

Tenth session of the Assembly  
Abu Dhabi, 11–12 January 2020

**REPORT**

**OF THE TENTH SESSION OF THE ASSEMBLY OF**

**THE INTERNATIONAL RENEWABLE ENERGY AGENCY**

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## Report of the tenth session of the Assembly of the International Renewable Energy Agency

### Agenda Item 1: Opening of the meeting

1. The tenth session of the Assembly of the International Renewable Energy Agency (IRENA) was held from 11 to 12 January 2020 in Abu Dhabi, United Arab Emirates. There were over 1750 registered participants, including 110 Ministers, along with delegates from 147 countries and the European Union.

**2. The President of the ninth session of the Assembly, China, represented by Mr Liu Baohua, Vice-Administrator of the National Energy Administration of China declared open the tenth session of the Assembly.**

3. Welcoming delegations, Mr Baohua highlighted the momentum in the development of renewable energy and the resolve of the international community to address climate change. He highlighted the importance of co-operation with other international organisations in working together to face the challenges of a changing climate, to facilitate the application of global renewable energy transformation and sustainable development of economies, societies and civilisations, as a means to contribute to the welfare of citizens. He commended the Agency for the impact of its work in facilitating international energy co-operation and advocating for the development of renewable energy.

### Agenda Item 2: Organisation of work

#### a. Election of officials

4. The Assembly had, at its ninth session, designated by acclamation Uganda as President of the tenth session. Accordingly, the outgoing President proposed that the Assembly elect Uganda, represented by H.E. Mr Ally Kirunda Kivejinja, Deputy Prime Minister, as President of the tenth session of the Assembly.

**5. The Assembly elected by acclamation Uganda, represented by H.E. Mr Ally Kirunda Kivejinja, Deputy Prime Minister, as President of the tenth session of the Assembly.**

6. The Assembly had, at its ninth session, further designated, by acclamation, Burkina Faso, El Salvador, Luxembourg, and Samoa as Vice-Presidents of the tenth session of the Assembly.

7. **The Assembly elected by acclamation as Vice-President of its tenth session:**

- **Burkina Faso, represented by H.E. Mr Bachir Ismael Ouedraogo, Minister of Energy;**
- **El Salvador, represented by Mr Daniel Alejandro Alvarez Campos, President and Legal Representative of the Executive Hydroelectric Commission of the Lempa River;**
- **Luxembourg, represented by H.E. Mr Claude Turmes, Minister of Energy and Spatial Planning; and**
- **Samoa, represented by H.E. Ms Fiaame Noami Mata'afa, Deputy Prime Minister and Minister of Natural Resources and Environment.**

8. The President informed the Assembly that he had proposed to Costa Rica to act as Rapporteur of its tenth session.

9. **On the basis of the President's proposal, Costa Rica, represented by H.E. Mr Francisco Chacón Hernández, Permanent Representative to IRENA, was appointed as Rapporteur of the tenth session of the Assembly.**

**b. Adoption of the Agenda (A/10/1)**

10. The President introduced the Provisional Agenda (A/10/L.1).

11. **The Assembly adopted the Agenda (A/10/1).**

**c. Appointment of the Credentials Committee**

12. The President proposed to the Assembly that it appoint Bangladesh, Canada, Dominican Republic, Egypt, European Union, Ghana, Japan, Senegal and UAE as members of the Credentials Committee.

13. **The Assembly appointed these nine countries as members of the Credentials Committee.**

**d. Participation of Observers (A/10/2)**

14. The President introduced the document 'List of applicants for observer status at the tenth session of the Assembly' (A/10/L.2).

15. **The Assembly considered the matter and granted observer status for its tenth session to applicants included in the List of Applicants (A/10/2).**

### **Agenda Item 3: Host country and other opening remarks**

16. H.E. Mr Ally Kirunda Kivejinja expressed his honour to represent Uganda as President of the tenth session of the Assembly. With reference to the goals of the 2030 Agenda for Sustainable Development, he highlighted the importance of accelerating the deployment of renewable energy worldwide to extend energy access to remote communities and contribute to the socio-economic development of nations. The President acknowledged the Agency's achievements over the past eight years, particularly those in Africa. He presented a summary of Uganda's commitment to renewable energy and access, citing the progress the country is making in hydropower and solar powered plants, with the level of access to electricity at approximately 50%. He mentioned that the country is still heavily reliant on bioenergy resources and is looking towards diversification of the energy supply and achieving universal energy access.

17. The President recognised that IRENA has established itself as an important global platform in fostering the development and deployment of renewable energy and commended the inclusive and systematic approach to the implementation of the enabling frameworks created by the Clean Energy Corridors (CEC) regional initiative, which has increased the penetration and cross-border trade of renewables. He stressed that renewable energy enables the advancement of key development priorities in agriculture, food security, human health and in promoting gender balance.

18. The Director-General, in his address to the Assembly, welcomed delegations and thanked the President of the ninth session, represented by China, for its work in delivering a successful session in 2019, and expressed his support to the President of the tenth session, represented by Uganda. He further expressed his appreciation to the host country for its continued support of the Agency's work. He introduced Ms Gauri Singh as the new Deputy Director-General and underlined that her experience will be an asset to the Agency.

19. The Director-General highlighted that the strong participation of Ministers, High-Level officials and other senior decision-makers, as well as representatives from the private sector, parliaments, civil society, academia and media, proves that IRENA has become a truly inclusive platform. He welcomed the Agency's newest Member, the Republic of Guinea, stating that the Agency has grown to 161 Members. He also welcomed the introduction of the first 'youth assembly' at IRENA which adds important perspectives to the discussion on renewable energy. The Director-General invited all delegates to participate in the upcoming discussions and to seize the opportunity to fully address the various issues on the agenda.

20. H.E. Dr Thani Ahmed Al Zeyoudi, Minister of Climate Change and Environment of the United Arab Emirates expressed condolences to Oman on the death of Sultan Qaboos bin Said. He welcomed delegations on behalf of the host country and congratulated the President in his role at the tenth session of the Assembly and thanked the outgoing President, and the Director-General and his team for their efforts over the past year. He commended the contribution of the Agency throughout the past decade and acknowledged the rapid growth in membership.

21. H.E. Dr Al Zeyoudi highlighted the United Arab Emirates' national achievements and their continued promotion of renewable energy projects locally, investment in projects that contribute to renewable energy solutions worldwide, and implementation of solutions to increase the commercial value of clean technologies. He invited delegates to attend the opening of Abu Dhabi Sustainability Week and Zayed Sustainability Prize, to be held after the conclusion of the Assembly.

22. H.E. Mr Tijjani Muhammad-Bande, President of the UN General Assembly, thanked the Agency for its tireless efforts to support the global economy's transition to renewable energy, as its work is a vital component in this 'Decade of Action' and in the delivery of the Sustainable Development Goals. He commended the United Arab Emirates on their support of sustainable development and on being selected to host the first Regional Climate Week in the Middle East and North Africa. He emphasised the indispensable role of multilateral co-operation and action in achieving carbon neutrality by 2050 and a cap of 1.5 degrees temperature rise. He further stressed that fulfilling the Paris Agreement requires a six-fold increase in the deployment of renewable energy and a five-fold increase in investment in energy efficiency measures.

23. H.E. Mr Muhammad-Bande highlighted the progress made with the support of IRENA, the United Nations and other partners on critical areas of Sustainable Development Goal 7 (SDG7) on sustainable energy with the number of people without access to electricity falling from 1.2 billion to 840 million and the number of people without clean cooking fuel decreasing by 60 million between 2010 and 2017. Emphasising the inter-linkages of the SDGs, he noted that progress on SDG7 leads to progress on other SDGs through the eradication of poverty, creation of jobs, improved health, food and water security, and gender equality. He called on the membership to practice climate-conscious decision-making in terms of urban planning, transport and energy efficiency, as cities contribute more than 70% of global emissions. He further advised on the need for adequate disaster risk reduction planning to protect renewable energy infrastructure from natural disasters, and to facilitate a rapid post-disaster recovery.

24. Highlighting IRENA's role as a strategic partner of the United Nations system, he commended the Agency's work in supporting global climate action, particularly through the SIDS Lighthouses Initiative, the Climate Investment Platform and the Coalition for Sustainable Energy Access as announced at the UN Secretary-General's Climate Action Summit. The President of the General Assembly also underlined that IRENA could play a significant role in supporting the efforts of the United Nations on sustainability, in particular through the UN's Greening the Blue 2030 Strategy, and in increasing renewable energy use in the UN's peacekeeping and monitoring operations which can create lasting development gains for communities. He stressed that more engagement and cooperation among IRENA, the UN system and Member States is required to build upon these initiatives.

25. H.E. Mr Muhammad-Bande welcomed and look forward to IRENA's participation in the three mandated environmental events during the 74<sup>th</sup> session of the UN General Assembly, namely the 2020 UN Ocean Conference, High-Level Dialogue on Desertification, and 2020 UN Biodiversity Summit. He highlighted that the transition to renewable energy offers great opportunities for economic growth, including adding 7 million more jobs to the global economy. He emphasised the necessity of multilateral co-operation to seize these opportunities including ensuring the participation and continued involvement of women and youth. H.E Mr. Muhammad-Bande underlined that beyond economics, the energy transition will also contribute towards strengthening regional and international cooperation through expanded regional coordination and integrated energy grids. He encouraged IRENA to continue its partnerships to turn these potential gains into realities, the Assembly providing a platform to inspire more initiatives.

26. The President conveyed the message of Mr António Guterres, Secretary-General of the United Nations to the tenth Assembly. In his message Mr Guterres noted that the Assembly opens a pivotal year in the fight against climate change and for large-scale energy transition, continuing the momentum of the UN Climate Action Summit. He emphasized the central role of renewable energy in the path to limit global warming to no more than 1.5°C by 2100 – bring down carbon dioxide emissions globally by about 45 per cent by 2030 and reach net zero by 2050. He noted that while the growth of renewable energy was encouraging, there were still many barriers that prevented it from becoming the automatic choice to power the highest emitting sectors. In this context, he called upon leaders to push their governments to invest in innovation and to replace fossil fuel subsidies with tax incentives for the scaling-up of renewables. He also urged the IRENA Assembly to continue to push for the scale-up of renewable energy in all sectors. He underlined that the upcoming UN Transport Conference in May 2020 is an important opportunity for energy leaders to announce new commitments as transport is becoming the highest emitting industry. Mr. Guterres also mentioned the Sustainable Energy for All Forum and COP26 in Glasgow as further opportunities to advance renewable energy this year. The Secretary-General highlighted that IRENA's global leadership is critical and welcomed the growing partnership between the United Nations and the Agency, including through the strengthened UN-Energy. Mr Guterres urged governments to design and implement just transition plans and to redouble efforts to mobilise political will, international co-operation and financing.

27. Following the opening remarks by the President, the Director-General, the host country, the President of the UN General Assembly and the message of the UN Secretary General, the reports on the High-Level Meeting on Accelerating the Energy Transformation in Small Island Developing States and the High-Level meeting on the Geopolitics of the Energy Transformation, as well as the Legislators Forum, Public-Private Dialogue and the IRENA Youth Forum, held on the day preceding the Assembly, were presented:

### ***Report from the High-Level Meeting on Accelerating the Energy Transformation in Small Island Developing States through Renewable Energy***

28. H.E. Mr Ivan Leslie Collendavelloo, Deputy Prime Minister of Mauritius, reported on the High-Level Meeting attended by Heads of Government, Ministers and officials from Small Islands Developing States (SIDS) and development partners. The meeting provided a platform for SIDS and development partners to engage in a dialogue focused on the progress in key areas of the energy transformation and to share insights on the outstanding existing barriers and possible actions that can be implemented in cooperation with SIDS Lighthouses Initiative (LHI) partners.

29. H.E. Mr Collendavelloo acknowledged that SIDS access to clean and affordable energy represents a key factor in their pathway towards sustainable development and remain at the forefront of climate action despite having negligible carbon footprint. He highlighted that SIDS face unique challenges associated with geographical isolation and limited availability of technical

and financial resources. He stated that many SIDS have already set very high renewable energy targets in their Nationally Determined Contributions (NDCs), while other countries are expected to increase their ambition in the next round this year, taking into account the socio-economic implications as well as the synergies between energy, climate, and other Sustainable Development Goals (SDGs).

30. He underlined that, in spite of the progress in the market uptake and implementation of climate funding for renewable energy in SIDS, there are still some critical barriers hampering private sector investment, grid stability, affordable technology including storage, knowledge and technology transfer at affordable costs, as well as transportation between islands and other countries. He stressed the importance of substantial investments by 2030 in order to meet the renewable energy targets set out in SIDS NDC's to date. In this context, he noted that partners have understood the need to identify, develop and implement innovative climate funding instruments and enabling frameworks.

31. H.E. Mr Collendavelloo called upon IRENA and partners to operationalise the Climate Investment Platform (CIP) that will contribute to unlocking the needed affordable finance for clean energy transition in SIDS. He also underscored the need to intensify capacity building and strengthen technical training and institutional development that are specific to the vulnerability and unique challenges faced by SIDS. In this context, he acknowledged the willingness from partners to increase their engagement starting from the new Capacity Development Programme for LDCs and SIDS young professionals launched by IRENA. Finally, he emphasised the necessity to reinforce partnerships and project facilitation support, which will be partly addressed through the ambitious SIDS Climate Action Summit Package and will also be coordinated by IRENA through the SIDS LHI. He concluded by encouraging all partners to continue the much-needed engagement.

### ***Report from the High-Level Meeting on the Geopolitics of the Energy Transformation***

32. Ms Fatima Al-Foora Al Shamsi, Assistant Undersecretary for Electricity and Future Energy in the Ministry of Energy and Industry of the United Arab Emirates, reported on the High-level meeting, which gathered high-level representatives from Members States, as well as international organisations and academia. The meeting served as an opportunity for participants to discuss key areas in the changing geopolitical dynamics of the energy transformation as well as the role of the Agency could play in this context.

33. Ms Al Shamsi reported that participants at the meeting recognized that the report Global Commission "A New World; the Geopolitics of the Energy Transformation" had attracted significant global interest since its launch in January 2019 and was considered a milestone in raising awareness of the issue and mapping the geopolitical contours of the energy transformation. She stated that participants highlighted that the report offered a solid basis from which to deepen and expand analytical work on this issue. In this context, they called for the Agency to develop a knowledge framework and a platform for the exchange of best practices across a range of key areas in the changing geopolitical dynamics of the energy transformation, including enabling policies and technology options, with an aim to allow governments and other stakeholders to better prepare for the consequences of this transformation and to take advantage of the opportunities offered by renewables.

34. Ms Al Shamsi reported on key focus areas that emerged from the High-level meeting. First, participants highlighted the crucial role of international cooperation in ensuring a smooth energy transition and in addressing social and economic challenges related to these changes and underlined the importance of economic diversification plans and policies that ensure a just

transition. Second, participants highlighted the role of renewables as a key solution in meeting global sustainable development and climate objectives, including by reducing competition over natural resources, and improving food and water security. In this context, the pivotal role the Agency could play in providing further research and analysis on the contribution of renewables to the climate-security nexus was emphasised. Third, participants addressed the geopolitical implications of the deployment of hydrogen and called for further in-depth examination and analysis while commending IRENA's initiative to discuss this issue at its annual Assembly. Fourth, participants recognised that the widespread adoption of renewable energy and related technologies, such as solar panels, wind turbines, electric vehicles, and energy storage technologies, will increase the demand for a range of minerals and metals required for their production. The need to ensure greater transparency along the global supply chain was raised. Finally, participants emphasised that electrification will stimulate cross border trading in electricity, thus enhancing regional cooperation. In this regard, they underlined the importance of drawing lessons from successful examples of regional cooperation and called on IRENA to use its convening power to discuss these issues and share experiences with a view to identify best practices.

35. Ms Al Shamsi concluded by conveying participants' call for the continuation of work on the Geopolitics of the Energy Transformation within the IRENA framework, by requesting the Director-General to take it forward through engagement with the IRENA membership, researchers and experts, and with the support of interested Members. She further called upon the Assembly to encourage Members to provide inputs on the future of the Agency's engagement on this matter by mid-March 2020 and invited the Director-General to report on the matter to Council for Members' consideration at its next meeting.

### ***Report from the '2020 Legislators Forum'***

36. Ms Vandana Chavan, Member of Parliament from India, reported on the 2020 Legislators Forum, which gathered more than 130 members of parliament from over 40 countries to discuss the key role of renewables in accelerating the energy transformation with a specific focus on the importance of engaging communities to promote a fair and just transition.

37. Ms Chavan noted that parliamentarians welcomed their continued engagement with IRENA through the Legislators Forum, which was acknowledged as an effective platform to identify the role that parliaments can play in promoting the deployment of renewable energy projects, and in achieving the Sustainable Development Goals (SDGs) and the targets set by the Paris Agreement. 38. She reported that legislators discussed key actions to emphasise urgency of action and to increase ambition at the national level, foster the social dialogue and raise the public awareness needed to support the deployment of renewable energy and the engagement of local communities in the energy transformation. In this regard, it was recognised that parliamentarians hold a unique position for increasing public support for renewables through the maximisation of socio-economic benefits, including jobs, increased welfare and local value creation.

39. Parliamentarians further recognised their responsibility in contributing to national efforts and measures that could improve women's engagement and representation at all levels especially in the renewables sector and explored ways to prioritise women's empowerment in national development strategies through the adoption of policies, gender targets and actions at the local level to accelerate development of renewables. Furthermore, it was noted that gender inclusiveness can be enhanced through targeted capacity building, education and training for women.

40. Ms Chavan conveyed that participants in the Forum encouraged the Assembly to request the Secretariat to continue to work with parliamentarians in order to support them in accelerating the energy transformation on the ground, including by engaging in parliamentary meetings at the

regional level, in promoting synergy with regional parliamentary networks and assemblies as well as other relevant regional and international entities to further support parliamentarians in their consideration of legislation necessary for the energy transformation.

#### ***Report from the ‘2020 Public-Private Dialogue’***

41. Mr Bruce Douglas, Deputy Chief Executive Officer of Solar Power Europe and Co-Chair of the IRENA Coalition for Action “Business and Investors” Working Group, reported on the third Public-Private Dialogue. At the outset, he paid tribute to Mr. Steve Sawyer, passionate member of the Coalition for Action, former Director of Greenpeace International, and Secretary-General of the Global Wind Energy Council, whose passing had been commemorated during the event.

42. Mr Douglas went on to note the growing interest from renewable energy actors to engage with IRENA, which has contributed to the continued growth of the IRENA Coalition for Action now comprising nearly 100 members representing the private sector, industry associations, civil society, research institutes and international organisations. He further conveyed the satisfaction of Coalition members that increasingly more governments recognise the urgency to implement very high shares of renewable energy.

43. Mr Douglas referred to the Coalition’s latest white paper ‘Working together to drive the global energy transition’ launched during the Public-Private Dialogue session, which showcases the encouraging energy transformation of utilities to 100% renewable energy. He highlighted the Coalition’s concerns that renewable energy targets in Nationally Determined Contributions (NDCs) are not ambitious enough to meet global climate goals, and that implementing renewable energy projects continues to be challenging in many countries with investment levels still far below what is needed.

44. Mr Douglas further emphasised the following key takeaways from the Public-Private Dialogue: a) achieving high shares of up to 100% renewable energy in all sectors will not be possible without a transformation of energy system structures along with policies that support the characteristics of renewables-based systems; b) scaling up investment in both small and large scale renewable energy projects to close Africa’s energy gap, will require the de-risking of investment, integrated planning, and adequate policy frameworks; and c) early involvement of local communities, continued collaboration among all stakeholders and inclusive decision-making processes are key to ensuring renewable energy projects maximise socio-economic benefits for all.

45. In concluding, Mr. Douglas emphasised the need for more ambitious renewable energy targets and domestic frameworks to achieve the Paris Agreement goals, while conveying the Coalition’s readiness to work with all Members and other partners on the road to a sustainable energy future.

#### ***Report from the ‘IRENA Youth Forum’***

46. Ms Lydia Sanz Lozano reported on the IRENA Youth Forum, which, for the first time, gathered 55 young people from over 35 countries to discuss the critical role of youth in accelerating the global energy transformation.

47. Ms Lozano noted that youth welcomed this initiative from IRENA, which enabled a space for them to take part in the global conversation around renewable energy beyond 2030, and to exchange views with representatives from governments, private sector, and renewable energy experts in the context of innovation, climate change and the socio-economic benefits of the energy transition. In this regard, youth echoed the importance of amplifying the voice of renewables globally in order to achieve resilience, clean growth, a sustainable and climate-safe future, intergenerational equity, and a transition that is fair and just, she added.

48. In exploring the interlinkages of renewable energy with the global development agenda, and the challenges and opportunities that are inherent to the energy transformation, Ms Lozano conveyed that participants in the IRENA Youth Forum identified the below key messages:

- Urgent and unprecedented action is necessary to accelerate the pace of the energy transformation, implement the 2030 Sustainable Development Agenda and achieve the Paris Agreement;
- It is possible to achieve the Sustainable Development Goals (SDGs) and address climate change with renewables. The renewables-driven energy transition promises gains for climate, as well as a multitude of socio-economic benefits;
- Renewable energy benefits have a ripple effect throughout society, improving public health, strengthening the role of women in the energy sector, creating jobs, stimulating innovation, ensuring inclusive education and boosting GDP while reinforcing water and food security. Renewable energy education and capacity building, including local and indigenous knowledge, and more broadly SDG7 should be taken into account in revised NDCs;

49. Ms Lozano further reported that participants encouraged IRENA to continue to promote an inclusive platform for meaningful youth engagement, and to include youth as an enabling actor while implementing work to accelerate the energy transformation at national, regional and global levels, and promoting impact on the ground.

50. In conclusion, Ms Lozano highlighted that youth welcomed the opportunity to strengthen the developing network of young energy advocates with the latest insights from the renewables sector, and they called upon IRENA and its Members to expand youth engagement, recognising youth as equal partners, and empowering the young generations to amplify the global voice of renewable energy by promoting and advocating for renewable energy solutions locally and globally.

**51. The Assembly received, with appreciation, the welcoming remarks and took note of the reports provided.**

### **Agenda Item 4: Annual Report of the Director-General on the Implementation of the Work Programme and Budget for 2018-2019 (A/10/3 and A/10/INF/2)**

52. The Director-General introduced the Annual Report on the Implementation of the Work Programme and Budget 2018-2019, highlighting that IRENA, with over 180 Members and States in Accession, has become the foremost global framework for international collaboration on sustainable energy. He emphasised that IRENA's near-universal reach is the Agency's key asset to support and fulfil the global commitment set out in the 2030 Agenda for Sustainable Development and highlighted that renewable energy is increasingly playing a major role in national development and climate strategies that will support countries transitioning to clean energy systems.

53. The Director-General noted a significant growth of 7-8% in global renewable installed capacity in 2019 compared to 2018 and highlighted that renewables currently account for 33% of the total installed power-generating capacity, with hydropower, wind and solar playing an increasingly strong role. He highlighted that these significant achievements are in great part due to declining costs of technologies, especially in solar and wind. These technologies are now frequently less expensive than any fossil-fuel option even without financial assistance. He pointed out that IRENA's latest power generation costs analysis show that global weighted average costs for onshore and utility-scale solar PV costs in 2018 dropped by 13% compared to 2017.

54. He indicated that deployment of renewable energy has been swift and widespread during the last decade and referred to the Report on the Innovation Landscape, underlining that three

innovation trends – electrification, decentralisation and digitalisation – are reshaping the future of the power sector. In this regard, the Director-General emphasised that system design and operations, as well as policies and markets must adapt to the emerging renewables-based systems. The flexibility needed for a high share of variable renewables penetration must be found in different places and sectors, as experienced in the electric mobility sector: in 2007 just about 100 Electric vehicles (EVs) were sold worldwide and in 2018, EV sales reached two million units. This opens new possibilities for the power market by introducing an additional source of flexibility.

55. The Director-General emphasised that flexibility is not only a technology solution, but also a cornerstone of the decarbonisation strategy, which is only achievable if countries accelerate efforts also in end-use sectors. He welcomed the request to establish working groups on long-term planning and integration of a high share of variable renewable energy to be abreast of the latest knowledge, gather global best practice and facilitate the exchange of experiences.

56. The Director-General highlighted that the energy system should not be seen in isolation from the broader economy. National-level planning needs to connect with the needs and perspectives at different levels of governance, such as municipal authorities and state or provincial governments, and examine how the interactions between the public and private sectors can maximise the benefits for all and leave no one behind.

57. The Director-General emphasised that according to IRENA's latest analysis, the renewable energy sector employed 11 million people by the end of 2018, compared to 10.3 million in 2017, and that renewable-based energy transitions have the potential to generate significant benefits in terms of impact on job creation, economic, social and environmental benefits in those countries where attractive policies exist.

58. The Director-General noted that the ongoing energy transitions are not equally spread world-wide and that energy poverty is still widespread in several parts of the world – especially in developing countries. In this regard, he emphasised that this situation is no longer acceptable and empowering those who are lacking today is the key to shared prosperity and sustainable future.

59. Before concluding, the Director-General acknowledged the resources IRENA has received to date which have enabled the effective delivery of the Agency's programmatic agenda and noted that the Agency has utilised 90% of the core budget received for the 2018-2019 biennium with a 99.9% implementation rate. He announced that the \$25 million in voluntary contributions was invested wisely, thanking countries that provided voluntary contributions. He expressed the hope to increase the level of voluntary contributions in the future.

60. Pursuant to the presentations, the President invited Members on the speakers' list to make their statements. The Vice-President, H.E. Mr Bachir Ishmael Ouedraogo, Minister of Energy for Burkina Faso presided over the continuation of statements under this agenda item in the afternoon.

61. Delegations expressed their appreciation to the host country for their continued hospitality and congratulated the Director-General on the appointment of Ms Gauri Singh as Deputy Director-General.

62. Delegations welcomed the progress on the implementation of the Work Programme and Budget 2018-2019 and commended the achievements of the Director-General and IRENA on the work undertaken during the biennium. A delegation emphasised the importance of the Agency's assessment of its biennial programmatic work as instrumental tool to assess the qualitative and quantitative success of efforts deployed by IRENA for the Membership.

63. Members highlighted IRENA's impact as a global voice of renewables, a repository of knowledge and data and as a source of advice and technical assistance in promoting the global renewables-based energy transition. Sharing their national efforts and developments, delegations affirmed their commitment to advancing the energy transition as a strategy to build a sustainable energy future and achieve the objectives of the 2030 Agenda on Sustainable Development and the Paris Agreement, stressing the Agency's role in supporting Members during this process.

64. Delegations also emphasised that the Agency has become the major international cooperation framework for renewable energy and recognised the critical role of international cooperation and strategic results-oriented partnerships in shaping the energy transformation. One delegation welcomed in particular the partnership established between the Agency and the United Nations High Commissioner for Refugees (UNHCR) as instrumental to promote renewable energy solutions for the improvement of the humanitarian situation for refugees and displaced communities.

65. Delegations highlighted the importance of policies in accelerating the energy transition, on the national and subnational level, and noted that the Agency's work on auctions has allowed countries to speed up the deployment of renewable energy while lowering costs and attracting investments from abroad. In this regard, delegations stressed the importance of private sector engagement and partnerships and the need to strengthen enabling policy and de-risking instruments to further deploy renewable energy in all end-uses and economic sectors, to achieve the global energy transformation. Delegations also welcomed IRENA's efforts in supporting countries setting their renewable energy targets, and in the development and implementation of ambitious NDCs. IRENA's work on the socio-economic benefits of renewable energy, including jobs, was welcomed by delegations.

66. Delegations underlined the potential of renewable energy to promote universal access to sustainable, affordable and reliable energy services and to generate economic growth and sustainable development. In this regard, delegations highlighted the importance of regional tailored solutions to accelerate the energy transformation including regional market analyses, technical advisory services, capacity building and technical training and emphasised the Agency's work developed in Asia, Africa, Southeast Europe and Latin America.

67. Delegations further highlighted the contribution of the Abu Dhabi Fund for Development (ADFD) to national projects and energy transition efforts and emphasised the role of the IRENA/ADFD Project Facility in supporting countries meeting renewable energy targets beyond 2030, promoting sustainable development and ensuring socio-economic benefits to the society.

68. Delegations highlighted the value of the *Global Energy Transformation: A Roadmap to 2050 (2019 edition) (GET 2019)* in identifying the trends and projections of the global renewable energy transition as well as in providing guidance to countries and companies on actions that should be developed to achieve the Paris Agreement.

69. Delegations emphasised the importance of innovation in decarbonising the energy sector and achieving the energy transformation; in this regard, delegations appreciated IRENA's Regional Innovation Days as a convening opportunity to engage in the discussion all decision-makers [from public and private sector as well as other actors of the energy transformation] and showcase emerging innovations, inspire and inform the broader and faster uptake of innovative solutions that can help deliver a renewable-powered future.

70. In his concluding remarks, the Director-General welcomed countries' commitment to ambitious renewable energy policy targets and actions, including the promotion of innovation and international co-operation and expressed appreciation for Members' feedback and support to the Agency.

71. The Assembly considered and took note with appreciation of the ‘Annual report of the Director-General on the Implementation of the Work Programme and Budget for 2018-2019’ contained in document A/10/3, and of the ‘Assessment of the Work Programme and Budget for 2018-2019’ contained in document A/10/INF/2.

**Agenda Item 5: Proposed Work Programme and Budget for 2020-2021 (A/10/4; A/10/CPR/1 and A/10/DC/L.1)**

72. In his presentation on the Proposed Work Programme and Budget for 2020-2021, the Director-General highlighted that the Medium-term Strategy 2018-2022, adopted by the Assembly at its eighth session in 2018, provides a clear direction for the Agency to continue playing a leading role in the transformation of the global energy system. In this regard, he emphasised that this mission can be performed by ensuring excellence in providing accurate, timely and trusted data and analyses to inform policy and investment decisions, supporting the creation of frameworks to enable private investment and effectively leverage public funds, and driving action to develop a pipeline of projects that will translate investment into sustainable energy infrastructure.

73. The Director-General stressed that based on the Agency’s analysis, government plans in place call for an investment of at least USD 95 trillion in energy systems of which USD 18 trillion would need to be redirected towards an energy system that prioritises renewables, efficiency, and associated infrastructure. He also emphasised that adding USD 15 trillion to the planned investment would result in a largely climate-proof global energy system by 2050. This would also deliver a broad array of socio-economic benefits, including jobs, improved health and reduced environmental damages, with a saving of USD 3-7 for every dollar of investment coming from reductions in subsidies and externalities.

74. The Director-General called for concerted actions from government and public entities, private sector actors, legislators, citizens and youth to realise this potential. He highlighted that renewable technologies must be deployed faster and at a much larger scale, along with supporting infrastructure and significant improvements in efficiency, and energy systems need to become more flexible and market design should adapt to new realities. He also stressed that rapid progress must be made in end-use sectors, notably transport, heating and cooling, through the adoption of enabling frameworks that attract finance, encourage innovation and drive deployment at scale, while ensuring that the energy transitions are timely and just.

75. The Director-General highlighted that the Proposed Work Programme and Budget for 2020-2021 has been developed based on Member inputs and feedback and to align the Agency’s activities with emerging priorities. It provides a proactive agenda for action on the ground which is reinforced by analytical and empirical excellence, ensuring that the Agency is firmly established as a thought leader on the transformation of the global energy system and a reliable source of information and knowledge for Members and other actors.

76. The Director-General noted that the Agency’s knowledge must be a tool to drive action on the ground through the development of initiatives and action agendas at regional level along several geographical clusters in order to have sustained engagement and provide targeted and predictable support to Members. In this regard, he highlighted that IRENA’s Investment Forums will become the primary platform for the engagement with Members at a (sub-)regional level, where other stakeholders will also have the opportunity to contribute to priority needs. He informed that the first Investment Forums are envisaged to commence after the second quarter of 2020.

77. The Director-General stressed that the Agency will continue to support Members in realising their priorities and connect them with other stakeholders that support their efforts through the

Climate Investment Platform (CIP) that was launched at the UNSG's Climate Action Summit together with the Green Climate Fund, Sustainable Energy for All and the United Nations Development Programme as a tool to gather ideas and projects, identify gaps and catalyse investments. He informed that a dedicated [CIP webpage](#) has been recently launched on the IRENA website and encouraged Members to invite multilateral, bilateral and local financial institutions, other development organisations and other institutions that are prepared to provide financial resources, technical assistance and/or support the realisation of projects, along with private companies and private investors, to become partners of the CIP.

78. The Director-General stressed that IRENA will continue its efforts to amplify its impact through close collaboration and partnerships with international organisations and other entities who can contribute to the Agency's mission with strong commitment to collective action. In this regard, he mentioned the partnership with the United Nations Framework Convention on Climate Change, United Nations Development Programme, International Energy Agency, European Commission, as well as with other regional organisations, financial institutions and development banks. In addition, IRENA has also initiated a Sustainable Energy Jobs Platform in cooperation with several international partners, intended to enhance understanding of the jobs and socio-economic impacts of the energy transition.

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83. Delegations commended the Agency on the Work Programme and Budget for 2020-2021 and its efforts to accelerate the deployment of renewable energy while ensuring its alignment with the Medium-term Strategy for 2018-2022. Delegations affirmed their continued support to the Agency's mission and programmatic work for the 2020-2021 and three delegations announced additional voluntary contributions.

84. Delegations welcomed the Agency's focus on supporting countries to empower action on the ground and expressed appreciation on the role of regional cooperation as an avenue to cost effective and inclusive energy transitions. Some stressed that IRENA, while not becoming an implementing agency, should provide more information on the concrete meaning of actions on the ground and ensure a balanced approach when developing activities at sub- and regional levels. In addition, a delegation requested the Agency to present a clear budget representation of the expenditures allocated to such activities and countries.

85. Delegations emphasised that IRENA's research and analysis, reliable statistics and data collection remain central to the Agency's programmatic activities, and that the knowledge products reflect and support the trustworthiness of advice and guidance of the action on the ground and the global energy transformation. Delegations welcomed the Agency's focus on project facilitation by using the established resources and mechanisms for engagement with Members and emphasised that the Agency should continue to focus on policy support for renewable energy deployment and develop general tools for project facilitation, while at the same time refraining from technical assistance through individual projects.

86. Delegations also reiterated their appreciation to the Agency for continuing supporting countries' energy transition through a combined approach of policy advice, capacity building, technical support as well as with specific initiatives such as the Renewables Readiness Assessments (RRAs) and REmap.

87. Members affirmed their commitment to achieving the objectives of the Paris Agreement and highlighted renewable energy and energy efficiency policies as a key strategy to help meet global climate goals. Delegations further emphasised that upscaling renewable energy is critical for achieving the goals of the UN 2030 Agenda on Sustainable Development, particularly SDG 7 on affordable and clean energy. One delegation noted that IRENA, as the global voice of renewables, has an opportunity to play a leading role in realising these goals and one delegation emphasised the role that IRENA and its Members will have on the climate discourse at COP 26.

88. While citing 2020 as the year of ambition, delegations echoed the need to raise the level of ambition and the alignment of the new NDCs to meet targets in the Paris Agreement and welcomed IRENA's prioritisation of supporting development and implementation of ambitious NDCs with a focus on concrete targets for renewable energy both in high emission countries as well as Africa, the LDCs, and the SIDS.

89. Several delegations emphasised the role that the Climate Investment Platform could have in the near future in becoming an effective platform to enable more financing for renewable projects and support the implementation of NDCs and encouraged the Agency to continue to focus on investment landscape for renewables as it can support countries in the decision-making process.

90. Delegations expressed appreciation on the continuation of the Agency's work on the geopolitics of the energy transformation under the Work Programme and Budget for 2020-2021 and emphasised the need to consider and address the consequences and implication of the energy transformation in terms of availability, management and governance of critical energy minerals as their demand could increase 1,000% in the near future due to the spread diffusion of renewable-related technologies.

91. Delegations agreed that the promotion of renewable energy is indispensable for the realisation of a decarbonised society and proposed that IRENA Members should start discussing the issue of future disposal of renewable energy equipment as the energy transformation evolves to contribute to the realization of recycling in society as well as to the achievement of the SDGs.

92. While welcoming the priority given by the Agency to developing analyses on renewables in end-use sectors, including transport, heating and cooling, and industry as well as in the tourism and hospitality sectors, delegations noted the importance of storage and other supporting technologies in accelerating energy transitions and reiterated their support in encouraging innovative and affordable application of renewable technologies.

93. Delegations commended the Agency's work on LDCs and SIDS, including the SIDS Lighthouses Initiative, and called for strengthened support on these initiatives as enabler of the energy transformation in these countries. Several delegations also noted the increased role of hydropower as the largest source of renewable energy electricity in the world and one delegation proposed to establish a hydropower group by interested countries and stakeholders in IRENA.

94. Delegations expressed the requirement for further support from IRENA on affordability and scalability of renewable energy projects and the need for the sharing of best practices, technical training, upscaling e-technology and storage solutions.

95. Several delegations commended the European Green Deal as a new growth strategy and a guide for more prosperous and competitive economy with an integrated approach consisting of effective policy measures to reach the European Commission's target of becoming climate neutral in 2050.

96. At the end of the session, the Director-General thanked delegations for their comments offering guidance on how the Agency can best meet Members' needs and for their active participation in the consultation process leading to the development of the Proposed Work Programme and Budget for 2020-2021.

**97. The Assembly considered and took note with appreciation of the 'Proposed Work Programme and Budget for 2020-2021' as contained in document A/10/4 and A/10/CRP/1 and adopted the related draft decision (A/10/DC/1).**

### **Agenda Item 6: Ministerial Plenary Session: Renewables Investment in the context of National Energy Planning and Implementation (A/10/BN/2)**

98. The Vice-President of the Assembly, H.E. Ms Fiame Naomi Mata'afa, Deputy Prime Minister of Samoa, presided over the deliberations under this agenda item and invited the Director-General to introduce the topic. The introductory remarks were followed by two panel discussions.

99. The first panel discussion on "National Energy Plans including Nationally Determined Contributions (NDCs)" was moderated by H.E. Ms Fiame Naomi Mata'afa. It included keynote remarks by Ms Armida Salsiah Alisjahbana, Executive Secretary of the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP); Ms Ditte Jørgensen, Director General of Energy at the European Commission; Mr Pablo Vieira, Global Director of the NDC Partnership Support Unit; Mr Karsten Sach, Director-General for International and European Policy at the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety and Mr Mourad Wahba, Acting Associate Administrator at the United Nations Development Programme (UNDP).

100. The second panel discussion on “Investment Platforms and De-risking Investments” was moderated by H.E. Mr Claude Turmes, Minister of Energy of Luxembourg. The panel discussion included keynote remarks by Mr Frehiwot Woldehanna, State Minister for the Energy Sector at the Ethiopian Ministry of Water, Irrigation and Energy and Co-Lead of the Energy Transition Track of the United Nations Climate Action Summit; Mr Ibrahim Thiaw, Executive Secretary of the United Nations Convention to Combat Desertification (UNCCD); Ms Damilola Ogunbiyi, Special Representative of the United Nations Secretary-General and Chief Executive Officer of Sustainable Energy for All (SEforALL) and Co-Chair of United Nations Energy; Mr Harish Hande, Chief Executive Officer of SELCO Foundation; and Ms Antonella Baldino, Director of International Development and Cooperation at Cassa Depositi e Prestiti of Italy.

101. The Director-General emphasised the importance of transforming the energy system to achieve sustainable development and a climate-safe future and stressed the need for long-term planning and immediate action. He underscored the importance of universal access to affordable, reliable and modern energy and the necessity for a simultaneous and significant increase in energy efficiency and the deployment of renewables, as reflected in Sustainable Development Goal 7 (SDG7). Noting that renewable power accounts for more than 30% of the global energy mix today, the Director-General highlighted the contribution of renewables to energy efficiency improvements and stressed that despite the decrease in the number of people that lack access to energy, the world is still not on track to meet SDG7 and ultimately the global climate objectives.

102. The Director-General went on to note that renewables are usually underestimated in NDCs and often do not reflect already existing national energy plans, and added that the next round of NDCs to be submitted at COP26 presents an opportunity for countries to renew their commitments and promote holistic policy making to devise strategies that address socio-economic objectives and enable an inclusive and just transition. Doing so is crucial to ensure coherence among sectors affected by the energy transition, such as water and agri-food value chains, provision of essential public services, health, education, and promotion of proper use of energy.

103. The Director-General further noted IRENA’s collaboration with UNDP in supporting countries to cover the renewables part in the review of their NDCs. This collaboration is facilitated in the context of UNDP’s Climate Promise and is very important in ensuring that NDCs are effectively an energy planning strategy owned by countries. He further emphasised the Climate Investment Platform (CIP) launched together with UNDP and SEforALL in cooperation with the Green Climate Fund (GCF) with a view to establishing a strategic result-oriented partnership that will help declutter and streamline support to countries that face a broad range of real and perceived risk of technology, finance, and policy issues and assist them in scaling up renewable energy investment. He announced that the CIP will work through 14 digital platforms going online at the end of January 2020. As partners of this open-session platform, he urged financial institutions, banks and private companies to be part of this exercise, as the Agency will work with countries to secure investment for projects. The Director-General concluded by emphasising that the changes required for the energy transition in the decade ahead are achievable and planning for an efficient transition is vital.

**a. National Energy Plans including Nationally Determined Contributions (NDCs)**

104. Ms Armida Salsiah Alisjahbana conveyed that countries of the Asia-Pacific are responding with ambitious plans to the varying and diverse challenges across the region and addressing growing energy demand through the vast renewable potential available in the region. The development of renewable energy offers solutions to other major problems that the region is tackling, such as air pollution, energy access, and energy security, she added while noting that leveraging these core benefits will be very important to ensure the region's renewable energy potential is maximised. She remarked that current policy frameworks are insufficient to drive the

energy transition needed to reach SDGs by 2030, explaining that the trajectory of renewable energy and energy efficiency under existing policy frameworks falls short of what is needed. Ms Alisjahbana conveyed that UNESCAP has been supporting several to advance power grid connectivity with more renewable energy in their energy mix, as well as standardisation and policy issues for which UNESCAP is prepared to collaborate further with partners, including IRENA and concerned countries.

105. Ms Ditte Jørgensen explained that the success of the European Union (EU) energy and climate policy is based on a combination of long-term visions, ambitious targets, comprehensive legislation and enabling measures set at EU-regional and national level. She advised that the EU is meeting targets set in 2007, which include 20% reduction in greenhouse gas emissions and a 20% share of renewable energy in the overall mix. This reflects collective progress in terms of integrating renewable energy thanks to long-term planning and investment measures. She referred to the EU's 2030 NDC 40% greenhouse gas targets which are backed with firm targets for 32% of renewable energy and efficiency. She highlighted that to meet this target the EU is setting a comprehensive legal framework to include governance measures that cover all member states and the national energy and climate plans. Ms Jørgensen stressed that with 2030 being viewed by the EU as an intermediate step toward achieving full climate neutrality by 2050, the European Commission's Green Deal sets out the pathway by building in all of the different policy instrument sectors and by building further targets.

106. Mr Pablo Vieira reiterated the Director-General's remarks that an energy transition into renewables, efficient energy use and increased electrification can deliver up to 90% of emissions reduction needed to achieve the goals of the Paris Agreement, and noted that as such energy and the transition to renewables is a fundamental component of NDCs for 132 countries, but untapped potential remains. He provided two reasons why the pace and scale of action are not at the level required; countries are facing challenges to effectively implement their commitments and to align NDCs with the National Energy Roadmaps, plans and strategies and there are still mixed signals coming from countries such as the parallel promotion of renewable energies and fossil fuels. He reminded the Assembly that to tackle such issues the NDC Partnership was launched as a global coalition of countries and institutions to support governments, identify NDC implementation needs and to connect them with support partners. Mr Vieira further highlighted that countries are required to update and increase their ambition of the NDCs this year and every five years thereafter, which presents an opportunity to include sustainable energy targets and link actions to long-term strategies. He mentioned that to support the updates the Partnership launched the Climate Action Enhancement Package (CAEP) to deliver targeted fast-track support. At the same time, he underlined that the impressive commitment of governments on delivery is matched by the commitment of NDC Partnership members, with over 35 partners providing financial and technical assistance to support NDC enhancement efforts, which includes a specialised support from IRENA and UNDP's Climate Promise. He encouraged all Members to actively engage in the updating of their NDCs in 2020.

107. Mr Karsten Sach shared Germany's experience stating that for a successful energy transition a clear enabling environment with clear long- and medium-term targets is needed in parallel to a process that involves stakeholders as well as a comprehensive and coherent set of measures covering all sectors to avoid mixed signals. He emphasised the need for participation from all stakeholders as key to draw intelligent solutions to the system, supported by planning. He outlined Germany's 2030 programme of measures, which offers incentive schemes to all sectors to transform with a legally binding term of annual stock-take of progress. He summarised that holistic and inclusive energy and climate planning with effective implementation schemes are needed, as well as correct signals being sent to the financial and other sectors. He concluded by stating that the markets of the future are green and, therefore, a good business strategy is key to cope with climate change challenges.

108. Mr Mourad Wahba highlighted that the key to a successful energy transition lies beyond submitting NDCs, but in the implementation and visible change on the ground. He advised that the joint strategic acceleration-oriented and forward-looking Memorandum of Understanding (MoU) signed between IRENA and UNDP in 2019, capitalises on IRENA's technical knowledge and its function as the data repository of renewable energy solutions combined with UNDP's development expertise and operational background with proven collaboration in finance, with the objective of jointly supporting countries to fast-track the progress of energy transition and implement concrete steps towards SDGs. Mr Wahba further stressed the importance of UNDP's partnership with IRENA and other partners through the launch of joint initiatives at the Climate Action Summit. In particular, he explained that the Climate Promise initiative was launched with an aim of supporting 100 countries to enhance their climate ambition under the Paris Agreement and through their NDCs by 2020, and to implement them in close coordination with the NDC Partnership, in which both UNDP and IRENA are active members. Additionally, he referred to the Climate Investment Platform as an inclusive partnership, whose operationalisation is to be founded under the strengthening of existing institutional infrastructures as a light mechanism to be aligned with existing mandates. He concluded by stressing that the future depends on partnership within the international community to make IRENA's dream of sustainable energy for all a reality.

#### **b. Investment Platforms and De-risking Investments**

109. Upon introducing the members of the second panel, H.E. Mr Turmes queried on the success of developed financial instruments to-date and the lessons learned from presented challenges.

110. Mr Frehiwot Woldehanna shared national experience on access to finance in relation to energy access and expanded on Ethiopia's involvement as the co-lead of the Energy Transition Track of the UN Climate Action Summit, where along with Denmark, Ethiopia was engaged in the preparation of successful energy access incentives, in cooperation with IRENA and SEforALL. He further referred to the Coalition for Sustainable Energy Access, an initiative spearheaded by Ethiopia and Morocco, which, in line with the SDG7 on energy aims at responding to vital needs of LDCs and high impact developing countries in terms of access to electricity, clean water, clean cooking, heating, cooling, and irrigation. He expanded that through Public Private Partnerships (PPP), the local and international private sectors are encouraged to participate in generation, transmission and distribution of the system for which the de-risking mechanisms are provided by partners such as the World Bank and African Development Bank, where partial and full risk guarantees are available.

111. Mr Ibrahim Thiaw stressed the need to reflect on the difficulties encountered to mobilise financial resources by considering whether national energy plans are integrated into the countries' overall national development plans with regard to the challenges of employment and food security. He highlighted further concerns of counties on how to mitigate the effects of droughts and irregular migration. He pointed out some elements of concern to the UNCCD that include the energy sector as an important contributor to development, the consequences and effects of migration from rural to urban areas, connecting the energy sector to the primary sector to the rural development sector, the provision of energy to agriculture, reduction of food loss, the contribution of the energy sector to the overall development of the rural development plans, as issues that should be explored whilst examining SDG7 in the context of all 16 SDGs. Mr. Thiaw declared that connecting the elements to mobilise all the investment to provide economic justification is the reason why it is important to provide the link between energy and development.

112. Ms Damilola Ogunbiyi stated that access to affordable, sustainable, reliable and modern energy should be provided to all. She elaborated that apart from renewables being critical to

achieve SDG7, the speed and pace of delivery to the most vulnerable is visible in many communities offering solutions like mini grids and solar home systems. She emphasised the importance of understanding that the economics of universal access will create 50 million green jobs. She advised that as we start 2020, global efforts need to transition to implementation driven by accurate data and productive partnerships focused on country level interventions and enabling that the right type of finance goes to the right type of solutions. She reiterated that finance is key to delivering all the above, by that SEforALL has an energising finance report series that attempts to track finance methodologies with statistics on access in comparison to expenditure in Africa accentuating the scale of the problem. She advised that the CIP may be one of the solutions to scale up the issue along with the results-based financing presently being examined as speed is essential to meet 2030 targets. She concluded that to deliver to scale it is necessary to channel resources, build partnerships and work together to make new commitments.

113. Mr Harish Hande clarified that the underlying assumption that a lot of problems of deprived countries are solved is incorrect as a lot of innovations have not happened where capital is needed to make market linkages happen. He stated that private capital being accessible to only a certain sector and the current situation is the capital that exists is from outside the country that is being partly funded by philanthropic capital resulting at times in the death of local entrepreneurs. He highlighted the need to redefine what privatisation means and he recommended that IRENA needs to create centres of innovation in the continent of Africa, Asia and Latin America to permit philanthropic capital to be used for financial, technical and business model innovations. He stressed that the creation of incubation centres is needed to incubate private sectors from rural parts of these countries and create capital that is accessible and localised with cash flow for local transactions and local problems and that the creation of such centres would aid development and poverty eradication and automatically achieve the SDGs. He noted that the platforms allow the localisation of the thought process and gives power to the people.

114. Ms Antonella Baldino highlighted that the financial institution has increased commitment to international markets with a focus on clean energy projects. She noted that the two main challenges of the financial innovation association with the SDGs are timing and scale, as both carry implications with the need for leverage in the private sector to meet the investment gap in terms of resources and delivery expertise, the need to build complementary strategies through the reliable network of financial institutions, donors, companies at national and local level in order to develop a proper pipeline of projects, as well as the need for reliance on partnerships across different types of stakeholders with the objective to strike a new balance between the public and private sector, between donor and market players, between public interests and private capital risk appetite.

115. Ms Baldino explained that a blended finance is the mix of different financial resources to maximise the leveraged effect of limited public funds by crowding in private capital and attracting long-term investors, which is a de-risking approach. She suggested that risk mitigation can be implemented through various types of financial structures from risk sharing to first loss guarantee schemes in order to promote credit enhancement. She noted that the CDP aims to be a forerunner in the use of guarantees to develop renewable energy projects by leveraging on national, international and European resources to structure effective blended finance solutions. She provided an example of blended finance and risk mitigation at the CDP where they are promoting a specific platform focussing on renewable energy development in Sub-Saharan Africa known as the European Guarantee for Renewable Energy (EGRE) programme as the first step, as the co-financer, to using guaranteed partnership in sharing risk amongst different shareholders. Ms Baldino advised that a financing plus model is required to take into account policy and regulatory reforms and permit access to capital markets. She stressed that the CIP provides an opportunity to deploy complementarity in the renewable energy and provides a crucial multilateralism and opportunity to work in partnership.

116. Ms Baldino agreed that the most pressing challenge on global development is to attract significant investment and private sector resources with a lack of financing due to high risks for investors. She indicated that the financial market is prepared to use different financial tools including guarantees, to attract private capital such guarantees are not the sole solution and a more comprehensive approach, integrated strategy and policy and regularity reform is needed to mobilise private capital in the promotion of renewable energy projects for which global initiatives partnerships such as the CIP take into consideration.

117. Ms Ditte Jørgensen advised that the Green Deal is an international agenda and is the beginning of an increased partnership on how to work together towards achieving a reduction in greenhouse gas emissions which includes through financing of programmes. She explained that the EU represents 40% of public climate financing globally with the current financial framework allocated €3.5 billion to sustainable energy while integrating climate change in all programmes and in the financial framework ahead by setting a target of at least 25% of the EU spending to climate change. Ms Jørgensen, referred to the Green Deal as also having an economic growth agenda that requires planning and investor security and defining a taxonomy to eradicate green washing. The objective towards a just transition and the inclusion of all is addressed by the European Union through the establishment of a just transition and funding mechanisms with a purpose to ensure assistance is provided for transition to countries currently dependent on or emerging from the use of coal. At an international level the Green Deal is a way to build partnerships with countries through international partnerships. She noted that the scaling up and finding local solutions and the role of regulators is planned with the scale-up of large projects such as off-shore wind and large solar farm projects, connected to the grid and which will be relevant in the production of green hydrogen for which we need to examine new storage options. Ms Jørgensen highlighted that a regulatory framework is set up that allow local energy communities local production but that a need remains to examine best practices, international partnerships and cooperation on local and large-scale solutions.

118. Mr Mourad Wahba highlighted the Climate Investment Platform (CIP) as an inclusive partnership for which the operationalisation is to be founded under the strengthening of existing institutional infrastructures requiring integrated solutions and look forward to the triage of support with IRENA and other partners to identify methods of support delivery. He took the opportunity to thank Denmark for their support in the CIP and stated that the future depends on partnerships and working together will achieve sustainable energy for all with the international community has an ambitious agenda and that working together to achieve sustainable energy for all.

119. Mr Wahba conveyed that energy issues are global issue. Technical planning alone is insufficient but innovative reliable solutions that can be applied over the next 5 to 10 years bringing a major leapfrog change is needed. International organisations such as IRENA may have to come up with something new as finance may not be available at a given point, but it can be made available through innovative techniques.

120. In the ensuing discussions, delegations provided an outline of their national plans, their participation in global initiatives and the progress of work on regulatory policy frameworks they have put into place to focus on renewable energy development, provide sustainability and good governance, and encourage technology development and innovation. Delegations acknowledged COP26 as an opportunity to increase their NDCs ambitions with a need to establish partnerships with public and private sector, while they further highlighted the challenge of coordinating energy planning with other sectors such as agriculture, tourism and public works.

121. Delegations delivered a summary of their national investment efforts and highlighted the difficulty in attracting investors as one of the challenges encountered and echoed the Director-General on his appeal to multilateral development banks to join the CIP platform.

122. Delegations stressed the need for safe investment environments to attract investors and listed enabling factors such as the development of economies of scale, strong power purchase agreements, the availability of land and transmission lines and availability of social financing and strong mechanism for project implementation and de-risking. Some delegations elaborated on the investment needs in storage technologies, investment in technology development and innovation and infrastructure, the need for flexible power system investments for the substitution of fossil fuels in the next ten years and the need to address solutions on the variability of renewable energy and its penetration into the existing system.

123. Delegations applauded IRENA's continued support in facilitating the sharing of experiences and best practices, and the Agency's commitment to matching renewable energy project developers with potential investors in order to facilitate projects on the ground.

124. Mr. Viera agreed that 2020 is a critical year and that there is a need for all governments and societies approaches to climate action and to combine the climate and development agendas to be effective, with particular concern for developing countries where the climate emergency is the development emergency. He emphasised the importance of IRENA as a leader in the process to have ministers of energy, financial institutions and the private sector engaging and accelerating decarbonisation for which the NDC Partnership is prepared to support.

125. Ms Alisjahbana stipulated the that urgency of 2020 and highlighted information and accuracy of data and financing are two key elements in unison towards achieve universal access and raise the importance of working at the localised level with finance grounded to the places that need it and all the institutional targets will have to collate information for example how many people are connected and how many have clean cooking.

126. H.E. Mr Turmes reiterated that it is the urgency of 2030 brings little comfort to desperate individuals in dire presently and that the matter of urgency needs to be faced and the people empowered to create jobs themselves through the decentralisation of technology, finance and the thought process.

127. Mr Thiaw reflected on the local benefits in a globalised work making people in all countries a partner in the solution. He mentioned that renewable as a low-cost option to ensure access, but subsidies prevent renewables entering the market therefore pricing is to be amended to let the markets work for the people towards a climate future. He suggested linking the agenda on co-benefits of health, jobs, ownership and education with policy objectives.

128. Mr Sach concluded by saying that the climate emergency is a survival emergency with a call for multilateral solutions on an improved regulatory environment and the encouragement of private sector investment.

129. The Chair expressed his appreciation to the panel members and the intervening delegations.

130. H.E. Mr Turmes stated the present ambition is needed to win the race against climate change. He mentioned that planning on all aspects (housing, industry, innovation, transportation, finance) is necessary and noted that more efforts on finance is needed through contact with financial institutions and donors to dedicate money towards access to renewable energy for all and poverty eradication. He advised that subsidies on coal and gas must be eradicated and money-flows must

concentrate on renewables. H.E. Mr Turmes highlighted that transparency in banking and all funds requires a systematic, strategic approach to finance where every bank confronts their responsibilities, and reminded central banks that on this one planet we all need to solve the climate change agenda.

131. The Chair reiterated that identifying, developing and implementing innovative climate funding instruments that use funds more efficiently remains a priority with the CIP having strong potential to unlock the needed finance for clean energy transition and easier access to suitable de-risking instruments. He encouraged continuing efforts of IRENA in the coming years through the implementation of investment forums, towards achieving a larger impact on the ground.

**132. The Assembly considered and took note, with appreciation, of the presentations and discussions.**

### **Agenda Item 7: Ministerial Plenary Session: Hydropower (A/10/BN/3)**

133. The Vice-President of the Assembly, Mr Daniel Alejandro Alvarez Campos, Executive Director and President of the Hydroelectric Commission of the Lempa River, El Salvador, presided over the deliberations under this agenda item and invited the Director-General and Mr Benoît Revaz, State Secretary of the Swiss Federal Office of Energy, to introduce the topic. The introductory remarks were followed by a panel discussion.

134. The panel discussion was moderated by Mr Eddie Rich, Chief Executive of the International Hydropower Association (IHA). It included a keynote presentation by Mr Pravin Karki, Global Lead on Hydropower at the World Bank Group, followed by a discussion with Mr Tareq Emtairah, Director, Department of Energy at the United Nations Industrial Development Organization (UNIDO) and Mr Frédéric Hofmann, Director of Development at EDF Hydro, France.

135. Introducing the topic, the Director-General recognised hydropower as the largest source of renewable capacity, supplying 16% of the world's electricity and directly employing over two million people globally. In noting the social and environmental constraints that are changing the role of hydropower in system expansion, especially for storage, the Director-General highlighted the emerging opportunity to modernise existing hydropower capacity by introducing new equipment and digital technologies to enhance operation, maintenance and management of facilities. The Director-General underlined the short-term flexibility of hydropower plants which can help accommodate intermittent sources of renewable electricity such as solar and wind, enabling 100% renewable power systems, and added that this flexibility can be further strengthened through the increased digitalisation of hydropower plants. He further highlighted that the resilience of hydropower plants to climatic change, which provides other services beyond power generation, such as flood and drought management and water supply, need to be considered when designing market regulations. In concluding his introductory remarks, the Director-General expressed his optimism that this exchange of experiences between governments and industry experts will help identify pathways to address the most pressing issues concerning hydropower and remarked that detailed planning and dynamic collaboration amongst stakeholders will be paramount to ensure appropriate investment and to secure financing.

136. Mr Benoît Revaz presented Switzerland's proposal for the establishment of a hydropower group in IRENA. He also announced the joint organisation of a hydropower conference by Switzerland and IRENA in the course of 2020. The conference will address issues pertaining to countries with large untapped hydropower potential, including Least Developed Countries (LDCs) and Small Island Developing States (SIDS). Mr Revaz further referred to hydropower as a source

of flexibility for variable renewable integration to demonstrate how important is regional electricity market integration and adequate regulation. In concluding his remarks, he highlighted that integration helps harvest system efficiency and lowers the overall cost of the energy transition, while ensuring positive impact on both, grid stability and the reduction of externalities potentially generated by variable renewable sources.

137. Mr Pravin Karki reiterated that achieving affordable, reliable, sustainable and modern energy for all will require a significant upscale of renewables, and stated that besides adding new capacity, attention needs to be given to grid integration issues and power systems flexibility, where storage has an important role to play. In this context, hydropower provides a range of services including flexibility, efficiency and grid-scale storage of electricity, he added, and highlighted that hydropower provides a low-cost source of reliable electricity supply and various water management services such as drinking water, irrigation, navigation. Mr Karki went on to emphasise the importance of preserving already installed hydropower capacity, and how vital the introduction of sediment management policies is for continued service from existing dams and hydropower assets. He highlighted that risk management through careful preparation is the key to sustainable hydropower projects for both, the public and private sectors and quoted a number of risk management tools available to support countries with hydropower projects under implementation or planning and preparation. In explaining how the World Bank and other International Financial Institutions (IFIs) can help safeguard that the public does not bear costs associated to the impact of climate change on hydropower, Mr Karki stated that government policy needs to be strengthened whilst ensuring projects are well-prepared and tested for sustainability and climate resilience, with proper climate risk assessments in place. In conclusion, Mr Karki stressed the significance of education and training on the complexities of hydropower.

138. In moderating the ensuing panel discussion, Mr Eddie Rich cited IRENA's Renewable Energy Roadmap (REmap) case for 2050, highlighting that it is possible to meet increasing hydropower demand for the next 30 years, if immediate planning for the modernisation of facilities is put into place. That would, in turn, support hydro-dependent variable sectors, he added, and called on governments to recognise the multiple benefits of hydropower in political frameworks and in the context of market pricing, as hydropower provides flexible balancing, storage, and other water, climate and energy services, and it has a low carbon emission over the whole lifecycle.

139. Mr Tareq Emtairah drew the linkages of UNIDO's work to the hydropower sector, in driving industrial development for developing countries through a technical assistance facility for harnessing energy access for productive use and supporting the establishment of an international competency center for small hydropower to facilitate south-south cooperation and capacity building. Mr Emtairah noted the minimum growth in installed small-hydro capacity, attributing it to three main country- and context-specific barriers, including the lack of policy focus on small hydropower with adequate incentive regimes to attract investment; a skill and capacity gap in some countries for articulating potential into opportunities either from a national government or from a private sector point of view; and the difficulty in attracting private sector developers and investors. He further highlighted that small hydropower has the potential to play a very complementary role in governments' clean energy transition, with particular benefits to addressing energy access challenges in rural communities. Lastly, Mr Emtairah advised that attention needs to be drawn to the ecological impact of hydropower, by increasingly introducing better standards, and an agreement on a global framework, as the negative public perception of small hydropower needs to be corrected.

140. Mr Frédéric Hofmann echoed the benefits of hydropower development, including the ability to provide low-carbon electricity, the integration with variable renewable energy and key role in a number of parallel water services, and highlighted the fact that hydropower is key in efforts to

adapt to climate change. He offered insights on the issue of pumped hydropower as a storage model and explained that its profitability is impacted by the spread of price between peak and off-peak times, the low remuneration for ancillary services, the double charging for access to the grid as a consumer and a producer, and taxation. Mr Hofmann advised that to make pumped storage models more attractive high price spreads should be considered in the market to allow for arbitrage, while there should also be additional remuneration for ancillary services and duplication of charges and high taxes should be avoided. By presenting examples from EDF experience, Mr Hofmann concluded that positive innovation could increase the value of hydropower, while addressing climate mitigation.

141. Mr Paolo Frankl, Head of the Renewable Energy Division at the International Energy Agency (IEA), acknowledged the session on hydropower as both important and very timely as hydropower has a key role to play in the energy transition. He noted that despite hydro being amongst the cheapest sources of electricity, global capacity additions are slowing down, and financing remains complex. Mr. Frankl stated that there is a need for accessible and appropriate policies and dedicated resources to extend the life of existing assets and stressed that with better market design and business models, the flexibility and storage of hydropower will significantly contribute to increasing electricity security. In concluding his intervention, Mr Frankl reiterated the IEA's readiness to work closely with IRENA, the IHA and all countries concerned to concretely address these barriers and underline the role of hydropower in the energy transition.

142. In the discussions that followed, delegations unanimously highlighted the potential of hydropower in delivering a number of benefits for the energy transition globally, including the production of reliable electricity and storage, grid flexibility, the mitigation of climate change effects as well as the introduction of a number of water services with broader positive impact on the community. Several delegations advocated for the further development of hydropower through the introduction of legal frameworks, technological support, innovation and more robust business models.

143. One delegation recommended a focus of efforts by IRENA on further investigating potential impacts of climate change on hydropower to allow Members to better forecast performance, while other delegations proposed that the Agency focuses on policy and market design to cement the exchange of experience and cooperation between countries.

144. Delegations further highlighted the need for more investment and technology support from IRENA, with one delegation suggesting that support should be extended to countries through technical capacity building for national technical staff skills and capabilities development.

145. Some delegations welcomed the proposal to create a hydropower group, and further acknowledged the importance of focusing more attention to hydropower development and to addressing current challenges, paving the path for the continued deployment of hydropower. In that respect, one delegation emphasized the importance of maintain the informal nature of this hydropower group and highlighted that the creation of such a group needs to preserve IRENA's role as an umbrella organisation to promote the increased adoption and sustainable use of all forms of renewable energy, including embracing a vision with regard to hydropower and its interlinkages with food and water. Another delegation noted that modernising existing assets rather than introducing new capacity is pivotal, as environmental and social impact needs to be contained.

146. **The Assembly took note, with appreciation, of the presentations and discussions.**

### **Agenda Item 8: Report from the Ministerial Roundtable on Decarbonisation – Green Hydrogen**

147. Before taking up agenda item 8 the President invited several representatives from international and regional organisations to each sign a Memorandum of Understanding with IRENA. The President called the following representatives to join the podium and sign the Memorandum of Understanding;

- Ms Armida Salsiah Alisjahbana, Executive Secretary, United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP);
- Ms Nandita Parshad, Managing Director, Sustainable Infrastructure Group, European Bank for Reconstruction and Development (EBRD);
- Ms Antonella Baldino, Chief International Development Finance Officer, Cassa Depositi e Prestiti (CDP);
- Mr Sun Xiansheng, Secretary-General, International Energy Forum (IEF), and;
- Mr Mackay A.E. Okure, Executive Director, East African Centre of Excellence for Renewable Energy and Efficiency (EACREEE)

148. Mr Anand Kumar, Secretary of the Ministry of New and Renewable Energy, India, reported on the discussions in the Ministerial Roundtable on Decarbonisation – Green Hydrogen, which gathered Ministers as well as senior representatives from the private sector, financing institutions and development organisations.

149. Mr Kumar reported that a consensus is building around green hydrogen as the potential missing link for the energy transition, as it allows renewable electricity to be converted into carbon-neutral fuels to be used to decarbonise sectors that are hard to directly electrify. He emphasised that hydrogen is beginning to be incorporated in many country plans, for example, it is considered a key energy carrier in the European Green Deal. He further continued by acknowledging examples provided by countries during the meeting, which confirmed that hydrogen has various possible applications depending on the country specificities; some countries may look at hydrogen mainly as a source of power system flexibility, and other countries may consider it as a way to increase energy independence. He underlined that in most cases, hydrogen from renewable power can provide multiple value propositions.

150. Mr Kumar stated that only one year ago such attention to the topic and such rapid development of projects was difficult to imagine. At the same time, he stressed the need to pursue with the deployment of renewables, which entail a continuous work with grid expansion and decarbonisation of the power sector and electrification of end use sectors, as hydrogen can complement and strengthen these efforts. He further reported that Members stressed the importance of continued work on standards and establish international trade of CO<sub>2</sub>-free hydrogen that can be certified and verified in its production route, to ensure clear signals are given to investors and enable rapid scale up. In this context, he noted that in many sectors, a large-scale availability at low cost for hydrogen is required in order to perceive a significant uptake. He stated that participants emphasised the need for policy support at the beginning, to help create the early applications that can lead to the scale up necessary to bring prices down and illustrated with the example of electrolyzers costs reduction which is key to achieve competitive green hydrogen.

151. Mr Kumar pointed out that that green hydrogen might become competitive sooner than many people would expect. He noted that one sign of this acceleration is the investment environment with large institutional investors, which up until a few years ago, used to be sceptical about investing in renewables, now requesting oil and gas companies to show a significant renewable energy portfolio as necessary condition not to disinvest. He mentioned that participants

highlighted the opportunity to establish bilateral trade relationships between countries with abundant, low-cost renewable resources and countries that are going to need green hydrogen beyond what they can domestically produce, or with limited low-cost renewable energy resources. Participants also underlined how green hydrogen production and hydrogen storage can increase the flexibility of the power system at all timescales, from contributing to frequency control to providing seasonal storage for wind and solar.

152. Finally, Mr Kumar reported that Members called upon IRENA, as the lead intergovernmental organisation mandated to promote renewable energy and support countries in their energy transformation, to continue its work on hydrogen from renewable power and, building on the productive discussions in the Ministerial Roundtable, to use its global network to facilitate partnerships and knowledge exchange between countries and with the private sector.

153. **The Assembly considered and took note of the presentation.**

### **Agenda Item 9: Facilitating finance for renewable energy in developing countries through the IRENA/ADFD Facility (A/10/5)**

154. Presiding at the session, H.E. Mr Bachir Ishmael Ouedraogo, Minister of Energy of Burkina Faso introduced the agenda item and referred Members to the document entitled *IRENA/ADFD Project Facility: Report of the Chair of the Advisory Committee*. He welcomed H.E. Mr Mohammed Saif Al Suwaidi, Director-General of the Abu Dhabi Fund for Development and Mr Mike Allen of New Zealand, Chair of the Advisory Committee of the IRENA/ADFD Project Facility.

155. The Director-General explained that the partnership between the Abu Dhabi Development Fund and IRENA commenced with a commitment of concessional funding of \$US 350 million throughout a seven-year cycle for projects in developing countries. He noted that the IRENA/ADFD Facility continued to develop projects now being fully implemented since the initiation of the first cycle in January 2014. He described his visit to the solar PV project in Cuba, where the investment in a high wind resistant solar park resulted in the provision of electricity to 7,000 families at a cost of €US 5 million.

156. The Director-General underlined the need for IRENA to become more action oriented and that he intends to build on the partnership with the ADFD in scaling up efforts and additional commitments from donors to accelerate the uptake of renewable energy and achieve the SDGs.

157. Mr Mike Allen reported on the selection process in the seventh cycle and on the progress of selected projects as conveyed in the Chair's report. He summarised that 95 renewable energy project submissions from 48 developing countries were evaluated by a panel of 23 independent experts. He advised that several members of the Committee expressed urgency to build on the success and experience of the Facility by engaging with the ADFD and other funds to secure new commitments and meet the demand for finance on renewable energy projects in developing countries. In an effort to reinforce IRENA's ability to influence the delivery of a central project financing system, Mr Allen announced that he is available to continue working with Committee members and representatives to explore techniques on the evolution of the Facility beyond the seventh cycle, which may involve additional partners in collaboration with other initiatives.

158. A project impact video was played showcasing the advances made in the delivery of projects in 2019 including in Cuba (first project to be commissioned in May 2019 in the IRENA/ADFD Facility pipeline), Maldives (waste to energy), Saint Vincent and the Grenadines (geothermal), Seychelles (solar PV integrated into an existing wind farm) and Sierra Leone (solar PV). The video highlighted how the IRENA/ADFD Facility is playing an instrumental role in renewable energy sector development.

159. H.E. Mr Mohammed Saif Al Suwaidi announced the results of the seventh funding cycle of the IRENA/ADFD Facility, explaining that that the Facility has become instrumental in the deployment of renewable energy. He announced that there were eight projects at a total cost of US\$104.54 million, as follows:

<b>Country</b>	<b>Project</b>	<b>ADFD contribution US\$ million</b>
Antigua and Barbuda	Hybrid (Wind and Solar PV) serving water and health sectors	15
Burkina Faso	Community Solar PV	5.54
Chad	Solar PV	15
Cuba	Solar PV with batteries	20
Maldives	Waste to energy	14
Nepal	Promotion of biogas	10
Saint Lucia	Hybrid solar and battery storage	15
Saint Vincent and Grenadines	Solar PV transition	10

160. H.E Mr Al Suwaidi congratulated the selected countries and extended his appreciation to IRENA, the Advisory Committee and the Panel of Experts in their selection of projects that contribute to the objectives of the IRENA/ADFD partnership.

161. Delegates from the selected countries conveyed their appreciation to the ADFD and IRENA for the approval of their proposed projects and delivered a brief explanation of their projects to the Assembly.

162. H.E. Mr Mahamat Hamid Koua, Minister of Petroleum, Mines and Energy of Chad pointed out that the project reduces greenhouse gas emissions significantly benefitting the environment and creates a significant amount of jobs, including of women with commensurate social and economic benefits. The project enables the storage of medicine and helps the running of hospitals.

163. H.E Mr Hussain Rasheed Hassan, Minister of Environment of the Maldives described that waste management remains one of the key challenges in their coral atoll nation with current waste management practices being basic and unsustainable. He said this project will provide a sustainable waste management solution whilst simultaneously providing drinking water and alternative energy from the waste heat. The selection of the project has aided the Maldives to achieve the UN SDGs and improve lives and livelihoods of the island communities.

164. H.E Mr Barshaman Pun, Minister for Energy, Water Resources and Irrigation of Nepal representative described that the funding for the project will contribute to the scale-up of the large biogas sector to new heights in Nepal and reduce CO2 emissions considerably. Biogas has multiple benefits supporting small business energy needs and is a clean cooking solution in remote areas, improving the health of women and girls.

165. H.E Mr Luke Browne, Minister of Health, Wellness and the Environment of Saint Vincent and the Grenadines described the importance of the solar PV project for sustainable development and the transformation of their energy system as they are heavily dependent on diesel. He explained that Saint Vincent and the Grenadines has set the ambitious goal for 2022 of generating 80% of electricity from renewable indigenous sources.

166. H.E. Mr Conrod Hunte, Ambassador and Permanent Representative of Antigua and Barbuda to IRENA, explained their need for a resilient energy system in order to recover from hurricane disasters and the government's NDC target of full decarbonisation of the electricity sector by 2028.

He explained the project whilst contributing to the NDC target and SDGs will build resilience to hurricanes with a target of renewable energy backup systems of 100% including wind, solar, batteries and a hybrid system for over 30% of critical facilities such as public health, schools, hurricane shelters, ports and airports.

167. H.E. Mr Roberto Blanco, Ambassador of Cuba to the UAE explained that the solar PV project with a battery system will be launched in the youth island Isla de La Juventud in the southwest of Cuba reducing fossil fuel use significantly and curbing CO2 emissions. The project will have positive social consequences with a transfer of know-how on solar PV installations to the local population and allow the increase in the share of renewables in their energy mix. He reiterated Cuba's commitment to actively change their energy mix and apply integrated solutions that include environmental, energy, economic and cultural elements.

168. Mr Ivor Daniel, Permanent Secretary, Department of Infrastructure, Ports and Energy of Saint Lucia explained that the solar PV battery storage project is one of several transformative interventions that the island has envisaged is necessary to achieve energy independence. He noted that the funding granted to drive this project to fruition will prove beneficial to the island's entire population, help to achieve climate goals, increase renewables within their energy matrix, improve the trade balance, promote economic competitiveness, increase job creation, and will be a forward step towards a sustainable future for the country.

169. The Vice-President, in his capacity as the representative of Burkina Faso explained that the solar PV project will enable over 40,000 people in rural areas to have access to clean, productive energy through multifunctional platforms and will cater to the needs of over 1,000 small business and 4,000 households improving life, especially for women and creating jobs.

170. At the invitation of the Vice-President, the representatives from Niger, Togo and Liberia signed their respective loan agreements with the ADFD on the podium.

**171. The Assembly took note of the 'IRENA/ADFD Project Facility – Report of the Chair of the Advisory Committee'. The Assembly agreed to extend the mandate of the current members of the Advisory Committee and Panel of Experts until the twentieth meeting of the Council.**

### **Agenda Item 10: Report of the Chair of the Council**

172. The President of the Assembly invited the Chair of the Council to present his report under this agenda item.

173. Luxembourg, in its capacity as Chair of the seventeenth and eighteenth Council meetings, represented by Mr Guy Lentz, Coordinator for the European Union and International Energy Affairs, reported on the activities of the Council during 2019 and referred delegations to the reports of the meetings, contained in documents C/17/SR/1 and C/18/SR/1.

174. Mr Lentz highlighted the role of the Council as a platform to shape the Agency work and reflect needs, priorities and targets in support of Assembly in the facilitating consultation and cooperation among Members. He noted that the meetings of the Council in 2019 saw a high level of participation, with the seventeenth meeting attracting delegates representing 101 countries. He informed the Assembly that, during 2019, the programmatic discussions included innovations for renewable powered future, global energy transformation – a roadmap to 2050, socioeconomic trends of the energy transformation, decentralised renewables for energy access and sustainable development, IRENA areas of engagement in support renewable energy deployment, renewables and NDC implementation partnerships, and renewables and the climate investment platform.

175. He highlighted the Council's discussions on the implementation of the work programme and budget for 2018-2019 and 2020-21, which included trends and developments influencing the work of the Agency, the comparative advantages and directions for an effective and efficient Agency in the evolving global energy landscape and he highlighted that the Council considered a range of administrative and institutional matters for the Assembly's consideration.

176. Mr Lentz closed by thanking Antigua and Barbuda and Egypt for their roles as Vice-Chair and Rapporteur respectively, as well as all Council members for contributing to the successful outcome of the Council meetings. He expressed his appreciation to the Chairs of the Administration and Finance Committee and the Programme and Strategy Committee for their role in supporting Member consultations in preparation for the Council. He further expressed his gratitude to the Director-General and the Secretariat.

**177. The Assembly considered and took note of the report of the Chair of the Council.**

### **Agenda Item 11: Administrative and institutional matters**

#### **a. Report of the Credentials Committee (A/10/6)**

178. The President of the Assembly invited the Chair of the Credentials Committee, the Dominican Republic, represented by Mr Amer El Kadi, to introduce the 'Report of the Credentials Committee' (A/10/6). Based on its examination of credentials received, the Committee determined that 115 Members had submitted credentials in the form required by Rule 24 of the Rules of Procedure of the Assembly or were represented by the competent authority. The Committee recommended that these Members be entitled to participate in the tenth session of the Assembly.

179. The Committee also noted that five Members in attendance had not submitted credentials in the proper form and recommended that the representatives of these Members be permitted to participate provisionally in the tenth session of the Assembly on the understanding that their credentials in the proper form will be submitted to the IRENA Secretariat as soon as possible.

180. The Committee further noted that fourteen Members in attendance had not submitted any credentials and recommended that the representatives of these Members be permitted to participate in the tenth session of the Assembly under the condition that their credentials will be submitted to the IRENA Secretariat as soon as possible.

181. The Committee reiterated its recommendation to the Assembly to call upon all IRENA Members to submit to the Secretariat the credentials of their representatives, if possible, not less than seven days in advance of the relevant session of the Assembly, as provided in Rule 24 of the Rules of Procedure of the Assembly, but no later than the opening of the session.

182. The Committee reiterated its recommendation to the Assembly to request the Secretariat to issue to all IRENA Members, at least three months before each session of the Assembly and as may be needed thereafter, a reminder about the requirement to submit the credentials of their representatives in accordance to Rule 24 of the Rules of Procedure of the Assembly, and no later than the opening of the session.

183. The Committee further recommended that the Assembly request the twentieth session of the Council to provide recommendations for the Assembly's approval and adoption on the interpretation of the "competent authority of the Member" responsible for the issuance of credentials in compliance with Rule 24 of the Rules of Procedure of the Assembly.

184. The Chair of the Committee expressed his appreciation to committee members and the legal department of the Secretariat.

**185. The Assembly considered and approved the ‘Report of the Credentials Committee’ (A/10/6).**

**b. Staff Tenure Policy**

186. The President invited the Chair of the Council to introduce the agenda item.

187. Mr Lentz reported that the seventeenth session of Council considered the Report of the Director-General on Human Resources Management and Trends (C/17/4) and agreed to take note of the report. He reported that the eighteenth session of the Council considered the Report of the Director-General on IRENA staff Tenure Policy and Human Resources Trends (C/18/5) and the noted comparative disadvantage in recruitment and the retention of staff.

188. The Council recommended that the Assembly request that the current regime on tenure remains in place and that the Secretariat continues its efforts on the major challenges, as reported.

189. The Council recommended that the Assembly request a detailed report for submission to the nineteenth session of the Council on the implications of the proposals to exclude general services staff from the present tenure policy, to include the number of staffs affected, their roles and the costs associated with the exclusion.

190. The Council recommended that the Assembly request a further review and consideration on the option of rehiring ex-IRENA staff.

**191. The Assembly considered and approved the report by the Council and agreed with the recommendations made by the Council.**

**c. Audited Financial Statements for 2018 (A/10/7) and Report of the Director-General on the Status of Implementation of the External Audit Recommendations (A/10/8)**

192. Mr Bruce Neese, Director of IRENA’s Administration and Management Services introduced the ‘Audited Financial Statements of IRENA for 2018’ (A/10/8), as well as the ‘Report of the Director-General on the Status of the Implementation of the External Audit Recommendations’ (A/10/8).

193. Mr Neese informed the Assembly that as there were no recommendations made in 2018, he informed the Assembly of the progress made on the one outstanding recommendation which was on the finalisation of the occupancy agreement associated with the IRENA headquarters in Abu Dhabi.

**194. The Assembly considered and took note with appreciation of the ‘Audited Financial Statements of IRENA for 2018’ (A/10/7) and the ‘Report of the Director-General on the Status of the Implementation of the External Audit Recommendations’ (A/10/8).**

**d. Report of the Director-General on the Status of Collection of Assessed Contributions and Advances to the Working Capital Fund (A/10/INF/3)**

195. Mr Bruce Neese, Director of IRENA's Administration and Management Services introduced the 'Report of the Director-General on the Status of Collection of Assessed Contributions and Advances to the Working Capital Fund' (A/10/INF/3).

196. Mr Neese provided the status of collection of Members' assessed contributions and advances to the Working Capital Fund as of 3 December 2019. He further informed that the Report, transmitted to Members, provides a full status of contributions with Annex I: Status of contributions for Countries who were Members as of 3 December 2019; Annex II: Status of Contributions of new Members during 2019 and Annex III: Status of Members whose arrears reached or exceeded the amount of its contributions for the two preceding years.

**197. The Assembly considered and took note of the 'Report of the Director-General on the Status of Collection of Assessed Contributions and Advances to the Working Capital Fund (A/10/INF/3).**

**e. Staff Provident Fund (A/10/9)**

198. The Chair of the Staff Provident Fund Management Board, Mr Bruce Neese, introduced the item and referred delegations to the '2018 Annual Report of the Staff Provident Fund Management Board on Operations of the Staff Provident Fund of IRENA' (A/10/9), including the 'Audited Financial Statements' of the Staff Provident Fund for 2018.

199. He reported that as of 31 December 2018, there were 138 participants in the provident fund valued at US\$13.1 million.

**200. The Assembly considered and took note of the '2018 Annual Report of the Provident Fund Management Board on Operations of the Staff Provident Fund of IRENA' as contained in A/10/9.**

**f. Report of the Ethics Officer (A/10/10)**

201. Ms Jelena Barnes, Ethics Officer of IRENA, presented the 'Report of the Ethics Officer on the Implementation of the Policy on Ethics and Conflict of Interest', contained in document A/10/10 and reported on the policy on ethics and conflict of interest on disclosure of interest procedure for the period 1 October 2018 to 30 September 2019.

202. She highlighted that training to promote and strengthen the ethical culture in the Agency continues to be a priority and is included in the Agency's training plan for supervisors and staff, with 91% of active staff having already completed the online training course and the inclusion of training as part of the induction for newly appointed staff.

**203. The Assembly considered and took note of the 'Report of the Ethics Officer on the Implementation of the Policy on Ethics and Conflict of Interest' (A/10/10).**

**Agenda Item 12: Arrangements for the eleventh session of the Assembly**

204. The President noted that Spain had expressed its willingness to serve as the President of the eleventh session of the Assembly, and Albania, Costa Rica, Ghana and India as Vice-Presidents.

205. The President proposed to designate Spain as President of the eleventh session of the Assembly, and Albania, Costa Rica, Ghana and India as Vice-Presidents.

**206. The Assembly designated by acclamation Spain as President of its eleventh session of the Assembly, and Albania, Costa Rica, Ghana and India as Vice-Presidents.**

207. The President proposed 16 and 17 January 2021 as dates for the eleventh session of the Assembly to allow for synergies with the World Future Energy Summit, starting on 18 January 2020.

**208. The Assembly decided to hold its eleventh session on 16 and 17 January 2021 in Abu Dhabi.**

### **Agenda Item 13: Any other business**

209. The UAE, in partnership with IRENA invited the permanent representatives to a quarterly roundtable network discussion and reminded delegates of the opening ceremony for the Abu Dhabi Sustainability Week and the awards ceremony for the Zayed Sustainability Prize.

**210. The Assembly took note of the invitations.**

### **Agenda Item 14: Assembly conclusions and closing of the meeting**

211. The President expressed his gratitude to the Vice-Presidents and the Secretariat for their contribution to a successful Assembly and the UAE as host country. He invited the Director-General to share his closing remarks.

212. The Director-General thanked the President, Vice-Presidents, Rapporteur, Chair of the Credential Committee, and delegations for the fruitful discussions and for contributing to the successful outcome of the Assembly. He thanked the Chair and Vice-Chair of the 17<sup>th</sup> and 18<sup>th</sup> Council and expressed his appreciation to the interpreters and the Deputy Director-General, students and service staff who contributed to the success of the Assembly.

213. The Director-General highlighted the adoption of the programme of work and budget for 2020-2021 as the foundation and framework for operations for the biennium. He thanked Member States for their contribution and noted the recommendations made during the Assembly that call on IRENA to work closely and continuously with its members and stakeholders on the issues such as energy transition in SIDS, hydropower, hydrogen, NDC review, scaling up investment project facilitation, Geopolitics of Energy Transformation, cities, grid integration, engagement of legislators, youth empowerment and Public-Private Dialogue. The Director-General closed by expressing his belief that that the foundation is now built on which to realise a decade of action on renewable energy.

214. The President closed by thanking the Director-General and delegations for their effective participation during the Assembly.

**215. The President declared the tenth session of the Assembly closed.**

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Tenth session of the Assembly  
Abu Dhabi, 11–12 January 2020

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## Agenda

### Plenary

1. **Opening of the meeting**
2. **Organisation of work**
  - a. Election of officials
  - b. Adoption of the agenda
  - c. Appointment of the Credentials Committee
  - d. Participation of Observers
3. **Host country and other opening remarks**
4. **Annual Report of the Director-General on the Implementation of the Work Programme and Budget for 2018-2019**
5. **Proposed Work Programme and Budget for 2020-2021**
6. **Ministerial Plenary Session: Renewables Investment in the context of National Energy Planning and Implementation**
  - Energy Plans, including Nationally Determined Contributions
  - Investment Platforms
  - De-risking Investments
7. **Ministerial Plenary Session: Hydropower**
8. **Report from the Ministerial Roundtable on Decarbonisation – Green Hydrogen**
9. **Facilitating finance for renewable energy in developing countries through the IRENA/ADFD Facility**
10. **Report of the Chair of the Council**

**11. Administrative and Institutional matters**

- a. Report of the Credentials Committee
- b. Staff Tenure Policy
- c. Audited Financial Statements of IRENA for 2018 and Status of Implementation of the External Audit Recommendations
- d. Report of the Director-General on the Status of Collection of Assessed Contributions and Advances to the Working Capital Fund
- e. Staff Provident Fund
- f. Report of the Ethics Officer

**12. Arrangements for the eleventh session of the Assembly**

**13. Any other business**

**14. Closing of the meeting**

Tenth session of the Assembly  
 Abu Dhabi, 11-12 January 2020

## List of Observers at the tenth session of the IRENA Assembly

### IRENA Signatories / States in Accession

1. Austria
2. Brazil
3. Liberia
4. Malawi

### UN Member States: Non-Signatories / Non States-in-Accession

1. San Marino

### Others

1. Abu Dhabi Environment Agency (EAD)
2. ACCIONA
3. ACWA Power
4. Advanced Biofuels Coalition (LSB)
5. Africa Energy Commission (AFREC)
6. Africa Renewable Energy Initiative (AREI)
7. African Biofuel & Renewable Energy Company (SABER-ABREC)
8. African Development Bank (ADB)
9. African Institute for Economic Development and Planning
10. African Union
11. Alliance for Rural Electrification (ARE)
12. Africa Middle East Asia Power (AMEA Power)
13. Arctic Circle
14. Asian Infrastructure Investment Bank (AIIB)
15. Association Congolaise pour le Développement Agricole (ACDA)
16. B.Grimm Power Public Company Limited
17. Boao Forum for Asia (BFA)
18. Boston Consulting Group (BCG)
19. Carbon Disclosure Project (CDP)
20. Cassa depositi e prestiti S.p.A (CDP)

21. China National Nuclear Corporation (CNNC)
22. China University of Mining and Technology, Beijing
23. China5e
24. China Energy Research Society (CERS)
25. China International Capital Corporation (CICC)
26. Clean Cooking Alliance
27. Clean Energy Business Council MENA
28. Clean Energy Ministerial (CEM)
29. Climate Action Network International (CAN)
30. Climate Institute
31. Climate Parliament
32. Council on Energy, Environment and Water (CEEW)
33. Crédit Agricole Corporate and Investment Bank (CA-CIB)
34. DAI Europe
35. Delft University of Technology (TU Delft)
36. Desert Technologies
37. Dii Desert Energy
38. Dubai Supreme Council of Energy
39. E Fund Management Co., Ltd
40. East African Centre for Renewable Energy and Energy Efficiency (EACREEE)
41. East African Community Secretariat
42. Eclareon
43. Ecologic Institute
44. Economic Cooperation Organization (ECO)
45. Électricité de France Hydro (EDF Hydro)
46. CIS Electric Power Council
47. Emirates Green Building Council (EmiratesGBC)
48. Emirates Nature – World Wide Fund for Nature (WWF)
49. Enel Group
50. ENERGIA International Network on Gender and Sustainable Energy
51. Energy and Economic Growth (EEG): Applied Research Programme
52. Energy Charter Secretariat
53. Energy Research Institute (ERI) of the National Development and Reform Commission (NDRC)
54. Energy Watch Group (EWG)
55. Engie
56. Eni SpA
57. EnRupt
58. Environment Protection and Development Authority Services (EPDA Services)
59. ETA-Florence Renewable Energies
60. EU-GCC Clean Energy Technology Network
61. European Bank for Reconstruction and Development (EBRD)
62. European Biomass Industry Association (EUBIA)
63. European Climate Foundation (ECF)
64. European Renewable Energies Federation (EREF)
65. European Solar Manufacturing Council (ESMC)
66. Factor Ideas Integral Services, S.L.
67. Falck Renewables SpA
68. Finergreen

69. First Abu Dhabi Bank
70. Fondazione Eni Enrico Mattei
71. Fraunhofer Institute for Solar Energy Systems (ISE)
72. French Renewable Energy Trade Association (SER)
73. GE Renewable Energy
74. GEODEEP - French Geothermal Cluster for Heat and Power
75. Geothermal Canada
76. Gesellschaft für Wirtschaftliche Strukturforchung (GWS) mbH
77. Ghent University
78. Global Green Growth Institute (GGGI)
79. Global Maritime Forum
80. Global Solar Council
81. Global Wind Energy Council (GWEC)
82. Global Women's Network for the Energy Transition (GWNENET)
83. Graded S.p.A.
84. Gulf Cooperation Council Interconnection Authority (GCCIA)
85. Government of the Cook Islands
86. H2U - The Hydrogen Utility
87. Hivos
88. Iberdrola SA
89. International Council for Local Environmental Initiatives (ICLEI) - Local Governments for Sustainability
90. Ignite Power
91. Indian Wind Turbine Manufacturers Association (IWTMA)
92. Industrial Technology Research Institute (ITRI), Chinese Taipei
93. Institut de la Francophonie pour le Développement Durable (IFDD)
94. Institute for Advanced Sustainability Studies (IASS)
95. Institute for Sustainable Energy Policies (ISEP)
96. International Atomic Energy Agency (IAEA)
97. International Electrotechnical Commission (IEC)
98. International Energy Agency (IEA)
99. International Energy Forum (IEF)
100. International Geothermal Association (IGA)
101. International Hydropower Association (IHA)
102. International Solar Alliance (ISA)
103. International Solar Energy Society (ISES)
104. Inter-Parliamentary Union (IPU)
105. Iran Renewable Energy Association (IrREA)
106. Islamic Development Bank
107. Khalifa University of Science & Technology
108. kiloWattsol
109. King Abdullah Petroleum Studies and Research Center (KAPSARC)
110. KTH Royal Institute of Technology
111. League of Arab States
112. Legislators Forum (IRENA Legislators Forum 2020)
113. Loughborough University
114. Ludwig Bölkow Foundation
115. Mainstream Renewable Power
116. Monica Oliphant Research

117. Moroccan Agency for Sustainable Energy (MASEN)
118. National Renewable Energy Laboratory (NREL)
119. NDC Partnership
120. Nepal Renewable Energy Programme - Development Alternatives Incorporated (DAI)
121. New Energy and Industrial Technology Development Organization (NEDO)
122. Nordic Development Fund (NDF)
123. Ocean Energy Europe (OEE)
124. Offshore North Sea Foundation (ONS Foundation)
125. Order Group Co., Ltd
126. Organisation for Economic Co-operation and Development (OECD)
127. Ørsted
128. Oxford Policy Management
129. Pacific Community (SPC)
130. Pacific Islands Development Forum (PIDF)
131. Pacific Power Association
132. PDA Trade Fairs Pvt Ltd (PDATF)
133. PostScriptum Ventures Ltd
134. Power for All
135. Rahimafrooz Renewable Energy Ltd (RREL)
136. Regional Center for Renewable Energy and Energy Efficiency (RCREEE)
137. Renewable Energy and Energy Efficiency Partnership (REEEP)
138. Renewable Energy Institute
139. Renewable Energy Policy Network for the 21st Century (REN21)
140. Renewable Energy Solutions for Africa (RES4Africa)
141. Renewables Grid Initiative
142. Rocky Mountain Institute
143. SADC Centre for Renewable Energy and Energy Efficiency (SACREEE)
144. Salvadoran Industry Association (ASI)
145. SB Energy Corp. (SoftBank Group)
146. SELCO Foundation
147. Serbian Geothermal Association
148. Shell
149. SHURA Energy Transition Center
150. Siemens
151. Siemens Gamesa Renewable Energy
152. SkyPower Global
153. Snam
154. SoftBank Group Corp.
155. Solar Energy Cluster
156. Solar Head of State
157. SolarPower Europe
158. Stiftung Wissenschaft und Politik (SWP)
159. Sunna Design
160. Sustainable Energy for All (SEforALL)
161. Terrawatt Initiative (TWI)
162. The Institute of Energy Economics, Japan (IEEJ)
163. Total
164. Union for the Mediterranean (UfM)

165. United Nations Department of Economic and Social Affairs (UN DESA)
166. United Nations Convention to Combat Desertification (UNCCD)
167. United Nations Development Programme (UNDP)
168. United Nations Economic and Social Commission for Western Asia (UNESCWA)
169. United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP)
170. United Nations Economic Commission for Africa (UNECA)
171. United Nations Environment Programme (UNEP)
172. United Nations General Assembly (UNGA)
173. United Nations Human Settlement Programme (UN-Habitat)
174. United Nations Industrial Development Organization (UNIDO)
175. United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (UN-OHRLLS)
176. University of California, Berkeley
177. University of Energy and Natural Resources (UENR) Ghana
178. University of Southampton
179. Vestas
180. VietNam Academy of Science and Technology (VAST)
181. VITO
182. WaterPower Canada
183. Wilton Park
184. World Bank
185. World Bioenergy Association (WBA)
186. World Climate Ltd
187. World Future Council
188. World Wide Fund for Nature (WWF)
189. World Wind Energy Association (WWEA)
190. Yellow Door Energy
191. Youth Forum (IRENA Youth Forum 2020)
192. Zayed Sustainability Prize

Tenth session of the Assembly  
Abu Dhabi, 11-12 January 2020

## Decision on the Work Programme and Budget for 2020-2021

The Assembly,

*Reaffirming* its firm belief in the vast opportunities offered by renewable energy in meeting growing energy demand, addressing energy security, and stimulating economic growth and low-carbon development;

*Recognising* the imperative of creating a sustainable, affordable, secure and inclusive energy system to underpin global growth;

*Stressing* the importance of the 2030 Agenda for Sustainable Development, and *recalling* that Sustainable Development Goal (SDG) 7 sets out the need to substantially increase the share of renewable energy in the global energy mix by 2030 and achieve universal access to modern, reliable and affordable energy;

*Recalling also* the requirement for deep reductions in global greenhouse gas emissions and the need for enhanced deployment of renewable energy in this regard;

*Reaffirming* IRENA's leading role in the ongoing transformation of the global energy system, set out in the Medium-Term Strategy 2018-2022;

*Emphasising* IRENA's central role in enabling international cooperation and in supporting countries to transform their energy systems with a greater share of renewable energy;

*Reaffirming* its determination to strengthen the role, capacity and impact of the Agency to remain responsive to the changing global environment and evolving needs of its Members;

*Welcoming* the alignment of the Work Programme and Budget for 2020-2021 with the strategies and objectives of IRENA's Medium-term Strategy 2018-2022;

*Welcoming also* the consultations in the preparation of the proposed Work Programme and Budget for 2020-2021;

*Noting* the continued increase in the Agency's membership and the resulting demand for its services;

*Bearing in mind* that new Members join the Agency periodically pursuant to Article VI of the IRENA Statute, and that the IRENA Scale of Contributions is to be adjusted to account for such new membership in accordance with Financial Regulations 6.2 to 6.4 and *having considered* the update to the scale of assessments for the year 2020, as contained in document A/10/CRP/1;

*Stressing* the need for a diversified resource base to allow for growth commensurate with IRENA's global role;

*Recalling* Article XII of the Statute on the budget of the International Renewable Energy Agency;

*Having considered* the Report of the Director-General on the Proposed Work Programme and Budget for 2020-2021 contained in document A/10/4 and A/10/CRP/1;

*Taking into account* the views expressed by Members during the consideration of this item:

1. *Approves* the Work Programme and Budget for 2020-2021, with budgetary requirements amounting to USD 66,174 million as specified on page 25 of document A/10/4, comprising USD 44,460 million in core assessed and USD 21,714 million in core non-assessed resources;
2. *Notes with appreciation* core non-assessed contributions of USD 9.12 million from the United Arab Emirates to support the programme implementation, and USD 10.89 million from Germany for the operations of the IRENA Innovation and Technology Centre in Bonn;
3. *Invites* Members to provide other core non-assessed contributions to enable the Agency to fully implement the proposed Work Programme;
4. *Adopts* the indicative scale of contributions for 2020 contained in Annex II, *confirms* that the latest approved UN Scale of Assessments shall be used starting from the Work Programme and Budget 2022-2023 for the calculation of the Members' contributions, and *requests* the Director General to take the necessary steps in this regard;
5. *Requests* the Director-General to establish partnerships and cooperative arrangements with bilateral, multilateral and international initiatives and entities to jointly implement elements of the Work Programme, as appropriate; and
6. *Authorises* the Director-General to make transfers between appropriations sub-programmes pursuant to Financial Procedure 104.1 (b) up to the limit of 15 percent of the amount appropriated for the sub-programme in question.

Tenth session of the Assembly  
Abu Dhabi, 11 – 12 January 2020

## Report of the Credentials Committee

1. At its tenth session the Assembly appointed the Credentials Committee, consisting of the following members: Bangladesh, Canada, Dominican Republic, Egypt, European Union, Ghana, Japan, Senegal and the United Arab Emirates.
2. The Credentials Committee met on 11 and 12 January 2020. The Committee elected Mr Amer El Kadi of the Dominican Republic as Chairperson.
3. The Committee examined the credentials submitted to the Secretariat in accordance with Rule 24 of the Rules of Procedure of the Assembly in respect of the representatives registered to attend the tenth session of the Assembly. The Committee had before it the information provided by the Secretariat on the status of the credentials received as at 11 January 2020.
4. The Committee determined that, as at 11 January 2020, the Members listed below had submitted credentials in the form required by Rule 24 of the Rules of Procedure of the Assembly, or were represented by the competent authority and therefore deemed to conform to the credentials requirement:

Albania; Algeria; Angola; Antigua and Barbuda; Armenia; Bahamas; Bahrain; Bangladesh; Barbados; Belarus; Belgium; Belize; Bhutan; Bosnia and Herzegovina; Botswana; Burkina Faso; Canada; Colombia; Costa Rica; Croatia; Cuba; Cyprus; Czech Republic; Denmark; Djibouti; Dominican Republic; Egypt; El Salvador; Eswatini; Ethiopia; European Union; Fiji; Finland; France; Gambia; Germany; Ghana; Greece; Grenada; Guyana; Hungary; Iceland; India; Indonesia; Iraq; Ireland; Italy; Japan; Jordan; Kazakhstan; Kenya; Kiribati; Latvia; Lesotho; Luxembourg; Malaysia; Maldives; Mali; Malta; Marshall Islands; Mauritania; Mauritius; Mexico; Micronesia (Federated States of); Montenegro; Morocco; Mozambique; Nepal; Netherlands (Kingdom of the); New Zealand; Nicaragua; Niger; Nigeria; Norway; Oman; Pakistan; Palau; Philippines; Portugal; Republic of Moldova; Republic of Korea; Rwanda; Saint Lucia; Saint Vincent and the Grenadines; Samoa; Sao Tome and Principe; Saudi Arabia; Senegal; Seychelles; Serbia; Sierra Leone; Singapore; Slovenia; Solomon Islands; Somalia; South Africa; Spain; Sri Lanka; Sudan; Sweden; Switzerland; Thailand; Tajikistan; Tonga; Turkey; Turkmenistan; Tuvalu; Uganda; Ukraine; United Arab Emirates; United Kingdom of Great Britain and Northern Ireland; United States of America; Uruguay; Yemen and Zimbabwe.

5. The Committee noted that 5 Members had not submitted credentials in the proper form and recommends that the Assembly accepts the credentials of the representatives of these Members on the understanding that their credentials in the proper form will be submitted to the IRENA Secretariat as soon as possible.
6. The Committee noted that 14 Members in attendance had not submitted any credentials. The Committee recommends that the representatives of these Members be permitted to participate provisionally in the tenth session of the Assembly on the condition that their credentials will be submitted to the IRENA Secretariat as soon as possible.
7. The Committee recommends that the Assembly call upon all Members to submit to the Secretariat the credentials of their representative, if possible, not less than seven days in advance of the relevant session of the Assembly, as provided in Rule 24 of the Rules of Procedure of the Assembly, but in no event later than the opening of the session.
8. The Committee recommends that the Assembly requests the Secretariat to issue to all IRENA Members, at least three months before each session of the Assembly and as may be needed thereafter, a reminder about the requirement to submit the credentials of their representatives in accordance with Rule 24 of the Rules of Procedure of the Assembly, and no later than the opening of the session.
9. The Committee recommends that the Assembly requests that the Council, at its 20<sup>th</sup> session, provides recommendations for the Assembly's approval and adoption on the interpretation of the "competent authority of the Member" responsible for the issuance of the credentials in accordance with Rule 24 of the Rules of Procedure of the Assembly.

**THE SECRETARY-GENERAL**

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**MESSAGE TO TENTH ASSEMBLY OF THE INTERNATIONAL RENEWABLE  
ENERGY AGENCY (IRENA)****Abu Dhabi, 11 January 2020**

I am pleased to greet the International Renewable Energy Agency.

Your Assembly opens a pivotal year in the fight against climate change and for large-scale energy transition, continuing the momentum from the Climate Action Summit I convened in New York last September.

The impacts of climate change are upon us, faster than had been predicted. We know what we must do to limit global warming to no more than 1.5<sup>o</sup> C by 2100 – bring down carbon dioxide emissions globally by about 45 per cent by 2030 and reach net zero by 2050.

Renewable energy will play a central role in getting us on this path.

Renewables are the fastest growing energy source, and least expensive for producing electricity in most parts of the world. In each of the last four years, more renewable capacity was installed than fossil fuel and nuclear combined. This trend is very encouraging.

However, there are still many barriers to entry that prevent renewable energy from becoming the automatic choice to power our highest emitting sectors. Battery storage is still not sufficient for wind and solar to operate at their optimum capacity. Fossil fuel subsidies still create an unfair playing field.

I urge all leaders to push their governments to make new investments in innovation, and to boldly phase out subsidies and replace them with tax incentives for renewable scale-up.

I also count on all countries to design and implement just transition plans to ensure that the move to renewables is smooth, economically sound and benefits the most vulnerable communities.

Finally, I urge the IRENA Assembly to continue to push for renewable energy scale-up in all sectors.

The upcoming UN Transport Conference in May of this year is an important opportunity for energy leaders to announce new commitments. In many countries, emissions from the transport sector are outpacing those from the power sector, and transport is becoming the highest emitting industry.

The year ahead also includes the Sustainable Energy for All Forum and COP26 in Glasgow – further opportunities to advance renewable energy and unlock all barriers.

IRENA's global leadership is critical. I welcome the growing partnership between the United Nations and IRENA, including through the strengthened UN-Energy.

I am pleased to see some governments and investors backing away from coal and fossil fuels, and other important steps by cities, civil society and other partners. But we must redouble our efforts to mobilize political will, international cooperation and financing.

I count on IRENA's leadership and wish you a productive Assembly.

Tenth session of the Assembly  
Abu Dhabi, 11-12 January 2020

## LIST OF PARTICIPANTS

### A. MEMBERS

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