the long-term trend of gradually increasing expansion each year (Figure 2), with Asia accounting for 64% of new capacity. This jump mainly occurred in China. Capacity in Europe and North America also expanded, with a notably large expansion in the USA. Africa saw an increase of 2.6 GW, slightly more than in 2019 but still woefully below its potential. Oceania remained the fastest growing region, although its share of global capacity is small and almost all occurred in Australia (Figure 3). Hydropower remained the highest source of energy for electricity generation globally, in terms of capacity and production, followed by wind and solar, whose expansion jointly accounted for 91% of all net renewable additions in 2020.



#### Figure 2: Renewable Share of Annual Power Capacity Expansion

Source: IRENA, Renewable Capacity Statistics 2021

<sup>&</sup>lt;sup>2</sup> Available <u>here</u>

North America	Europ	e	~~~~~	Eura	sia
Capacity 422 GW	Capacity	609 GW		Capacity	116 GW
Global share 15%	Global share	22%		Global share	4%
Change +32.1 GW	Change	+34.3 GW		Change	+6.2 GW
Growth +8.2%	Growth	+6.0%	55	Growth	+6.0%
Central America and the Caribbean	Middle I	East	4 0 00	Asia	а
Capacity 16 GW	Capacity	24 GW		Capacity	1 286 GW
Global share 1%	Global share	1%	P P 1	<b>Global share</b>	46%
Change +0.3 GW	Change	+1.2 GW	New Y	Change -	+167.6 GW
Growth +2.1%	Growth	+5.2%		Growth	+15.0%
South America	Africa	a		Ocear	nia
Capacity 233 GW	Capacity	54 GW		Capacity	44 GW
Global share 8%	Global share	2%		<b>Global share</b>	2%
Change +9.2 GW	Change	+2.6 GW		Change 🧹	+6.9 GW
Growth +4.1%	Growth	+5.0%		Growth	+18.5%

### Figure 3: Renewable Generation Capacity by Region (2020)

Source: IRENA, Renewable Capacity Statistics 2021

The energy transition however can no longer be limited to mitigation efforts or incremental steps but must become a transformational effort, based on the rapid upscaling of available technologies, while innovating for the future. To increase the share of e-fuels in electrification in the end-use sectors by 2050, the adoption of innovative solutions must be mainstreamed. Methanol, for example, is a chemical building block and emerging energy fuel mostly produced from fossil fuels. The cost of renewable methanol production remains high and production volumes low. The *Innovation Outlook: Renewable Methanol<sup>9</sup>* report, jointly prepared with the Methanol Institute, highlights that transitioning to renewable methanol could expand its use as a chemical feedstock and fuel, while moving industrial and transport sectors toward net carbon neutral goals. The report also shows that the combination of the right policies could render renewable methanol cost-competitive by 2050 or earlier, thus making it a more attractive option as fuel.

While there is a plethora of emerging innovations countries can choose from to increase the shares of variable renewable electricity in power systems, doing so at regional level presents opportunities and challenges. At the joint webinar entitled Innovations for Operating Power Systems with Increasing Shares of Variable Renewables – A Regional Perspective<sup>4</sup> that took place on 11 February 2021, representatives from IRENA, TransnetBW GmbH and the Costa Rican Electricity Institute discussed innovative solutions and how to maximise synergies, while touching upon the regional dimension.

Regarding highly polluting sectors such as the heating and cooling, targeted action can have a hand in reshaping these to align with climate imperatives. The *Integrating Low-Temperature Renewables in District Energy Systems: Guidelines for Policy Makers*<sup>5</sup> report provides practical solutions and examples to overcome barriers and facilitate the use of low-temperature renewable heat sources in new and existing district energy systems (Figure 4). Their implementation will assist in scaling up renewable energy use, increasing energy efficiency, decreasing the utilisation of fossil fuels in the sectors, and improving urban area air quality. The report was developed by IRENA within the framework of the Global Geothermal Alliance (GGA) in collaboration with Aalborg University, and the support of experts from the GGA Advisory Group of District Heating and Cooling expert and other organisations.

<sup>&</sup>lt;sup>3</sup> Available <u>here</u>.

<sup>&</sup>lt;sup>4</sup> Available <u>here</u>.

<sup>&</sup>lt;sup>5</sup> Available <u>here</u>.



Figure 4: Schematic framework of enabling the integration of low-temperature sources into district energy system

Source: Integrating Low-Temperature Renewables in District Energy Systems: Guidelines for Policy Makers, 2021

In the power sector, IRENA continues to support countries in the design of auctions to procure renewablebased electricity at the lowest price while achieving objectives beyond price including ensuring project timely completion and performance, integrating higher shares of VRE and supporting a just and inclusive energy transition. Best practices and lessons learnt are extracted through country case studies that are used to provide recommendations and policy advice. Case studies on Colombia<sup>6</sup> and Japan<sup>7</sup> have been published.

<sup>&</sup>lt;sup>6</sup> Available <u>here</u>.

<sup>&</sup>lt;sup>7</sup> Available <u>here</u>.



IRENA's Coalition for Action has contributed to the discussion on the urgent need for decarbonisation of the heating and cooling sectors. The sourcing of renewable heating and cooling is still in its early stages, with renewable energy accounting for approximately 13% of total final energy consumption in industry. The white paper entitled *Companies in Transition towards 100% Renewables*<sup>8</sup>, prepared by the Coalition for Action, provides in insight into the technical, economic and policy opportunities and challenges industrial companies face, when trying to integrate high shares of renewables into their heating and cooling operations. The paper also presents key takeaways for governments and companies to help guide their efforts to increase the use of renewables.

**IRENA Insights**<sup>9</sup>, a series of short, focused webinars, have also been offering invaluable access to key findings from the Agency's latest programmatic work. Recent webinars explored opportunities, trends, best practices and innovative solutions in areas such as thermal energy storage, smart mini-grids and hydrogen, among others. By mid-April, seven webinars had taken place fortnightly, with the participation of more than 2,000 representatives from the public and private sector, intergovernmental organisations, non-governmental organisations, universities, think tanks etc. from all regions.

Off-grid solutions will play a major role in providing universal access to clean and reliable energy Although off-grid electricity production from renewables is believed to be expanding rapidly, it is largely unrecorded in most countries due to technical and institutional barriers. To discuss solutions to the challenge of collecting off-grid energy data, IRENA held the **Off-grid Renewable Energy Statistics (ORES) Conference<sup>10</sup>** virtually on 15-18 February 2021, with the participation of various relevant actors. Participants explored and identified synergies in the off-grid energy data space and learned how to maximise and optimise the data collection process.

While the energy transition, with renewables at its heart, is increasingly gaining ground, the unequal access to positions and underrepresentation of women in the sector - only 32% are women - especially at higher levels, is also becoming more prominent. On the occasion of the International Women's Day on 8 March 2021, IRENA organised a virtual event on **Gender Equality for an Inclusive Energy Transition**:

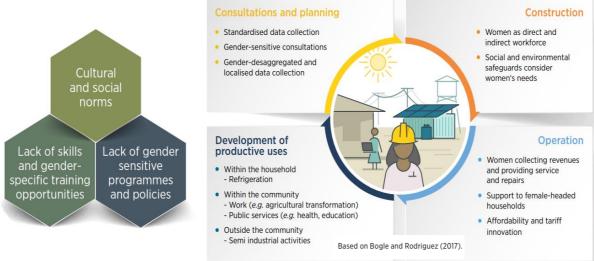
<sup>&</sup>lt;sup>8</sup> Available <u>here</u>.

<sup>&</sup>lt;sup>9</sup> Available <u>here</u>.

<sup>&</sup>lt;sup>10</sup> Available <u>here</u>.

Women Leading the Way in Solar Energy<sup>11</sup> to present the challenges and barriers, the lessons learnt, and success stories of women leaders in the Solar Photovoltaic (PV) sector (Figure 5). The event also served as the official launch of the new IRENA Global Gender Survey of the Solar PV Energy Industry.





### In Focus: Solar PV Energy Gender Survey

IRENA is undertaking a global **Solar PV Energy Gender survey**<sup>12</sup> to gather quantitative and qualitative insights on the current status of women's participation in the solar PV energy sector, existing challenges and potential solutions to improve gender diversity. The findings from the survey will contribute to addressing the data and knowledge gap on gender in the solar PV energy, and inform policy making to ensure that the energy transition is inclusive and benefits from a wider pool of talent.

You can take the survey as an individual or on behalf of your organization. The questions for each category are different for individuals (both women and men) working in the solar PV sector and for organisation. On completing the survey, we encourage you to share the survey with your colleagues and the Human Resources (HR) department in your organization. With regard to organisations, answering the questions requires knowledge of relevant staff statistics; therefore, HR representatives may be best equipped to filling it in.

The information provided through the survey will be processed and aggregated with information provided by other respondents and serve as an important input for the forthcoming **Solar PV Energy: A Gender Perspective report**. The report will collect estimates and analysis of the representation and roles of women in the solar PV industry worldwide and strengthen and deepen our knowledge of women's employment issues, workplace opportunities, challenges and policy solutions.

The survey is anonymous and should take about 20 minutes to fill out.



The deadline is 1 June 2021.

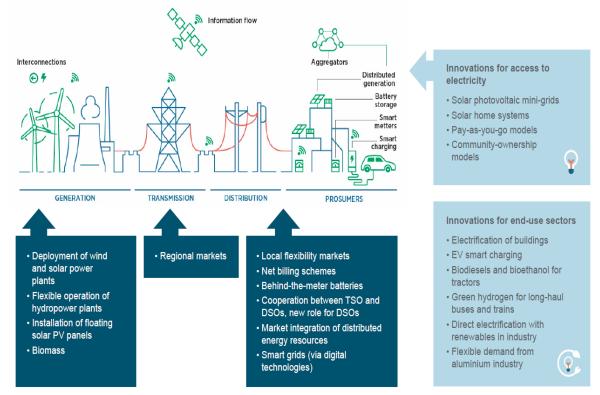
<sup>&</sup>lt;sup>11</sup> Available <u>here</u>.

<sup>&</sup>lt;sup>12</sup> Available <u>here</u>.

At the regional-level, harnessing Africa's vast natural resources and leapfrogging towards clean energy hold the key to addressing the region's current and projected energy poverty. The **Renewable Energy Transition in Africa**<sup>13</sup> report, jointly prepared by Germany's KfW Development Bank, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), and IRENA on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), explores how African countries can achieve universal energy access within the 2030 Agenda timeframe and identifies areas of action. A complementary report explores the transformational potential of the electricity sector in five African countries, namely, Côte d'Ivoire, Ghana, Morocco, Rwanda and South Africa, exploring pathways for the power sector transformation in these countries (Figure 6). Specifically, the study demonstrates how countries can take



advantage of the abundancy and competitiveness of renewables; align ambitious renewable targets in energy and climate plans; continue supporting the development of regional markets; leverage renewables and distributed energy resources to achieve universal energy access; develop tailored power sector transformation plans based on a systemic innovation approach; and build on policy frameworks for just and inclusive transitions.



#### Figure 6: Innovations to be considered for a Power Sector Transformation in Ghana

Figure 15 – Innovations to be considered for a future renewable power sector in Ghana

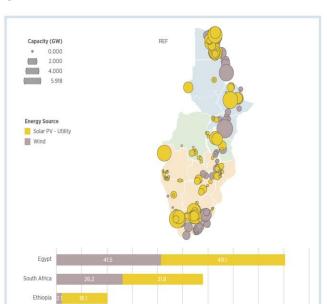
Source: The Renewable Energy Transition in Africa: Country Studies for Côte d'Ivoire, Ghana, Morocco, Rwanda and South Africa, 2021

<sup>&</sup>lt;sup>13</sup> Available <u>here</u>.

IRENA's Planning and Prospects for Renewable Power: Eastern and Southern Africa14 report examines the power systems of Eastern and Southern African countries in the Africa Clean Energy Corridor (ACEC) initiative and shows Africa's potential for penetration of solar and wind by 2040 that together with cross-border transmission could help meet the region's energy needs. The report highlights that an estimated 100 GW of new coal-fired power generation could be brought online over the next 20 years based on existing power pool master plans. In contrast, based on assessed potential and falling costs, these countries could costeffectively meet more than 60% of their electricity needs with renewables by 2040. According to IRENA's analysis, 230 GW of solar PV and wind alone is possible in the region, representing a combined share of 50% of total capacity by 2040 (Figure 7). The report also includes recommendations for potential generation and transmission projects of

regional importance, to inform regional power

planning processes.



# Figure 7: Generation capacity of solar PV and wind generation in 2040 in IRENA's reference scenario

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

Source: Planning and prospects for renewable power: Eastern and Southern Africa, 2021

### In Focus: Energy Modelling of the Future

Other countri

(Aggregated

IRENA continues to develop its **MESSAGE-SPLAT** long-term capacity expansion models that are behind the Agency's analytical work presented in planning and prospects for renewable power publication series as well as energy planning capacity building activities in Africa. Recently, five African power pools have chosen the MESSAGE-SPLAT models as the modelling platform for its development of a Continental Power Systems Masterplan, an initiative of the African Union Development Agency, in which IRENA is a partner. The model will be updated as part of this work to reflect improved renewable energy resource and technology data.

Simultaneously, IRENA developed an **atlas of African hydropower**, containing spatiotemporal availability profiles of existing and future hydropower plants for the entire African continent. The atlas will help improve the resources available to the energy modelling community for exercises focused on Africa. Such resources had been lacking, resulting in sub-optimal assessments of power system expansion planning in hydro-rich regions, which are ubiquitous across the continent. The new resource has the potential to become a go-to database for energy modellers focusing on the African continent.

IRENA has led the exchange of knowledge and good practices in the use and development of model-based Long-term Energy Scenarios (LTES) to guide the clean energy transition. The LTES activities achieved several key milestones during this reporting period. Firstly, the Clean Energy Ministerial (CEM) Secretariat adopted LTES to be an official Initiative of the CEM. The new **LTES Initiative**<sup>15</sup> will continue to be co-

<sup>&</sup>lt;sup>14</sup> Available <u>here</u>.

<sup>&</sup>lt;sup>15</sup> Available <u>here</u>.

ordinated by IRENA and supported by two co-lead governments, Denmark and Germany. The LTES Initiative is joined by 11 other member countries, Brazil, Canada, Chile, Finland, Italy, Japan, Mexico, Netherlands, Saudi Arabia, United Arab Emirates and the United Kingdom.

Secondly, to engage the countries beyond CEM in the LTES discussion, IRENA has also formalized the **LTES Network<sup>16</sup>** as a global platform for best practice exchange and to promote broader and more effective use of LTES in government for energy and climate policy-making. In 2021, IRENA's LTES network welcomed six new member countries, including Austria, Colombia, Costa Rica, Dominican Republic, Latvia and Lithuania, increasing the total number of country members to twenty-five, including the CEM LTES Initiative member countries. The LTES Initiative and Network shape the annual work plan and upcoming activities according to member's interests and priorities. Discussion with strategic partners, such as UNFCCC, is ongoing as to their participation in the Network.

Thirdly, IRENA has sought to carry out joint activities with partner institutions. In collaboration with the United Nations Economic Commission for Latin America and the Caribbean (ECLAC) and the GET.transform programme of GIZ, IRENA has been organising a series of bi-weekly webinars on **The development and use of long-term energy scenarios in developing national plans in Latin America.**<sup>17</sup> This regional series ran from February to April 2021 and featured presentations from governmental energy planning experts from planning agencies and offices from 14 countries.



IRENA and the Southern African Development Community's (SADC) Centre for Renewable Energy and Energy Efficiency (SACREEE) signed an Memorandum of Understanding<sup>18</sup> to join efforts in accelerating the deployment of renewable energy solutions, including decentralised technologies, as well as to co-operate on policy development, capacity building programmes and regional events aimed at attracting investments to the region. This is implemented though the SADC Renewable Energy Entrepreneurship Support Facility. To date, IRENA has trained thirty-two entrepreneurs in the Southern African region as part of the Facility work to increase local capacities of small and medium-sized enterprises to enhance the successful deployment of renewables projects in the region. The training covered basics of renewables, renewables finance and business models, risk mitigation and project preparation and bankability.

<sup>&</sup>lt;sup>16</sup> Available <u>here</u>.

<sup>&</sup>lt;sup>17</sup> Available <u>here</u>.

<sup>&</sup>lt;sup>18</sup> Available <u>here</u>.

Urban-level energy planning and decision-making at the local level must also come at the forefront as humanity is currently half urban, with numbers projected to double by 2050, and urban centres accounting for 65% of global energy use and 70% of human-made carbon emissions. IRENA's **Renewable Energy Policies for Cities: Experiences in China, Uganda and Costa Rica**<sup>19</sup> report<sup>20</sup> analyses policy experiences and includes case studies of renewable energy-powered initiatives, programmes and policies in medium-sized cities in the three indicated countries.

Along those lines and in the context of the Italian Presidency of G20, IRENA co-organised with Italy a side event on **Resilient cities: Renewable Energy Policies & Technologies**<sup>21</sup> on 31 March 2021 to showcase policy options, technical solutions, and examples in support of the development of the renewable energy sector at a city-level based on local contexts, needs and priorities. With the participation of China, Germany and Uganda, discussions covered policy instruments, strategies, planning tools and technologies for urban energy transformations.

Governments are without a doubt at the steering wheel of the energy transition. However, the actions of the private sector can amplify national efforts, provided there is goal alignment. The recent economic downturn, reduced oil demand, surge in climate-friendly commitments and pressure to accelerate the energy transition have led several international oil companies to reposition themselves. As such, they are defining new or more ambitious emission reduction targets and turning towards investments in renewable energy solutions, energy efficiency and other clean technologies. IRENA's *Oil companies and the energy transition*<sup>22</sup> technical paper demonstrates that their strategies are not bold enough to decarbonise on time, and outlines opportunities and potential areas to become forerunners of the energy transition.

On the other side of the spectrum is the work on energy-health nexus. IRENA is supporting the Government of Burkina Faso on the assessment of the electrification needs of its health facilities. As part of this project, a training workshop on data collection for the assessment was convened on 7 April 2021 in Ouagadougou for staff from Ministries of Health and Energy of Burkina Faso. The Government of Mali has submitted a formal request for IRENA to support a similar effort in that country. These efforts are contributing to foresighted pathways that use renewable energy to meet multiple priorities, including health which has gained visibility during the pandemic.



"The trillions of dollars needed for recovery from the pandemic must be simultaneously used to move our economies towards net-zero emissions.

We must build a global coalition to achieve carbon neutrality by 2050. Renewable technologies are the first choice for decarbonization strategies."

Antonio Guterres, UN Secretary-General

<sup>&</sup>lt;sup>19</sup> A summary and case studies will be available shortly as a separate publication with translations in Chinese and Spanish.

<sup>&</sup>lt;sup>20</sup> This project is part of the International Climate Initiative (IKI). The German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) supports this initiative on the basis of a decision adopted by the German Bundestag.

<sup>&</sup>lt;sup>21</sup> Available <u>here</u>.

<sup>&</sup>lt;sup>22</sup> Available <u>here</u>.

### Investments for a carbon-free future

A climate-safe future calls for the scale-up and redirection of investments from fossil fuels towards energy transition technologies – renewables, energy efficiency and electrification of heat and transport applications. The creation of an enabling environment in this regard is paramount in attracting financing, promoting trade and investment, and developing capacity- building. IRENA's work in improving project quality, market visibility, and access to finance by facilitating renewable energy project development and financing has been instrumental. For example, IRENA has completed twenty draft Project Information Documents (PIDs).<sup>23</sup>

As part of the **Climate Investment Platform (CIP)**<sup>24</sup>, IRENA continues to work with partners to enhance climate action and translate ambitious national climate targets into concrete investments. The CIP is a demand-driven platform that facilitates the development and scale up of renewable technologies through tailored technical assistance to Members. Project proponents, registered in the platform, are considered for technical assistance and project facilitation support to reach commercial feasibility readiness for financing matchmaking with registered financial institutions or for financing under the New Facility (see below).

As of March 2021, CIP has around 250 registered partners<sup>25</sup>, of which 51 are financial institutions, and 218 are projects' proponents such as local and global developers (Figure 8). These 218 projects come from a diverse geographic distribution from Africa, Asia to Latin America, representing the unique reach of IRENA's initiatives and their credibility. CIP has identified 50 renewable projects eligible for support, of which 32 projects are provided with technical assistance and advisory services, such as guidance to prepare business plans and PIDs to introduce them to registered financing partners for funding considerations. Currently, there are 15 projects ready for financing matchmaking.



#### Figure 8: Climate Investment Platform

<sup>&</sup>lt;sup>23</sup> Comprehensive business documents that entail financial and technical information of a specific project to help project proponents identify gaps in the technical, financial, legal, and regulatory considerations, and ensure effective presentation of the project information

<sup>&</sup>lt;sup>24</sup> Available <u>here</u>. CIP is a joint initiative of IRENA, United Nations Development Programme (UNDP) and the Sustainable Energy for All (SEforALL), and the Green Climate Fund (GCF).

<sup>&</sup>lt;sup>25</sup> A reclassification of the partner database impacted the previously reported numbers.

IRENA and the Abu Dhabi Fund for Development (ADFD) implemented seven cycles of the IRENA/ADFD Project Facility for USD 350 million of concessional funding. Building on this experience, IRENA and ADFD are consolidating their strategic partnership via the design and implementation of a new facility. This facility would be a "financing matchmaking hub" designed to pilot the development and implementation of low-carbon and climate-resilient renewable energy projects geared towards local developers, corporates, and private sector investors. It is envisioned that the new facility would be sized to at least USD 1 billion from ADFD and new funding partners' contributions that would leverage finance for estimated 1.5 GW of new capacity, including storage capacity based on appropriate sustainable and industry-proven technologies.

### International cooperation and partnerships

The eleventh session of the IRENA Assembly, held in January 2021, featured a series of virtual High-level meetings on current topics of interest to the Membership. The **High-level Panel on Energy Transition for Sustainable Post-COVID Recovery<sup>26</sup>** that opened the eleventh session of the Assembly, comprised of Ministers and High-level representatives from international organisations, taking stock of the ongoing trends in energy transitions and post-COVID recovery, with the view to drawing out the strategies to advance economic, social and climate priorities simultaneously. The session also highlighted experiences and concrete actions that can accelerate the energy transitions in support of the 2030 Agenda for Sustainable Development and the Paris Agreement.





11 Assembly

The Ministerial Plenary Meeting on Renewables and Pathway to Carbon Neutrality - Innovation, Green Hydrogen and Socioeconomic Policies,<sup>27</sup> organised in the margins of the eleventh Assembly, highlighted the necessary steps for a successful rapid transition to net-zero and the contribution of renewables to this end. The event presented best practices on pathways to net-zero and highlighted the importance of international collaboration. Discussions also revolved around the potential of renewable electricity and fuels in the end-use sectors of buildings, industry and transport.

<sup>&</sup>lt;sup>26</sup> Available <u>here</u>.

<sup>&</sup>lt;sup>27</sup> Available <u>here</u>.

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IRENA's **Ministerial Plenary Meeting on Scaling up Finance for Renewables**,<sup>28</sup> at the Eleventh Assembly, highlighted the central role that investment mobilisation plays in accelerating the energy transformation, the global nature of financial markets, and the need to facilitate the flow of significant capital to developing countries. Avenues to best utilise the opportunities that the rapidly evolving renewable energy sector offers were also examined.

To showcase national perspectives and best practises in reinforcing energy planning and implementation and aligning them to global climate action and goals through NDCs, IRENA organised a **Ministerial Plenary Meeting on National Energy Planning and Implementation for Fostering Energy Transition.**<sup>29</sup> The meeting, held during IRENA's eleventh Assembly, offered a platform to approach climate action from the perspective of accelerated energy transition and faster deployment of renewable energy.

The **Ministerial Plenary Meeting on Driving the Agenda for Energising Healthcare**<sup>30</sup> offered an opportunity to analyse the crucial energy-health nexus, especially in light of the pandemic, and challenges and opportunities in the deployment of renewables-based solutions to power healthcare infrastructure in developing countries. Speakers also explored ways to enhance dialogue among key stakeholders to rapidly scale up implementation on the ground by accelerating electrification of healthcare facilities, with increased private sector involvement.

To ensure no one is left behind and all voices are heard, IRENA organised virtual meetings with various stakeholders in the margins of the eleventh session of the Assembly. Specifically, to stimulate public-private dialogue on how to promote a renewables-based energy transition, the IRENA Coalition for Action and IRENA Legislators Forum organised the **IRENA Public-Private Dialogue<sup>31</sup>** to discuss COVID-19's impacts, public and private responses to the crisis, and the steps needed to accelerate the pace of the energy transition. The sixth edition of the **IRENA Legislators Forum<sup>32</sup>** was also convened, bringing together parliamentary leaders from across the world to discuss global, regional and local agendas relating to a renewables-based energy transition and avenues to accelerate the deployment of renewables. IRENA also held the second edition of the **IRENA Youth Forum: The New Generation of Decision Makers<sup>33</sup>**, under the theme 'Promoting an Inclusive and Just Energy Transition,' to discuss the challenges and opportunities in the process, the role of renewables and avenues to promote youth participation to ensure inclusivity and equity.

The **IRENA Coalition for Action**<sup>34</sup> held its 5<sup>th</sup> Annual Strategy Meeting virtually in the margins of the IRENA Assembly on 25 January 2021. Preparatory Working Group Meetings had already taken place prior from 12 to 21 January 2021. The Strategy Meeting provided an opportunity for Coalition members to strategically discuss how the work of the Coalition can build on the success of 2020 as well as decide on the Coalition Work Programme for 2021 and main action deliverables.

<sup>&</sup>lt;sup>28</sup> Available <u>here</u>.

<sup>&</sup>lt;sup>29</sup> Available <u>here</u>.

<sup>&</sup>lt;sup>30</sup> Available <u>here</u>.

<sup>&</sup>lt;sup>31</sup> Available <u>here</u>.

<sup>&</sup>lt;sup>32</sup> Available here.

<sup>&</sup>lt;sup>33</sup> Available <u>here</u>.

<sup>&</sup>lt;sup>34</sup> The Coalition for Action brings together leading renewable energy players from around the world with the common goal of advancing the uptake of renewable energy. IRENA acts as the Secretariat of the Coalition. To learn more about the Coalition for Action, see <u>www.coalition.irena.org</u>.

In the margins of the United Nations (UN) General Assembly in September 2021, the UN Secretary-General will convene a **High-Level Dialogue on Energy**<sup>35</sup> to promote the implementation of the energy-related goals and targets of the 2030 Agenda for Sustainable Development in support of the implementation of the UN Decade of Sustainable Energy for All (2014–2024), including the global plan of action for the Decade, and the High-level Political Forum on Sustainable Development. As member of UN-Energy, IRENA is co-leading one of the five Technical Working Groups (TWGs), namely on Energy



Transitions. In co-operation with the UN Environment Programme UNEP) and the UN Economic Commission for Asia and the Pacific (UN-ESCAP), and with inputs from experts, IRENA is preparing a thematic report on the topic. The report will present targeted action-oriented and operational-focused recommendations for achieving the 2025 interview milestances the SDC7 targets by 2020.

recommendations for achieving the 2025 interim milestones, the SDG7 targets by 2030 aligned with net-zero emissions by 2050. The inter-agency report, comprised of all thematic reports, will be officially launched at the Dialogue in September. At the inaugural meeting of the TWG, the IRENA Director-General gave opening remarks, underlining the urgency of making a decisive shift in the current trajectory and using energy transitions as a vehicle to link the short-term recovery measures with sustainable development and climate priorities.



IRENA is co-leading the preparation and contributing to a number of **SDG7 Policy Briefs** on all facets and intersections of the goal such as energy access, climate action, poverty eradication, healthcare, employment and economic growth, sustainable cities and regional implementation. This analytical work will feed into the annual High-level Political Forum in July 2021 as well as into the Dialogue in September 2021. The **UN Food Systems Summit** will also be held in September 2021 in New York, two months before COP26 in Glasgow, to promote the 2030 Agenda and decouple food and energy systems from greenhouse gas emissions. In January 2021, the first joint **Ministerial Meeting<sup>36</sup>** of the two UN Summit processes was held to identify potential outcomes such as initiatives, targets, policies, and other concrete deliverables, with simultaneous food, energy, and climate benefits that can be considered for both Summits, as well as COP26. The Meeting was convened by the UN Food Systems Summit, UN High-Level Energy Dialogue, IRENA, and the United Arab Emirates as part of Abu Dhabi Sustainability Week and IRENA Assembly.



<sup>35</sup> United Nations General Assembly resolution 74/225. More information on the Dialogue available <u>here</u>.

<sup>&</sup>lt;sup>36</sup> Available <u>here</u>.

The United Arab Emirates (UAE) in partnership with IRENA held the third **Renewables Talk for IRENA Permanent Representative**<sup>37</sup> on 29 March. The meeting gathered Permanent Representatives to IRENA and the broader diplomatic community and presented an opportunity to exchange their unique examples and experiences from their countries in their journeys towards carbon neutrality.



**IRENA's** Director-General with met Hon John Kerry, US Special Presidential Envoy for Climate on 3 April 2021, in the lead up to the first GCC and MENA Regional Dialogue for Climate Action, hosted in the UAE. Discussions focused on the central importance of renewable energy in addressing climate change and crucially the need for collective political will to drive the energy transition as urgency grows to align with 2050 carbon neutrality goals. Mr. La Camera underlined that the socioeconomic benefits of the energy transition make a strong case for countries to accelerate their renewables



programmes and noted that WETO offers global policy makers a clear 2050 energy pathway compliant with the 1.5 degrees Paris Agreement goal. The meeting took place in the presence of the UAE Special Envoy for Climate Change, H.E. Dr. Sultan bin Ahmed Al Jaber, Cabinet Member and Minister of Industry and Advanced Technology.

On the occasion of the UAE for Climate event hosted on 4 April 2021, the **COP 26 President Alok Sharma** and the IRENA Director-General had a fruitful meeting to discuss the road to COP 26. The Rt Hon Sharma commended IRENA for its contribution to the COP26 preparatory events and the

participation of the Agency in the Energy Transition Council. Moreover, he underlined the need for a strong cooperation between UK as G7 President and Italy as G20 President on energy and climate action, acknowledging the role of IRENA in the work of the two groups. Mr. La Camera assured the COP26 President that the Agency is ready to provide its maximum support on the pathway to Glasgow underlining the indissoluble link between climate action and just energy transition.



<sup>&</sup>lt;sup>37</sup> Available <u>here</u>.

### Targeted climate action

Updating Nationally Determined Contributions (NDCs) represents a significant milestone in global efforts to cut energy-related emissions. At the end of March 2021, out of the 191 Parties that submitted NDCs, 141 included quantified renewable energy targets in their NDCs. Over the last year, IRENA has increased focus to support countries in enhancing and implementing the energy components of their NDCs. In addition to direct Member support, IRENA has partnered with UNDP under the Climate Promise Initiative and NDC Partnership, through the Climate Action Enhancement Package (CAEP), and has received in-kind support through the EU Global Technical Assistance Facility to support this work. The requests include roadmaps and long-term plans, data collection and analysis and target setting, project facilitation and investment, policy support and enabling frameworks, just transition and socio-economic impact, and nexus issues (i.e., food, water, gender). In response, IRENA utilises its vast body of knowledge and expertise to provide substantive input to countries' NDC enhancement and implementation processes. As such, IRENA's NDC engagement currently spans 68 countries across the globe with total energy related greenhouse gas emissions close to 3 billion tonnes of carbon dioxide equivalent per year (Figure 9). The following countries have recognised IRENA's support in their updated NDC submissions: Grenada, Dominican Republic, Lebanon, Marshall Islands, Nepal, Papua New Guinea, and Vanuatu.



#### Figure 9: IRENA's NDC Engagement

Disclaimer: Boundaries and names shown on this map do not imply any official endorsement of acceptance by IRENA.

In the lead up to **COP 26**, IRENA has continued to engage with partners in the climate space to highlight the importance and urgent need of energy transitions. IRENA continues to support ongoing climate efforts by working closely with the UK as the COP 26 Presidency and Italy as the COP 26 Co-host. As such, the Agency is a member of the **COP 26 Energy Transition Council**<sup>38</sup>, which is co-chaired by the UK and SEforAll and convenes the global political, financial and technical leadership in the power sector to work together through COP 26 to accelerate the transition from coal to clean power as part of a green economic recovery. As a member, IRENA engages in country- and regional-level dialogues to understand the needs in respective energy transitions and how the Agency can support such needs.

<sup>&</sup>lt;sup>38</sup> More information <u>here</u>.

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IRENA, in partnership with the United Kingdom COP 26 Presidency and the Regional NDC Pacific Hub, hosted a virtual event on **Pacific NDC Dialogue: Enhancing and Implementing the Pacific Small Island Developing States (SIDS) Commitments to the Paris Agreement through Energy Transformation<sup>39</sup> on 23 February 2021. The Dialogue aimed to build momentum through enhanced NDCs in the lead up to COP 26, raise awareness on long-term Low Emission Development Strategies (LT-LEDS) and highlight the vital role of energy transformation in the Pacific SIDS post-COVID recovery efforts, climate action and sustainable development.** 

On 6 April 2021, IRENA in co-operation with the African Union and the United Kingdom COP 26 Presidency held a virtual webinar on **Advancing the Energy Transition in Africa through Nationally Determined Contributions.**<sup>40</sup> The meeting served to discuss the role of energy transition and the NDCs in achieving a green recovery in Africa to increase employment opportunities and foster growth, whilst addressing socio-economic challenges and halting climate change.

### In Focus: Capacity Building for NDC Enhancement in Gabon and Niger

In the framework of the Climate Action Enhancement Package (CAEP), IRENA, in partnership with the International Atomic Energy Agency (IAEA), organised tailored capacity building programmes on long-term power sector planning and resource assessment to inform NDC enhancement for representatives from energy and environmental agencies and ministries in Gabon and Niger from December 2020 to March 2021. The programmes showcased the opportunities that renewable electricity generation may bring to Gabon and Niger to achieve cost-optimal power systems in the next decade and beyond. Comparable capacity building programmes are planned for Mali and Cameroon.

To support the accelerated mobilisation of investments and finance for energy transitions in SIDS for improved livelihoods and poverty eradication, IRENA, through the **SIDS Lighthouses Initiative** (SIDS LHI), co-organised with the High-level Climate Champions the **Net-zero Investment Lab: Public** and Private Collaboration on Accelerating Green Investment in SIDS<sup>41</sup> event on 30 March 2021. The event underscored the importance of multi-stakeholder participation and involvement in SIDS' energy transitions and of harnessing the potential of platforms, such as the Climate Investment Platform to support SIDS priorities and needs.

IRENA also co-hosted together with the UN Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and SIDS (UN-OHRLLS) the **2021 SIDS Global Business Network Virtual Forum on Leveraging Partnerships for the Sustainable Development of Ocean Energy in SIDS**<sup>42</sup>. The Forum was held on 30-31 March 2021 with the aim to promote dialogue and foster strong private sector collaboration in the implementation of the S.A.M.O.A Pathway and 2030 Agenda. Special attention was given to the nexus between SDG 7: Affordable and Clean Energy and SDG 14: Life Below Water as well as the development priorities of SIDS.

<sup>&</sup>lt;sup>39</sup> Available <u>here</u>.

<sup>&</sup>lt;sup>40</sup> Available <u>here</u>.

<sup>&</sup>lt;sup>41</sup> Available <u>here</u>.

<sup>&</sup>lt;sup>42</sup> Available <u>here</u>.

The Initiative has also doubled its efforts in information sharing and outreach targeting a wider number of stakeholders through its knowledge sharing platform. This includes the publication of IRENA's first digital story showcasing the accelerated uptake of renewable energy in SIDS, a renewed call to Partners and Members to provide new updates on ongoing activities, the publication of the *SIDS LHI Progress and Way Forward*<sup>43</sup> report, which this year features case studies, experiences and lessons learned from SIDS in addition to the progress of the SIDS energy transformation. Moreover, SIDS LHI created a LinkedIn platform to communicate the most recent updates and activities on SIDS energy transformation to its Members and Partners. Furthermore, one additional partner has joined (Island Innovation) and one additional Agency has expressed its interest in joining SIDS LHI (NDC Partnership).



IRENA continues to serve as the focal point for energy<sup>44</sup> within the *Marrakech Partnership for Global Climate Action*<sup>45</sup>. The Partnership supports implementation of the Paris Agreement by enabling collaboration between governments and the cities, regions, businesses and investors that must act on climate change. In this role, IRENA is leading the update of the *Climate Action Pathway for Energy*.<sup>46</sup> The Pathways, initiated by the COP25 High-level Champion, outline the longer-term vision for a 1.5°C climate-resilient world and set out actions needed to achieve that future by 2050. It is envisaged that they will remain living documents to inform discussions across sectors of the global economy.

### **Communications and Outreach – Amplifying Impact**

IRENA continues to strengthen its communication and outreach activities. Since the beginning of 2021, IRENA has been referenced in over 7,400 media articles in 33 languages across 119 countries. Overall, IRENA's global media coverage continues to grow with an increase of 28% in comparison to the same period last year. Particularly, IRENA mentions in top-tier media grew significantly with a 42% increase compared to 2020.

During this period, several IRENA flagship reports and key initiatives were launched. For example, the preview of the Agency's World Energy Transitions Outlook was disseminated through press releases in 8 languages and all regions globally. Media relations including a virtual global media roundtable with lead journalists have led to 447 articles in 58 countries in just one week and generated anchor content on CNN, Financial Times, CNBC, Guardian, Forbes, Reuters etc. The publication page of the preview of WETO attracted 23,000 views and led to 5,300 downloads. The WETO press release was read by over 8,000 people placing it in the top 5 most read articles in the first quarter of 2021.

The number of visitors to IRENA websites grew significantly. Over 412,000 users browsed 2.8 million pages which represents a 48% increase in the number of users and a booming 180% increase in the number of pages browsed since the beginning of 2021 compared to the same period last year. Overall, the IRENA website generated 1.6 million pageviews, corresponding to an increase of 45% compared to last year. New formats like digital stories encouraged user interaction, thus increasing the time spent on the site and return visitor rates to establish irena.org as a reliable knowledge hub for renewables. IRENA Assembly's #11A Blog, which hosted the Assembly live stream, was the most read newsroom piece since the beginning of this year, registering over 21,400 views.

IRENA has continued to implement its strategy to target and deploy social media for global events, reports, and news. Today, IRENA's Twitter account has over 97,000 followers, up from 84,000 compared to the same period in 2020, an increase of around 15%. Throughout the first quarter of 2021, IRENA's Facebook

<sup>&</sup>lt;sup>43</sup> Available <u>here</u>.

<sup>&</sup>lt;sup>44</sup> Other members of the energy group include: The Climate Group, International Chamber of Commerce, International Energy Agency, REN21, SEforAll, UNEP, and WBCSD.

<sup>&</sup>lt;sup>45</sup> Other thematic groups include: Human Settlements; Industry; Land Use; Oceans and Coastal Zones; Transport; Water; Finance; and Resilience.

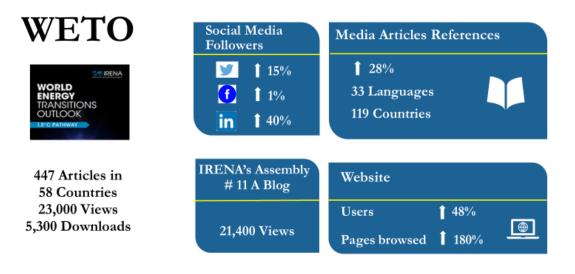
<sup>&</sup>lt;sup>46</sup> Available <u>here</u>.

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constituency increased to over 470,000. LinkedIn is the fastest growing social media platform with an increase of 8.5% since the beginning of 2021. On LinkedIn 96,268 people follow IRENA, a year-on-year difference of about 30,000 or around 40%. Overall, the Agency's Twitter engagement on WETO alone generated a reach of 800,000, with approximately 500,000 through direct engagement with High-level partners and influencers (Figure 10).

Dedicated mailing campaigns outside of IRENA's daily Media Brief provide targeted information on IRENA publications and events to a pool of over 67,000 stakeholder subscribers today (up from 50,000), an increase of 35.3% over the course of the year 2020. Since the beginning of this year, IRENA reached out to stakeholders in two big direct mailing campaigns, one on the preview of WETO and second on annual Renewable Capacity Statistics 2021. Mass emails on WETO resulted in the largest download rates so far in 2021, with a letter sent by the Director-General generating "open rates" of over 50%. The press release on Renewable Capacity was coming close, successfully sent to 17,525 subscribers, reaching an open rate of 27.4% few days after launch.

#### Figure 10: IRENA's Social Media Presence



# Looking ahead

In pursuit of realising its mission to accelerate energy transitions towards a decarbonised future, the Agency continues to plan and execute activities within the scope of its Work Programme for 2020-2021. The COVID-19 pandemic and the ensuing lockdowns and restrictions have led to an extension of some of the work taking place virtually. Selected highlights of IRENA's upcoming activities can be found below.

Drawing on cost and auction price data from projects around the world, IRENA's annual **Renewable Energy Power Generation Costs** publication represents a comprehensive cost study. The next edition envisaged to be released in June 2021, will highlight the latest trends for each of the main renewable power technologies.

The eighth edition of the **Renewable Energy and Jobs – Annual Review** will present the status of renewable energy employment, both by technology and in selected countries. The report is envisaged to be released in June 2021.

Published annually by IRENA, jointly with the International Energy Agency (IEA), the United Nations Statistics Division (UNSD), the World Bank, and the World Health Organization (WHO), the **Tracking SDG 7: The Energy Progress Report** will present and analyse global progress in implementing Sustainable Development Goal 7 on energy. This year, UNSD is chairing the development of the report. For the first time this year, the report will also include a chapter on the progress toward SDG7 indicator 7.a.1 on international financial flows to developing countries in support of clean energy, tracked by IRENA and the OECD.

IRENA's upcoming **Regional Market Analysis: Africa** will provide an energy outlook to 2050 and its socio-economic implications in Africa and identify emerging trends at the intersection of public policy, finance and market development.

IRENA's **Renewable Energy Targets: A Guide to Design** will quantify and assess national renewable energy targets for the power sector currently active in 160 countries, in terms of projected capacity additions and investment needed for their implementation.

IRENA has kept the **Global Atlas for Renewable Energy (Platform)** operational over the years as it continues to provide renewable energy data required in resource and infrastructure planning. The updated renewable energy resource information, including hydropower and infrastructure datasets, will feature in the new version of the Global Atlas planned to be released in the coming months.

In 2021, one of the workstreams of the Collaborative Framework on the Geopolitics of Energy Transformation is focused on the geopolitics of hydrogen economy. To achieve a deeper understanding of the geopolitical consequences of hydrogen deployment and the rise of hydrogen economies as well as assess and present policy options and considerations to help governments navigate this transition, IRENA is preparing a report on **Geopolitics of Hydrogen Economy**. The report will be officially presented at the Twelfth session of the IRENA Assembly in January 2022.

In June 2021, IRENA will hold the **3<sup>rd</sup> International Forum on LTES for Clean Energy Transition**. The event will bring together a wider range of subject experts and energy scenario end-users to discuss the emerging issues and explore how scenarios can better support the clean energy transition.

The sixth edition of the **International Off-Grid Renewable Energy Conference and Exhibition** will be held in the second half of the year. The meeting will gather high-level policy, intergovernmental, private sector and non-governmental participants from around the world to exchange ideas and insights on the future of standalone and mini-grid renewable energy solutions and identify ways to scale-up their adoption.

### In Focus: Collaborative Frameworks

IRENA's Collaborative Frameworks are a strong evidence of the Agency's commitment to the energy transition and recognition of the importance of enhancing peer-to-peer collaboration and exchanging national experiences, challenges, and respective solutions.

IRENA has continued expanding the work of the Collaborative Frameworks this year. As such, the third meeting of the **Collaborative Framework on Hydropower** will take place on 3 May 2021 to raise awareness on the most pressing hydropower-related issues, which will also be addressed in the San José Declaration on Sustainable Hydropower. The meeting will also identify Members willing to lead the work on specific topics and serve as a preparatory meeting for a High-level event to take place during the World Hydropower Congress in September 2021 that is hosted by Costa Rica.

Members will meet on 4 May 2021 to discuss the preparations for the report on the green hydrogen workstream and the way forward on the climate-security nexus, among others, in the context of the **Collaborative Framework on the Geopolitics of Energy Transformation**.

The Collaborative Framework on Enhancing the Dialogue on High Shares of Renewables in Energy Systems will convene on 5 May 2021 to elaborate on one of the workstreams for 2021, namely cross-border interconnections.

The third meeting of the **Collaborative Framework on Green Hydrogen** will be held on 17 May 2021 to discuss some of the challenges in developing the supporting infrastructure to enable a global trade such as drivers for hydrogen trading for different countries and sharing of first best practices; infrastructure needs; certification and investment to establish global trade among other.

In 2021, IRENA established a new **Collaborative Framework on a Just and Inclusive Energy Transitions**. The first meeting of the Framework will be held on 20 May 2021.

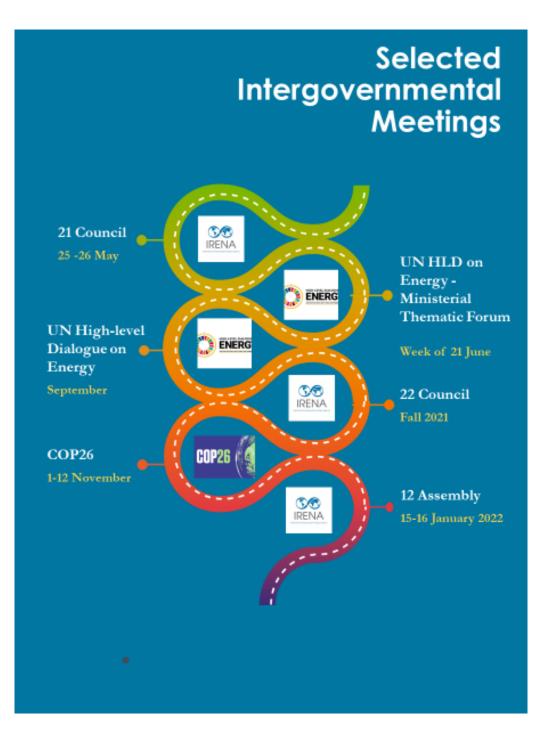
The **Collaborative Framework on Ocean Energy/Offshore Renewables** will meet on 8 June 2021 to discuss input from Members to the report on Innovation in Offshore Renewables commissioned by the G20 Presidency to IRENA.

The **Annual Thematic meeting of the Global Geothermal Alliance** will be held in May 2021. The meeting will provide a forum for members and partners of the Alliance to exchange experiences and share the latest geothermal developments and planned activities in their respective jurisdictions. Geothermal experts will also have the opportunity to network and discuss pressing needs in the geothermal industry.

The **UNFCCC Regional Climate Weeks**<sup>47</sup> in 2021 to take place in the Latin America and Caribbean, Africa and Asia-Pacific regions are regional meetings to help build momentum for COP26 and drive forward regional implementation of the Paris Agreement. The events will provide a platform for representatives of national and subnational governments, cities, the private sector, financial institutions and civil society to jointly discuss opportunities for climate action and how to build back better from the COVID-19 pandemic. IRENA will contribute to energy transition-related discussions in these events.

<sup>&</sup>lt;sup>47</sup> Available <u>here</u>.

### Selected Intergovernmental Meetings



# Upcoming IRENA events and publications

Date	Event name
26-28-April	Long-term Energy Scenarios for Clean Energy Transition
26-28 Apr	Ministerial Validation of the Central Africa Renewable Energy Roadmap
27-April	GROWTH 2021 Spring: Energy Data and Targets
27-April	COP26 Climate Energy Dialogue in the Middle East and North Africa Region
30-April	Capacity Building on Long-Term Energy Planning in the Republic of Cameroon
3-7 May	Capacity Building on Long-Term Energy Planning in Republic of Cameroon
3-May	Collaborative Framework on Hydropower
4-May	Collaborative Framework on the Geopolitics of Energy Transformation
5-May	Collaborative Framework on Enhancing the Dialogue on High Shares of Renewables in Energy System
6-May	GROWTH 2021 Spring: Decentralised energy for access, health and humanitarian applications
11-May	2021 IRENA Policy Talks #2 on Green Hydrogen
17-May	Collaborative Framework on Green Hydrogen: Discussion amongst Governments
18-19 May	IRENA's 21st Council - Committee meetings
18-May	GROWTH 2021 Spring: Innovation and Project Development
19-May	Capacity building – East Africa Geothermal Market Assessment
20-May	Collaborative Framework on Just and Inclusive Energy Transition-Introductory Meeting
20-May	Annual Thematic Meeting of the Global Geothermal Alliance
24 May	IRENA's 21st Council - Programmatic Discussions
25-26 May	IRENA's 21 <sup>st</sup> Council
25 May	2021 IRENA Policy Talks #3 on Auctions
27-May	GROWTH 2021 Spring: Innovation and Project Development
1-June	GROWTH 2021 Spring: Innovation and Project Development
1-June	Collaborative Framework on Ocean Energy and Offshore Renewables
8-June	GROWTH 2021 Spring: Innovation and Project Development
8-10-June	3rd International Forum on LTES for Clean Energy Transition
14-18 June	IRENA Regional Model Analysis & Planning Support Programme: Central Africa #2
18-June	Trans-European Networks for Energy: A Milestone towards a Renewables-Powered EU
29-June	2021 IRENA Policy Talks #4 on Statistics

# Table 1: Tentative Schedule of IRENA Events, 2021

5-9 July	Capacity Building on Long-Term Energy Planning in Republic of Cameroon
28-July	2021 IRENA Policy Talks #5 on Socioeconomics
2-6-Aug	Capacity Building on Long-Term Energy Planning in Republic of Cameroon
21-Aug	2021 IRENA Policy Talks #6 on Socioeconomics
29-Sep	2021 IRENA Policy Talks #7 on Socioeconomics
4-8 Oct	Capacity Building on Long-Term Energy Planning in Republic of Cameroon
27 Oct	2021 IRENA Policy Talks #8 on Finance
30 Nov	2021 IRENA Policy Talks #9 on Energy Access and Livelihoods

### Table 2: Selected Upcoming Publications, 2021

Date	Provisional Report Title
April	Renewable Energy Policies for Cities – Experiences in China, Uganda and Costa Rica
April	Utility-scale Solar and Wind Areas: Mauritania
April	Utility-scale Solar and Wind Areas: Burkina Faso
April	Utility-scale Solar and Wind Areas: Ecuador
April/May	Green Hydrogen Supply: A Guide to Policy Making
April/May	Energy Solutions for Cities of the Future - 7 x briefs
April/May	Assessment of sector coupling report opportunities in cities
May	Urban Energy Transformation - Wuzhong
May	Urban Energy Transition for the Greater Metropolitan Area of the Central valley of Costa Rica
June	Leveraging Decentralised Renewable Energy Solutions to Foster Sustainable Livelihoods
June	Navigating the Way to a Renewable Future 2.0: Pathways to decarbonize the shipping sector by 2050
June	Sector- Coupling Opportunities in Facilitating Integration of Variable Renewable Energy Cities
June	Renewable Power Generation Costs in 2020
June	Renewable Energy and Jobs – Annual Review 2021
June	Tracking SDG 7: The Energy Progress Report 2021 jointly with co-Custodians IEA, UNSD, WB, WHO
June	World Energy Transitions Outlook: Full report
June	United Nations Framework Classification for Geothermal Energy: Pilot applications in the Caribbean, Ethiopia and Indonesia
July	Renewable Energy Statistics 2021
July	Renewable Energy Targets: A Guide to Design
July	Sustainable Bioenergy: A Guide to Policy Making
August	Renewable Energy Market Analysis: Africa
September	Joint IRENA/FAO report on Renewable Energy and Agri-food Systems
September	Green Hydrogen for Industry: A Guide to Policy Making
November	Utility-scale Solar and Wind Areas: Colombia

# Effective functioning of the organisation

To deliver on the Agency's mandate, IRENA relies on the contributions and support of its Members, cooperation with a wide range of experts and institutions, and the commitment of its talented staff. This chapter summarises IRENA's key institutional and strategic activities to-date.

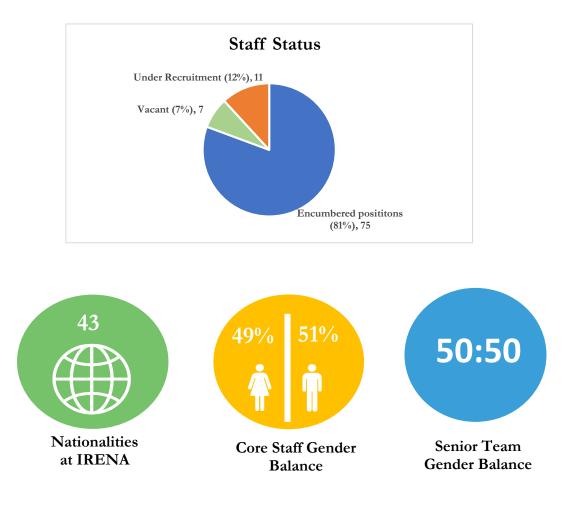
### Human Resources

More than a year since the breakout of the pandemic, lockdowns, movement and other health and safety restrictions persist. IRENA staff from all three duty stations have continued to deliver the programmatic activities, whilst working from home as required.

Human Resources policies and procedures have continued to be refined and updated to ensure effective and efficient responsiveness to the Agency's emerging and evolving needs and challenges, while safeguarding its core values and principles. In support of the Agency's strategic and operational objectives, additional initiatives have also focused on enhancing organisational capabilities and attracting the right talent, with the right combination of knowledge, skills, competencies, and experience while promoting geographical, cultural, and gender diversity.

IRENA has stepped up its outreach efforts to attract talent from all over the world, including 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 arrangements and the Junior Professional Officer Programme. During the period from 1 January 2021 to 15 April 2021, 29 vacancies (core and project, including interns) were announced and over 4,100 applications were received.

As of 15 April 2021, out of 93 core posts, 86 had been filled or are under recruitment (75 filled and 11 under active recruitment) and 7 are vacant. The 75 staff are from 42 nationalities. Regarding gender distribution, out of 75 staff, 37 are women and 38 are men, representing 49% and 51% respectively.



Level	Approved	Filled or Under Recruitment
ASG	1	1
D-2	1	1
D-1	6	5
P-5	17	17
P-3/4	37	35
P-2/1	3	2
Sub-total Professional and above	65	61
General Services	28	25
Total	93	86

Approved and filled/ under recruitment posts by level as of 14 April 2021

Loaned Personnel as of 15 April 2021

Division	Title	Loaned from
ODG	Liaison and Protocol Officer	UAE
ODG	Loaned Officer, Planning and Programme Support	United Kingdom
IITC	Programme Officer, State Grid Corporation of China (SGCC)	China

# Seconded Officers as of 15 April 2021

Division	Title	Seconded from
СЕР	Programme Officer	Republic of Korea
PFS	Associate Programme Officer, Climate Finance and NDC	Republic of Korea
ODG	Advisor to the Director-General	Italy

No.	Country	Staff
1	Austria	2
2	Brazil	2
3	Canada	2
4	Colombia	1
5	Cote d'Ivoire	1
6	Egypt	1
7	France	2
8	Germany	4
9	Ghana	1
10	Greece	1
11	Guatemala	1
12	India	5
13	Indonesia	1
14	Iraq	1
15	Ireland	1
16	Italy	5
17	Japan	1
18	Jordan	3
19	Kenya	3
20	Lebanon	2
21	Lithuania	1
22	Malaysia	1
23	Maldives	1
24	Mexico	1
25	Netherlands	2
26	New Zealand	1
27	Pakistan	2
28	Peru	1
29	Philippines	1
30	Romania	1
31	Serbia	2
32	South Africa	1
33	Sri Lanka	1
34	Sudan	3
35	Tajikistan	1
36	Trinidad and Tobago	2
37	Tunisia	1
38	Turkey	2
39	Ukraine	1
40	United Kingdom	4
41	United Republic of Tanzania	1
42	United States of America	2
43	Yemen	1
	Total	75

Geographical distribution (core posts, loaned personnel and seconded officers) as of 15 April 2021

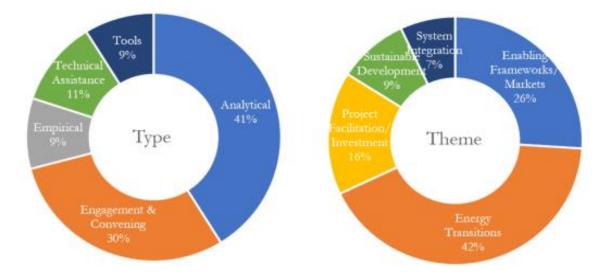
# **Implementation Progress Overview**

In early 2021, the Agency's senior management prepared for the second time an internal Directive, setting out the framework for delivery of the Work Programme and Budget for 2020-2021. Specifically, the Directive sets out the responsibilities of all Directors in the implementation of the programmatic outputs, expectations to uphold IRENA's core values of efficiency, competency, and integrity, and to promote a harmonious environment based on mutual respect that empowers staff, fosters creativity and promotes a culture of learning. The Directive will continue to be updated annually to reflect progress on the implementation of the Work Programme and set out new and refined responsibilities.

There are a total of 54 Work Programme outputs for the 2020-2021 biennium, spreading across the four strategic objectives or pillars identified in the current MTS: a centre of excellence for knowledge and innovation; a global voice of renewable energy; a network hub for all stakeholders; and a source of advice and support for countries. Of these total outputs, 15% are complete and 83% in progress, totalling 98% implementation of the work programme.

Centre of Excellence for Energy Transition	• Empower effective policy and decision-making by providing authoritative knowledge and analyses on renewables-based energy transformation at global, national and sectoral level
Global Voice of Renewables	•Shape the global discourse on energy transformation by providing relevant, timely, high-quality information and access to data on renewable energy
Network Hub for Energy Transformation	• Provide an inclusive platform for all stakeholders to foster action, convergence of efforts and knowledge sharing for impact on the ground
Source of Advice	• Support country-level decision-making to accelerate the renewables-based transformation of national energy systems, advance strategies to diversify energy sources, reduce global emissions and achieve sustainable development





For the purpose of this analysis, IRENA's outward-facing activities have been grouped according to the following themes:

- Enabling frameworks: improving frameworks such as policy, regulation and markets to enable renewables deployment;
- o Energy transitions: global and regional energy transitions and global energy discourse;
- Project facilitation/investment: support to facilitate the implementation of renewable projects;
- o Sustainable development: activities aligned with SDG 7 or cross-sectoral, sustainable agenda; and
- o System integration: technical-level transition-related activities.

### **Resource overview**

This section presents details of the core budget and voluntary contributions applicable to the Work Programme for 2020-2021.

# Biennial budget overview

### Table 3: 2020-2021 Biennium Budget Utilisation by funding source (in USD Thousands)

		Utilisation a	tion as of 15 April 2021	
	2020-2021 Biennium Budget	Commitment and Expenses	Proportion of 2020- 2021 Biennium Budget	
Assessed Contributions (Core Budget)	44,461	38,286	86%	
Core Non-Assessed UAE Contribution:				
UAE Support	5,000	3,011	60%	
Governing Body Meetings	3,200	1,072	34%	
IT Infrastructure Support	920	647	70%	
Subtotal	9,120	4,730	52%	
Core Non-Assessed Germany				
Innovation and Technology Centre	10,890	9,211	85%	
Subtotal	10,890	9,211	85%	
Core Non-Assessed Other Contributions				
Core Non-Assessed Other	1,704	604	35%	
Subtotal	1,704	604	35%	
Total Core Non-Assessed	21,714	14,545	67%	
Grand Total	66,175	52,831	80%	

### Core Non-Assessed Contributions

as of 15 April 2021, in USD

# Budgeted Voluntary Contributions

	2020-2021		
	Committed	Received	
GERMANY			
IRENA Innovation and Technology Centre	10,890,000	5,445,000	
Subtotal Germany Contributions	10,890,000	5,445,000	
United Arab Emirates (UAE)			
UAE Support	5,000,000	2,500,000	
Governing Body Meetings	3,200,000	1,600,000	
IT Infrastructure Support	920,000	460,000	
Subtotal UAE Contributions	9,120,000	4,560,000	
Total Budgeted Voluntary Contributions	20,010,000	10,005,000	

# Other Voluntary Contributions

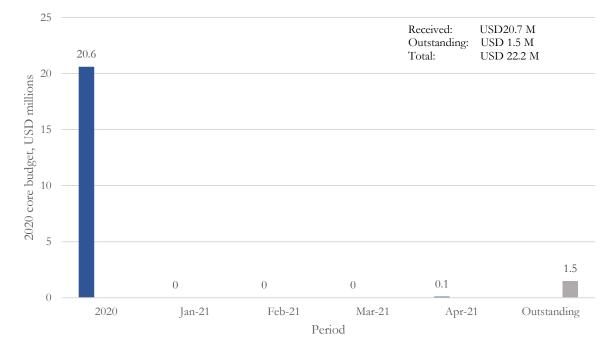
	2020-2021	
Donor/Project	Committed	Received
European Commission, Horizon 2030	550,791	409,389
European Commission, Directorate-General for Energy	390,625	-
Germany	2,021,753	1,431,957
Italy	567,634	567,634
Japan	1,106,164	1,106,164
King Abdullah Petroleum Studies and Research Centre (KAPSARC)	200,000	200,000
Korea Energy Economics Institute	82,892	82,892
NDC Partnership Climate Action Enhancement Package (CAEP)	1,364,684	1,113,945
Republic of Korea	182,258	182,258
United Nations Development Programme (UNDP)	2,200,000	1,110,377
World Bank (IBRD)	13,438	13,438
Subtotal	8,680,239	6,218,054

Fund for Developing Country Representatives		
2	2020-20	
Donor	Committed	Received
Flanders Region of Belgium	17,461	17,461
Walloon Region of Belgium	14,095	14,095
United Arab Emirates (UAE)	100,000	100,000
Subtotal	131,556	131,556
Total Other Voluntary Contributions	8,811,795	6,349,610

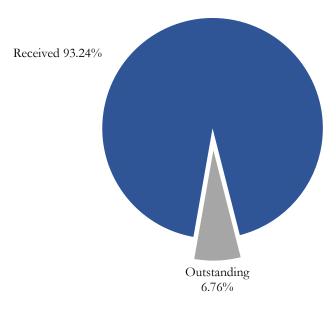
The **Fund for Developing Country Representatives (FDCR)**, which was established at the second session of the IRENA Assembly, facilitates the participation of the representatives of developing countries in IRENA meetings. Since its establishment, the FDCR has been instrumental in ensuring a high level of inclusiveness, ownership, and transparency in the decision-making process and activities of the Agency. The Fund supports the participation of representatives of Least Developed Countries (LDCs) and Small Island Developing States (SIDS) in all IRENA's governing body meetings, including the Assembly, Council and its Committees.

Multi-Year Voluntary Contribution			
Donor/Project	Multi-Year Commitments	Received prior to 2020	Received by March 2021
Government of the Walloon Region, Belgium	2,207,506	-	1,173,709
Denmark*	13,738,852	6,355,549	3,607,885
Germany (International Climate Initiative) *	6,796,311	3,459,818	738,551
Norway	4,332,756	-	2,215,291
Total	27,075,425	9,815,367	7,735,436

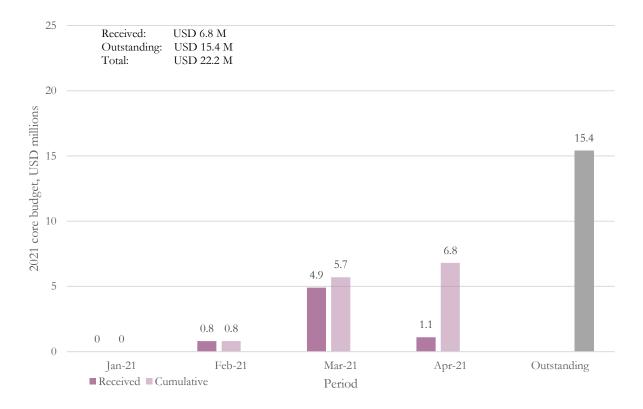
\*Contributions pledged and partially received prior to 2020

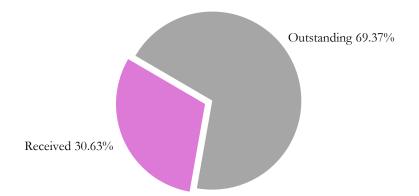






# Figure 14: Received and outstanding assessed contributions for 2021 core budget (in USD million, as of 15 April 2021)





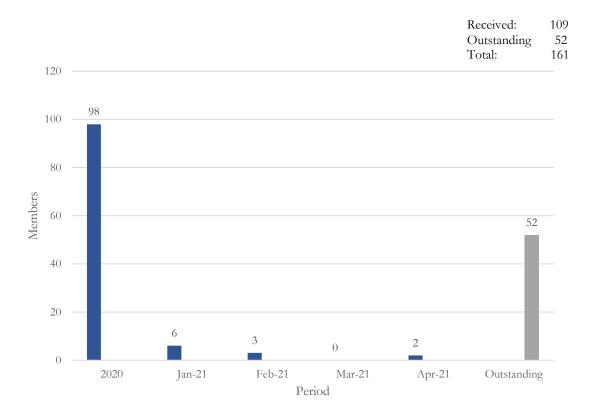
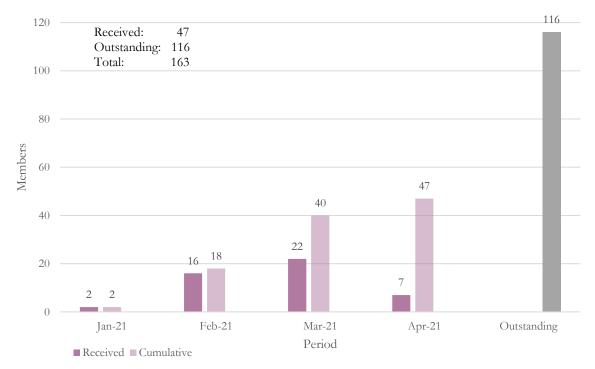


Figure 15: Number of Members with received and outstanding contributions to the 2020 core budget (as of 15 April 2021)

# Figure 16: Number of Members with received and outstanding contributions to the 2021 core budget (as of 15 April 2021)



#### **IRENA** donors (2020-2021)



**Government of the Walloon Region of Belgium** Various Projects and Fund for Developing Country Representatives

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**Government of the Flanders Region of Belgium** Fund for Developing Country Representatives



Denmark Ministry of Foreign Affairs: Long-term Planning / SIDS Lighthouses Initiative 2.0



#### **European Commission**

**Directorate-General for Energy**: Central and South-Eastern Europe (CESEC) Remap **Horizon 2030:** Tracking Energy Innovation Impacts Framework



#### Germany

Federal Ministry of Economics and Technology (BMWi): World Energy Transitions Outlook and various projects
Federal Ministry for Economic Cooperation and Development (BMZ): Renewable Energy Transition Africa
Federal Foreign Office: Geopolitics of Hydrogen Economy International Climate Initiative: SIDS Lighthouses / Energy Solutions for Cities of the Future



International Bank for Reconstruction and Development (IBRD) IRENA Contribution to SDG 7 Tracking Report

#### Italy

**Ministry of Foreign Affairs and International Cooperation:** Desert to Power in Sahel and Climate Investment Platform / G20 analysis on Offshore Renewables and Ocean Energy



Ministry of Agriculture, Forestry and Fisheries (MAFF): Biomass Strategy for Sustainable Bioenergy Production / Development of Circular Economy with Bioenergy and Co-products Ministry of Economy, Trade and Industry (METI): Various Projects



King Abdullah Petroleum Studies and Research Centre (KAPSARC) G20 reports for the Circular Carbon Economy



#### Korea Energy Economics Institute (KEEI)

Northeast Asia Power System Interconnections: Lessons from the Regional Initiatives for the Promotion of Renewable Power Deployment and Trade



NDC Partnership NDC Partnership Climate Action Enhancement Package (CAEP)



**Norway Ministry of Foreign Affairs:** Core non-assessed contribution to the Work Programme (includes dedicated funds for geopolitics)



#### United Arab Emirates

IRENA/Abu Dhabi Fund for Development (ADFD) Project Facility / Fund for Developing Country Representatives



United Nations Development Programme (UNDP) UNDP Climate Promise

### Work Programme 2020-2021 Biennium

This section presents a full matrix detailing the progress of Work Programme activities by pillar

#### I. Centre of Excellence for Energy Transition

Core assessed and core non-assessed resources (in USD thousands): 13,394. Outputs supported by additional voluntary contributions are footnoted.

Objective: Empower effective policy and decision-making by providing authoritative knowledge and analyses on renewables-based energy transformation at global, national and sectoral levels.

Outputs	Status	Description
Annual statistics: renewable capacity, renewable energy, off- grid	In progress (2020 editions completed)	<ul> <li>"Renewable Capacity Statistics" (March 2020) (<u>Click</u> <u>here</u>) / (March 2021) (<u>Click here</u>).</li> <li>"Renewable Energy Statistics" (July 2020) (<u>Click here</u>)</li> </ul>
Jobs Annual Review (annual)	In progress (2020 edition completed)	"Renewable energy and jobs – Annual Review 2020" (Sept. 2020). ( <u>Click here</u> )
Annual update on power generation costs	In progress (2020 edition completed)	"Renewable Energy Power Generation Costs in 2019" (June 2020). ( <u>Click here</u> )
Annual update on patents and standards	In progress (2020 edition completed)	Annual update of the International Standards and Patents in Renewable Energy. ( <u>Click here to access the</u> <u>INSPIRE platform</u> )
Global Atlas data updates on renewable potentials	In progress	Updating the renewable resource maps from data providers (member states, international institutions and private sectors). ( <u>Click here to access the platform</u> )
IRENA/IEA Policies and Measures Database	Completed	Updated 80 countries from Africa, Asia, Europe, Latin America and SIDS.
The Energy Progress Report: Tracking SDG7 <sup>48</sup> (annual, jointly with IEA, WB, WHO and UN)	In progress (2020 edition completed)	"Tracking SDG 7: Energy Progress Report 2020" (May 2020). ( <u>Click here</u> ) SDG 7 Policy Briefs:
		<ul> <li>"Advancing Implementation of SDG 7 in Support of the 2030 Agenda" (June 2020). (<u>Click here</u>)</li> <li>"Advancing SDG 7 in Least Developed Countries". (June 2020). (<u>Click here</u>)</li> </ul>
Global Energy Transformation (annual editions) <sup>49</sup>	In progress (2020 edition completed)	<ul> <li>"World Energy Transitions Outlook:1.5°C Pathway" (Preview) (March 2021) (<u>Click here</u>)</li> <li>Selected articles:</li> <li>\$131 trillion needed to cap global warming at 1.5C (<u>Video</u>) (<u>CNN</u>)</li> <li><u>Invest \$131 trillion in clean energy by 2050 to hit climate goals (Reuters)</u></li> </ul>
		World Oil Demand May Have Peaked In 2019 Amid Energy Transition: IRENA (S&P Global Platts Co-leading "Energy Transition" theme and contributing to other four themes of UN Secretary-General's High-

<sup>&</sup>lt;sup>48</sup> Supported by the International Bank for Reconstruction and Development.

<sup>&</sup>lt;sup>49</sup> Supported by the Government of Germany (BMWi).

Measuring the Socio-Economic		level Dialogue on Energy, to take place September 2021. "Global Renewables Outlook: Energy Transformation 2050" (April 2020). ( <u>Click here</u> ) "Post-COVID Recovery – an agenda for resilience, development and equality" (June 2020). ( <u>Click here</u> ) COVID Tracker developed: Track of energy related monetary, fiscal, and other measures since April 2020 for internal knowledge.
Footprint report Innovation Landscape: Renewable Electricity in End-use report	In progress	Analysis is ongoing. Experts workshop to collect input conducted on April 13th 2021
Global Landscape: Renewable Energy Finance report	Completed	"Global Landscape: Renewable Energy Finance 2020" (Nov. 2020) ( <u>Click here</u> )
Third Innovation Week	Completed	IRENA Innovation Week (Oct 2020). ( <u>Click here for</u> event listing and here for webpage) Innovation Week Summary Report ( <u>Click here for</u> event summary)
ASEAN 2050 energy transition outlook <sup>50</sup>	In progress	Data collection and analysis ongoing; Engaging with ASEAN Centre for Energy to align with the Asian Energy Outlook (AEO). <i>FlexTool training</i> for ASEAN conducted (June 2020). ( <u>Click here</u> )
Central America 2050 energy transition outlook <sup>51</sup>	In progress	New joiner: Guatemala Costa Rica workshop postponed due to COVID-19. FlexTool analysis completed for historical data and reference scenario. <i>FlexTool training</i> for Latin America conducted (May 2020). ( <u>Click here</u> )
Impact of Innovation on Energy Transition <sup>52</sup>	In progress	Data gathering and analysis ongoing. Interim findings shared with project funders. Expert workshop planned for April 2021 and Policy makers briefing planned for June. <i>Experts consultative workshop</i> held (Oct. 2020). ( <u>Click here</u> ) <i>Innovations for a decentralised, renewable-powered system: Peer-</i> <i>to-peer electricity trading</i> webinar (Aug 2020) ( <u>Click here</u> )
Human resources and workforce planning strategy	In progress	58 new staff appointments and internal movements and eight new Associate Personnel. Reclassification of all jobs' Terms of Reference underway.

<sup>&</sup>lt;sup>50</sup> Supported by the Government of Denmark.
<sup>51</sup> Supported by the Government of Norway.
<sup>52</sup> Supported by the European Commission, under Horizon 2030 programme.

Performance management	Completed	<ul> <li>The Capacity Development Programme for SIDS and LDCs initiated January 2020 was placed on hold March 2020 due to the COVID-19 pandemic.</li> <li>Online Performance Management System (e-PAR)</li> </ul>
Refinement of Staff Rules and updated HR Manual	In progress	launched with 97% compliance.         Admin Instructions/Directives in draft on Remote         Work, Performance Management, Training, Roster         Management.
System for engagement of academia, researchers and the private sector	In progress	<ul> <li>Development of guidelines for private sector engagement released in July 2020. (Click here). (Click for associated news article: IRENA Develops Guidelines for Co-operation with the Private Sector).</li> <li>Academic review conducted. Results are helping IRENA to improve our presence with academia.</li> <li>Organisation of IRENA Insights. (Click here)</li> </ul>
Training and staff development strategy	In progress	<ul> <li>Performance Management training held in Abu Dhabi.</li> <li>Performance Management and CBI training in Bonn postponed due to COVID-19.</li> <li>All staff have access to virtual learning through LinkedIn training platform.</li> <li>A training directive and calendar for staff-wide training activities will be finalised post-pandemic.</li> <li>Training requisition forms have been updated to enable staff to engage in external learning and development activities.</li> </ul>

#### II. Global Voice of Renewables

Core assessed and core non-assessed resources (in USD thousands): 11,011. Outputs supported by additional voluntary contributions are footnoted.

Objective: Shape the global discourse on energy transformation by providing relevant, timely, high-quality information and access to data on renewable energy.

Outputs	Status	Description
Power Market Design for the Energy Transition report	In progress	
Market Analysis: Africa	In progress	Finance and policy landscape in drafting, energy data and resource assessments ongoing, and socio-economics modelling underway.
Ecosystems for Sustainable Livelihoods report	In progress	In review phase.
Policies at the Time of Transition: Transport (with IEA and REN21) report	In progress	IRENA will collaborate with institutions that possess Transport policy expertise.
Leveraging Local Capabilities (selected technologies) report	In progress	

6th and 7th Global Policy Day	Completed	<ul> <li>6<sup>th</sup> Global Policy Day turned into online sessions under IRENA Policy Talks, due to COVID-19:</li> <li>Policy Talk 1: <i>Renewable Energy Finance: Status,</i> <i>Trends and Recommendations</i> (Nov. 2020) (Click here)</li> <li>Policy Talk 2: <i>Policies for Green Hydrogen</i> (Nov. 2020) (Click here)</li> <li>Policy Talk 3: <i>Renewable Energy Policies in a Time</i> <i>of Transition</i> (Nov. 2020) (Click here)</li> <li>Policy Talk 4: <i>Stimulating Investment in Community</i> <i>Energy</i> (Dec. 2020) (Click here)</li> <li>The series of the 2021 IRENA Policy Talks started in April 2021.</li> </ul>
Toolbox for long-term planning: methodologies and best practice	In progress	AVRIL spin-off brief on Geo-Spatial modelling (in development) Development of visualisation dashboard of long- term modelling results for Africa. <sup>53</sup> "Power sector planning in Arab countries: Incorporating variable renewables" <sup>54</sup> (Jan 2020). ( <u>Click here</u> )
Grid codes for variable renewable energy (VRE) report	In progress	Data collection has started.
Value of storage in national energy systems report and toolkit	Completed	<ul> <li>"Electricity Storage Valuation Framework" released (March 2020). (<u>Click here</u>)</li> <li>The Framework has been presented under the partnership with the World Bank in the context of the Energy Storage Partnership (May and June 2020).</li> <li>Methodology developed for valuing the role of storage in national power systems. The methodology will assist countries in exploring the role &amp; value of storage for their system.</li> </ul>
Global assessment of geothermal energy	In progress	Development of concept and identification of partners
Gender and Renewable Energy report	In progress	Wind energy: A gender perspective ( <u>Click here</u> ) Solar PV: A gender perspective (upcoming 2021)
NDCs and Renewable Energy Targets <sup>55</sup>	In progress	NDC update for PA Anniversary completed (Dec 2020) ( <u>Click here</u> ). Database of Renewable Energy Targets completed. ( <u>Click here</u> ).
Geopolitics of the Energy Transformation <sup>56</sup>	In progress	Collaborative Framework on Geopolitics of Energy Transformation meeting (June 2020) (Click here).

<sup>&</sup>lt;sup>53</sup> Supported by the Government of the Walloon Region of Belgium.
<sup>54</sup> Supported by the Islamic Development Bank (IsDB).
<sup>55</sup> Supported by the Government of the Walloon Region of Belgium.

<sup>&</sup>lt;sup>56</sup> Supported by the Government of Norway and the Government of Germany.

		<i>Collaborative Framework on Geopolitics of Energy</i> <i>Transformation</i> meeting (Oct 2020) (Click here).
Analytical briefs, guidelines and working papers on topical issues (bio-energy, hydrogen, hydropower, offshore wind, power-to-X, standards, VRE integration, auctions, fiscal policies, target design, distributed generation, cities, renewable options for buildings, market-based mechanisms, access and electrification planning)	Completed	<ul> <li>Briefs published:</li> <li>"Renewable energy finance: Sovereign guarantees" (Jan. 2020). (Click here)</li> <li>"Renewable energy finance: Institutional capital" (Jan. 2020). (Click here)</li> <li>"Renewable energy finance: Green bonds" (Jan. 2020). (Click here)</li> <li>"Energy subsidies: Evolution in the global energy transformation to 2050" (Apr. 2020) (Click here)</li> <li>"Business Models Innovation Landscape" (Jul. 2020) (Click here)</li> <li>"System Operation Innovation Landscape" (Jul. 2020) (Click here)</li> <li>"Green Hydrogen: A Guide to policy making" (Nov 2020) (Click here)</li> <li>"Oil Companies and the Energy Transition" (Feb. 2021). (Click here)</li> <li>"The Renewable Energy Transition in Africa" (March 2021) (Click here)</li> <li>"Renewable energy auctions in Japan: Context, design and results" (Janch 2021) (Click here)</li> <li>"Renewable energy auctions in Colombia: Context, design and results" (March 2021) (Click here)</li> <li>"Renewable energy auctions in Colombia: Context, design and results" (March 2021) (Click here)</li> <li>"Renewable energy auctions in Colombia: Context, design and results" (March 2021) (Click here)</li> <li>"Renewable energy auctions in Colombia: Context, design and results" (March 2021) (Click here)</li> <li>"Reports published:</li> <li>A chapter in the Policy Briefs in Support of the High-Level Political Forum 2020 - "The role of energy scenarios in guiding the energy transition" (June 2020) (Click here)</li> <li>"Concentrating Solar Power: Clean power on demand 24/7" (Feb 2021) (Joint Publication with the World Bank) (Click here)</li> <li>"Reaching Zero with Renewables" (Sept. 2020). (Click here)</li> <li>"Novative solutions for 100% renewable power in Sweden"<sup>57</sup> (Jan. 2020). (Click here)</li> <li>"Novilising institutional capital for renewable energy "Innovative solutions for 100% renewable energy "Nov 2020). (Click here)</li> <li>"Renewable Energy Policies in a Time of Transition: Heating and Cooling" (Nov. 2020). (Click here)</li> <li>Innovation Tool</li></ul>

<sup>&</sup>lt;sup>57</sup> Supported by the Government of Sweden.

## C/21/2

	"Innovation Outlook: Thermal Energy
	Storage" (Nov. 2020). ( <u>Click here</u> )
	"Innovation Outlook: Ocean Energy
	Technologies" (Dec. 2020). ( <u>Click here</u> )
	<ul> <li>"Fostering a blue economy: offshore renewable energy" (Dec. 2020). (<u>Click here</u>)</li> </ul>
	<ul> <li>"Rise of Renewable Energy in Cities" <sup>58</sup>(Oct.</li> </ul>
	2020). ( <u>Click here</u> )
	• "Quality Infrastructure for the renewable mini- grid of the future" (Dec. 2020). ( <u>Click here</u> )
	<ul> <li>"Innovation Outlook: Renewable Methanol" (Jan 2021) (<u>Click here</u>)</li> </ul>
	"Green hydrogen cost reduction: Scaling up
	electrolysers to meet the 1.5°C climate goal" (Dec. 2020) ( <u>Click here</u> )
	Reports soon to be published:
	• "100% Renewable Energy"
	<ul> <li>"Smart Electrification with Renewables" (In collaboration with State Grid China)</li> </ul>
	• "Sector coupling in facilitating integration of
	<ul><li>variable renewable energy in cities"</li><li>"Sustainable Energy Planning for Wuzhong</li></ul>
	District, Suzhou, China"
	• "Urban Energy Transition for the Greater
	Metropolitan Area of the Central Valley of Costa Rica"
	<ul> <li>"Sustainable Bioenergy: A Guide to Policy Making"</li> </ul>
	<ul> <li>Joint IREA-FAO study on "Renewable Energy"</li> </ul>
	and Agri-food Systems: Advancing Energy and
	Food Security towards Sustainable
	Development Goals"
	<ul> <li>"Green hydrogen supply: a guide to policy making"</li> </ul>
	IRENA/SELCO Foundation report
	"Ecosystems for Sustainable Livelihoods"
	Events:
	<ul> <li>Collaborative Framework on Hydropower (June 2020). (<u>Click here</u>)</li> </ul>
	<ul> <li>Collaborative Framework on Hydropower (Sept.</li> </ul>
	2020). ( <u>Click here</u> )
	<ul> <li>Collaborative Framework on Green Hydrogen (June 2020). (<u>Click here</u>)</li> </ul>
	<ul> <li>Collaborative Framework on Green Hydrogen (Sept. 2020). (Click here)</li> </ul>
	<ul> <li>Collaborative Framework on Ocean Energy/Offshore</li> </ul>
	Renewables (June 2020). ( <u>Click here</u> )
	• Collaborative Framework on Ocean Energy/Offshore
	Renewables (Oct. 2020). ( <u>Click here</u> ).

<sup>&</sup>lt;sup>58</sup> Supported by the Government of Germany as part of the German Government International Climate Initiative.

<ul> <li>Collaborative Framework on Enhancing the Dialogue on High Shares of Renewables in Energy Systems (July 2020). (<u>Click here</u>)</li> <li>Collaborative Framework on Enhancing the Dialogue on High Shares of Renewables in Energy Systems</li> </ul>
<ul> <li>(Oct. 2020). (<u>Click here</u>)</li> <li>Side event on <i>Energy Transition for the Cities of the Future</i> at the 10<sup>th</sup> World Urban Forum (Feb 2020) (<u>Click here</u> for press release)</li> <li>The future for heavy-duty vehicles in the Pentalateral Region: Integrating electromobility in the energy transition (Oct. 2020). (<u>Click here</u>)</li> </ul>

#### III. Network Hub

Core assessed and core non-assessed resources (in USD thousands): 11,037. Outputs supported by additional voluntary contributions are footnoted.

Objective: Provide an inclusive platform for all stakeholders to foster action, convergence of efforts and knowledge sharing for impact on	
the ground.	

Outputs	Status	Description
IRENA Forums in regions and sub-regions	In progress	Preparations in place, Forums delayed due to COVID-19. Provisional plans for early 2022.
SIDS Lighthouses Initiative <sup>59</sup>	In progress	<ul> <li>Initiative coordination:</li> <li>Five new partners joined the initiative: Pacific Community, Pacific Power Association, Sur Futuro Foundation and the UN Office of the High Representative for the LDCS, LLDCS, and SIDS (UN-OHRLLS) and Greening the Islands. Total – 36 SIDS<sup>60</sup> and 30 development partners<sup>61</sup>.</li> <li>Country profiles updated and uploaded on the SIDS Lighthouse Initiative (LHI) website and shared with SIDS. The knowledge platform also includes energy transformation related documents for SIDS.</li> </ul>

<sup>&</sup>lt;sup>59</sup> Supported by Governments of Denmark, Germany as part of the German Government International Climate Initiative, NDP Partnership and UNDP.

<sup>&</sup>lt;sup>60</sup> Antigua & Barbuda, Aruba, Bahamas, Barbados, Belize, British Virgin Islands, Cabo Verde, Comoros, Cook Islands, Cuba, Dominican Republic, Fiji, Grenada, Guyana, Kiribati, Maldives, Marshall Islands, Mauritius, Micronesia (Federated States of), Montserrat, Nauru, New Caledonia, Niue, Palau, Papua New Guinea, Saint Lucia, Saint Vincent and the Grenadines, Samoa, Sao Tome and Principe, Seychelles, Solomon Islands, Tonga, Trinidad and Tobago, Turks and Caicos, Tuvalu, Vanuatu.

<sup>&</sup>lt;sup>61</sup> Denmark, France, Germany, Italy, Japan, New Zealand, Norway, United Arab Emirates, United States of America, Association of the Overseas Countries and Territories of the European Union, Caribbean Electric Utility Services Corporation, Clean Energy Solutions Center, Clinton Climate Initiative, ENEL, European Union, Greening the Islands, Indian Ocean Commission, International Renewable Energy Agency, Organisation of Eastern Caribbean States, Pacific Islands Development Forum, Pacific Community (SPC), Pacific Power Association, Rocky Mountain Institute - Carbon War Room, Solar Head of State, Sustainable Energy for All, Sur Futuro Foundation, United Nations Development Programme, United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (UNOHRLLS) , World Bank

<ul> <li>Social media page created on LinkedIn to widen the outreach to all SIDS stakeholders.</li> <li>Development of the SIDS LHI Annual Report/Brochure and SIDS digital interactive stories ongoing.</li> <li>Progress of SIDS LHI and the Enhanced SIDS Climate Package presented at the Alliance of Small Island States (AOSIS) Placencia Forum.</li> </ul>
<ul> <li>(Apr. 2020) (Click here)</li> <li>Co-hosted SIDS High-Level Dialogue - Accelerating Energy Transition in Small Island Developing States to Stimulate Post-Pandemic Recovery with the AOSIS (June 2020). (Click here)</li> <li>Co-hosted Energy Transformation in Small Island Developing States: Towards sustainable and climate resilient post-pandemic recovery with Denmark on the progress of the Ambitious SIDS Climate Package during the UN Climate Summit Week (Sept. 2020). (Click here)</li> <li>Signed MOU with SIDS DOCK to collaborate on SIDS energy transformation to strengthen climate resilience and pandemic recovery efforts.</li> <li>Technical webinar series on Transforming SIDS Power Systems through Variable Renewable Energy</li> </ul>
completed for the Pacific (Sept. 2020) ( <u>Click</u> <u>here</u> ) and Caribbean region (Dec. 2020). ( <u>Click</u> <u>here</u> ) Country-level work:
<ul> <li>Antigua and Barbuda: Renewable Energy Roadmap (Mar. 2021) (<u>Click here</u>)</li> <li>Joint mission with UNDP on Energy and Blue Economy to Sao Tome Principe (Mar. 2020).</li> <li>Renewable energy project concept notes for Sao Tome and Principe is being considered on the Climate Investment Platform. Partial funding has been secured from GEF.</li> </ul>
<ul> <li><u>Climate Promise</u> energy-related activities in SIDS (<u>Click here</u>).</li> <li>With support of UNDP country offices, Climate Promise engagements established in Barbados, Dominica, Saint Kitts and Nevis, Saint Vincent and the Grenadines, and Sao Tome and Principe.</li> <li>Supporting CAEP country-level activities in</li> </ul>
<ul> <li>bupporting Griffi country level activities in the AIS - Seychelles, Caribbean – Belize, Dominican Republic, Grenada and Pacific SIDS – Papua New Guinea and Tonga.</li> <li>Direct technical assistance on NDC enhancement and implementation provided to Fiji reviewing the energy data management methodology, Saint Lucia and Seychelles for solar rooftop simulation analysis</li> </ul>

		<ul> <li>Technical analysis to support implementation of Palau's NDC mitigation measures, including a review of the energy sector baseline and mitigation objectives and analysis of the readiness, efficiency, and affordability of emerging renewable energy technologies.</li> <li>Development of a 100 % renewable energy roadmap for Palau ongoing.</li> <li>Development of coconut biofuel strategy for Vanuatu ongoing.</li> <li>Completed review of the Mauritius Bioenergy Strategy.</li> </ul>
Global Geothermal Alliance	In progress	<ul> <li>New GGA partners: Serbian Geothermal Association. Total 46 Countries<sup>62</sup> and 40 Partners<sup>63</sup>.</li> <li>GGA website is being developed into a knowledge sharing platform: <ul> <li>Updated geothermal profiles: Africa (Click here), Europe (click here), Asia (upcoming), Latin America and Caribbean (click here).</li> <li>Themes on International Training Centres and Geothermal Resource Assessment Methodologies. (Click here)</li> </ul> </li> <li>Report: Assessment of geothermal development for electricity and direct use in East Africa Rift region (Click here)<sup>64</sup></li> <li>Renewable Energy Applications for district heating and cooling: <sup>65</sup></li> <li>Report: Guidebook for enabling the integration of low-temperature renewable energy sources in district heating and cooling networks (Click</li> </ul>

<sup>&</sup>lt;sup>62</sup> Argentina, Bolivia, Burundi, Chile, Colombia, Comoros, Costa Rica, Djibouti, Ecuador, Egypt, El Salvador, Ethiopia, Fiji, France, Germany, Guatemala, Honduras, Iceland, India, Indonesia, Italy, Japan, Kenya, Kingdom of the Netherlands, Malaysia, Mexico, New Zealand, Nicaragua, Pakistan, Papua New Guinea, Peru, Philippines, Poland, Portugal, Romania, Saint Vincent & the Grenadines, Solomon Islands, Switzerland, Tonga, Turkey, Uganda, United Republic of Tanzania, United States of America, Vanuatu, Zambia, Zimbabwe.

<sup>64</sup> Supported by the Government of Japan.

<sup>65</sup> Supported by the Government of Germany as part of the German Government International Climate Initiative.

<sup>&</sup>lt;sup>63</sup> African Development Bank, African Union Commission, AGH University of Science and Technology (Poland), Andean Geothermal Center of Excellence (Chile), Asian Infrastructure Investment Bank (AIIB), Association GeoEnergy Celle e.V. (Germany), Canadian Geothermal Energy Association, Caribbean Electric Utility Services Corporation (CARILEC), Centro Mexicano de Innovación en Energía Geotérmica (CeMIEGeo), Chinese Renewable Energy Industries Association (CREIA), Eastern African Power Pool, Energy Institute Hrvoje Požar (Croatia), European Geothermal Energy Council, Geothermal Canada, GEODEEP - Geothermal Cluster for Heat and Power (France), Geothermal Power Plants Investors Association (Turkey), Geothermal Resources Council (USA), Geothermal Training Programme in Iceland (GRO GTP), Iceland GeoSurvey, Iceland Geothermal Cluster Initiative, Inter-American Development Bank, International Geothermal Association, International Renewable Energy Agency, Islamic Development Bank, Macedonian Geothermal Association, National Energy Authority (Iceland), New Partnership for Africa's Development, Nordic Development Fund, Organization of American States, Organisation of Eastern Caribbean States, Pacific Community, Regional Center for Renewable Energy and Energy Efficiency, Serbian Geological Society, Serbian Geothermal Association, Southern Africa Power Pool, United Nations Environment Programme (UN Environment), United Nations Industrial Development Organization (UNIDO), United States Energy Association (USA), University of Geneva, World Bank.

5th International Off-grid	In progress	<ul> <li>Three webinars organised on Integration of low-temperature renewable energy source in district heating and cooling networks (<u>Click</u><u>here</u>).</li> <li>Workshop on the integration of low- temperature renewable energy sources in district energy systems: Focus on Belarus (<u>Click here</u>).</li> <li>Workshop on the integration of renewables in district heating and cooling in China (<u>Click here</u>)</li> <li>5<sup>th</sup> IOREC scheduled for October 2020 postponed</li> </ul>
Renewable Energy Conference	In progress	<ul> <li>to 2021 due to COVID-19.</li> <li>4<sup>th</sup> edition of the annual <i>ECOWAS Sustainable Energy</i> <i>Forum</i> (ESEF) in partnership with ARE, ECREEE, and GIZ (Nov. 2020) (<u>Click here</u>)</li> </ul>
Implementation of regional action agendas and clean energy corridors <sup>66</sup> in Central Asia, Latin America, Middle East and North Africa, South Asia, South East Asia Southeast Europe and Sub-Saharan Africa	In progress	<ul> <li>Africa</li> <li>Implementation initiated for the "Regional Capacity-Building Programme on Long-Term Planning for Central Africa" in partnership with the Central Africa Power Pool.<sup>67</sup></li> <li>Implementation initiated for Regional trainings on the <i>Economics of Power Systems Planning and Operation</i> in West Africa.</li> <li>Development of a regional parliamentary strategy in the ECOWAS region, including a regional parliamentary meeting.</li> <li>Ministerial Meeting for the validation of the Renewable Energy Roadmap for Central Africa under preparation</li> <li>Co-organisation of a <i>High-Level Dialogue with the Africa Union on the COVID-19 pandemic response and Africa's energy transformation</i> (May 2020). (Click here).</li> <li>Africa Hydropower Database (Database disseminated through the Global Atlas platform, and a short technical note published) on high spatial-temporal hydro power generation profile data</li> <li>Asia</li> <li>Implementation initiated for Regional Webinar on Advancing the Energy Transition in Central Asia through NDC's and Long-Term Strategies (LTS)</li> </ul>
		<ul> <li>Implementation initiated for Regional Capacity Workshop on Project Development in South Asia: Enhancing Decentralised Renewable Energy in the Hindukush Himalayas</li> <li>Webinar Accelerating the Southeast Asian Energy Transformation (Aug. 2020). (Click here).</li> </ul>

<sup>&</sup>lt;sup>66</sup> Supported by the Islamic Development Bank (IsDB) and the Government of Norway.<sup>67</sup> Supported by the Government of the Walloon Region of Belgium.

<ul> <li>Organised workshop with ACE on sidelines of 27th Annual Meeting of the Renewable Energy Sub-Sector Network (RE-SSN) to discuss the IRENA-ASEAN MOU activity priorities for 2020-2021 (June 2020). (Click here).</li> <li>Organised 2nd SOME-IRENA meeting with representatives from ACE, ASEAN Secretariat and Energy Ministries from 10 ASEAN Member States on the sidelines of the 38th ASEAN Senior Officials Meeting on Energy (SOME) (August 2020) (Click here)</li> <li>Co-organised ASEAN - COP 26 Climate Dialogue with UK COP 26 Presidency and ASEAN Secretariat (September 2020). (Click here).</li> <li>Organised 4th ASEAN Ministers on Energy Meeting (AMEM) - IRENA meeting with representatives from ASEAN Secretariat, ACE and Energy Ministers from 10 ASEAN Member States on the sidelines of the 38th AMEM (November 2020)</li> </ul>
Latin America and Caribbean
<ul> <li>Webinar Accelerating Latin America's Energy Transformation RE and Economic Recovery (Aug. 2020). (Click here)</li> <li>NDCs and the energy transition in Central America, COREN 2020, (Oct 2020) (Click here)</li> <li>Webinar Advancing the Energy Transition in Latin America and the Caribbean through Nationally Determined Contributions (NDCs) in collaboration with UK COP26, (Dec 2020) (Click here)</li> <li>CECCA workshop 2020: Integration of variable renewable energy sources (Oct 2020). (Click here)</li> <li>Middle East and North Africa:</li> <li>Interim reports produced including outcomes of the first stage of the zoning project.<sup>68</sup></li> </ul>
<ul> <li>IRENA <i>FlexTool Training</i> for MENA hosted in partnership with RCREEE and League of Arab States (LAS). (<u>Click here</u>)</li> </ul>
Global:
<ul> <li>Organised roundtable discussion on Global Renewables Outlook - key technologies and trends for the energy transformation at Singapore International Energy Week (SIEW) (Oct 2020). (<u>Click here</u>)</li> </ul>

 $<sup>^{68}</sup>$  Supported by the Government of Norway.

Partnerships to promote deployment of decentralized renewable energy solutions <sup>69</sup>	In progress	<ul><li>WHO-led Global Health and Energy Platform for Action (HEPA) operational.</li><li>In partnership with the WHO, World Bank and SEforAll, IRENA is producing the Global Assessment of Electricity in Healthcare report under the auspices of HEPA.</li></ul>
Assessment of renewable energy in agri-food chains <sup>70</sup>	In progress	Partnering with ICIMOD to conduct Viability Assessment of Decentralised Renewable Energy for Food Value Chains in the Hindukush and Himalaya Regions. Inception meeting held.
Country-specific assessments for electrification of rural health centres <sup>71</sup>	In progress	Partnered with the Government of Burkina Faso (Ministries of Energy and Health) and SELCO Foundation to conduct a sectoral assessment for electrification of rural health facilities. Approach and work plan adapted due to COVID-19. Inception meeting held.
Collaborative engagement with international organisations, multilateral institutions and initiatives	In progress	<ul> <li>21 MoUs have been signed as of March 2021 with:</li> <li>Abu Dhabi Global Market</li> <li>CARICOM Development Fund</li> <li>Cassa Depositi e Prestiti S.P.A</li> <li>Department of Energy of Abu Dhabi</li> <li>East African Centre of Excellence for Renewable Energy and Energy Efficiency</li> <li>European Bank for Reconstruction and Development</li> <li>European Patent Office</li> <li>Food and Agriculture Organisation of the United Nations</li> <li>Fondazione Eni Enrico Mattei</li> <li>Global Wind Energy Forum</li> <li>International Energy Forum</li> <li>International Hydropower Association</li> <li>The Rockefeller Foundation</li> <li>New Energy and Industrial Technology Development Organisation of Japan</li> <li>Small Island Developing States Sustainable Energy and Climate Resilience Organisation</li> <li>Southern African Development Community's Centre for Renewable Energy and Energy Efficiency</li> <li>United Nations Economic and Social Commission for Asia and the Pacific</li> <li>United Nations Human Settlements Programme</li> <li>UAE Ministry of Energy and Industry</li> <li>World Economic Forum</li> <li>Ocean Energy Europe</li> </ul>

<sup>&</sup>lt;sup>69</sup> Supported by the Government of the Walloon Region of Belgium.
<sup>70</sup> Supported by the Government of the Walloon Region of Belgium.
<sup>71</sup> Supported by the Government of the Walloon Region of Belgium.

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	Partnership Agreements signed:
	ENEL Foundation
	Other cooperative arrangements include:
	<ul> <li>Input to G20 (Reduce and Recycle reports finalized; presentation during G20 working groups) in cooperation with King Abdullah Petroleum Studies and Research Center (KAPSARC), Saudi Arabia under the G20 Presidency<sup>72</sup></li> </ul>
	<ul> <li>Co-organisation of a High-Level Dialogue with the Africa Union on the pandemic response and Africa's energy transformation. (May 2020). (<u>Click here</u>)</li> <li>Collaboration with Africa Centre for Sustainable Development at the Africa Energy</li> </ul>
	Indaba 2020, Cape Town, South Africa (Mar. 2020). <sup>73</sup> ( <u>Click here</u> )
	• Government of Denmark and IRENA signed a Strategic Partnership in September 2020.
	• Letter of Agreement signed with UNDP for the implementation of the Global Project "Strategic Accelerator Partnership for Climate Change and Sustainable Development".
	• Agreement concluded with the Pacific Community for the implementation of activities envisaged in the MoU entered into by the parties in April 2019.
	• Agreement signed with EBRD for the
	<ul> <li>preparation of a report on tracking the SDG7.</li> <li>Declaration of Intent concluded with the African Development Bank regarding an Institutional Partnership for accelerating the</li> </ul>
	<ul> <li>deployment of renewable energy in Africa.</li> <li>Data Sharing Agreement signed with ECOWAS Centre for Renewable Energy and Energy Efficiency, for the provision of access to their data resources through IRENA's Global Atlas for Renewable Energy.</li> </ul>
	• Data Sharing Agreement signed with Delft University of Technology (TU-Delft) for the provision of access to their data resources through IRENA's Global Atlas for Renewable Energy.
	• Data Sharing Agreement signed with Transvalor S.A, for the provision of access to their data resources through IRENA's Global Atlas for Renewable Energy.

<sup>&</sup>lt;sup>72</sup> Supported by the Government of Saudi Arabia, KAPSARC.<sup>73</sup> Supported by UNDP.

Data Sharing Agreement signed with Hot Dry
Rocks Pty Ltd, for the provision of access to their data resources through IRENA's Global Atlas for Renewable Energy.
Support for climate efforts <sup>74</sup> :
<ul> <li>Focal point for Energy within the UNFCCC Marrakesh Partnership for Global Climate Action. Leading the development of Climate Action Pathway 2021 for energy.</li> <li>Hosted <i>Race to Zero Dialogues on Energy</i> (16 November 2020). (Click here).</li> </ul>
<ul> <li>Hosted Net-zero Investment Lab: Public and Private Collaboration on Accelerating Green Investment in SIDS event (30 March 2021) (click here).</li> <li>IRENA/UNFCCC op-ed on COVID</li> </ul>
<ul> <li>Institutional Partnership with World Climate Foundation (2020).</li> </ul>
<ul> <li>Member of NDC Partnership.</li> </ul>
Participation in the UK-led COP26
preparation activities, including as a member of the COP26 Energy Transitions Council.
• Participation in climate initiatives:
<ul> <li>Accelerating energy transition in SIDS initiative, for which the SIDS LHI serves as an implementing framework</li> <li>The Climate Investment Platform (CIP)<sup>75</sup></li> <li>The Coalition for Sustainable Energy Access</li> <li>The Cool Coalition</li> </ul>
The Decarbonizing Shipping – Getting to Zero Coalition
<ul> <li>The Three Percent Club for Energy Efficiency, and</li> <li>The initiative towards Cleaner</li> </ul>
Electricity in Latin America and the Caribbean
IRENA Insights Webinars:
<ul> <li>Smart Mini Grid</li> <li>Skill Building for the Energy Transition (see also under Long-Term Energy scenarios campaign and network output)</li> <li>Green Hydrogen a Guide to Policy Making</li> <li>Green Hydrogen Cost Reduction</li> <li>Scaling up Electrolysers to Meet the 1.5C Climate Goal</li> </ul>

<sup>&</sup>lt;sup>74</sup> Supported by the Government of Denmark and Government of the Walloon Region of Belgium.

<sup>&</sup>lt;sup>75</sup> Supported by the governments of Denmark; Germany, as part of the German Government International Climate Initiative (IKI). The Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) supports this initiative based on a decision adopted by the German Bundestag; and UNDP.

Coalition for Action	In progress	Reports/Briefs published, and events held:
		<ul> <li><i>Public-Private Dialogue</i> at the 10<sup>th</sup> IRENA pre- Assembly, including launch of Coalition for Action white paper "Towards 100% Renewables: Utilities in Transition" (Jan. 2020). (Click here)</li> <li>IRENA Coalition for Action Members Webinar: <i>COVID-19 and Beyond</i> (Apr. 2020). (Click here)</li> <li>IRENA Coalition for Action Members mid-year strategy meeting (Oct. 2020). (Click here)</li> <li>IRENA Coalition for Action Members Call to Action in Response to COVID-19: Renewable Energy is Key Part of the Solution (Apr. 2020). (Click here).</li> <li>IRENA Coalition for Action Members Renewed Call to Action in Response to COVID-19: Governments must act now to correct course for a green recovery and accelerate progress towards Paris Agreement (Dec. 2020). (Click here)</li> <li>IRENA Coalition for Action country papers of the Coalition Business and Investors Group (Algeria, Colombia, Jordan, Mexico, Tunisia and Viet Nam). (Click here).</li> <li>Coalition for Action white paper "Stimulating Investment in Community Energy" and launch webinar (Click here)</li> <li><i>Public-Private Dialogue</i> at the 11th IRENA pre- Assembly. (Click here)</li> <li>Coalition for Action white paper on "Companies in Transition Towards 100%</li> </ul>
		Renewables: Focus on Heating and Cooling" and launch webinar. ( <u>Click here</u> )
		Reports/briefs and events under preparation:
		<ul> <li>Coalition for Action country papers of the Coalition Business and Investors Group (India, Philippines, South Africa)</li> <li>Coalition for Action white paper on "Hydrogen Best Practices: Lessons Learned"</li> <li>Coalition for Action brief on "Mapping national and subnational 100% renewable energy targets"</li> <li>Coalition for Action white paper on "Best Practices in Community Energy"</li> <li>Coalition for Action brief on "Origination/certification for green hydrogen"</li> <li>Coalition for Action white paper on "Towards 100% renewable energy: Opportunities and</li> </ul>

Long-Term Energy scenarios campaign and network <sup>76</sup>	In progress	LTES Campaign now upgraded to LTES initiative under the Clean Energy Ministerial.
		Reports/Briefs published and events held:
		<ul> <li>International Dialogue on Global Best Practices for Strategic Long-Term Energy Planning (Jan 2020).</li> <li>(<u>Click here</u> for event information, and <u>here</u> for proceedings).</li> </ul>
		• Second International Forum on Long-term Energy Scenarios (LTES) for the Clean Energy Transition (March 2020) ( <u>Click here</u> for event information, and <u>here</u> for live videos of event)
		• Campaign outputs contributed to the Policy Briefs in Support of the High-Level Political Forum 2020. ( <u>Click here for policy briefs</u> and <u>here</u> for side event link).
		<ul> <li>Joint IRENA – JRC Expert Workshop on Benchmarking long-term scenario comparison studies for the clean energy transition (Sept. 2020) (<u>Click here</u>)</li> <li>Campaign synthesis report "Long-term</li> </ul>
		scenarios for the clean energy transition - Best practices and global experiences" (Sept. 2020) ( <u>Click here</u> )
		<ul> <li>High-level open event at the 11<sup>th</sup> Clean Energy Ministerial programme on Raising global climate ambition in uncertain times with long-term energy scenario' (Sept. 2020). (Click here).</li> </ul>
		<ul> <li>IRENA Insights webinar: Scenarios for the Energy Transition: Global Experience and Best Practices (Dec. 2020) (Click here)</li> <li>LTES Network Information Scenario (Dec.</li> </ul>
		<ul> <li>LTES Network Information Sessions (Dec. 2020) (<u>Click here</u>)</li> <li>High level webinar: <i>Planning with Net-Zero Scenarios: Moving from Political Ambition to Country-Level Pathways</i> (Dec. 2020) (<u>Click here</u>)</li> </ul>
		<ul> <li>Long-Term Energy Scenarios (LTES) for Developing National Clean Energy Transition Plans in Latin America (Feb Apr. 2021) - presentations by 12 countries in 6 sessions, in cooperation with UNECLAC and GIZ (<u>Click</u><u>here</u>)</li> </ul>
		Reports and events under preparation:
		• Dashboard on planning and clean energy transition scenarios (May 2021)
		<ul><li> 3rd International LTES Forum (6-8 June 2021)</li><li> CEM12 Side-event, co-organized with Agora</li></ul>
		<ul> <li>Energiewende (May/June 2021)</li> <li>Report on "Benchmarking long-term scenario comparison studies for the clean energy transition" (June 2021)</li> </ul>
		• Webinar series: Long-Term Energy Scenarios (LTES) for Developing National Clean Energy Transition Plans in Africa (Q3 2021)

 $^{76}$  Supported by the Government of Denmark.

#### IV. Source of Advice

Core assessed and core non-assessed resources (in USD thousands): USD 5,569. Outputs supported by additional voluntary contributions are footnoted.

Objective: Support country-level decision-making to accelerate the renewables-based transformation of national energy systems, advance strategies to diversify energy sources, reduce global emissions and achieve sustainable development.

Outputs	Status	Description
Outputs CIP implementation <sup>77</sup> : Project Navigator and Sustainable Energy Marketplace	Status       In progress	<ul> <li>Climate Investment Platform launched at 10<sup>th</sup> IRENA Assembly (Jan. 2020). (<u>Click here</u> for webpage).</li> <li>Partners:</li> <li>250 partners registered on the CIP, of which 52 can provide significant support including development partners and investors. Of these, 7 financial institutions agreements signed with from the private sector, which include: Acre</li> </ul>
		<ul> <li>Impact Capital, AIIM, Brawn Capital, GAIA, Hausch, IFU, Intesa Sanpaolo.</li> <li>New registrations include: 5 bilateral financial organisations; 11 multilaterals; 14 international development organisations.</li> </ul>
		Projects and project support:
		<ul> <li>218 projects on the CIP sourced to date through the platform.</li> <li>32 projects currently actively supported.</li> <li>15 new projects in preparation.</li> <li>20 Project Information Documents (PIDs) are in the final stages of preparation and will be introduced to CIP partners.</li> <li>Over 14 projects under the Climate Promise programme progressing to be submitted to the CIP for funding consideration upon completion.</li> <li>Transfer of IRENA's Sustainable Marketplace projects to the CIP is underway.</li> </ul>
		<ul> <li>Capacity building has been provided to Sao Tome and Principe and the region of Southern Africa on preparation of Project Information Documents (PIDs) to facilitate access to climate finance as well as training of project developers.</li> <li>Capacity building for Ecuador to support access to climate finance is ongoing.</li> <li>In Eswatini, capacity building on solar PV for the beneficiaries of a solar PV refurbishment project in support of a regional UNDP-led project has been concluded.</li> </ul>

<sup>&</sup>lt;sup>77</sup> Supported by the Governments of Denmark; Germany, as part of the German Government International Climate Initiative (IKI). The Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) support this initiative based on a decision adopted by the German Bundestag; and UNDP.

Project site assessments and	In progress	<ul> <li>Open Solar Contracts was launched at the WFES (Jan. 2020). (<u>Click here</u>). Two capacity building events in 2020 in cooperation with the International Solar Alliance. One capacity building event under development for 2021 for Sudan.</li> <li>Risk Assessment and Mitigation Platform (RAMP) is operational (<u>click here</u>) and released at World Futures Energy Summit (Jan. 2020).</li> <li>Webinars:         <ul> <li>UNDP Community of Practice on Energy Meeting on Raising Renewable Energy Ambitions in NDCs. (Sept. 2020) (<u>Click here</u>)</li> <li>Energy Transformation in Small Island Developing States: Towards sustainable and climate resilient post-pandemic recovery. (Sept. 2020) (<u>Click here</u>)</li> <li>Introduction to CIP organised for Trade Commissioners of the Government of Canada (Jul. 2020). (<u>Click here</u>)</li> <li>Open Solar Contracts – preparation, finalisation and capacity building delivered in English and French. (<u>Click here</u>).</li> <li>At the request of the Coalition for Action, a podcast on CIP was delivered to Mainstream.</li> <li>Solar PV and wind site assessments conducted for</li> </ul> </li> </ul>
feasibility assessments <sup>78</sup>		<ul><li>Burkina Faso (18), Ecuador (7) and Mozambique (12).</li><li>32 solar and wind generation profiles to support grid integration and stability studies for Mozambique.</li></ul>
		Support generation and transmission expansion studies undertaken for Morocco with generation profiles.
		A suitability assessment conducted for Mauritania and Burkina Faso.
		Interim reports on zoning assessment for Arab countries.
		Report soon to be published:
		• United Nations Framework Classification for Geothermal Energy: Pilot applications in the Caribbean, Ethiopia and Indonesia.
IRENA/ADFD Project Facility implementation <sup>79</sup>	Completed	Facilitated soft loans of USD 104.54 million from ADFD for 8 projects in 7 <sup>th</sup> cycle (Jan. 2020). ( <u>Click</u> <u>here</u> ) "IRENA/ADFD Project Facility: Lessons from the selection process" (Oct. 2020) ( <u>Click here</u> )
		Progress monitoring for the 26 projects in the IRENA/ADFD Facility is on-going.

<sup>&</sup>lt;sup>78</sup> Supported by the Government of the Walloon Region of Belgium.<sup>79</sup> Supported by the Government of the United Arab Emirates.

Renewable readiness assessments	In progress	Completed:
Renewable readiness assessments (RRA) and REmap	In progress	<ul> <li>Completed:</li> <li>Albania (RRA) (March 2021) (<u>Click here</u>)</li> <li>"Central and South Eastern Europe/South East Europe REmap" summary report (Oct. 2020). (<u>Click here</u>)<sup>80</sup>.</li> <li>Belize (RRA) (presented and awaiting country feedback).</li> <li>El Salvador (RRA) (Dec. 2020) (<u>Click here</u>)</li> <li>Lebanon (Outlook – RRA REmap) (June 2020). (<u>Click here</u>)</li> <li>Tunisia (RRA) (April 2021)</li> <li>In progress:</li> <li>Belarus (RRA)</li> <li>Burkina Faso (RRA)</li> <li>Botswana (RRA)</li> <li>Indonesia (RRA+REmap)</li> <li>Jordan (RRA)</li> <li>Kyrgyzstan (RRA)</li> <li>Malaysia (RRA+REmap)</li> <li>Nigeria (REmap)</li> <li>Paraguay (RRA)</li> <li>New requests received from the following countries:</li> <li>Bosnia and Herzegovina (RRA)</li> <li>Iraq (RRA)</li> <li>Sudan (RRA)</li> </ul>
Long-term planning for energy transition <sup>81</sup>	In progress	<ul> <li>Report on the prospects of the power system in Eastern and Southern Africa (analysed with SPLAT) in finalisation.</li> <li>Update of the North African Power Pool SPLAT model, consisting of electricity generation scenarios (in progress).</li> <li>National energy masterplan development support programme established and in progress with the Cameroon government.</li> <li>Support being provided to African Union Development Agency (AUDA-NEPAD) with the development of a Continental Power System Masterplan (CMP)</li> <li>Completion of the SPLAT Model Results Dashboard.</li> <li>Engagement and knowledge dissemination:</li> <li>Hosted fifth Roundtable Discussion on <i>Strategic Energy Planning</i> (Abu Dhabi, Jan. 2020) (Click here).</li> <li>"Energy planning brochure" (2020) (Click here)</li> </ul>

<sup>&</sup>lt;sup>80</sup> Supported by the European Commission.
<sup>81</sup> Supported by the Governments of Denmark and the Walloon Region of Belgium.

		<ul> <li>"Scenario for the Energy Transition: Global experience and best practices" (Sept. 2020) (<u>Click here</u>).</li> </ul>
FlexTool and grid integration support <sup>82</sup>	In progress	IRENA FlexTool training for Latin America: Power systems operators from 13 countries gathered for online training on (May 2020) ( <u>Click here</u> ). IRENA FlexTool Training for MENA hosted in partnership with RCREEE and League of Arab States (June 2020). ( <u>Click here</u> ) IRENA FlexTool training for ASEAN conducted (June 2020). ( <u>Click here</u> ) FlexTool analysis of the impact of electromobility and hydrogen production in Uruguay's power system <i>Regional Virtual Workshop on Grid Integration of Variable</i> <i>Renewable Energy (VRE) in Latin America</i> under the aegis of CECCA and in collaboration with GIZ and EOR (Ente Operador Regional) (Oct. 2020) ( <u>Click</u> <u>here</u> ).
Socio-economic footprint at the country level (five countries)	In progress	Reports on Japan and the Republic of Korea <sup>83</sup> , and Indonesia <sup>84</sup> in review stage.
Energy transition in NDCs: development and implementation <sup>85</sup>	In progress	<ul> <li>IRENA is engaging with 68 countries on NDC enhancement and NDC implementation through direct country request and through its institutional partnerships with NDC Partnership's Climate Action Enhancement Package (CAEP) and UNDP's Climate Promise (Click here for related article):</li> <li>Scoping (17)<sup>86</sup></li> <li>Work plan development (10)<sup>87</sup></li> <li>Implementation of Support (33)<sup>88</sup></li> <li>Input to NDC already provided (8)<sup>89</sup></li> <li>Assistance provided to Antigua and Barbuda, Belize, Cuba, Dominican Republic, Ecuador, El Salvador, Grenada, St. Kitts and Nevis, St. Lucia and Uruguay in reviewing mitigation and adaptation targets set by countries towards the enhancement of their National Determined Contributions (NDC).</li> </ul>

<sup>&</sup>lt;sup>82</sup> Supported by the Governments of Norway and NDC Partnership.

<sup>&</sup>lt;sup>83</sup> Supported by the Government of Japan.

<sup>&</sup>lt;sup>84</sup> Supported by the Government of Denmark.

<sup>&</sup>lt;sup>85</sup> Supported by Government of the Walloon Region of Belgium, NDC Partnership and UNDP.

<sup>&</sup>lt;sup>86</sup> Bahamas, Barbados, Belarus, Cambodia, Chad, Cuba, Guyana, Indonesia, Laos, Mongolia, Myanmar, Panama,

Pakistan, Rwanda, Thailand, Trinidad and Tobago, and Uzbekistan.

<sup>&</sup>lt;sup>87</sup> Botswana, Egypt, Georgia, Kazakhstan, Nauru, Palau, Saint Kitts and Nevis, Turkey, Uzbekistan, and Vanuatu.

<sup>&</sup>lt;sup>88</sup> Albania, Antigua and Barbuda, Belize, Benin, Burkina Faso, Cameroon, Colombia, Dominica, Ecuador, Eswatini, El Salvador, Gambia, Jordan, Kyrgyzstan, Liberia, Mali, Mauritius, Mozambique, Nicaragua, Nigeria, North Macedonia, Paraguay, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Seychelles, Sudan, South Africa, Tonga, Uganda, Uruguay, Zambia, and Zimbabwe.

<sup>&</sup>lt;sup>89</sup> Bhutan, Dominican Republic, Fiji, Gabon, Grenada, Lebanon, Nepal, and Papua New Guinea.

Entrepreneurship Facility <sup>90</sup>	In progress	<i>First technical committee meeting of SADC Entrepreneurship</i> <i>Facility</i> held to select entrepreneurs for the first cohort of training and mentorship.
		Introductory meeting held to introduce the 32 selected entrepreneurs to the Facility in preparation for training, mentorship and networking.
		Capacity building and training workshops conducted for the first cohort of entrepreneurs (Nov 2020) ( <u>Click here</u> )

ADDITIONAL OUTPUTS		
Strategic Management		
Outputs	Status	Description
Comprehensive communication and outreach strategy	In progress	<ul> <li>45 publications released since 2020.</li> <li>17 publications were translated to eight different languages (Arabic, Chinese, French, Spanish, Russian and also to German, Japanese and Portuguese).</li> <li>Since 2020, IRENA publications were downloaded 124,00 times.</li> </ul>
		Publications 2020 strategy developed, and communications and outreach strategies aligned. Communication supports provided to publication releases, webinars, press releases, website updated
		etc. IRENA referenced in over 23,843 media articles in 42 languages across 152 countries.
		<ul><li>IRENA Director-General gave 18 interviews and placed 7 op-eds.</li><li>4.3 million webpage views.</li></ul>
		92,600 Twitter followers. 84,552 LinkedIn followers.
		Financial Times Partnership Launch Covid-19 Report with 1,335 registrations, generated 141 live event downloads.
Governance Support Office	In progress	Coordinated over 15 VIP visits to the IRENA HQ (Heads of States, Ministers of Foreign Affairs, Special Envoys for Climate Change, etc.). Engagement and outreach to States in accession and non-Members to expedite ratification and accession process. Governing Body meetings:
		<ul> <li>Organisation and conduct of the 10th Session of the IRENA Assembly and publication of the Summary Report (<u>Click here</u>).</li> <li>Organisation and conduct of the 19th and 20th Council meetings and publication of Summary Reports (<u>Click here</u>).</li> </ul>

<sup>&</sup>lt;sup>90</sup> Supported by Government of the Walloon Region of Belgium.

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		<ul> <li>Organisation and conduct of the 11th Session of the IRENA Assembly and publication of its Summary Report (Click here).</li> <li>Preparation underway for the 21st Council meeting, including the meetings of the Administrative and Finance Committee (AFC) and the Programme and Strategy Committee (PSC).</li> <li>Legislators:         <ul> <li>Organization of the sixth IRENA Legislators Forum (Click here)</li> <li>One edition of the IRENA Legislators Dialogue (July 2020) (Click here)</li> <li>Publication of issues n.11 - "Insights from the Fifth Legislators Forum" (May 2020) (Click here)</li> <li>Publication of issues n.11 - "Insights from the Fifth Legislators Forum" (May 2020) (Click here) and n.12 - "The Post-COVID Recovery: An Agenda for Resilience, Development and Equality" (March 2021) (Click here) of REview for Parliamentarians.</li> </ul> </li> <li>Permanent Representatives         <ul> <li>Three editions of the Renewables Talk for Permanent Representatives (May 2020) (Click here) (Dec. 2020) (Click here) (March 2021) (Click here)</li> <li>Planned and organised almost 20 ceremonics for the Presentation of Credential Letters resulting in an increased number (65) of accredited Permanent Representatives.</li> </ul> </li> <li>Youth         <ul> <li>Launch of the first IRENA Youth Video Contest focused on the theme Renewable Energy Hub, the SDG 7 Youth Constituency project that catalyses youth action on sustainable energy (Feb. 2021) (Click here).</li> <li>Second IRENA Youth Forum (Click here)</li> <li>Two editions of the IRENA Youth Talk (June 2020) (Click here).</li> <li>Second IRENA Youth Forum (Click here);</li> <li>Three thematic virtual meetings in preparation to the 2021 IRENA Youth Forum (Jan 2021) (Click here).</li> </ul> </li> <li>Organisation underway for additional virtual meetings to be held in 2021 targe</li></ul>
New York Liaison Office	In progress	Implementation of MOU with UN-OHRLLS: UN- OHRLLS joined SIDS Lighthouse Initiative and agreement developed on joint activities to support energy transition in LDCs and LLDCs.

		Update provided to New York Community on CIP progress during 13 May 2020 briefing. Updates provided on implementation of SIDS Energy Transition as part of SIDS Climate Action Summit Package (April 2020, March 2021) Inputs provided to 2020 preparations for HLPF and ECOSOC on the theme <i>Accelerated action and</i> <i>transformative pathways: realizing the decade of action and</i> <i>delivery for sustainable development.</i> (Click here) Support the preparation of HLPF 2021. Support the UN HLDE preparations.
Legal Office	In progress	Guidelines on designation of IRENA Emissaries have been finalised. The Emissaries will facilitate and promote the Agency work at national, regional and international level. The Guiding Principles for Engaging in Cooperation Activities with the Private Sector have been finalised. ( <u>Click here</u> for news article) Legal review of commercial contracts, MoUs and cooperation agreements concluded in the programmatic areas, providing legal advice on IRENA's privileges and immunities and the interpretation and application of IRENA's Statute, regulations, rules and policies, reviewing and facilitating preparation of administrative regulations, policies, strategies and contracts etc. donor event and vendor contracts, publications etc.
Events Unit	In progress	<ul> <li>Events and Missions database for internal and external communication maintained.</li> <li>Organised 248 events (since January 2020), of which 198 were virtual events and 12 hybrid.</li> <li>Growth @ IRENA programme (online): Over 60 students (2020).</li> <li>Student Leaders Programme (online-virtual hybrid): 50 students to date (2021).</li> <li>Ongoing Outreach activities with the UAE including EXPO 2020, World Government Summit, Abu Dhabi Sustainability Week (ADSW) / The World Future Energy Summit (WFES), Abu Dhabi Global Markets (ADGM), Abu Dhabi Youth Hub (ADYH), Dubai Electricity &amp; Water Authority (DEWA)'s Innovation Centre.</li> <li>FDCR Fund coordination: FDCR supported the attendance of 81 delegates from 46 delegations during its 10th session of the Assembly.</li> </ul>
Diversification of resource base	In progress	<ul> <li>New contributions concluded in 2020/2021:</li> <li>European Commission (Innovation)</li> <li>Flemish Region of Belgium (FDCR)</li> <li>Germany, International Climate Initiative (SIDS Lighthouses)</li> </ul>

		<ul> <li>Germany, Federal Ministry of Economics and Technology (BMWi) (Various projects including WETO)</li> <li>Germany, Federal Foreign Office (Geopolitics of Hydrogen)</li> <li>Germany, Federal Ministry for Economic Cooperation and Development (BMZ) (Renewable Energy Transition Africa)</li> <li>International Bank for Reconstruction and Development (SDG7 Tracking Report)</li> <li>Italy, Ministry of Foreign Affairs and International Cooperation (Desert to Power in Sahel and Climate Investment Platform)</li> <li>Italy, Ministry of Foreign Affairs and International Cooperation (Offshore renewables and Ocean energy)</li> <li>Japan, MAFF (Various projects)</li> <li>Korea Energy Economics Institute (Report "Northeast Asia Power System Interconnections: Lessons from the Regional Initiatives for the Promotion of Renewable Power Deployment and Trade")</li> <li>NDP Partnership (CAEP)</li> <li>Saudi Arabia, KAPSARC (G20)</li> <li>UNDP (Climate Promise)</li> <li>Walloon region of Belgium (Various projects and FDCR)</li> </ul>
Monitoring and evaluation system	In progress	External evaluation process concluded. Report transmitted to the 11 <sup>th</sup> session of the Assembly. Work Programme implementation database developed to monitor progress in the implementation of the DG's Directives (2020 and 2021) and Work Programme.
Programmatic reports to the Council and Assembly	In progress	Progress report on implementation of the Work Programme and Budget, in a revitalised format, sent to Membership (Jun. 2020 and Oct. 2020). Annual report sent to Membership (Dec. 2020)
Strategic outreach	In progress	Since January 2021, IRENA's Director-General held bilateral discussions with 62 representatives from different entities (including regional bodies, non- governmental organisations and the private sector as well as 25 governments.) Active outreach by IRENA Deputy Director-General and Directors to Members, IOs, multilateral and regional entities and other stakeholders.

Enabling IRENA delivery		
Outputs	Status	Description
Upgrades and enhancements to the IRENA website, platforms, and projects.	In progress	<ul> <li>CIP<sup>91</sup> website launched. (<u>Click here</u>).</li> <li>Quickscan (SIDS) tool website launched. (<u>Click here</u>)</li> <li>Website upgrade in progress</li> <li>ERP quarterly upgrade.</li> <li>Enhanced ERP reporting / dashboard.</li> <li>Performance Management System implemented.</li> <li>Platform for virtual meetings deployed</li> <li>Virtual events platforms consolidated.</li> </ul>
Efficient budget services	In progress	<ul> <li>Internal monthly reporting and administration of core and voluntary contributions:</li> <li>19 donor reports</li> <li>15 monthly internal core budget reports</li> <li>15 monthly VC reports</li> <li>Ongoing support to the Agency in administration of core funds and voluntary contributions.</li> </ul>
Delivery of efficient financial services	In progress	Audited IRENA and IRENA SPF 2020 Annual Financial Statements completed. Ongoing provision of full financial services to the Agency.
Support to the Provident Fund operations	In progress	Annual meeting of members conducted 22 Jan 2020. Management Board met on 9th March, 12th May and 30th September 2020 to review performance.
Efficient procurement services	In progress	<ul> <li>To maintain open, fair, transparent and competitive bidding process, Procurement opportunities continue to be posted on IRENA's website</li> <li>(www.irena.org) and on United Nations Global</li> <li>Market (www.ungm.org) as well as and disseminated to the vendors registered with IRENA database</li> <li>(www.irena.org/procurement).</li> <li>Annual and quarterly procurement plan continues to be maintained and updated throughout the year.</li> </ul>
Effective general and travel services	In progress	Administration support, enhancement of Facility Management, and other services.Health and Safety program enhanced to address COVID-19 pandemic measures.Travel logistic services management for 14 Workshops and 249 Travel requests. Introduction and preparation for online travel tool.

<sup>&</sup>lt;sup>91</sup> Supported by the governments of Denmark; Germany, as part of the German Government International Climate Initiative (IKI). The Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) support this initiative based on a decision adopted by the German Bundestag; and UNDP.