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Report of the Director-General
Proposed Work Programme and Budget for 2020-2021

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Introduction

1. The implementation of the 2015 milestones of the 2030 Agenda for Sustainable Development and the Paris climate change agreement is underway. These inherently connected, and mutually reinforcing, processes are providing a framework for international co-operation, with the goal of a sustainable, prosperous world where no one is left behind. Energy runs through all facets of these global agreements and it is a decisive element for their achievement.

2. Over the next decades, every part of the energy-related system will be affected by changes in demand and consumption across the global economy, developments in climate policy and continuous technological advancements. It is difficult to know what a coherent and reasonably swift transition to a new energy system could be, as systemic innovation and ingenuity of the participants are opening new avenues for progress. It is certain however that the ongoing changes are transformational and already profoundly affecting the system that has evolved over the past century. Importantly, previously unimagined possibilities are emerging for millions who lack access to energy.

3. Renewable technologies, coupled with energy efficiency, provide an immediate, cost-effective solution in the quest for economic prosperity, social inclusion and a climate-safe future. Amid widespread efforts to accelerate progress, renewables have become a cornerstone of the local, national, regional and global strategies. The variety of policy, market and application options is rapidly increasing in all corners of the world and renewable power capacity has already reached some 2,400 GW in 2018[1]. This is nearly a third of the global installed capacity. As accelerating uptake brought economies of scale, the cost of wind and solar energy fell drastically, and countries continuously raised their ambitions. Mainstream projections on renewables envisage a profound impact, based on a compelling business case, resulting in a macro-economic footprint and rapid pace of innovation.

4. Considerable progress has been made, but much remains to be done. The world is lagging behind its set agenda on development and climate. Investments are still reflecting the business-as-usual approach; IRENA estimates that redirecting some 18 trillion of already planned investments toward clean energy infrastructure is needed[2]. Solutions for transport, heating and cooling are lacking, and supporting infrastructure must evolve. But IRENA's 160 Members, along with over 20 in the accession process, collectively possess the knowledge, experience and means to change this paradigm.

Strategic Direction

5. The ongoing energy transition is unprecedented due to its scale and the profound impact on the established socio-economic, technological and geopolitical trends around the world. This underlines the need for both concerted action on near-term priorities and a shared understanding of the long-term vision. In the course of preparations of the Proposed Work Programme and Budget for 2020-2021, IRENA sought feedback from the membership on the

[1] *Renewable Capacity Statistics 2019*: https://www.irena.org/publications/2019/Mar/Renewable-Capacity-Statistics-2019
[2] *Transforming the Energy System – holding the line on rising global temperatures*: https://www.irena.org/publications/2019/Sep/Transforming-the-energy-system

priorities for the coming biennium[3]. Reflecting the global nature of the Agency, Member feedback showed that a diverse set of objectives, including development imperatives, sustainable growth, climate change, energy security, energy poverty and local pollution considerations, drive the energy transition. IRENA's work has to align with these objectives.

6. Progress towards these objectives requires the latest knowledge, evolving policies, continuous innovation, large volumes of investment and inclusive multi-stakeholder co-operation. IRENA's mission set out in the Medium-term-Strategy (MTS) 2018-2022[4] responds to these requirements. It calls for the Agency "*to play a leading role in the ongoing transformation of the global energy systems as 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*"[5]. The MTS strategic objectives below provide orientation to successive programmatic cycles:

    - Empower effective policy and decision-making by providing authoritative knowledge and analysis on renewables-based energy transformation at global, national and sectoral levels;

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

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

    - Support country-level decision-making to accelerate the renewables-based transformation of their energy systems, advance strategies to decrease global emissions and achieve sustainable development.

7. The MTS further highlights IRENA's global membership as a major asset to access the wealth of knowledge, experience and expertise that exists in countries for the common good. Member feedback underscores this point, and all countries, regardless of the level of development, call for international collaboration. This collaboration is particularly important as the speed and scale of the energy transition hinge upon an acceleration of the learning curve and mobilisation of the necessary finance and investment at scale. Fittingly, the MTS places particular focus on enabling policy, regulatory and technical frameworks, and business models and financing instruments. It calls on IRENA to undertake work that helps facilitate private investment and support key actors in channelling finance toward renewables.

The Way Forward

8. The energy sector has changed dramatically, even in the short time since the adoption of the MTS. Renewable energy targets are now commonplace, and even a target of 100% renewable power is becoming mainstream. Major economies are setting zero-carbon goals by

[3] All Members were invited to provide written input in February 2019. Programmatic Framework was discussed at the 16th meeting of the Council in June 2019.
[4] A/8/11 of 13 January 2018

mid-century, sending an important signal to markets that business-as-usual is no longer an option. These decisions are accelerating energy transitions, but there is a divide between this ambition and the ability to attract investment at the necessary scale. Accurate, timely and trusted data and analyses will be needed more than ever to support policy and investment decisions. Regulatory frameworks will be needed to enable private investment and effectively leverage public funds. And there has to be a pipeline of projects that will translate investment into a sustainable energy infrastructure that not only decarbonises the sector but, importantly, secures a just and inclusive transition.

9. IRENA must adapt to use its comparative advantages to support countries in realising their ambitions. The Agency possesses technical expertise, analytical capability and a global reach. In line with the MTS mission to lead the global energy transition, IRENA will deploy its capabilities to drive change. Therefore, in the next biennium, all efforts will be channeled toward sharpening the Agency's analytical and empirical work to be fit-for-purpose, supporting the development of enabling frameworks, and convening partners and stakeholders to create a pipeline of projects to attract investment, most notably from the private sector. To achieve this, IRENA will streamline its own programmatic activities in this direction, and leverage partnerships that can contribute to this agenda and sustain action on the ground. In this context, the Agency's overall priorities will include: empowering action on the ground, strengthening partnerships and fostering dialogue and ensuring institutional excellence.

10. The proposed Work Programme and Budget for 2020-2021 outlines a proactive agenda that anticipates Members' needs and drives collective action, underpinned by analytical and empirical excellence. Building on the work to date, it streamlines the programmatic output to fewer, but more impactful activities, with a decisive shift to action on the ground. In doing so, the Agency must be mindful not only of its advantages but also of its constraints. Given near-universal membership, IRENA must be efficient in organising its work to be able to serve all of its Members. Given that the Agency has already worked at the regional level and has significant knowledge of the circumstances at these levels, it was assessed that IRENA's work could be organised around 15 geographical areas. Working at the regional and sub-regional levels will enable the Agency to efficiently use its limited resources, while promoting cross-border collaboration and priority setting. IRENA's data and analyses will follow the same patterns, to support informed and timely policy considerations and decision-making. Such an approach will contribute to the pertinence of the Agency's analytical work, as it will have a unique view on the energy transitions that are contextualised beyond borders. It will also facilitate a proactive approach to identify gaps and needs for the creation of enabling frameworks and attracting investments at scale.

11. IRENA will convene investors, international financing institutions (IFIs), multilateral and development banks (MDBs), the private sector and international organisations to create a space for dynamic matchmaking. It is envisaged that the Climate Investment Platform (CIP) announced at the UN Secretary-General's Climate Summit in September 2019 will serve as an organising framework for these activities. This Platform was founded by IRENA, UN Development Programme (UNDP), Sustainable Energy for All (SEforALL) in collaboration with GCF as an inclusive partnership with the objective to promote accelerated, transformative and scaled-up investments. The Platform has attracted many partners, including countries, financing institutions and multilateral and international organisations. IRENA's already-established project facilitation activities will help to jump-start the work of CIP.

In turn, the CIP will provide an inclusive framework convening the institutions whose expertise and resources are essential for the success of IRENA's mission.

12. To be proactive in this work, IRENA will convene regular Forums tailored to regional and sub-regional needs and requirements. The Forums will be shaped by the latest empirical and analytical information, underpinned by a thorough understanding of the countries' needs and existing partner activities. This will be a primary space for Agency-wide activities, consolidating the currently fragmented engagement with Members. It will also promote a holistic approach to dissemination of knowledge, facilitating the exchange of experiences and peer-to-peer collaboration. Regular dialogues among and with countries will also help prioritise IRENA's technical assistance and capacity building efforts while promoting its work achieved to date. Predictability of Forums will provide a continuum to engage with local stakeholders, sustain the effects of programmatic activities and increase the visibility of the Agency's work. This approach will also increase efficiency in the programme delivery, as the number of stand-alone events will be dramatically reduced. Internally, it will promote close cross-divisional coordination which, in turn, will further improve the quality and effectiveness of IRENA's service to its Members.

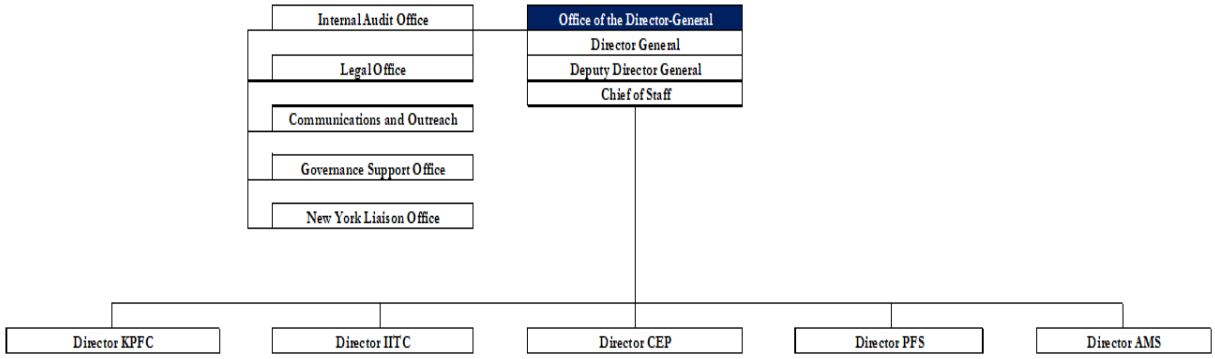
Institutional Considerations

13. In today's challenging global context where varied agendas are competing for limited resources, proving added value is of utmost importance. The clarity of IRENA's purpose, timeliness of its mandate and global membership give the Agency a privileged space in the global institutional landscape. Sustaining and increasing Members' engagement is a defining prerequisite for the Agency's success, and the generosity of their input can set IRENA apart in impact and effectiveness. To tap into the vast knowledge that exists in the membership, co-operation with national and industry experts, academic institutions and research entities from developed and developing countries will be enhanced. IRENA will also look for opportunities for collaborative projects with Members that can augment the programmatic output, such as collaboration in initiatives, events and programmes.

14. The programmatic alignment is reflected in the proposed organisational structure that clarifies the focus and direction of IRENA's work and aligns the established activities with refined priorities. The Office of the Director-General will rebalance its strategic and managerial responsibilities including by defining the roles of the Deputy Director-General and Chief-of-Staff. This clarity will ensure managerial stability and promote predictability in the implementation of the programme and support functions.

15. The Country Engagement and Partnerships division (CEP, previously Country Support and Partnerships) will streamline its current functions to simplify access to the Agency's services and consolidate country, regional and sub-regional information. CEP will thus become the Agency's window to Members and partners worldwide. This is especially pertinent given the focus on regional and sub-regional levels, which will require both substantive understanding of local circumstances and thorough knowledge of actors. CEP will facilitate the engagement of other programmatic divisions, namely the IRENA Innovation and Technology Centre (IITC) and the Knowledge, Policy and Finance Centre (KPFC) to effectively deploy analyses, data and methodologies for change on the ground.

16. To date, IRENA evolved several activities related to project facilitation. However, this work is spread across the Agency, hampering the coordination and potential impact. Given the Member focus on investment and project development, and the urgent need to accelerate progress in this regard, it is proposed to create a programmatic division for Project Facilitation and Support (PFS). Creating a dedicated institutional space for project facilitation will bring coherence to the existing activities, leverage their complementarities and accentuate the areas where additional work is necessary. The PFS will comprise some of the IRENA existing project-oriented activities such as the Project Navigator, the Sustainable Energy Marketplace and the ADFD Project Facility. PFS will implement the functions related to the assessment of pre-feasibility and feasibility of projects, access to finance and investment and IRENA's support to Nationally Determined Contribution (NDC) implementation. It will also provide related technical assistance to support the development of a pipeline of projects, which is necessary to accelerate the energy transition. PFS will mainly be resourced by voluntary contributions. Selected core posts will be redeployed from respective divisions, and a limited increase of 1-D1 is proposed to guide the division .



17. This structural alignment will be accompanied by the empowerment of the senior team and managers to efficiently perform their duties through systematic planning and monitoring, an appropriate delegation of authority and continuous improvement of business processes. In line with recent efforts, engagement with staff through their associations and elected representatives will be systematised to secure staff input in the institutional matters that affect their work environment and welfare.

Monitoring and Evaluation

18. To date, efforts have been made to capture and report some of the impacts of programmatic activities, mainly by illustrating the work through strategic communications and in annual reports. In recent months, IRENA has undertaken its first self-assessment set out in the MTS, which creates an empirical baseline for better monitoring and evaluation of the programmatic output[6]. Building on this work, a monitoring and evaluation system will be gradually mainstreamed in all facets of Agency work. It should be noted that the MTS also envisages mid-term external evaluation[7], which will take place during the 2020-2021 programmatic cycle.

[6] C/18/INF/3
[7] A/8/11, paragraph 21

Resources

19. The core assessed budget, amounting to USD 44.46 million for the biennium, reflects USD 43.13 million approved for 2018-2019 biennium and USD 1.33 million assessed contributions from new Members who joined since 2018. Core non-assessed contributions comprise USD 10.2 million from Germany for the IRENA Innovation and Technology Centre and USD 9.12 million from the United Arab Emirates[8] (USD 5 million for IRENA operations, USD 0.92 for information technology infrastructure and USD 3.2 million for governing body meetings) and 1.7 million from other Members.

20. Members emphasised that their ambition for the Agency cannot be met through core resources only and encouraged a diversified resource base. Dedicated efforts in this regard have resulted in securing multi-year voluntary contributions from Denmark, the European Commission, Germany, and NDC Partnership Climate Accelerated Enhancement Package (CAEP), collectively amounting to almost USD 12 million. A pledge for continuous support was also received from Norway and discussions are underway with several other Members. The proposed Work Programme therefore integrates the activities that will be supported by these already-secured voluntary contributions to promote coherent programmatic delivery and transparency in resource availability.

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21. The tenth anniversary of the IRENA's establishment will occur in the upcoming programmatic cycle. A decade ago, the prevailing narrative on renewables was that of high costs, unreliability and uncertain futures. This is no longer the case. Today, renewable energy is a backbone of global development and climate strategy. The past decade is a reminder that IRENA is not just another international organisation, but a symbol of confidence that foresighted decisions and collective action can bring solutions for the future. Its work must now adapt to the new circumstances to respond to evolving dynamics, anticipate Members' needs and drive change on the ground.

[8] The United Arab Emirates also provides housing allowance averaging USD 2.2 million biennially.

I. Centre of Excellence for Energy Transition

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

22. Over the years, IRENA has become a trusted source of transparent data, which is widely used by Members, the private sector, international organisations, media outlets and others. This data also serves as the basis for the Agency's knowledge products, and advisory and support activities. Empirical underpinnings give credibility to IRENA analyses, demonstrate the business case of renewables and facilitate work on the ground.

23. This work remains a backbone of the Agency's work. IRENA estimates that renewable energy supply, energy efficiency and increased electrification of end-use sectors can deliver over 90 per cent of energy-related emission reductions[9]. Analysis highlights that the socio-economic footprint of such a pathway would boost global gross domestic product (GDP) by 2.5 per cent by 2050, along with additional employment, health and environmental benefits. It finds, however, that such benefits will be achieved only if policies to promote a just, fair and inclusive transition are in place. The work under this Pillar streamlines IRENA's analytical and empirical work to provide timely, objective and rigorous information to Members, critical to informed decision-making and central to the scaling up of investments to required levels.

24. Going forward, IRENA will collect data and structure its analyses in a manner that can inform work at regional and sub-regional levels. Data collection and analyses will be undertaken with the rigour, accuracy and timeliness that the profoundness of the energy transition requires. Renewable energy data will continue to be collected from every country of the world. This makes the Agency the only source of detailed information on renewable generation, capacity, energy balances and off-grid deployment that is global in scope. This work will continue to feed into the tracking of Sustainable Development Goal (SDG) 7 on energy, where IRENA serves as co-custodian of the energy goal together with the International Energy Agency (IEA), the United Nations (UN), World Bank and World Health Organization (WHO).

25. IRENA's cost data, collected from real-life projects, plays an indispensable role in understanding the trends, costs and performance of renewable technologies. This work will continue with an added focus on regional and sub-regional assessments that could help better understand the cost drivers and patterns across regions. This will also help address an increasing demand from Members to consider local circumstances that influence costs of technologies. Efforts will be made to provide regular insights on storage and other supporting technologies, given the importance of such issues. Complementing this information, IRENA's Global Atlas will be maintained and further developed to enhance the quality and quantity of its maps and data to provide investment-grade information. This information will become increasingly important as the Agency's focus shifts toward project facilitation and investments.

26. Sustained market growth for renewable energy technologies can only be achieved if expectations regarding performance, safety and durability are met. IRENA's work on quality assurance and standards is filling an important knowledge gap. The Agency will continue to collect best practices for the development of quality assurance systems for renewable energy.

[9] *Global Energy Transformation: A roadmap to 2050 (2019 edition):* https://www.irena.org/publications/2019/Apr/Global-energy-transformation-A-roadmap-to-2050-2019Edition.

The resulting information will populate the International Standards and Patents in Renewable Energy (INSPIRE) platform which provides decision-makers, project developers and entrepreneurs a strategic window into renewable energy patents and standards.

27. Many solutions to transform the global energy system exist, but many more must be found to achieve sustainable development and a climate-safe future. IRENA has done considerable work on capturing innovation trends, as well as gaps, to both raise awareness and convene stakeholders. Having mainly focused on the power sector to date, IRENA will shift its concentration to end-use solutions, including the potential for their electrification. To achieve this, significant investment will have to be put into clean infrastructure, tailored to local conditions. IRENA Forums will provide a space for dissemination of this knowledge as well as for collection of information on local solutions and best practice that may be replicable and beneficial to other Members.

28. Close alignment between analytical and convening work will help shape IRENA's engagement on the ground and enrich the Agency's analyses. Over the years, selected knowledge products have shown their potential to shape the global energy discourse. These flagship products will continue to be developed with ever-greater rigor, timeliness and excellence.

29. IRENA's Renewable Energy Roadmap (REmap) will continue to develop medium- and long-term scenarios, aligned with global development and climate objectives. IRENA will further develop the REmap tool to include components on energy efficiency, system flexibility and end-uses for a holistic picture of the energy system. The tool will be deployed in selected regions to develop more nuanced analyses of possible transformation pathways and inform investment patterns. Sub-regional engagement will provide refined insights, timely adjustments and accurate information that will further improve IRENA's ability to monitor progress toward global goals.

30. Given the breadth and depth of changes in the energy sector, it is essential to work across sectors, geographies and communities. The integrated nature of these changes must be understood to ensure the solution to one challenge is also the solution to others, manage synergies and trade-offs and secure a just and inclusive transition to a prosperous, climate-proof future. The Agency's work to date has shown a pressing need to understand how the energy system interacts with the broader economy. Thus, IRENA will evaluate the likely socio-economic footprint created by different combinations of energy policies and socio-economic factors, providing a comprehensive view of the outcomes of the transformation pathways, showing likely effects on GDP), employment and human welfare.

31. The Agency has made great strides in the dual effort of establishing a new institution while securing its place in the global energy landscape. Moving forward, the Agency must ensure that it strengthens its institutional focus and capacity to deliver on its important mandate. The quality of staff will determine the success of the Agency, since it cannot succeed unless it attracts, develops and retains the right people to carry out the tasks entrusted to it. The Agency will also be a mirror of its membership in its geographical diversity and gender balance. To retain the best professionals and enhance its own capacities, IRENA will prioritise high standards of ethics, fairness, transparency, empowerment and accountability, as well as the culture of continuous learning, high performance and managerial excellence. This approach to human capital will promote institutional excellence in the challenging, dynamic environment

of the energy frontier and ensure that the Agency is well-prepared to meet the expectations of its membership.

32. Attracting and retaining the best talent, ensuring diversity of personnel to reflect IRENA's global membership and improving gender balance, including at the senior levels, will be priorities for the coming years. For example, analysis of Human Resources patterns has shown that staff are seeking learning opportunities and career prospects. Every effort will be made to rectify these issues, given their impact on staff retention. Externally, IRENA will strengthen collaboration with those who can contribute to the excellence of its work, including through exchange of personnel. Special effort will be made to engage academic and research institutions worldwide to secure input into the Agency's work.

OUTPUTS[10]

Data

- Annual statistics: renewable capacity, renewable energy, off-grid
- Jobs Annual Review (annual)
- Annual update on power generation costs
- Annual update on patents and standards
- Global Atlas data updates on renewable potentials
- IRENA/IEA Policies and Measures Database
- The Energy Progress Report: Tracking SDG7* (annual, jointly with IEA, WB, WHO and UN)

Talent

- Human resources and workforce planning strategy
- Performance management
- Refinement of Staff Rules and updated HR Manual
- System for engagement of academia, researchers and the private sector
- Training and Staff Development Strategy

Analyses

- Global Energy Transformation (annual)
- Measuring the Socio-Economic Footprint
- Innovation Landscape: Renewable Electricity in End-use.
- Global Landscape: Renewable Energy Finance
- 3rd Innovation Week
- ASEAN 2050 energy transition outlook*
- Central America 2050 energy transition outlook*
- Impact of Innovation on Energy Transition*

[10] Outputs marked with Asterix (*) are fully or partially funded by voluntary contributions. In Pillar 1, this includes contributions from Denmark, the European Commission, and the World Bank/IBRD

Budgetary requirements			
Core assessed and core non-assessed resource requirements 2020-2021 (in USD thousands)	**13,394**	Proportion of IRENA budget	**20%**
Breakdown of *core assessed* and *core non-assessed* costs (in USD thousands)			
Staff costs			**5,853**
Non-staff costs			**7,541**
Non-staff costs by division			
IRENA Innovation and Technology Centre			5,137
Knowledge, Policy and Finance Centre			2,177
Administration and Management Services			227

II. Global Voice of Renewables

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

33. At a time when many countries are making highly consequential decisions on their energy strategies, IRENA will continue to be the authoritative voice of renewable energy, its business case and its potential for a just transition. Ambitious investments in the energy sector – reshaping power generation, transport and other energy uses on both supply and demand sides – can provide many of the quick wins needed for a sustainable future. Renewable energy sources, coupled with steadily improving energy efficiency, offer the most practical and readily available solution to global warming within the timeframe set by the UN Intergovernmental Panel on Climate Change (IPCC). Government plans in place today envisage investment of at least USD 95 trillion in energy systems over the coming three decades[11]. However, many of these plans and related investments are still locked in the unsustainable system of the past. IRENA estimates that over USD 18 trillion will have to be redirected towards clean energy solutions.

34. Members encouraged the Agency to continue to influence the global energy discourse and promote cross-sectoral thinking through its analytical products in a streamlined manner. As a result, IRENA will consolidate its analytical output to produce fewer, but more comprehensive reports. It will consider topical issues from multiple angles to provide deeper and more nuanced analyses for diverse audiences. Through informed investments, regions, countries and communities can scale up renewables cost-effectively, make steady gains in energy efficiency and achieve extraordinary synergies through electrification. If socio-economic needs and aspirations are fulfilled in parallel, such changes are likely to gain acceptance and endure beyond the current urgency to act.

35. Aligned with IRENA's work at the regional and sub-regional levels, providing insights on different aspects of enabling frameworks will be paramount. Analysis of markets will capture the wealth of knowledge and experience; it will identify emerging renewable energy trends at the intersection of public policy and market development. Timely assessments of policy options will assist Members in their decision-making and support the Agency's efforts to catalyse investment at scale. IRENA will continue to consider the technology aspects of the energy transition, especially regarding the integration of variable renewable energy (VRE) in the power system, given the growing shares of solar and wind. Analyses of renewables in end-use sectors, including transport, heating and cooling, will also be prioritised, given the delayed progress in these areas. In response to Member feedback, IRENA will facilitate peer-to-peer collaboration among countries with shared interests and concerns. This will include targeted discussions on the integration of VRE, access, hydropower, fiscal policies and geopolitics of energy transition, among others. To facilitate and encourage expert analyses and debate, IRENA will introduce a working papers series, which will provide a knowledgeable and informed basis for IRENA analytical work at a higher level. These series will fill the information gaps and ensure the Agency's solid knowledge base, but in a less resource-intensive manner.

[11] *Transforming the Energy System – holding the line on rising global temperatures*: https://www.irena.org/publications/2019/Sep/Transforming-the-energy-system

36. Renewable energy is a key driver of progress in development and climate efforts. In 2020, countries have an opportunity to communicate new or updated NDCs. Alignment of NDCs with energy strategies and long-term plans is required for further progress and IRENA will provide the knowledge and tools to assist Members in this regard. Similarly, the intersection of renewables and SDGs is of interest to many Members, and IRENA will build upon its work to date to examine such relationships.

37. To underpin its role as the Global Voice of Renewables, IRENA will step-up proactive communication and outreach. Public information and communications play a role in reaffirming the relevance of IRENA's work and in invigorating its credibility, image and reputation. In this context, the Agency will pursue multiple avenues to effectively communicate with diverse audience and place focus on strategic leadership to define and disseminate key messages and knowledge products. IRENA will co-operate with communications and social media actors who can amplify reach and better target audiences for more significant impact. In this regard, multilingualism will be used as a tool to disseminate knowledge and enable greater participation in programmatic activities. Furthermore, IRENA will systematically collect information on its reach and impact to better profile the effects of its programmatic activities and make timely adjustments where needed.

OUTPUTS[12]

Enabling Frameworks

- Power Market Design for the Energy Transition
- Market Analysis: Africa
- Ecosystems for Sustainable Livelihoods
- Policies at the Time of Transition: Transport (with IEA and REN21)
- Leveraging Local Capabilities (selected technologies)
- 6th and 7th Global Policy Day

Technology Insights

- Toolbox for long-term planning: methodologies and best practice
- Grid codes for variable renewable energy (VRE)
- Value of storage in national energy systems report and toolkit
- Global assessment of geothermal energy

Topical Analyses

- Gender and Renewable Energy report
- NDCs and Renewable Energy Targets*
- Geopolitics of the Energy Transition*
- Analytical briefs, guidelines and working papers on topical issues (bio-energy*, hydrogen, hydropower, off-shore 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)

[12] Outputs marked with Asterix (*) are fully or partially funded by voluntary contributions including from Denmark, Japan, Germany and the Walloon Region of Belgium.

Budgetary requirements			
Core assessed and core non-assessed resource requirements 2020-2021 (in USD thousands)	**11,011**	Proportion of IRENA budget	**17%**
Breakdown of *core assessed* and *core non-assessed* costs (in USD thousands)			
Staff costs			**5,324**
Non-staff costs			**5,687**
Non-staff costs by division			
Office of the Director General			2,215
IRENA Innovation and Technology Centre			799
Knowledge, Policy and Finance Centre			2,673

III. Network Hub for Energy Transformation

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

38. The nature and pace of the energy transition differs between countries and regions as the needs and capacities are increasingly nuanced. Supported by rigorous analyses, objective information and timely data, IRENA will place a considerable effort in translating its knowledge into targeted action on the ground. One of the priorities highlighted by Members is the need to drive investment to scale. To maximise impact while efficiently using its limited resources, IRENA will proactively work with groups of countries at sub-regional levels, or around issues of common interest. With this approach, IRENA will have sustained more predictable engagement adapted to the needs of Members with shared interest and needs. This engagement will also include facilitating peer-to-peer collaboration among Members to enable the exchange of knowledge and experience, and the capturing of best practice. Special effort will be devoted to support Small Island Developing States (SIDS) and Least Developed Countries (LDCs) in line with the global effort to leave no one behind. Engagement of stakeholders who can meaningfully contribute to scaling-up investments and facilitating projects will be prioritised, including multilateral and financial institutions, private companies and investors.

39. Regional co-operation is a key element to boost efficiencies and bring about economies of scale in the deployment of renewable energy technologies. Adopting an integrated approach to trans-boundary energy issues – such as planning, trade, regulatory frameworks and policies, regional power infrastructure and other factors – allows countries to benefit from access to a wider range of renewable resources at affordable prices. Importantly, an integrated approach facilitates investment at scale that is necessary for countries to meet their development and climate targets.

40. Working from the outset to promote regional co-operation, IRENA currently organises regional activities worldwide. With valuable lessons acquired over the last years, the Agency is refining its approach to be proactive in the implementation of the action plans and regional initiatives already in place. Going forward, this will include a more granular work at sub-regional levels to drive targeted action for the creation of enabling environments and investment at scale.

41. A central part of IRENA's work going forward will be the creation of a partnership base around regional initiatives, aimed at sustaining political commitment, engaging key stakeholders and helping channel resources to accelerate renewable energy deployment. Targeted activities, rooted in strong ownership by local actors, will be adapted to prevailing circumstances and needs in each region and sub-region.

42. IRENA's work will continue to be guided by regional action plans and initiatives, developed through iterative processes and wide consultations. These include the Communiqué on the Africa Clean Energy Corridor and the West Africa Clean Energy Corridor (WACEC), the Economic Community of Central African States (ECCAS) Renewable Energy Roadmap, the ASEAN-IRENA Memorandum of Understanding, the Astana Communiqué on Accelerating the Uptake of Renewables in Central Asia, Abu Dhabi Communiqué on Accelerating Renewable Energy Uptake in Latin America, Clean Energy Corridor for Central America (CECCA), Pan-Arab Clean Energy Initiative (PACE), Abu Dhabi Communiqué on

Accelerating the Uptake of Renewables in South East Europe (SEE) and RE Solutions for Mountainous Communities in Hindu Kush Himalayas.

43. Collaboration with regional institutions and entities will remain central to all IRENA activities as they are key partners for the organisation of regional and sub-regional Forums. These include the Arab League, ASEAN and its Centre for Energy (ACE), African Union Commission, Central American Integration System (SICA), Energy Community, the European Union, International Centre for Integrated Mountain Development (ICIMOD), Latin American Energy Organization (OLADE) and Regional Centre for Renewable Energy and Energy Efficiency (RECREEE), among others.

44. Regional action agendas and initiatives will continue to guide the Agency's regional work in successive programmatic cycles, maintaining a longer-term perspective while working step-by-step to transform the energy system. In this context, IRENA will convene regular Forums at sub-regional levels to gather policy-makers, partner institutions, MDBs, IFIs the private sector and project developers, among others, to promote the creation of enabling frameworks and stimulate investment flows through matchmaking projects with financiers. IRENA Forums will be a primary space for the Agency-wide activities, consolidating the currently fragmented engagement with Members. IRENA's capacity building and technical assistance activities will be guided by the priorities and requests identified at Forums. Similarly, they will be used to disseminate IRENA knowledge products to ensure their wide diffusion, facilitate the exchange of experiences and peer to peer collaboration and encourage feedback and input. It is envisaged that the CIP will be an effective organising framework, as it brings a structured approach to assisting counties with setting ambitious, but realistic targets, policy and regulatory frameworks, risk mitigation instruments and access to private and public finance. The Agency's partnership with UNDP and other implementing agencies will help sustain the follow-up, given their presence at the country level.

45. With an increased operational focus, the creation of collaborative platforms and leveraging partnerships is essential to ensure the sustained impact of IRENA's work. The growing momentum of climate action has provided a strategic opportunity to advance selected activities and priorities. This includes the engagement with SIDS that has been central to IRENA's work from the outset. Despite abundant natural resources, SIDS are severely constrained in terms of economic growth potential with major barriers to investment, among other things. Cost-effective and resilient energy systems based on renewables, however, are redefining this situation.

46. The Agency will continue to improve and expand its established initiatives. With the strong support of IRENA Members, the SIDS Lighthouses (SIDS LHI) received a renewed boost at the UN SG's Climate Action Summit, where it was profiled as a part of the SIDS Climate Package. As a result, IRENA's future work will prioritise the development and implementation of NDCs. This will include proactive engagement with partners to channel resources to key areas, taking into consideration development objectives outlined in the S.A.M.O.A. Pathway. With support from development partners[13], the Agency will also continue to provide direct assistance on issues such as island energy roadmaps, grid integration, end-use sectors (such as transport), nexus, climate resilience and project support and facilitation.

[13] Denmark, Germany and Norway pledged support for SIDS LHI at the 2019 Climate Action Summit.

47. The Global Geothermal Alliance (GGA) initiative, launched at the 21st session of the Conference of the Parties (COP21) in Paris, is a global platform for improved dialogue, co-operation and co-ordinated action among policy-makers, industry and other stakeholders to increase the use of geothermal energy. IRENA will continue to co-ordinate the implementation of the GGA Action Plan, provide expert contributions and facilitate peer-to-peer co-operation. With substantive and financial support from GGA members, IRENA will be able to further consolidate and disseminate knowledge on the complex challenges associated with geothermal development for power generation and direct use of heat, helping to unlock investments on a global scale.

48. Renewable off-grid solutions play a critical role in supporting rural electrification and are a major enabler for the achievement of the SDG agenda. In this regard, IRENA's ambitious approach to catalysing action on the ground requires participation of a wide range of partners. The Agency will seek to drive change in the context of Sustainable Development Agenda by promoting decentralised renewable energy solutions for food security, gender, healthcare and humanitarian responses, among others. To this end, IRENA is concluding collaborative arrangements with the United Nations and its specialised organisations, including Food and Agriculture Organization (FAO), UN High Commissioner for Refugees (UNHCR) and WHO to provide expert input into their work. IRENA will also effectively use its International Off-grid Renewable Energy Conference (IOREC) platform to accelerate progress of rural electrification.

49. Collaboration with the Africa Renewable Energy Initiative (AREI), Clean Energy Ministerial (CEM), Island Renewable Energy Initiative (IREI), International Solar Alliance (ISA), Marrakesh Partnership for the Global Climate Action (MPGCA), Mission Innovation and NDC Partnership remains a high priority. IRENA is also a member of several of the Climate Action Summit initiatives including the 3% Club on Energy Efficiency; Cool Coalition, Shipping Solutions; and Solar Risk Mitigation Initiative, which will help advance the energy transition agenda. Finally, the Agency will seek to effectively engage stakeholders who need to play a role in energy transition including the private sector, legislators, entrepreneurs, youth and citizens. IRENA's Coalition for Action will remain an avenue for such an engagement and efforts will be made to grow its contribution in content and participation.

OUTPUTS[14]

- IRENA Forums* in regions and sub-regions
- Implementation of regional action agendas and clean energy corridors in Central Asia, Latin America*, Middle-east and North Africa*, South Asia*, South East Asia* Southeast Europe* and Sub-Saharan Africa*.
- SIDS Lighthouses*
- Global Geothermal Alliance*
- 5th International Off-grid Renewable Energy Conference
- Partnerships to promote deployment of decentralized renewable energy solutions*
- Collaborative engagement with international organisations, multilateral institutions and initiatives*
- Coalition for Action
- Long-Term Planning campaign and network*

[14] Outputs marked with Asterix (*) are fully or partially funded by voluntary contributions including from Denmark, Germany, Japan, and NDC Partnership.

Budgetary requirements			
Core assessed and core non-assessed resource requirements 2020-2021 (in USD thousands)	**11,037**	Proportion of IRENA budget	**17%**
Breakdown of *core assessed* and *core non-assessed* costs (in USD thousands)			
Staff costs			**4,860**
Non-staff costs			**6,177**
Non-staff costs by division			
Country Engagement and Partnerships			3,896
Knowledge, Policy and Finance Centre			1,013
Project Facilitation and Support			1,269

IV. Source of Advice

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.

50. Driven by its cost-competitiveness, the share of renewable energy in the global energy mix has been rapidly increasing. While renewable energy investments have seen steady growth over the last decade, a rapid scaling-up is necessary to meet climate and sustainable development goals. This entails building a strong pipeline of investment-mature projects, which requires addressing the perception of high risk, making investment volumes more attractive to large-scale investors and improving market transparency through quality information on project profiles and available financing options.

51. If countries are to meet these goals, the current constraints must be overcome to improve access to capital and mobilise private sector investment at scale. Facilitating projects from initiation to full investment maturity can enhance project quality and visibility, leading to improved market liquidity. Furthermore, building on a standardisation of contracts and a simplification of the process to access funds, small-scale projects can be aggregated into larger bundles, thereby increasing investment volumes. Particularly, off-grid renewable project financing faces significant challenges due to limited financing access, low affordability of consumers and high transactions costs, among other things, therefore, supporting instruments must be implemented to facilitate off-grid investment and secure access for all.

52. To date, IRENA has developed a suite of tools, methodologies and platforms to support project facilitation. The Agency's site assessments help characterise, qualify and screen potential sites, which saves project development costs by addressing site identification risk. To date, IRENA has registered over 100 of such assessment undertaken in the past couple of years. The Project Navigator provides capacity building and support to developers to create investment-ready projects. And the Sustainable Energy Marketplace connects project owners, financiers/investors, governments, service providers and technology suppliers to bring projects to fruition. These tools were used to support the work of the Abu Dhabi Fund for Development (ADFD) / IRENA Project Facility to support replicable, scalable and potentially transformative renewable energy projects in developing countries. ADFD committed USD 350 million in concessional loans, over seven annual funding cycles, to renewable energy projects recommended by IRENA.

53. Going forward, IRENA will consolidate its project facilitation work within the Project Facilitation and Support (PFS) division. This holistic approach will enable IRENA to better understand capacity building and technical assistance needs for the creation of enabling frameworks and a pipeline of investment-ready projects. Given the magnitude of this task, strong partnerships will be required at all levels, most importantly with Members, but also with multilateral banks, financing institutions, private investors and stakeholders along the project value chain. These partnerships will also strengthen the Agency's ability to judge when it needs to directly engage at the country level or be supported by other partners in areas where they are better placed to assist.

54. In this respect, IRENA will prioritise the activities that contribute to the creation of enabling frameworks and the development of project pipelines. Given the difficulties faced by LDCs and SIDS, IRENA will help identify and appraise options for increasing renewable energy deployment and provide targeted assistance to identify and overcome barriers to accelerated

deployment. IRENA will also provide capacity building, technical information and facilitation services to support accelerated deployment. This will include the Agency's established area of expertise related to data collection, policy and regulation, Renewable Readiness Assessments, outlooks and long-term plans, along with the support for integration of VRE and system flexibility. Given the multifaceted nature of the energy transition, it is important to support Members in maximizing its benefits. Capacity building and technical assistance will therefore also be provided for the development and implementation of NDCs, as well as Members' Sustainable Development agenda, for a just transition that leaves no one behind.

OUTPUTS[15]

- CIP implementation: Project Navigator* and Sustainable Energy Marketplace
- Project site assessments and feasibility assessments*
- ADFD/IRENA Project Facility implementation*
- Renewable readiness assessments (RRA) and REmap*
- Long-term planning for energy transition*
- Flex-tool and grid integration support*
- Socio-economic footprint at the country level (five countries)*
- Energy transition in NDCs: development and implementation*
- Entrepreneurship Facility*

Budgetary requirements			
Core assessed and core non-assessed resource requirements 2020-2021 (in USD thousands)	**5,569**	Proportion of IRENA budget	**9%**
Breakdown of *core assessed* and *core non-assessed* costs (in USD thousands)			
Staff costs			**4,254**
Non-staff costs			**1,315**
Non-staff costs by division			
Country Engagement and Partnerships			606
Knowledge, Policy and Finance Centre			709

[15] Outputs marked with Asterix (*) are fully or partially funded by voluntary contributions including from Denmark, NDC Partnership, the UAE and the Walloon Region of Belgium.

V. Strategic Management

55. The success of IRENA's mission depends on the ability to effectively engage Members, along with sound leadership and management that promotes policy coherence, programme coordination and an organisational culture of empowerment. Institutionally, IRENA has reached a level of maturity that allows for a more decentralised management structure, underpinned by effective planning and monitoring systems. The Office of the Director-General will focus on strategic management and providing the executive direction of the Agency, leading the implementation of the Work Programme and ensuring sound management of the organisation. It will ensure that the new programmatic orientation trickles through all facets of the Agency work. It will also guide the Agency's efforts to diversify its resource base, to be fully aligned with the requirement to maintain excellence in the analytical work and enable action on the ground.

56. IRENA is the principal forum for international co-operation on renewable energy and the resulting transformation of the global energy system. Thus, Assembly sessions and Council meetings are key avenues for Members to shape the global energy agenda, monitor progress and guide the Agency on all policy, programmatic and governance matters. Plenary discussions, high-level dialogues, programmatic events and stakeholder fora and dialogues will promote the Agency's leading role in accelerating the energy transition with the view to sustainable development and climate efforts. The Agency will strive to make the governing body meetings richer in substance, more sustainable in operations and in efficiency of delivery.

57. High levels of inclusiveness and ownership are a lynchpin of IRENA's effectiveness. The Fund for Developing Country Representatives (FDCR) has been key in enabling the participation of representatives of Least Developed Countries (LDCs) and SIDS at IRENA governing body meetings. This Fund relies on voluntary contributions, and its replenishment, along with efficient management, guarantees that the advantages of the Agency's global membership are fully exploited. IRENA will also seek new avenues to secure the participation of LDCs and SIDS in its programmatic activities and institutional processes.

58. Members emphasised the need to align diverse approaches to international co-operation on energy, to ensure efficiency and avoid duplication of mandates. IRENA will collaborate with Members to promote coherence and synergies in interactions with other international processes and organisations, particularly where renewable energy-related issues are discussed. To this end, IRENA's New York Liaison Office will be effectively used to systematically engage with the United Nations System and other partners, as well as to establish links to the processes related to the 2030 Agenda on Sustainable Development Goals. Similarly, IRENA's presence in Bonn will be used to promote collaborative efforts on climate, given the geographical concentration of institutions that work on related issues. The new premises will also enable cost-effective use of the conference facilities.

59. The Agency will continue to work with countries that have yet to become Members, with the view to attaining universal membership and commitment to its mandate. To facilitate ongoing interaction with Members, IRENA will broaden and strengthen its engagement with Permanent Representatives at its Headquarters in Abu Dhabi. Regular briefings and discussions will be held to sustain interest in, and knowledge of, the work of the Agency.

60. The Agency will maintain a sustained dialogue with its host countries on the implementation of the respective agreements concerning Headquarters in Abu Dhabi and the Innovation and Technology Centre in Bonn. It will also raise Members awareness on the importance of granting to the Agency the privileges and immunities it requires for the exercise of its functions.

Budgetary requirements			
Core assessed and core non-assessed resource requirements 2020-2021 (in USD thousands)	**8,503**	Proportion of IRENA budget	**13%**
Breakdown of *core assessed* and *core non-assessed* costs (in USD thousands)			
Staff costs			**4,122**
Non-staff costs			**4,381**
Non-staff costs by division			
Office of the Director General			4,190
Administration and Management Services			191

VI. Enabling IRENA Delivery

61. The achievement of IRENA's strategic objectives relies on its internal capacity and institutional efficiency. Several operational processes underpin the functioning of the Agency. They include the management of finance, human resources, procurement, travel information and communications technology, facilities and security and safety. These functions, while not often visible, ensure efficient and effective delivery of the medium-term strategy and the programme of work. Most importantly, they are underpinned by transparency and accountability that sustains Members' trust in the management of the Agency. This will remain an overriding priority in all facets of the administrative and operational support.

62. IRENA's support services remain lean, which means that efficiency of its functions and processes will be paramount. To this end, the Enterprise Resource Planning (ERP) is an important tool that enables the streamlining and automation of IRENA internal business processes. In the coming biennium, ERP efficiency and application will continue to be improved. The Agency-wide use and continuous enhancement of ERP will also facilitate a more decentralised approach to management and support increased delegation of authority. Upgrades and enhancements will continue to be made to IRENA website, platforms and projects related to improving connectivity and communications. In addition, cyber-security capabilities will continue to be enhanced to protect data and assets, given the growing risks in this regard.

63. Consistent with the current approach, the Agency will proactively address management recommendations provided through internal review and oversight, as well as those identified by the Agency's internal and external audit functions. Also, the IRENA staff survey will be used as a tool to inform of actions to be taken with regards to various staff management issues. IRENA will also increase the environmental sustainability through office measures and business practices, so that the Agency's important mission is also reflected in its own operations.

Budgetary requirements			
Core assessed and core non-assessed resource requirements 2020-2021 (in USD thousands)	**15,970**	Proportion of IRENA budget	**24%**
Breakdown of *core assessed* and *core non-assessed* costs (in USD thousands)			
Staff costs			**10,726**
Non-staff costs			**5,244**
Non-staff costs by division			
Office of the Director General			1,901
Administration and Management Services			3,343

VII. Programmatic Overview

I. Centre of Excellence for Energy Transformation	Core assessed and core non- assessed resources (in USD thousands): 13,394
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[16]	
Annual statistics: renewable capacity, renewable energy, off-grid	
Jobs Annual Review (annual)	
Annual update on power generation costs	
Annual update on patents and standards	
Global Atlas data updates on renewable potentials	
IRENA/IEA Policies and Measures Database	
The Energy Progress Report: Tracking SDG7* (annual, jointly with IEA, WB, WHO and UN)	
Global Energy Transformation (annual editions)	
Measuring the Socio-Economic Footprint report	
Innovation Landscape: Renewable Electricity in End-use report.	
Global Landscape: Renewable Energy Finance report	
3rd Innovation Week	
ASEAN 2050 energy transition outlook*	
Central America 2050 energy transition outlook*	
Impact of Innovation on Energy Transition*	
Human resources and workforce planning strategy	
Performance evaluation and staff training strategy	
Refinement of Staff Rules and updated HR Manual	
System for engagement of academia, researchers and the private sector	

II. Global Voice of Renewables	Core assessed and core non-assessed resources (in USD thousands): 11,011
Objective: Shape the global discourse on energy transformation by providing relevant, timely, high-quality information and access to data on renewable energy.	
Outputs[17]	
Power Market Design for the Energy Transition report	
Market Analysis: Africa	
Ecosystems for Sustainable Livelihoods report	
Policies at the Time of Transition: Transport (with IEA and REN21) report	
Leveraging Local Capabilities (selected technologies) report	
6th and 7th Global Policy Day	
Toolbox for long-term planning: methodologies and best practice	
Grid codes for variable renewable energy (VRE) report	
Value of storage in national energy systems report and toolkit	

[16] Outputs marked with Asterix (*) are fully or partially funded by voluntary contributions. In Pillar 1, this includes contributions from Denmark, the UK and the World Bank/IBRD

[17] Outputs marked with Asterix (*) are fully or partially funded by voluntary contributions. In Pillar 2, this includes contributions from Denmark, Japan, Germany and the Walloon Region of Belgium.

Global assessment of geothermal energy
Gender and Renewable Energy report
NDCs and Renewable Energy Targets*
Geopolitics of the Energy Transition*
Analytical briefs, guidelines and working papers on topical issues (bio-energy*, hydrogen, hydropower, off-shore 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)
Comprehensive communication and outreach strategy and implementation

III. Network Hub	Core assessed and core non-assessed resources (in USD thousands): 11,037
Objective: Provide an inclusive platform for all stakeholders to foster action, convergence of efforts and knowledge sharing for impact on the ground.	
Outputs[18]	
IRENA Forums* in regions and sub-regions	
Implementation of regional action agendas and clean energy corridors in Central Asia, Latin America*, Middle-east and North Africa*, South Asia*, South East Asia* Southeast Europe* and Sub-Saharan Africa*	
SIDS Lighthouses*	
Global Geothermal Alliance*	
5th International Off-grid Renewable Energy Conference	
Partnerships to promote deployment of decentralized renewable energy solutions	
Collaborative engagement with international organisations, multilateral institutions and initiatives*	
Coalition for Action	
Long-Term Planning campaign and network*	

IV. Source of Advice	Core assessed and core non-assessed resources (in USD thousands): USD 5,569
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[19]	
CIP implementation: Project Navigator* and Sustainable Energy Marketplace	
Project site assessments and feasibility assessments	
ADFD/IRENA Project Facility implementation*	
Renewable readiness assessments (RRA) and REmap*	
Long-term planning for energy transition*	
Flex-tool and grid integration support*	
Socio-economic footprint at the country level (five countries)*	
Energy transition in NDCs: development and implementation*	

[18] Outputs marked with Asterix (*) are fully or partially funded by voluntary contributions. In Pillar 3, this includes contributions from Denmark, Germany, Japan.

[19] Outputs marked with Asterix (*) are fully or partially funded by voluntary contributions. In Pillar 4, this includes from Denmark, NDC Partnership, the UAE and the Walloon Region of Belgium.

VIII. 2020-2021 Biennium Budget Proposal

2020-2021 Biennium core assessed and core non-assessed resource requirements
(in USD thousands)

	2018-2019 Biennium Proposed Budget	2020-2021 Biennium Proposed Budget	2020 Proposed Budget	2021 Proposed Budget
Assessed Contributions (Core Budget)				
Members (2016)	42,934	43,130	21,565	21,565
Members (post-2018)*	196	1,330	665	665
Total Assessed Contributions (Core Budget)	**43,130**	**44,460**	**22,230**	**22,230**
Core Non-Assessed UAE Contributions:				
UAE Support	5,000	5,000	2,500	2,500
Governing Body Meetings	3,200	3,200	1,600	1,600
IT Infrastructure support	920	920	460	460
Subtotal UAE Contributions	**9,120**	**9,120**	**4,560**	**4,560**
Core Non-Assessed Germany Contributions:				
Innovation and Technology Center	10,200	10,200	5,100	5,100
Subtotal Germany Contributions	**10,200**	**10,200**	**5,100**	**5,100**
Core Non-Assessed Other Contribution				
Core Non-Assessed Other	1,704	1,704	852	852
Subtotal Germany Contributions	**1,704**	**1,704**	**852**	**852**
Total Core Non-Assessed	**21,024**	**21,024**	**10,512**	**10,512**
Grand Total	**64,154**	**65,484**	**32,742**	**32,742**

Note: * State members joining after January 2019: Canada

2020-2021 Biennium core assessed and core non-assessed resource requirements by Segment
(in USD thousands)

Programmatic Overview	**Core Assessed and Non-Assessed 2020-2021***	***(%)***
A. Strategic Direction	**8,503**	**13%**
Office of the Director General	8,312	13%
Administration and Management Services	191	<1%
B. Centre of Excellence for Energy Transformation	**13,394**	**20%**
IRENA Innovation and Technology Centre	7,065	11%
Knowledge, Policy and Finance Centre	4,290	7%
Administration and Management Services	2,039	2%
C. Global Voice of Renewables	**11,011**	**17%**
Office of the Director General	3,794	6%
IRENA Innovation and Technology Centre	2,497	4%
Knowledge, Policy and Finance Centre	4,720	7%
D. Network Hub for Energy Transformation	**11,037**	**17%**
Country Engagement and Partnerships	7,173	11%
IRENA Innovation and Technology Centre	355	1%
Knowledge, Policy and Finance Centre	2,240	3%
Project Facilitation and Support	1,269	2%
E. Source of Advice	**5,569**	**9%**
Country Engagement and Partnerships	2,148	3%
IRENA Innovation and Technology Centre	283	<1%
Knowledge, Policy and Finance Centre	1,149	2%
Project Facilitation and Support	1,989	3%
F. Enabling IRENA Delivery	**15,970**	**24%**
Office of the Director General	5,644	9%
Administration and Management Services	10,326	15%
Grand Total	**65,484**	**100%**

Note: * Includes Core Assessed and Core Non-Assessed from Germany, United Arab Emirates and "other"

2020-2021 Biennium Post requirements

Level	2018-2019	Proposed 2020-2021	Increase/ (decrease)
ASG	1	1	0
D-2	1	1	0
D-1	5	6	1
P-5	17	17	0
P-3/4	37	37	0
P-2/1	3	3	0
Sub-total Professional and above	**64**	**65**	**1**
General Services	**26**	**26**	**0**
Total	**90**	**91**	**1**

2020-2021Biennium core assessed and core non-assessed resource requirements by object of expenditure (in USD thousands)

Object of Expenditure	2018-2019 Biennium Total Core Assessed and Non-Assessed	2020-2021 Biennium Total Core Assessed and Non-Assessed
Total Staff Costs	**34,826**	**35,139**
Total Non-Staff Costs	**29,328**	**30,345**
Project & Seconded Personnel, Interns and Consultants	16,112	16,797
Programme and Expert Meetings	2,018	3,252
Travel of Staff	1,912	2,712
Contractual Services	6,724	5,430
General Operating Expenses	2,323	1,961
Furniture and Equipment	239	193
Total	**64,154**	**65,484**

Note: Core Non-Assessed includes USD 10.2m from Germany for IITC, USD 9.1m from UAE (USD 3.2m for Governing Body Meetings and USD 5.9m from United Arab Emirates) and USD 1.7m from "other"

Resource Requirements: Office of the Director General (ODG)

Resource Requirements	(in USD thousands)
Total Requirements	***17,750***

Category	Resources (in USD thousands)	Core Posts
Staff Costs	9,444	23
Non-staff Costs	8,306	-
Total	**17,750**	**23**

Object of Expenditure	2020-2021 Biennium Estimate (in USD thousands)
Total Staff Costs	**9,444**
Total Non-Staff Costs	**8,306**
Project & Seconded Personnel, Interns and Consultants	4,114
Programme and Expert Meetings	361
Travel of Staff	561
Contractual Services	2,829
General Operating Expenses	402
Furniture and Equipment	39
Total	**17,750**

Resource Requirements: Country Engagement and Partnerships (CEP)

Resource Requirements	Resources (in USD thousands)
Total Requirements	***9,321***

Category	Resources (in USD thousands)	Core Posts
Staff Costs	4,819	11
Non-staff Costs	4,502	-
Total	**9,321**	**11**

Object of Expenditure	2020-2021 Biennium Estimate (in USD thousands)
Total Staff Costs	**4,819**
Total Non-Staff Costs	**4,502**
Project & Seconded Personnel, Interns and Consultants	1,992
Programme and Expert Meetings	1,516
Travel of Staff	685
Contractual Services	309
Total	**9,321**

Resource Requirements: IRENA Innovation and Technology Centre (IITC)

Resource Requirements	Resources (in USD thousands)
Total Requirements	***10,200***

Category	Resources (in USD thousands)	Core Posts
Staff Costs	4,264	14
Non-staff Costs	5,936	-
Total	**10,200**	**14**

Object of Expenditure	2020-2021 Biennium Estimate (in USD thousands)
Total Staff Costs	**4,264**
Total Non-Staff Costs	**5,936**
Project & Seconded Personnel, Interns and Consultants	3,673
Programme and Expert Meetings	326
Travel of Staff	826
Contractual Services	478
General Operating Expenses	536
Furniture and Equipment	97
Total	**10,200**

Resource Requirements: Knowledge, Policy and Finance Centre (KPFC)

Resource Requirements	(in USD thousands)
Total Requirements	***12,400***

Category	Resources (in USD thousands)	Core Posts
Staff Costs	5,828	14
Non-staff Costs	6,572	-
Total	**12,400**	**14**

Object of Expenditure	2020-2021 Biennium Estimate (in USD thousands)
Total Staff Costs	**5,828**
Total Non-Staff Costs	**6,572**
Project & Seconded Personnel, Interns and Consultants	4,806
Programme and Expert Meetings	598
Travel of Staff	436
Contractual Services	679
General Operating Expenses	53
Total	**12,400**

Resource Requirements: Project Facilitation and Support (PFS)

Resource Requirements	(in USD thousands)
Total Requirements	***3,257***

Category	Resources (in USD thousands)	Core Posts
Staff Costs	1,989	4
Non-staff Costs	1,268	-
Total	**3,257**	**4**

Object of Expenditure	2020-2021 Biennium Estimate (in USD thousands)
Total Staff Costs	**1,989**
Total Non-Staff Costs	**1,268**
Project & Seconded Personnel, Interns and Consultants	538
Programme and Expert Meetings	452
Travel of Staff	191
Contractual Services	87
Total	**3,257**

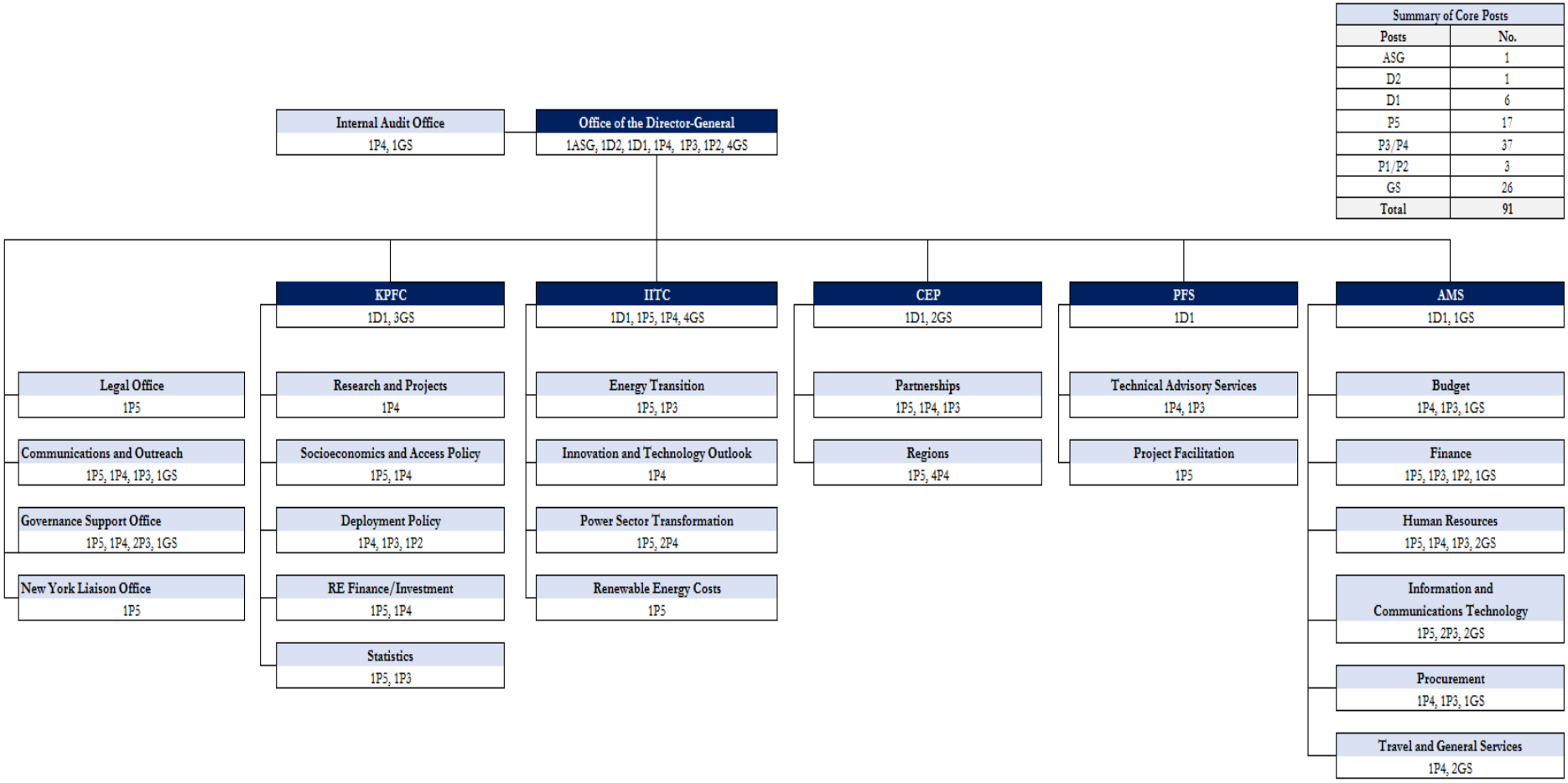
Resource Requirements: Administration and Management Services (AMS)

Resource Requirements	Resources (in USD thousands)
Total Requirements	***12,556***

Category	Resources (in USD thousands)	Core Posts
Staff Costs	8,795	25
Non-staff Costs	3,761	-
Total	**12,556**	**25**

Object of Expenditure	2020-2021 Biennium Estimate (in USD thousands)
Total Staff Costs	**8,795**
Total Non-Staff Costs	**3,761**
Project & Seconded Personnel, Interns and Consultants	1,675
Travel of Staff	12
Contractual Services	1,048
General Operating Expenses	969
Furniture and Equipment	57
Total	**12,556**

Annex I: IRENA Organisational Structure and Post Distribution for 2020-2021 Biennium



Annex II
Proposed Indicative IRENA Scale of Contributions for 2020

Members	UN Factor[20] 2016 to 2018	Indicative IRENA Adjusted Scale of Assessments 2020 (%)	Indicative Assessed Contribution to IRENA 2020 (USD)	Approved Assessed Contribution to IRENA 2019 (USD)	Variance 2020-2019 (USD)
Afghanistan	0.006	0.007%	1,472	1,472	-
Albania	0.008	0.009%	1,892	1,892	-
Algeria	0.161	0.182%	38,267	38,267	-
Angola*	0.010	0.010%	2,103	2,103	-
Antigua and Barbuda	0.002	0.002%	421	421	-
Argentina	0.892	1.007%	211,730	211,730	-
Armenia	0.006	0.007%	1,472	1,472	-
Australia	2.337	2.637%	554,451	554,451	-
Azerbaijan	0.060	0.068%	14,298	14,298	-
Bahamas	0.014	0.016%	3,364	3,364	-
Bahrain	0.044	0.050%	10,513	10,513	-
Bangladesh*	0.010	0.010%	2,103	2,103	-
Barbados	0.007	0.008%	1,682	1,682	-
Belarus	0.056	0.063%	13,246	13,246	-
Belgium	0.885	0.999%	210,048	210,048	-
Belize	0.001	0.001%	210	210	-
Benin	0.003	0.003%	631	631	-
Bhutan	0.001	0.001%	210	210	-
Bosnia and Herzegovina	0.013	0.015%	3,154	3,154	-
Botswana	0.014	0.016%	3,364	3,364	-
Brunei Darussalam	0.029	0.033%	6,939	6,939	-
Bulgaria	0.045	0.051%	10,723	10,723	-

[20] UN scale of assessment is established for a 3-year period of 2016-2018 as per A/RES/70/245 dated 8 February 2016, based on which IRENA scale for biennium 2020-2021 was developed.

Members	UN Factor[20] 2016 to 2018	Indicative IRENA Adjusted Scale of Assessments 2020 (%)	Indicative Assessed Contribution to IRENA 2020 (USD)	Approved Assessed Contribution to IRENA 2019 (USD)	Variance 2020-2019 (USD)
Burkina Faso	0.004	0.005%	1,051	1,051	-
Cabo Verde	0.001	0.001%	210	210	-
Cameroon	0.010	0.011%	2,313	2,313	-
Chad	0.005	0.006%	1,262	1,262	-
China	7.921	8.939%	1,879,499	1,879,499	-
Colombia	0.322	0.363%	76,324	76,324	-
Comoros	0.001	0.001%	210	210	-
Costa Rica	0.047	0.053%	11,144	11,144	-
Cote D'Ivoire	0.009	0.010%	2,103	2,103	-
Croatia	0.099	0.112%	23,549	23,549	-
Cuba	0.065	0.073%	15,349	15,349	-
Cyprus	0.043	0.049%	10,303	10,303	-
Czech Republic	0.344	0.388%	81,580	81,580	-
Denmark	0.584	0.659%	138,560	138,560	-
Djibouti	0.001	0.001%	210	210	-
Dominican Republic	0.046	0.052%	10,933	10,933	-
Ecuador	0.067	0.076%	15,980	15,980	-
Egypt	0.152	0.172%	36,164	36,164	-
El Salvador	0.014	0.016%	3,364	3,364	-
Eritrea	0.001	0.001%	210	210	-
Estonia	0.038	0.043%	9,041	9,041	-
Eswatini	0.002	0.002%	421	421	-
Ethiopia*	0.010	0.010%	2,103	2,103	-
Fiji	0.003	0.003%	631	631	-
Finland	0.456	0.515%	108,283	108,283	-
France	4.859	5.483%	1,152,846	1,152,846	-
Gabon	0.017	0.019%	3,995	3,995	-

Members	UN Factor[20] 2016 to 2018	Indicative IRENA Adjusted Scale of Assessments 2020 (%)	Indicative Assessed Contribution to IRENA 2020 (USD)	Approved Assessed Contribution to IRENA 2019 (USD)	Variance 2020-2019 (USD)
Gambia	0.001	0.001%	210	210	-
Georgia	0.008	0.009%	1,892	1,892	-
Germany	6.389	7.210%	1,515,962	1,515,962	-
Ghana	0.016	0.018%	3,785	3,785	-
Greece	0.471	0.532%	111,857	111,857	-
Grenada	0.001	0.001%	210	210	-
Guyana	0.002	0.002%	421	421	-
Hungary	0.161	0.182%	38,267	38,267	-
Iceland	0.023	0.026%	5,467	5,467	-
India	0.737	0.832%	174,935	174,935	-
Indonesia	0.504	0.569%	119,637	119,637	-
Iran (Islamic Republic of)	0.471	0.532%	111,857	111,857	-
Iraq	0.129	0.146%	30,698	30,698	-
Ireland	0.335	0.378%	79,478	79,478	-
Israel	0.430	0.485%	101,975	101,975	-
Italy	3.748	4.230%	889,393	889,393	-
Jamaica	0.009	0.010%	2,103	2,103	-
Japan	9.680	10.923%	2,296,576	2,296,576	-
Jordan	0.020	0.023%	4,836	4,836	-
Kazakhstan	0.191	0.216%	45,416	45,416	-
Kenya	0.018	0.020%	4,205	4,205	-
Kiribati	0.001	0.001%	210	210	-
Kuwait	0.285	0.322%	67,703	67,703	-
Latvia	0.050	0.056%	11,774	11,774	-
Lebanon	0.046	0.052%	10,933	10,933	-
Lesotho	0.001	0.001%	210	210	-
Liechtenstein	0.007	0.008%	1,682	1,682	-

Members	UN Factor[20] 2016 to 2018	Indicative IRENA Adjusted Scale of Assessments 2020 (%)	Indicative Assessed Contribution to IRENA 2020 (USD)	Approved Assessed Contribution to IRENA 2019 (USD)	Variance 2020-2019 (USD)
Lithuania	0.072	0.081%	17,031	17,031	-
Luxembourg	0.064	0.072%	15,139	15,139	-
Malaysia	0.322	0.363%	76,324	76,324	-
Maldives	0.002	0.002%	421	421	-
Mali	0.003	0.003%	631	631	-
Malta	0.016	0.018%	3,785	3,785	-
Marshall Islands	0.001	0.001%	210	210	-
Mauritania	0.002	0.002%	421	421	-
Mauritius	0.012	0.014%	2,944	2,944	-
Mexico	1.435	1.619%	340,408	340,408	-
Micronesia (Federal States of)	0.001	0.001%	210	210	-
Monaco	0.010	0.011%	2,313	2,313	-
Mongolia	0.005	0.006%	1,262	1,262	-
Montenegro	0.004	0.005%	1,051	1,051	-
Morocco	0.054	0.061%	12,826	12,826	-
Mozambique	0.004	0.005%	1,051	1,051	-
Namibia	0.010	0.011%	2,313	2,313	-
Nauru	0.001	0.001%	210	210	-
Nepal	0.006	0.007%	1,472	1,472	-
Netherlands (Kingdom of the)	1.482	1.672%	351,552	351,552	-
New Zealand	0.268	0.302%	63,498	63,498	-
Nicaragua	0.004	0.005%	1,051	1,051	-
Niger	0.002	0.002%	421	421	-
Nigeria	0.209	0.236%	49,621	49,621	-
North Macedonia	0.007	0.008%	1,682	1,682	-
Norway	0.849	0.958%	201,427	201,427	-

Members	UN Factor[20] 2016 to 2018	Indicative IRENA Adjusted Scale of Assessments 2020 (%)	Indicative Assessed Contribution to IRENA 2020 (USD)	Approved Assessed Contribution to IRENA 2019 (USD)	Variance 2020-2019 (USD)
Oman	0.113	0.128%	26,913	26,913	-
Pakistan	0.093	0.105%	22,077	22,077	-
Palau	0.001	0.001%	210	210	-
Panama	0.034	0.038%	7,990	7,990	-
Paraguay	0.014	0.016%	3,364	3,364	-
Peru	0.136	0.153%	32,170	32,170	-
Philippines	0.165	0.186%	39,108	39,108	-
Poland	0.841	0.949%	199,535	199,535	-
Portugal	0.392	0.442%	92,934	92,934	-
Qatar	0.269	0.304%	63,919	63,919	-
Republic of Korea	2.039	2.301%	483,804	483,804	-
Republic of Moldova	0.004	0.005%	1,051	1,051	-
Romania	0.184	0.208%	43,734	43,734	-
Russian Federation	3.088	3.485%	732,750	732,750	-
Rwanda	0.002	0.002%	421	421	-
Saint Kitts and Nevis	0.001	0.001%	210	210	-
Saint Lucia	0.001	0.001%	210	210	-
Saint Vincent and the Grenadines	0.001	0.001%	210	210	-
Samoa	0.001	0.001%	210	210	-
Sao Tome and Principe	0.001	0.001%	210	210	-
Saudi Arabia	1.146	1.293%	271,864	271,864	-
Senegal	0.005	0.006%	1,262	1,262	-
Serbia	0.032	0.036%	7,569	7,569	-
Seychelles	0.001	0.001%	210	210	-
Sierra Leone	0.001	0.001%	210	210	-
Singapore	0.447	0.504%	105,970	105,970	-
Slovakia	0.160	0.181%	38,057	38,057	-

Members	UN Factor[20] 2016 to 2018	Indicative IRENA Adjusted Scale of Assessments 2020 (%)	Indicative Assessed Contribution to IRENA 2020 (USD)	Approved Assessed Contribution to IRENA 2019 (USD)	Variance 2020-2019 (USD)
Slovenia	0.084	0.095%	19,975	19,975	-
Solomon Islands	0.001	0.001%	210	210	-
Somalia	0.001	0.001%	210	210	-
South Africa	0.364	0.411%	86,416	86,416	-
Spain	2.443	2.756%	579,472	579,472	-
Sri Lanka	0.031	0.035%	7,359	7,359	-
Sudan*	0.010	0.010%	2,103	2,103	-
Sweden	0.956	1.079%	226,869	226,869	-
Switzerland	1.140	1.286%	270,392	270,392	-
Tajikistan	0.004	0.005%	1,051	1,051	-
Thailand	0.291	0.328%	68,965	68,965	-
Togo	0.001	0.001%	210	210	-
Tonga	0.001	0.001%	210	210	-
Trinidad and Tobago	0.034	0.038%	7,990	7,990	-
Tunisia	0.028	0.032%	6,728	6,728	-
Turkey	1.018	1.149%	241,587	241,587	-
Turkmenistan	0.026	0.029%	6,097	6,097	-
Tuvalu	0.001	0.001%	210	210	-
Uganda	0.009	0.010%	2,103	2,103	-
Ukraine	0.103	0.116%	24,390	24,390	-
United Arab Emirates	0.604	0.682%	143,396	143,396	-
United Kingdom of Great Britain and Northern Ireland	4.463	5.036%	1,058,861	1,058,861	-
United States of America[21]	22.000	21.900%	4,604,732	4,604,732	-
Uruguay	0.079	0.089%	18,713	18,713	-

[21] A maximum assessment rate is established at 22 per cent.

Members	UN Factor[20] 2016 to 2018	Indicative IRENA Adjusted Scale of Assessments 2020 (%)	Indicative Assessed Contribution to IRENA 2020 (USD)	Approved Assessed Contribution to IRENA 2019 (USD)	Variance 2020-2019 (USD)
Uzbekistan	0.023	0.026%	5,467	5,467	-
Vanuatu	0.001	0.001%	210	210	-
Yemen*	0.010	0.010%	2,103	2,103	-
Zambia	0.007	0.008%	1,682	1,682	-
Zimbabwe	0.004	0.005%	1,051	1,051	-
Sub-Total Assessment from State Members of IRENA (as at 12 January 2019)			**21,025,831**	**21,025,831**	**-**
European Union[22]		2.500%	539,124	539,124	-
Sub-Total Core Budget Assessment			**21,564,955**	**21,564,955**	**-**

* Least Developed Countries (LDC) that have reached a maximum assessment rate established at .01 per cent

IRENA Members assessed after January 2019[23]					
Canada	2.734	3.084%	665,047	-	665,047
Sub-Total Assessment from State Member of IRENA (assessed after January 2019)			**665,047**	-	**665,047**
Grand-Total Core Budget Assessment			**22,230,002**	**21,564,955**	**665,047**

[22] Since 2012, the European Union has committed to paying an annual contribution fixed at 2.5 per cent of the overall core assessed budget

[23] Assessed after adoption of the Work Programme and Budget 2018-2019 on 13 January 2018.