

3 August 2023

Thirteenth session of the Assembly Abu Dhabi, 14–15 January 2023

# REPORT OF THE THIRTEENTH SESSION OF THE ASSEMBLY OF THE INTERNATIONAL RENEWABLE ENERGY AGENCY

## TABLE OF CONTENTS

|         | Document Title  | Document<br>Number | Page |
|---------|---|--------------------|------|
|         | Report of the thirteenth session of the Assembly of IRENA                               | A/13/SR/1          | 3    |
| Annex 1 | Agenda of the thirteenth session of the Assembly  | A/13/1             | 52   |
| Annex 2 | List of applicants for observer status at the thirteenth session of the Assembly        | A/13/2             | 54   |
| Annex 3 | Decision on the Medium-Term Strategy 2023-2027  | A/13/DC/1          | 61   |
| Annex 4 | Decision on the Indicative IRENA Scale of<br>Contributions for 2023                     | A/13/DC/2          | 62   |
| Annex 5 | Decision on the IRENA Council membership for 2023-2024                                  | A/13/DC/3          | 63   |
| Annex 6 | Decision on Appointment of the Incumbent<br>Director-General of IRENA for a second term | A/13/DC/4          | 65   |
| Annex 7 | Report of the Credentials Committee   | A/13/5             | 66   |
| Annex 8 | List of participants  | A/13/INF/5         | 68   |

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

#### Agenda Item 1: Opening of the meeting

- 1. The thirteenth session of the Assembly of the International Renewable Energy Agency (IRENA) was held in Abu Dhabi from 14-15 January 2023 with related meetings held on 13 January 2023. There were over 2,000 registered participants to the thirteenth session of the Assembly, including 85 Heads of State or Government and Ministers, along with delegates from 147 countries and the European Union and representatives from 250 organisations.
- 2. H.E. Ms Vanessa Interiano, Ambassador of El Salvador to the United Kingdom, presiding on behalf of the President of the twelfth session of the Assembly, H.E. Ms Alexandra Hill Tinoco, Minister of Foreign Affairs of El Salvador, declared open the thirteenth session of the Assembly.
- 3. In her video message, the President of the twelfth session of the Assembly, H.E. Ms Alexandra Hill Tinoco welcomed delegations and thanked the Vice-Presidents of the twelfth session of the Assembly for their contributions throughout the year. She affirmed that the transition to cleaner technologies is fundamental for addressing climate change and mitigating its devastating effects. She mentioned El Salvador's intention to lead the momentum in the renewable energy sector, as it is one of the important pillars of development and a viable means to ensure 100% clean, renewable, and environmentally friendly electricity consumption. Recognising multilateralism as the key and single mechanism through which global challenges can be addressed, she highlighted the achievements since assuming the Presidency of the Assembly in 2022, including the hosting of the second High-Level Conference of the Global Geothermal Alliance in El Salvador, and the Maritime Innovation Forum as a result of El Salvador's efforts, in collaboration with IRENA and the International Maritime Organization (IMO). She expressed gratitude for the appointment of El Salvador as Co-facilitator of the Collaborative Framework on Enhancing Dialogue on High Shares of Renewables in Energy Systems, together with Japan, which provides a space to share experiences on the integration of a greater percentage of renewable energy resources within the national energy system. She also affirmed El Salvador's commitment to continue building a strategic relationship with IRENA.
- 4. Highlighting the importance of geothermal energy in the decarbonisation of the energy system, H.E. Ms Tinoco informed that El Salvador will establish an international centre of excellence to strengthen geothermal operations and provide training on energy-system development. She further reiterated El Salvador's commitment to further expand cooperation with all Members and expressed her gratitude to the team at Comisión Ejecutiva Hidroeléctrica del Río Lempa CEL of El Salvador for the support provided during El Salvador's Presidency of the twelfth Assembly.
- 5. H.E. Ms Tinoco congratulated India as the President-designate of the thirteenth session of the Assembly and offered El Salvador's full support. She also expressed appreciation to IRENA Members, the Director-General and the Secretariat for the trust and continuous support throughout the period of El Salvador's Presidency.

#### Agenda Item 2: Organisation of work

#### a. Election of officials

- 6. The Assembly had, at its twelfth session, designated by acclamation India as President of the thirteenth session. Accordingly, the outgoing President proposed that the Assembly elect India, represented by H.E. Mr Raj Kumar Singh, Cabinet Minister of Power and New and Renewable Energy, as President of the thirteenth session.
- 7. The Assembly elected by acclamation India, represented by H.E. Mr Raj Kumar Singh, Cabinet Minister of Power and New and Renewable Energy, as President of the thirteenth session of the Assembly.
- 8. The Assembly had, at its twelfth session, further designated by acclamation Belgium, Indonesia, Saint Vincent and the Grenadines, and Zimbabwe as Vice-Presidents of the thirteenth session.
- 9. The Assembly elected by acclamation as Vice-Presidents of its thirteenth session:
  - Belgium, represented by H.E. Mr Philippe Henry, Vice-President and Minister for Climate, Energy, Infrastructure and Mobility of the Walloon Region;
  - Indonesia, represented by H.E. Mr Arifin Tasrif, Minister of Energy and Mineral Resources;
  - Saint Vincent and the Grenadines, represented by Hon Julian Francis, Minister of Urban Development, Energy, Airports, Seaports, Grenadines Affairs and Local Government, as well as members of the delegation present in Abu Dhabi; and
  - Zimbabwe represented by Hon Zhemu Soda, Minister of Energy and Power Development.
- 10. The President informed the Assembly that he had proposed to Canada to serve as Rapporteur of its thirteenth session.
- 11. On the basis of the President's proposal, Canada was appointed as Rapporteur of the thirteenth session of the Assembly.
  - b. Adoption of the agenda (A/13/L.1)
- 12. The President of the thirteenth session of the Assembly introduced the provisional agenda (A/13/L.1).
- 13. The Assembly adopted the agenda (A/13/1).
  - c. Appointment of the Credentials Committee
- 14. The President proposed to the Assembly that it appoint Belgium, Colombia, Cuba, Cyprus, Fiji, Mali, Spain, Uganda, and the United Arab Emirates as members of the Credentials Committee.
- 15. The Assembly appointed these nine countries as members of the Credentials Committee.

#### d. Participation of Observers (A/13/L.2)

16. The President introduced the document 'Draft List of applicants for observer status at the thirteenth session of the Assembly' (A/13/L.2).

17. The Assembly considered the matter and granted observer status for its thirteenth session to applicants included in the list of applicants (A/13/2).

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

- 18. H.E. Mr Raj Kumar Singh expressed his honour to represent India as President of the thirteenth session of the Assembly. He reflected on the developments around the globe and the clear messages received on the challenges facing the planet, stating that the current energy and economic landscapes are indicative of these challenges being felt at multiple levels. He highlighted that such challenges have underscored the significant importance of energy security and catapulted it to the forefront of the global discourse. He advised that as discussions on the energy transition progress, they must take into account the important aspects of energy security, access, affordability, and challenges pertaining to supply chain disruptions. The President highlighted the inadequate pace of the energy transition in achieving the 1.5°C pathway and noted that the complete energy challenge requires expertise, access to technology, as well as a mission to ensure availability and reliability.
- 19. He outlined that the energy access in India has connected up to nine million homes in 19 months with 42% of India's energy capacity being obtained from non-fossil fuel sources. In this regard, he recalled India's pledge at COP21 "to achieve about 40% cumulative electric power installed capacity from non-fossil fuel-based energy resources by 2030. He noted this target was increased in Glasgow to 50% as the initial target was achieved in 2021, nine years in advance. The President elaborated that India has 177 GW non-fossil fuel capacity installed with more under construction, and that based on 12% growth rate of energy demand in the recent months, the total energy capacity demand will be 1000 GW by 2030.
- 20. He also mentioned that, although India's per capita emissions are only one-third of the global average, the country has increased the planned emission intensity reduction ambition from 30% to 45% by 2030. Reflecting from the experience, he noted that issues regarding accessibility and affordability can also be moderated by the transition, while emphasising that funding and technology are still very much needed for the developing world. He stressed that similar to addressing COVID-19, energy transition cannot happen in isolation but rather a call for all countries to help each other, through investment mechanisms.
- 21. With reference to the global stocktake on the COP28 agenda, the President suggested that a comprehensive perspective is needed to realistically consider the challenges, as a successful transition depends upon the ability to deploy capital and secure access to technology. In order to find solutions, he suggested that the huge challenges must be recognised and acknowledged, and ambitions must be increased in response to these.
- 22. In his address to the Assembly, the United Nations Secretary-General, H.E. Mr António Guterres, highlighted the effect of the world's addiction to fossil fuels as a major contributory factor to the 1.5°C goal slipping out of reach. He warned that with the current policies, calculations estimate 2.8°C of global warming by the end of the century, which will have devasting consequences, as parts of the planet will become uninhabitable. To avert climate catastrophe,

he advised that renewables are the only credible path forward to safeguard the future, close the energy access gap, stabilise prices, as well as ensure energy security. He explained that renewables share 30% of global electricity, which needs to double by 2030 and triple to 90% by 2050, and that this endeavour is possible only if immediate action is taken.

- 23. He outlined a five-point energy plan for a just transition. First, to remove intellectual property barriers and treat key renewable technologies, including energy storage, as global public goods. Second, to diversify and to increase access to supply chains for raw materials, and components for renewables technologies, without degrading our environment which would also create millions of green jobs in the developing world. Third, he said decision-makers must 'cut the red tape', fast-track approvals for sustainable projects worldwide, and also modernise grids. Fourth, energy subsidies must shift from fossil fuels to clean and affordable energy, and support must be provided to vulnerable groups affected by the transition. Fifth, public and private investments in renewables should triple to at least USD 4 trillion per annum.
- 24. The United Nations Secretary-General further mentioned that as the developed world generally has greater access to investments in renewables, the price of renewable technologies can be several times higher in developing countries. He emphasised that a joint and unified effort is needed to reduce the capital cost for renewables and ensure that finances flow to those who need it most. He further emphasised that action is needed from multilateral development banks to invest massively into renewable energy infrastructure and highlighted that developed countries must encourage credit agencies to scale up green investments in developing countries.
- 25. He urged energy Ministers and others to promote ambitious national policies and greater social and economic equity, to include the taxation of the windfall profits of those exploiting today's energy crisis and welcomed the Just Energy Transition Partnerships established to support Indonesia, South Africa, and Vietnam. He conveyed that such initiatives are a critical first step, but that the actions need to be developed at a greater scale and faster pace. He explained it is for this reason he called for the Climate Solidarity Pact in which all Ministers exert efforts to reduce emissions this decade and ensure financial and technological support for countries in need. In concluding his remarks, he encouraged unified international approach to jump start the renewables revolution that will create a brighter future for all.
- 26. H.E. Mr Csaba Kőrösi, President of the seventy-seventh session of the United Nations General Assembly, identified that climate change is intrinsically linked to energy, and noted success in climate protection depends on the transition to a carbon-free energy use. He referred to the scientific reports depicting fossil fuels account for 75% of global greenhouse gas emissions and 90% of all carbon dioxide emissions. In querying how the energy transition will work in times of major confrontation, he advised when energy supplies are used as a tool of conflict short-term setbacks will be encountered in the transition and greenhouse gas emissions will rise. He also noted that the current investment trends depict that the long-term impact of the conflict has the opposite effect on solar to wind, wave and geothermal, as renewable energy sources are available for every climate and have the potential to strengthen energy sovereignty.
- 27. H.E. Mr Kőrösi outlined the existing choices to reduce dependence on fossil fuels imported or locally produced, and to transition to more renewable sources of energy that will not interrupt the sensitive balance of the planet. He emphasised the necessity to act without delay to ensure an equitable transition and explained that to realise the two-thirds of global power generation with renewables by 2030, there are three necessary actions.

First, he emphasised the need to further investment in scientific tools and measurements, which must include the creation of a follow-up mechanism to assess progress and identify areas that are lagging behind. Second, he noted the importance of sharing knowledge and transferring technologies to accelerate the transition and making renewable energy a global public product, and also to endeavour to make the intellectual property rights regime an enabler of energy transition and innovation. Third, he highlighted the relevance of bolstering partnerships with stakeholders from academics to civilians, through reputable corporations with proven track records in sustainable energy initiatives. H.E. Mr Kőrösi cautioned that although such necessary actions will help achieve SDG 7 and reach net zero emissions, there is a desperate race against time that demands bold transformative action to curtail climate change.

28. H.E. Dr Sultan Ahmed Al Jaber, Minister of Industry and Advanced Technology of the United Arab Emirates and President-designate for COP28 on behalf of His Highness Sheikh Abdullah bin Zayed bin Sultan Al Nahyan, Minister of Foreign Affairs and International Cooperation of the UAE, congratulated India as President of the thirteenth session of the Assembly and assured UAE's full support to advance IRENA's mission. He welcomed participants to the Assembly and thanked delegations for their contribution to IRENA's reputation as the leading advocate for renewable energy. He also thanked the Director-General of IRENA and IRENA staff for their tireless efforts.

29. Referring to the first global stocktake at COP28 to be held in the UAE in December 2023, H.E. Dr Al Jaber stressed the importance and great potential of renewable energy. He recalled that since inception, IRENA has paved the way for extraordinary growth in renewable energy capacity worldwide and remains at the forefront of this growth, whilst also guiding supportive policies and encouraging new technologies resulting in lower costs. H.E. Dr Al Jaber reflected that renewables have proven to be affordable and are also on course to expand considerably in the next five years and that they accounted for 81% of all new energy capacity installed in 2021, while emphasising the critical phase ahead concerning the short period of time in which to accelerate project implementation.

30. On tripling of renewable energy capacity worldwide by 2030, he reiterated the need to move faster, with IRENA playing a critical role in leading the global acceleration across all sectors, regions, and communities. He advised that to meet the scale and pace of change will require IRENA's contribution on innovation. He referred to the Energy Transition Accelerator Financing (ETAF) platform, launched during COP26, as a prime example that has already helped to target funding for emerging economies. He stated that the UAE committed USD 400 million of initial funding to the ETAF platform. He noted that the success of initiatives, such as the ETAF, will lie on the ability to secure new partners and operationalise a robust pipeline of economic-growth projects, in which IRENA will play a determining role. He recalled UAE's plan 18 years ago to explore renewable energy's potential, which has now resulted in evident benefits. He declared that UAE's construction of the world's largest and lowest cost solar plants is fundamental to its net zero development pathway; as well as UAE's investment in renewable energy on other continents which have demonstrated that pro-climate and pro-growth can go hand in hand. He stated UAE will continue to be IRENA's closest partner and strongest advocate as it will champion the innovation and ambition to transition global energy systems by working conjointly with IRENA in the pursuit of inclusive, climate progress.

- 31. The Director-General welcomed delegations and congratulated the newly elected President and Vice-President of the thirteenth session of the Assembly. He expressed his appreciation to the outgoing President of the Assembly, El Salvador, and commended the joint efforts achieved throughout the year, referring to the second High-Level Global Geothermal Alliance Conference as an example of collaboration.
- 32. He noted that this Assembly's attendance demonstrated the leading role IRENA plays in international cooperation on the energy transition and further noted that the mandate entrusted to IRENA is now even more critical and relevant. He highlighted that the lingering impact of the COVID-19 pandemic intersects multiple challenges, including conflict and climate change which has further aggravated inequalities and fragilities. He also underscored energy as the cornerstone of these challenges that have impacted volatile markets, unpredictable supply partners, and soaring prices to the detriment of countries and communities and has further increased the suffering of those most vulnerable.
- 33. The Director-General conveyed that the renewables-based energy transition is a powerful force for positive change and that the agenda of the thirteenth session of the IRENA Assembly reflects this reality. He also noted that discussions will centre on how to align actions around energy transition priorities to feed into the first Global Stocktake for COP28, including through Ministerial sessions on topical issues such as critical materials and project facilitation, as well as strategic discussions on the new five-year Medium-Term Strategy. He emphasised that the intersection of multiple challenges in the looming crisis demands concerted and unified global action, grounded in multilateralism, to achieve common goals. The Director-General conveyed that Members' insights and experience will guide the Agency's work whilst simultaneously conveying to the world that transforming the global energy system is a path that leads to resilience, equality, and prosperity.
- 34. The Assembly received, with appreciation, and took note of the welcoming remarks.

## Agenda Item 4: High-level Plenary session on World Energy Transition – The Global Stocktake (A/13/BN/1)

- 35. The President of the Assembly, H.E. Mr Raj Kumar Singh, presided over the deliberations under this agenda item. The objective of this High-level Plenary session was to take stock of the progress in energy transitions towards the goals of the Paris Agreement and to identify concrete and immediate actions to drive implementation. Following the introductory remarks, the panel discussion was moderated by Ms Becky Anderson, CNN Journalist and Anchor.
- 36. The panel discussion consisted of two parts. The first panel provided wide-ranging national and regional perspectives on the challenges and opportunities related to the energy transition and to evaluate the current situation and further actions needed in the process. Panellists included: H.E. Ms Teresa Ribera Rodríguez, Deputy Prime Minister and Minister for Ecological Transition and Demographic Challenge of Spain, Hon John Kerry, Special Presidential Envoy for Climate Change of the United States of America, H.E. Mr Frans Timmermans, Executive Vice-President of the European Commission, H.E. Mr Arifin Tasrif, Minister for Energy and Mineral Resources of Indonesia, H.E. Mr Siaosi 'Ofakivahafolau Sovaleni, Prime Minister of Tonga, H.E. Ms Irene Vélez Torres, Minister of Mines and Energy of Colombia, and Mr Simon Stiell, Executive Secretary of the UN Framework Convention on Climate Change (UNFCCC).

- 37. The second panel addressed implementation and required actions, and was joined by the Rt Hon Grant Shapps, Secretary of State for Business, Energy and Industrial Strategy of the United Kingdom, Ms Ann Mettler, Vice-President for Europe for Breakthrough Energy, Mr Christian Bruch, President and CEO of Siemens Energy, Mr Rajiv Mangal, Vice-President of Safety, Health & Sustainability at Tata Steel Ltd., Mr Achim Steiner, Administrator of UN Development Programme (UNDP), Ms Damilola Ogunbiyi, CEO and Special Representative of the UN Secretary-General for Sustainable Energy for All, and H.E. Mr Selwin Hart, Special Adviser to the UN Secretary-General on Climate Action and Just Transition.
- 38. The President reflected on the importance of bringing countries and stakeholders from around the world together to have this conversation at the IRENA Assembly. He stressed that the Global Stocktake at COP28 will provide an opportunity to assess progress under the Paris Agreement and whether the world is on right track to significantly reduce the impacts of climate change.
- 39. The President underlined the critical role renewables play in the energy transition and the achievement of national decarbonisation and development priorities as demonstrated though the technology, policy, and socioeconomic pathways developed by IRENA. He stressed the importance of implementing the plans at a greater speed and scale. He also pointed out that climate change is already impacting people around the world, particularly the most vulnerable. He noted that countries have varying starting points, development needs and priorities. The President then underscored that the Global Stocktake should bear in mind the obligations of the highest greenhouse gas emitters to provide financial and technological support to developing countries. In closing he emphasised the need to balance priorities to accelerate nationally driven actions, and that the ensuing discussion will identify concrete and immediate actions to drive implementation in the coming years.
- 40. Ms Anderson, in moderating the discussions, set the scene by pointing out that participants were global leaders from around the world, representing IRENA's membership, following different paths towards a common goal to fight climate change. She then underlined energy's outsized impact on climate action and that the ensuing discussion would focus on and zone in on how the energy transition could contribute to the first Global Stocktake at COP28. Next, she referred to the outcomes of COP27 and underscored that the world is not on track to meet the 1.5°C goal, and even in some cases progress is regressing. As such, it is expected that the conclusion of the Global Stocktake may inform decisions on how to course correct towards realising the 2030 Agenda. To this end, Ms Anderson underscored that the renewables and IRENA's pathway, laid out in its World Energy Transitions Outlook (WETO), could be a driver for success in terms of socio-economic security.
- 41. Panellists underscored that the world is not on track to meet the 1.5°C goal despite technological progress and national decarbonisation efforts. One panellist underlined that climate change poses an existential threat to SIDS and stated that the Pacific region is committed to achieving the 1.5°C goal. Some panellists underlined that climate action and development are not competing priorities and called for a just and inclusive energy transition. Panellists stressed that the risk of inaction, especially by high emitting countries, could have a detrimental effect on vulnerable developing countries and called for strategies to help tackle the impact of climate change and leapfrog developmentally. They also stressed the need to develop targeted solutions to address countries' needs. Panellists underlined that the energy transition could lead to economic and energy transformation, especially for Africa and SIDS, and energy security. Panellists also called for a holistic response to the climate crisis and industrial revolution by promoting green economies and synchronising efforts worldwide.

- 42. Some panellists noted that Russia's invasion of Ukraine has had a negative effect on fossil fuel prices, but also rallied countries to accelerate the energy transition, and highlighted the need to tackle issues related to the geopolitics of energy transition and promote international cooperation. Panellists discussed national strategies to increase the share of renewables in their energy systems, diversify energy supply sources and reduce energy consumption, and push for the early retirement of coal-fired power plants and explore carbon storage options. They also discussed creating an enabling environment for investments, promoting regional collaboration and integration and partnering with the private sector. One panellist also referred to the lessons learned from national energy transition strategies, such as the importance of systemic change, and not only technological, infrastructure transformation, and reskilling the labour force. Some panellists also underlined the social dimension of the energy transition and the need to secure public support and consensus, and the national dialogue under way to define a roadmap of action.
- 43. Panellists then underlined that the Global Stocktake will be a moment of truth, an exercise in ambition and accountability, and about setting a roadmap with political and technical direction to accelerate action jointly by all stakeholders. Panellists also stated that the Global Stocktake should get to the core of what is preventing the full energy transition, considering there are countries with a high rate of renewables in their energy mix, whose economy is thriving. Some panellists noted that COP28 should promote the phase out of fossil fuels and the massive deployment of renewables, as well as adaptation and the transformation of the climate finance landscape. Panellists called for COP28 to also focus on identifying solutions and operationalising implementation rather than targets.
- 44. Panellists elaborated on global energy-related challenges. These include diversifying the economy of fossil fuel producing countries and stopping financial incentives to seize extraction, attracting investment in developing countries often burdened with inflation and debt to support adaptation and mitigation inflation and debt. One panellist pointed out the need to raise awareness on the socio-economic benefits of the energy transition. Panellists also identified technological problems such as bringing clean energy to demand centres as they located far away from one another, stabilising the grid and storing energy, supporting regional power interconnection, and developing ocean technologies. Some panellists discussed the challenge of decarbonising hard-to-abate sectors and the need to come up with technologies to support the process.
- 45. Panellists then identified opportunities to promote the energy transition namely through enhanced international and regional collaboration. Some panellists stressed that the Breakthrough Agenda and enabling new technologies and innovation could enable solutions to key challenges in the energy transition. One panellist underlined the importance of leadership to set in place the right policy and regulatory frameworks as well as the right incentives to attract private investments. Panellists highlighted the potential of partnerships with the private sector in accelerating the energy transition. Panellists mentioned that energy transition, resilience and energy security are at the heart of corporations' strategy and called on IRENA to build on its analysis to bring developing countries to the table with bankable deals.
- 46. Some panellists noted that corporations are good at implementing, building assets, innovating, deploying capital, and taking a balanced risk approach. To harness these, it is critical for government to create enabling policy frameworks and market conditions to attract investments, support innovation and emerging new technologies, bring technologies to scale, set carbon pricing and demand, harmonise standards, and support technology transfer.

#### 47. The Assembly took note, with appreciation, of the insights and views provided.

## Agenda Item 5: Annual Report of the Director-General on the Implementation of the Work Programme and Budget for 2022-2023 (A/13/3)

- 48. The Director-General introduced the Annual Report on the Implementation of the Work Programme and Budget 2022-2023. He began by stressing that the richness of discussions until now reflected the critical importance of international cooperation for energy transitions, and IRENA's privileged space in the institutional landscape. He pointed out that IRENA's global family includes 168 Members, each with diverse priorities, plans and aspirations.
- 49. The Director-General highlighted that the multiple crises have manifested the consequences of tying economies to fuels that are prone to price shocks and supply risks and by far the largest contributors to climate change. He added that new questions on the affordability of energy have emerged, with a growing number of households not meeting their basic energy needs. In addition, over 700 million people remain without energy access, rendering services like health, water, and information technology out of reach. He then stressed that concerns around energy security have prompted several countries and regions to revise their energy transition strategies with more ambitious targets and timelines. Specifically, 140 countries that have set net-zero strategies, increasingly reaffirmed through legislation and implementation plans.
- 50. He underlined that the economic, social, and environmental case for a new energy system is abundantly clear, and there is a shared conviction that renewables could bring lasting solutions and help create resilient and inclusive economies and societies. The Director-General highlighted that in last decade renewables moved from niche to mainstream, with a shift in competitiveness with fossil fuel and nuclear options. According to IRENA estimates, 270 GW were added in 2021, creating USD 55 billion in savings from global generation costs in 2022.
- 51. The Director-General added that the immediate and positive impact of the shift to renewables is evident in many ways. For instance, IRENA has been monitoring the renewable employment trends since 2012, and the latest *Renewable Energy and Jobs Annual Review 2022* revealed that, despite the global difficulties, the total number of people employed in the renewable energy sector rose by 700,000, to 12.7 million in 2021. He noted that importantly, the sector attracts diverse workforce. He then added that the recently launched report *Solar PV: A Gender Perspective* showed that women occupy over 40% of jobs in the solar PV industry, above the average of 32% in the overall renewables sector, and almost double the share of 22% in the oil and gas sector.
- 52. The Director-General underlined the importance of timely, accurate and comprehensive knowledge as an essential foundation for informed decision making, and IRENA's role as a reliable and trusted source of such data and analyses. He stated that IRENA continues to monitor trends, strive to stay abreast of the latest developments, and provide insights into what lies ahead. In 2022, IRENA generated knowledge on topical issues such as green hydrogen, critical materials, policy frameworks, and market design; analysed the nexus between energy and other sectors, including health and the agri-food chain; and tackled emerging geopolitical trends. Moreover, he emphasised the close collaboration with Members to support respective energy transitions and bring data and analysis to life, with a real impact on the ground.
- 53. Turning to the Global Stocktake, he emphasised that the Nationally Determined Contributions (NDCs), are the cornerstone of this process. IRENA has worked with over 80 countries to date in response to their requests for support on the energy components of their NDCs. The Director-General underscored that this work provides important insights on the realities that countries face which, in turn, informs IRENA's analytical work and helps identify gaps and needs. For example, IRENA has observed that support on data, resource assessment and technical analyses is among

the most requested in the context of NDCs, indicating that many Members are still in early stages of their energy transitions with great needs for technical assistance and capacity building.

- 54. The Director-General highlighted the critical role of the private sector in achieving the climate and development goals. In this context, IRENA has been seeking to create different opportunities for closer cooperation. One such example is the Alliance for Industry Decarbonization, launched in September 2022 together with 13 major companies, aimed to accelerate the decarbonisation of industrial value chains. Another initiative is the Global Offshore Wind Alliance, GOWA, launched at COP27 with Denmark and the Global Wind Energy Council, to drive the global deployment of this promising technology.
- 55. The Director-General then stressed that the global ambition for the deployment of renewables requires investments. In this context, IRENA's contribution is focused and practical, bringing effective tools and instruments that facilitate projects, enable investment, and increase transparency on options available to countries. He stated that despite difficulties in getting this workstream off the ground due to the pandemic, concrete results are already showing. He pointed out that the number of projects and partners continues to grow in the Climate Investment Platform, created with UNDP and SEforALL in cooperation with the GCF. Nine projects, with some 240MW of projected capacity, have been matched with partners. He added that IRENA also convened the first Investment Forum in partnership with Indonesia as part of the G20 agenda, which provided critical insights and experiences. He continued that IRENA reached a major milestone with the ETAF, which has partnered with ADFD, Asian Infrastructure Investment Bank, Masdar and Swiss RE and committed funding close to USD 1 billion in renewable energy projects. He informed that more partners are poised to join and the first call for projects was announced at COP27.
- 56. The Director-General underlined, however, that the speed and scale of the transition is inadequate, and nothing short of radical and immediate action is needed to bring the world back on track. IRENA's World Energy Transitions Outlook (WETO) charts the fastest path to emissions reduction, consistent with the 1.5°C goal and prioritises existing solutions and those with the most chance of becoming viable in the coming years. He highlighted that the Outlook positions efficiency and electrification as primary drivers, enabled by renewable power, green hydrogen, and sustainable modern bioenergy. He relayed that WETO also shows that the energy transition can be a means for job creation, an inclusive economy, and a more equitable world, with a holistic policy framework, serious investment, and co-operation.
- 57. He pointed out that progress is lagging, thus, making the task more difficult, more expensive, and more complex. At the same time, he underlined that a critical set of solutions required to meet 2030 goals exists, but the question is whether the world has the resolve, discipline, and investment to shift the course toward inclusive and resilient economies and societies.
- 58. The Director-General stated that these issues should be taken into account, when considering IRENA's Medium-term Strategy for the coming five years. Moreover, he pointed out that the ongoing energy transition is not a fuel replacement, but a profound and systemic change away from a century-old system based on fossil fuels. He stressed that the world does not have the luxury of time to develop a system but must move quickly and strategically, toward different economic, social, and environmental goals.
- 59. He stressed though that to realise the goals, focus must be equally put on the supply and demand side of the energy equation as the latter must be the driver of development and decarbonisation, creating a system that is resilient, just, and inclusive. Demand will also point to new directions and priorities, warranting a closer scrutiny of choices and new infrastructure. He

highlighted the need to rethink the physical infrastructure required so that it integrates high share of renewable energy and enables its distribution and trade. He also explained that this would entail land grid expansion across borders and regions, connected to a maze of seabed cables for clean power supply. It would entail the emergence of a network of ports for green hydrogen trade, connecting new points of supply and demand. Overall, infrastructure buildout at this scale would involve new thinking on planning and investment, most notably for multilateral financial institutions.

- 60. The Director-General continued that policy and regulatory infrastructure would require a similar overhaul that reflects where we need to be, with net zero commitments embedded in legislation, properly resourced, and translated into implementation plans. He emphasised that IRENA has long advocated for a holistic approach to policy making that drives systemic change, breaks the current silos, and considers wider implications of the energy transitions. He then called for this approach to extend across borders and reshape the way support is provided to developing countries.
- 61. The final point the Director-General made was on paying attention to the infrastructure of institutional and human capacity and the lack of skilled labour, which could become an obstacle in a growing number of countries. He stressed that realising the ambition on the energy transition would require long-term strategies to ready the institutions and a workforce capable of meeting the upcoming demand.
- 62. The Director-General underscored that the new energy system cannot be built with tools and systems of the past. It is essential to innovate to reimagine international cooperation for the new energy era, by reassessing the roles and responsibilities in the institutional landscape. He added that international organisations, regional and multilateral financial institutions, and bilateral engagement should consider who is best placed to take on the roles in these three pillars of new infrastructure.
- 63. In concluding, the Director-General emphasised that a renewables-based transition is a vehicle for climate-proof energy systems, improved energy security, reduced inequality, and long-overdue universal access. He stated that the new mission entrusted to IRENA encapsulates all these elements and the mandate given calls on IRENA to lead this global effort with clarity of purpose, urgency in action and the conviction that success is possible. He underlined that IRENA would play its part faithfully with an open door to all who need to be part of this quest.
- 64. Delegations welcomed the Annual Report of the Director-General. Some delegations also noted that the report is comprehensive and highly informative. Delegations also thanked the Director-General and the Secretariat for the remarkable work in implementing the Work Programme and Budget 2022-2023. Delegations referred to the challenges posed by in recent years due to the pandemic and praised IRENA for rising to the occasion. Some delegations underscored the importance of ensuring the Agency has sufficient resources to deliver on its work programme, including extra-budgetary, and called on Members to provide them.
- 65. One delegation praised IRENA for achieving gender parity among its senior team and for promoting gender parity among the staff. The delegation also called on IRENA to consider the population size of the Members while maintaining equitable geographical distribution among the staff.

- 66. Delegations underlined IRENA's increased relevance and influence in the energy landscape and called on IRENA to further enhance its communication efforts, noting that the IRENA Assembly is one of the leading gatherings to accelerate the global energy transition, and praised IRENA for the High-level Forum on Energy Transition as a significant contribution to the promotion of energy transition.
- 67. One delegation recognised the World Energy Transitions Outlook, the Breakthrough Agenda and the NDC and RE targets reports. One delegation recognised the further refinement of the analysis undertaken in the Renewable Energy Costs report.
- 68. Some delegations highlighted that renewables have moved to the mainstream and the increase of renewables in the global electricity mix in the last decade, yet the speed of the energy transition is not fast enough, and the world is not on track to achieve the 1.5°C target. Some delegations underlined the progress lagging in achieving universal energy access and clean cooking and called for prioritising it.
- 69. Some delegations stated that the world is going through turbulent times, including the energy crisis and Russia's invasion of Ukraine, calling for the acceleration of the energy transition through efficient action, unprecedented international cooperation, and continued innovation. Delegations called for remaining focused on short-term priorities such tackling as the energy but also stressed that renewables coupled with energy efficiency measures could be the most effective strategy to accelerate sustainable development, boost climate action, energy security and lower energy prices. Delegations underscored that to navigate this unchartered territory, IRENA should be agile, practical, forward-looking, while considering the benefits and risks of the energy transition.
- 70. Delegations highlighted their commitment to the realisation of a just and inclusive renewables-based energy transition and the continuation of their collaboration with IRENA and its Members. Some delegations referred to the Just Energy Transition Partnerships and called on IRENA to intensify its advisory role in this context.
- 71. Delegations elaborated on their national strategies to increase the rate of renewables in their energy mix, improve energy access, domestically or in Africa, accelerate clean cooking, create enabling policy frameworks. Some delegations discussed the exploration of ways to develop and transport clean hydrogen. Delegations also discussed policies encouraging e-mobility and innovation in clean technologies, improving energy efficiency, exploring energy storage options, and increasing interconnectivity.
- 72. Delegations underlined the importance of having well-trained and sufficient human resources to affect the energy transition on the ground and invited IRENA to facilitate collaboration and the exchange of best practices to this end. One delegation called on IRENA to continue exploring the potential of renewables in creating jobs.
- 73. Referring to the collaboration with IRENA on the Energy Transition Education Network and the importance of engaging young people, delegations mentioned the "I Act" action for climate toolkit launched with IRENA, to inspire young leaders, and other national education and training initiatives to build the works force in different fields of energy. Delegations also welcomed the Youth Forum and its role in engaging the young decision-makers in the energy transition process.
- 74. Delegations underlined the importance of ensuring the sustainable and resilient supply of critical materials and the establishment of national strategic relations with producing countries and partners to achieve this. Delegations discussed national policies to ensure critical materials are

exported at the right market value, and invited IRENA to facilitate international cooperation, to ensure the extraction, use and transportation of raw materials in a sustainable, cooperative, and mutually beneficial way.

- 75. Delegations also pointed out the need to tackle the risks of the energy transition such as disposing of renewable energy devices and high costs and advised that solutions include the establishment of sustainable and economic supply chains by increasing life cycle assessments, decarbonisation of manufacturing processes, promotion of innovation and adoption of fair regulations for battery disposal. Delegations stressed the danger of decarbonizing but jeopardising energy security and economic growth in the process, and the decision to extend the operational life of existing nuclear power plants and construct innovative next generation reactors.
- 76. Delegations noted the challenges of deploying renewables and the need for some countries to leapfrog to the energy transition, and called on IRENA to support countries, while considering national and regional circumstances.
- 77. Delegations called for IRENA's work to intensify the focus on vulnerable countries and regions such as Africa, LDCs, LLDCs and SIDS, which are most in need of advice, technological support, infrastructure development and investments. One delegation called on IRENA to assist African countries with data collection on biomass to support data comparability and use and another delegation to assist countries in developing net-zero strategies through smart transition and unabated cleaner technologies.
- 78. Some delegations expressed gratitude for IRENA's support to ASEAN Members called on the Agency to continue this path and consider establishing regional support centres to enable localised support and collaboration. One delegation looked forward to the upcoming second ASEAN Regional Outlook.
- 79. One delegation underscored the importance of ensuring the countries in Latin America and the Caribbean achieve the energy transition and requested specific information on IRENA's plans to support them in 2023 as well as explore possible areas of cooperation with financial institutions in the region.
- 80. One delegation highlighted that the G7 achieved significant progress in their climate agenda in 2022 and underlined that this type of partnership could be key for the realisation of energy transitions.
- 81. Delegations welcomed the Collaborative Frameworks and suggested increasing the participation from the private sector such as utilities, suppliers, and financiers, to further expand the discussions taking place during the meetings.
- 82. Some delegations highlighted several initiatives and events including the recent launch of the Global Offshore Wind Alliance, in cooperation with IRENA, the upcoming Berlin Energy transition Dialogue to be hosted on 27-29 March that will translate the global ambition into action, and the upcoming Renewable Energy Conference to take place in Cyprus in October 2023.
- 83. Delegations stressed the importance of mobilising climate finance for climate vulnerable communities and stressed that shrinking private investments were exacerbated by the pandemic soaring cost of capital. Another delegation expressed hope that IRENA will assist the reform of multilateral development banks to further support the energy transition.

- 84. Delegations underscored the detrimental impact of climate change on SIDS as well as the urgent need for climate finance, climate resilient technologies and technical assistance to support the achievement of their climate and development goals. One delegation welcomed public and private partnerships and investments in the country bilaterally or through the SIDS Lighthouse Initiative.
- 85. Delegations stressed the critical role the private sector could play in accelerating the energy transition and noted that climate financing should be expanded to support small scale energy projects to increase energy access.
- 86. Delegations welcomed IRENA's first Investment Forum in Indonesia and its successful outcomes, and expressed hope that the Investment Forum, to be held in Nigeria in 2023, will facilitate the attraction of investments in the renewable energy sector of the country and the region at large. Some delegations welcomed the work of the Climate Investment Platform and looked forward to positive results and speeding up the work in the future.
- 87. Some delegations welcomed the establishment of the ETAF and applauded IRENA's efforts to rally up more partners and projects. One delegation requested clarifications on the ETAF structure, management, costs, and project eligibility criteria as well as on how it can be best used to address the needs of SIDS.
- 88. Delegations underlined the importance of the Renewables Acceleration Fund and the need to acquire more resources and invited IRENA to provide more information on contributions and expected results.
- 89. One delegation referred to the recently established national Climate Investment Fund which will invest in renewable energy projects in developing countries. The fund has already announced investments in several countries.
- 90. One delegation thanked IRENA for its support in achieving their national NDCs and extend renewables in the power grid. One delegation highlighted its support to the SIDS Lighthouse and Long-term Energy Strategy initiatives that can underpin the updating of the NDCs and the work of the NDC Partnership.
- 91. Some delegations congratulated the UAE for hosting COP28 and the IRENA HQs. Delegation underlined that the Global Stocktake at COP28 will focus on closing the gap between ambition and reality and accelerate the energy transition.
- 92. Delegations looked forward to an action oriented and successful COP28 and welcomed IRENA's Task Force and overall efforts to support the preparation process. One delegation stressed that COP28 will provide a unique opportunity for IRENA to demonstrate its' role as the authority and thought leader in the global energy policy landscape. Some delegations called on IRENA to support the conclusion of the first Global Stocktake and to support countries in updating and implementing NDCs. One delegation called on IRENA to not lose sight of the specialness of the NDC graduation countries, with respect to both technical assistance and finance in their energy transition policies and programs.
- 93. One delegation proposed to include in upcoming programmatic documents an assessment of the destruction of the Ukrainian energy infrastructure and its effect on global energy security and food systems.

94. The Assembly considered and adopted the 'Annual Report of the Director-General on the Implementation of the Work Programme and Budget for 2022-2023'.

#### Agenda Item 6: Draft Medium-Term Strategy 2023-2027 (A/13/L.4; A/13/DC/L.1)

- 95. Delegations welcomed the Medium-term Strategy 2023-2027 (MTS). Delegations also extended gratitude to the Secretariat and Members of the Working Team on the MTS for developing the Strategy, as well as Denmark and Kenya for co-chairing the process. Some delegations stressed that the Strategy is sharper than the previous iterations and an excellent basis to move forward. It also highlights the Agency's new geopolitical context and responds very well to the current global energy crisis.
- 96. Delegations welcomed the MTS's focus on systemic change and a holistic approach to realise sustainable development and maximise the impact of socio-economic policies. They also underlined the urgency and welcomed the reference in the MTS on achieving 1.5°C, energy transition, security, and access.
- 97. Delegation noted the importance of the alignment of the MTS with the achievement of the 2030 Agenda and its 17 SDGs, and the Paris Agreement, and called on IRENA to continue focusing on one of the main tenets of its Statue, namely the promotion of all forms of renewable energy. Delegations also called on IRENA to pursue practical solutions to promote interconnectivity, and the decarbonisation of hard-to-abate sectors and underscored the importance of strengthening the voice for renewables and called on IRENA to intensify work in this aspect, especially in the run up to COP28.
- 98. Some delegations welcomed the reinforced focus on multilateral and bilateral international cooperation as expressed through the fourth strategic objective on International Collaboration and Network Hub. Delegation highlighted the need to balance the increasing global energy demand and the impact of energy on climate change through global dialogue and reiterated the call to support developing countries in their energy transition, in securing sustainable finance and fostering collaboration with the private sector, in accordance with the 2063 Agenda.
- 99. Some delegations welcomed the focus on regional approaches and stressed that IRENA has significant experience and expertise on regional issues to draw from. Some delegations noted the need to promote technology transfer to promote the energy transition, green economy, and decarbonisation, and requested that the MTS should continue to foster capacity building in SIDS, facilitating funding proposals and accessing resources from various sources and help leverage public and private resources. Some delegations also called for a stronger focus on gender and youth in the implementation of the current strategy.
- 100. Delegations stressed that IRENA could play a critical role in supporting preparations for COP28 as well as the preparatory process of G7 and G20, based on the MTS, and requested that IRENA's next medium- and long-term strategies could be developed in a way that would bring the real impact on the ground for people's lives and livelihood, and the planet.
- 101. The Assembly considered the 'Draft Medium-term Strategy 2023-2027' and adopted the related draft decision (A/13/DC/1).

#### Agenda Item 7: General Member Statements

102. Delegations underlined that the world is not on track to meet the 1.5°C goal and reiterated their steadfast commitment to accelerating the energy transition and meeting this shared goal. Reiterating the urgency to realise the energy transition and climate goals, delegations highlighted the need to build momentum on this difficult but necessary transitional phase, towards achieving energy access and security. Delegations reaffirmed the role of IRENA in this context, and commended the work undertaken by the Agency in mainstreaming the renewables-based energy transition and supporting efforts to realise the 2030 Agenda for Sustainable Development and the Paris Agreement.

103. Delegations discussed challenges such as vulnerability to the effects of climate change, limited energy access and energy security, poverty, conflict, and delays in deployment due to the COVID-19 pandemic. They also added the difficulty in securing affordable financing and abating high energy costs, and that recent developments have further emphasised the need to diversify the economy and produce energy in a climate-friendly manner as well as to promote regional interconnectivity. In this regard, some delegations underlined that renewables are the solution to achieve energy security and affordability, sustainable development, and decarbonisation as well as to tackle the geopolitical upheaval and energy crisis stemming from Russia's invasion of Ukraine.

104. Delegations elaborated on their renewable energy strategies and targets, as well as their efforts to expand the deployment of various renewable energy sources in the electricity mix, increase energy access, enhance energy efficiency, promote e-mobility, create or enhance energy storage facilities, and improve policy frameworks. Delegations mentioned the national efforts to decarbonise hard-to-abate sectors, and referred to the IRENA SPLATS system planning tool, which is also utilised in the development of the African Continental Power Systems Master Plan, to update their national energy plans. Some delegations also recognised the role of IRENA's Renewable Energy Roadmap (REmap) programme in supporting the development of local capacities and enhancing knowledge of existing technologies, with a focus on strengthening the matrix of primary energy towards progressive decarbonisation of the energy sector and greater energy security.

105. Highlighting the role of green hydrogen in achieving climate and energy targets, fostering long-term decarbonisation efforts and ensuring sustainable economic growth, delegations outlined their strategies and efforts to promote the deployment of green hydrogen technologies, including through the development of green hydrogen roadmaps, supporting an increase of renewable energy capacities and infrastructure for hydrogen production, strengthening partnerships, and mobilising financial resources and investments. In this regard, delegations emphasised the increasing importance of international cooperation and the role of IRENA in providing timely and accurate information as well as in facilitating the exchange of best practices, particularly in light of the rapidly evolving and increasingly complex nature of the energy transition.

106. Some delegations also highlighted the role of regional connectivity and collaboration to strengthen countries' capabilities and knowledge and accelerate renewables development and deployment, thereby enhancing economic growth as well as energy access and security in the region. These delegations outlined their efforts to foster such initiatives, including with neighbouring countries, and conveyed their interest for more opportunities to partner with IRENA in this regard. One delegation called on IRENA to foster possibilities of triangular cooperation in regions, including Latin America and the Caribbean, to facilitate the exchange of experiences, enhance technical knowledge, and strengthen financing frameworks.

107. Delegations stressed their commitment to ensuring a just and inclusive energy transition, noting the role of renewables in providing an equalising force that enables the realisation of multiple benefits, including inclusive growth, access, and security. In this regard, delegations highlighted the centrality of a people-centred approach in ensuring that these benefits have far-reaching impacts across all levels of society. Some delegations also underscored the importance of engaging in a whole-of-government and whole-of-society approach to create an ecological consciousness and cultivate societies that are capable of contributing to adaptation and mitigation strategies and recognising the need to protect the environment.

108. Some delegations emphasised that the uptake of renewables must be considered through the lens of nexus issues, including water, agriculture, and healthcare, noting that the consideration of the politics and economics of the energy nexus is needed for policy frameworks to be truly robust. In this regard, one delegation highlighted that the work of IRENA has a complementary link to the Water Action Agenda and encouraged Members to place greater focus on issues relating to the water-energy nexus. Some delegations also underscored the importance of engaging in a whole-of-government and whole-of-society approach to ensure a just and inclusive energy transition and the creation of an ecological consciousness.

109. Delegations called on IRENA to continue its important role in providing timely and relevant research, knowledge and data, technical expertise in capacity building, support in the matchmaking of renewable energy technologies and tailor-made investments, as well as with policymaking and technology transfer. One delegation suggested the establishment of minimal benchmarks to measure countries' readiness to shift to stable, efficient, accessible, affordable, and inclusive renewable energy systems. One delegation stressed that SIDS could benefit more from research and application of modern technologies, and another expressed appreciation for the work of the SIDS Lighthouses Initiative.

110. Delegations stressed the difficulty of accessing financial instruments to support national energy transitions. They also called on the global community and IRENA to increase support towards the provision of climate finance to vulnerable countries, such as SIDS or small Latin American and Caribbean countries for whom climate change presents an existential threat, including through CIP, ETAF and other mechanisms. In this regard, one delegation emphasised the need to move from commitment to action, highlighting the need to place greater attention on project implementation and closing the investment gap in SIDS.

111. Delegations underlined the pivotal role of international collaboration, including in the IRENA context, and public-private partnerships in advancing the energy transition. Outlining their efforts to foster greater cooperation and collaboration towards the shared endeavour of accelerating the energy transition, delegations emphasised the leading role of IRENA in this regard and noted that the energy era based on renewables inherently fosters a cooperative approach in pursuit of a peaceful, resilient, and harmonious environment.

112. Delegations encouraged IRENA to continue assisting them with financing projects and partnering with the private sector, to establish stable electricity grids. One delegation welcomed the upcoming IRENA Investment Forum to take place in Uruguay on 9-10 November 2023. One delegation referred to the International Conference on Renewable Energy to be held on 20-23 February in Spain. One delegation mentioned the upcoming United Nations Water Conference to be held on 22-24 March in New York and co-hosted by Netherlands and Tajikistan.

- 113. Some delegations welcomed the IRENA Energy Compact on Renewable Energy for the United Nations Peacekeeping. Some delegations referred to the Global Offshore Wind Alliance (GOWA), launched at COP27, with the goal to accelerate the global uptake of offshore wind.
- 114. Some delegations sought continued support to NDC implementation and called on major emitters to enhance their NDCs. Delegations stressed that the Global Stocktake is about assessment, being realistic and practical, and changing the approach of implementing NDCs, and underlined that the phasing out of coal and fossil fuel subsidies should be a priority at COP28.
- 115. Delegations also congratulated the UAE for taking over the COP28 Presidency, expressed their full support towards a successful outcome, including through the Breakthrough Agenda, and called for renewed climate ambition and cooperation.
- 116. The Assembly took note of experiences shared by Members.

## Agenda Item 8: Ministerial Roundtable on Decarbonising Shipping: The role of ports in addressing supply, demand, and trade of renewable-based fuels (A/13/BN/2)

- 117. H.E. Mr Philippe Henry, Vice-President of the Assembly and Minister of Climate, Energy, Infrastructure and Mobility of Walloon Region of Belgium presided over the deliberations under this agenda item and invited the Director-General to introduce the topic. The Ministerial Roundtable included keynote remarks from Mr Emanuele Grimaldi, Chairman of International Chamber of shipping, and a video message by Mr Tom Hautekiet, Chief Commercial Officer of the Port of Antwerp-Bruges. The introductory part was followed by a panel discussion, moderated by Dr Melinda Crane, Chief Political correspondent at Deutsche Welle TV.
- 118. In his introductory remarks, the Director-General referred to IRENA's analysis that the liquid renewable fuels will play a crucial role in the form of green hydrogen-based fuel such as green ammonia and green ethanol and advanced biofuels, as well as recognised the essential role of ports and shipping in the development of this value chain. He stressed that a comprehensive infrastructure is the key to accelerate energy transition, including physical infrastructure, legal frameworks, institutional capacity, professional knowledge, international cooperation models, as well as investment mechanisms, and noted the commitment of the global shipping industry.
- 119. Mr Emanuele Grimaldi, Chairman of the International Chamber of Shipping (ICS) underlined the key role of shipping as an enabler for the wider energy transition and stressed the importance of collaboration to mobilise action. He commended the close work with IRENA, and the UAE's ambition and leadership in this area. He introduced the work of Clean Energy Marine Hubs Initiative under the Clean Energy Ministerial, which brings together key interested governments and the CEO-led clean energy maritime task force to accelerate the deployment of infrastructure and to de-risk investment needed to ensure access to low carbon fuels close to the ports for the maritime sector to transport and use. He noted that ICS had put forward a proposal to catalyse the adoption of alternative fuel by financially rewarding countries adopting new clean fuels. He also pointed out that transportation of green fuels from producer to consumer has been an overlooked topic so far, and further underscored that all parts of the energy value chain must be linked to build capacity to transport these fuels. He stated that to provide zero emissions fuel, both governments and companies need to start planning now and together.
- 120. Mr Tom Hautekiet, Chief Commercial Officer for the Port of Antwerp-Bruges noted in his video message that to support the shipping industry in this transition, all parties involved in the

value chain had to contribute; For ports and guarantors of global trade, the role was to create the necessary infrastructure and regulatory framework in time to allow shipping companies to use these future fuels. He also provided examples of how ports can impact the green shipping movement, including investing in greening fleet of service and operational vessels and highlighted the need for investment and regulatory clarity to achieve climate targets.

- 121. During the panel discussion, panellists joined a dynamic dialogue and shared their views on how to ensure a sufficient and reliable supply of renewable fuels for and through the maritime industry, how to work together to build a market, the needed infrastructure and fostering and accelerating demand for these fuels, and how to establish enabling frameworks to facilitate, transport and trade, including port infrastructure.
- 122. Ms Alicia Eastman, President of InterContinental Energy shared the progress of multiple large scale renewable fuels projects under development in Australia and the Middle East. She underlined the need to further develop port infrastructure, land infrastructure, as well as regulations, including safety regulations, certifications, amongst others. She stressed that only with regulations and projects in place and engagement at a global scale, a steady market can be created.
- 123. Ms Karrie Trauth, Senior Vice-President of Shipping and Maritime at Shell, confirmed that ambitions that IMO sets will drive the uptake and the increase in the need for decarbonised fuels. She stated that, to assume a net zero of 2050 target, it requires the share of low carbon fuels to reach 15% by 2030, with at least 5% zero carbon fuels by 2030, 40% by 2040, and 60% by 2050. She further noted that hydrogen has significant potential as a zero-carbon energy source, but progress was needed in both transportation and production aspects, i.e., the availability of sustainable feed stock. She also called for policies to incentivise the investment in the renewable energies in shipping sector.
- 124. Mr Arsenio Dominguez, Director of the Marine Environmental Division at the International Maritime Organization, IMO, elaborated on IMO's role to bringing all stakeholders together and creating a platform for exchange. He highlighted the need to give room to in particular developing countries to avoid creating imbalance in the sector. He also relayed that IMO advances technical and operational measures as well as the establishment and development of economic measures, which are the key to support the energy transition.
- 125. Mr Bud Darr, Executive Vice-President of the Mediterranean Shipping Company, shared his expectation that compared to conventional fuel, net zero or near net zero fuels have a different density and will thus pose a challenge to the shipping sector that needs to be addressed. He added that another challenge was that many developing countries that would in the future host the majority of consumers, are far from major trade hubs. He also introduced measures to lower the cost and make the transition affordable for carriers, which include participating in collaborative efforts and maximise fuel flexibility for the ships that are under constructing.
- 126. Mr Gunnar Stiesch, Chief Technology Officer and Member of the Executive Board of MAN Energy Solutions, presented examples of new propulsion technologies, including a methanol burning engine, an ammonia engine under development, as well as converting existing diesel ships and engines to run on natural gas. He pointed out that the availability of decarbonised fuels is one of the obstacles in energy transition in the shipping sector. He further stated that to address the problem, regulatory clarity at both global and national level is needed, including globally harmonised targets, timely incentives for low and zero carbon fuels, and pursue a well-to-wake approach.

- 127. Mr Ahmed Harby, Director of Chartering and Operations at FertiGlobe, pointed to existing safety frameworks for ammonia and underlined the importance of information sharing and training in this field. Furthermore, he shared his view that the energy sector could benefit from existing infrastructure and knowledge of other industries, and that synergies between these sectors would help to create a market and attract investment. Finally, work on the regulatory framework was of importance.
- 128. Mr Guy Platten, Secretary General of the International Chamber of Shipping (ICS) stressed the importance of international collaboration amongst different stakeholders to address the challenges in energy transition in shipping sector. He further elaborated on the Clean Energy Marine Hubs Initiative, which brings the public and the private sector together in order to support government and private stakeholders in establishing hubs for clean fuel to be produced, transported, and used at scale via shipping, and it also breaks down barriers between different industries and governments to collaborate, for both maritime sector and all parts of value chain. He also underlined not to overlook the need to training seafarers to new standards.
- 129. Mr Saif Al Mheiri, Managing Director of Abu Dhabi Maritime, introduced the actions taken by the company to transition to a multifuel landscape, including using biofuel recycled from cooking oil from restaurants, trial of various low sulfur fuel oil, and experiments on dual fuel, hydrogen, or methanal fuels. On collaboration, he mentioned several engagements with other collaborative endeavours, including the setup of an export/import corridor for clean hydrogen the United Arab Emirates were pursuing with the Netherlands.
- 130. Mr Esben Poulsson, Executive Chairman of Enesel PTE. LTD., stated that Singapore, with a very active maritime port authority and investments in technology, had become the world leading port and a multifuel centre with an assured supply of green fuels for shipping, despite of the shortage of land in Singapore. With its partners, Singapore had set up green corridors with California and the Netherlands.
- 131. Ms Lynn Loo, CEO of the Global Center for Maritime Decarbonization affirmed that the commitment to decarbonisation will bring the demand and supply in the market. She also called for advance the actions and move in parallel, since currently planned projects for methanol or e-ammonia would account for less than the half of the zero carbon fuels needed in 2030 She stated that her organisation is developing studies and pilots to ensure safety and training of seafarers.
- 132. Delegations affirmed that critical attention is needed on decarbonising shipping sector and stressed the important role that ports can play. They underscored that significant international collaboration is crucial in addressing technology challenges and huge infrastructure and investment needs, as shipping is a global industry. Delegations reiterated their commitment and shared practical examples of actions taken to decarbonise shipping, such as green shipping corridors. They also suggested to strengthen regulatory framework and standards. Delegates recognised that fuels and energy from multiple sources are needed, depending on the different needs of shipping companies and sectors.
- 133. Mr Roland Roesch thanked all participants for the active and insightful engagement. He summarised that the narrative of challenging decarbonisation of the shipping sector was changing to a narrative about collaboration to harness the business opportunities, and synergies to trade and use renewable fuels as well as developing new port infrastructure. The announcements from the private sector demonstrated that the decarbonisation of the maritime sector can be addressed. He reflected that various renewable fuel options will become available in the next few years, but

tailored solutions for different needs had to be implemented. Ports with their unique position in the maritime value chain had to play an important role in the greening efforts of this sector. He underlined the strong need to develop harmonised approaches for the maritime standards and decarbonisation targets, and that government had a leading role in promoting an ecosystem of sustainable investments and incentives. He pointed to green shipping corridors already going on across the globe and the important lessons they offer, and to the important role of human talent, reskilling, and upskilling. He closed by thanking the membership, the private sector, and key partners, including the International Chamber of Shipping, the Clean Energy Marine Hubs Initiative under the Clean Energy Ministerial, and International Maritime Organisation for supporting the processes to accelerate action. He stated that IRENA will follow-up on the input from Members and strengthen the close collaboration our work closely.

134. A report of this Ministerial Roundtable was presented at plenary under agenda item 12.

## Agenda Item 9: Ministerial Dialogue on Regional Energy Transition Outlooks: Southeast Asia Energy Transitions (A/13/BN/3)

135. The President of the Assembly briefly introduced the agenda item and provided context for the discussions at this session. He referred to IRENA's World Energy Transitions Outlooks (WETO), also at regional and country level, which provided guidance to national policymakers to achieve their energy transition and climate action plans through programmes and initiatives. He affirmed ASEAN's significant renewable energy potential and region's firm commitment to transition energy systems towards enhanced reliability, climate neutrality and affordability. He expressed his wish that the deliberations at this session will establish a model for other regions to realise the shift from energy transition scenarios to action on the ground.

136. The Vice-President of the Assembly, H.E. Mr Arifin Tasrif, Minister of Energy and Mineral Resources of Indonesia, then presided over the deliberations under this agenda item and invited the Director-General to introduce the topic. The introductory remarks were followed by a panel discussion, moderated by Mr Achim Steiner, Administrator of the United Nations Development Programme (UNDP). The panel discussion includes keynote remarks from Mr Ahmed M. Saeed, Vice-President of Asian Development Bank (ADB) and Mr Gurbuz Gonul, Director of IRENA's Country Engagement and Partnerships (CEP) Division, and discussions with the panellists.

137. In his introductory remarks, H.E. Mr Arifin Tasrif, affirmed ASEAN's expected high economic growth rate despite the global economic recession. He relayed Indonesia's 2023 ASEAN Chairmanship theme, "ASEAN Matters: Epicentrum of Growth" would strengthen energy security. He further relayed that Indonesia is preparing energy annual priorities to accelerate the region's growth through connected markets and new competitiveness, including inclusive digital economic transformation and participation, as well as sustainable economic growth for a resilient future. He stated that with strengthening interconnection, competitiveness, as well as inclusiveness, ASEAN will be able to address various challenges, including those related to the energy transition process, and to enhance, share, and utilise renewable energy resources to maintain the net zero emissions path, and at the same time, to keep the energy security around region. Recognising ASEAN as one of the most vulnerable regions to climate change, he underscored the importance of cooperation and collaboration, to ensure affordable energy for all and to guarantee that no one left behind.

138. The Director-General stated that Southeast Asia is at a crossroads in its energy transition and future development pathway. He recognised the economic and social progress made in this regional and pointed out that the progress is accompanied by increase in energy demand, mostly supplied by traditional fossil fuels. He stated the climate-neutral transition can be aided by the wealth of existing renewable energy resources available and stressed that the commitments need to be implemented. He highlighted the unique opportunity for ASEAN to develop a sustainable energy system based on renewable energy resources and end-use electrification that can offer socioeconomic benefits while meeting the 1.5°C goal.

139. The Director-General referred to the second Renewable Energy Outlook for ASEAN, which sets out an energy development pathway towards net zero to a transition towards 65% renewable energy share in final energy by 2050. He further explained that this transition requires over USD 5 trillion over the period to 2050 in investment in renewable power capacity, power grid and infrastructure, and enabling technologies like storage. He reflected on the IRENA G20 Energy Transition Investment Forum for Southeast Asia in 2021, co-organised by IRENA and Indonesia during its G20 Presidency, where 20 project developers and ten financiers were assembled, one of which reached financial closure. The Director-General reiterated commitment that IRENA will continue to follow up and provide support to advance other projects showcased at the regional Energy Transition Investment Forum. He reiterated IRENA's commitment to continue the fruitful partnership with ASEAN and invited ministers and partners to collaborate with IRENA to support Southeast Asia's energy transition.

140. Mr Ahmed M. Saeed, Vice-President of ADB for East Asia, Southeast Asia, and the Pacific, commended IRENA's Renewable Energy Outlook for ASEAN and congratulated Indonesia for a successful G20 presidency. He expressed pride in the ADB's work with Indonesia on the Energy Transition Mechanism focus group discussions throughout 2022. He also highlighted ADB's support for the region such as the Infrastructure Fund and the Catalytic Green Facility and noted the appropriate location of the dialogue to discuss energy transition, as the future host of COP28. Mr Saeed acknowledged that fight against climate change will be 'won or lost' in emerging markets and in Asia. He stressed for emerging markets to transition, ASEAN must show the way by creating models that can be adapted and replicated elsewhere in the developing world which will demand more from all Members, governments, regional organisations, international organisations, and multilateral banks. He announced that ADB has raised their ambition with a new goal of USD 100 billion in total climate financing commitment by 2030 and are working hard to test new initiatives and forms of collaboration across the public, private, and philanthropic sectors.

141. Mr Saeed highlighted three lessons learned. First, he noted ADB's strengths, including its knowledge of certain subjects, experience in developing countries, and support from its developing country members. Second, he emphasised ADB's capabilities matter to create high-impact partnerships. He elaborated that to address climate change requires joint effort from local community, public sector, private sector, philanthropy, and civil society, that requires understanding of strengths from each partner. Third, he emphasised the solutions to complex, dynamic problems are to be discovered on the field. Mr Saeed declared that although climate change is a threat that discriminates against the weakest and most vulnerable, it is an unprecedented opportunity for everyone to convene and work together. He noted this historic challenge represents the best opportunity ever seen before to mobilise capital and ideas for emerging markets. He stressed if the opportunities are demonstrated correctly ASEAN will blaze the trail forward. In this context, he mentioned decarbonisation may be viewed as another name for development.

142. Mr Gurbuz Gonul, Director of IRENA's Country Engagement and Partnerships Division, commenced his presentation by portraying IRENA's near-decade supportive work of IRENA to Southeast Asia on the energy transition, including the signing of a Memorandum of Understanding (MoU) with ASEAN in the presence of the ASEAN's Secretary General and ten energy ministers in 2018, helping to scale up activities and support the realisation of the ASEAN plan of Action on Energy Cooperation. Since then, he mentioned IRENA's presence in the region has gained momentum, including several streams of work through outlooks and assessments. He added that work also included IRENA's undertaking of renewable readiness assessments, assessments of socioeconomic impact of energy transition, and bioenergy. He stated that IRENA's work expanded in the areas of innovation and technology, power sector transformation, and grid flexibility assessment assistance. He listed the potential areas of work during Indonesia as ASEAN Chairmanship, including energy accessibility of remote islands, and strengthen regional interconnections.

143. Mr Gonul recapped key messages from IRENA's Renewable Energy Outlook and the upcoming Socioeconomic Impact on Energy Transition Report, highlighting that scaling up deployment of renewables and increasing energy efficiency would contribute significantly to the reduction in carbon dioxide. He underscored the key role of investment in strengthening of regional interconnections in power sector, energy-efficiency, and other supporting infrastructure. He further mentioned that bioenergy and hydrogen will contribute to the decarbonisation of the industry and transport sectors, and that Southeast Asia has the potential to play a vital role in the global hydrogen supply chain. On the socioeconomic dimension, he stated the Socioeconomic Footprint report for the ASEAN presents the benefits under the 1.5 °C scenario up to 2050. Mr Gonul also referred to the Director-General's remarks on the G20 Energy Transitions Investment Forum, which strengthens the ability of decision-makers to foster a strong enabling environment for energy transition related investments. He added that the Alliance for Industry Decarbonisation was launched at the Forum with 14 companies and has grown into 31 companies, representing different industrial sectors that share a common vision and strong appetite to decarbonise their value chains. Before concluding, Mr Gonul acknowledged contributions from Denmark and Japan which has helped scale up IRENA's support to the region in their energy transformation.

144. The Vice-President of the Assembly introduced a short video from IRENA on encouraging recommendations to assist ASEAN to achieve its climate goals and sustainable growth.

145. Mr Achim Steiner, Administrator of UNDP, recognised the developments in this region in access to energy, energy transitions, the efficiency of energy use, and pointed out that the significance of the supply side of energy and electricity, as well as the resulting in other win-wins, the transitions in mobility, in agriculture, in land use, in infrastructure, and housing, might be underestimated. He expects a scale up of innovation in ASEAN with an ability to influence multiple returns on investment which leverage a broader spectrum of private sector actors and different constituencies within an economy. He highlighted that the focus of the dialogue is on the ASEAN Plan of Action on Energy and Cooperation 2016 - 2025 for which the energy issue is a central part of the past Cambodian presidency and the present Indonesian ASEAN presidency. He commended IRENA for leading pioneering work and partnerships enjoyed, as well as the commitments to enable access to clean and affordable energy as one of the central objectives of work in the ASEAN region. He conveyed the UNDP have developed new approaches for the Social Action for Energy Framework to address ways these transitions can happen in an inclusive, affordable, and developmentally positive way. He noted that the countries of the ASEAN region are considered the pioneers in framing these transitions, whether from within the energy sector alone or in the broader pathway of decarbonisation.

146. H.E. Mr Victor Jona, Undersecretary of State for the Ministry of Mines and Energy of Cambodia, outlined the key achievements during Cambodia's Chairmanship of the ASEAN. First, he mentioned the launch of two important document, the 7<sup>th</sup> ASEAN Energy Outlook by ASEAN Centre for Energy and the 2<sup>nd</sup> Renewable Energy Outlook for ASEAN by IRENA. Second, he mentioned about the cross-border power trade between Lao PDR-Thailand-Malaysia-Singapore up to 100 MW which was successfully commenced on 23 June 2022. He mentioned the successful share of installed renewable capacity has reached 33.5%, the total renewable energy mix is 33.5%, and the primary energy supply of renewable energy, at 14.2%, has a target of 23% by 2025.

147. H.E. Mr Arifin Tasrif, Vice-President of the Assembly and Minister of Energy and Mineral Resources of Indonesia shared forward looking ideas on key priorities for energy transition in Southeast Asia, since the pass of ASEAN chairmanship from Cambodia. He underscored that the ASEAN would continue with further enforcement through the creation of common goal targets. He highlighted the importance of interconnection for electricity and natural gas to bridge the transition. He reported that the existing interconnection for natural gas by Indonesia and Malaysia may extend to Vietnam to have the potential of natural gas to bridge the needs of energy during the transition. He also advised collaboration in industrialising minerals to strengthen support to the energy transition.

148. H.E. Stefan Wenzel, Parliamentary State Secretary of Germany, shared his views on energy transition for the ASEAN region from German and G7 perspective. Referring to the "aggressive war against Ukraine", he stated that discussions at G7 and G20 show the need to strengthen both efficiency and the renewable energy security. He mentioned the newly launched Just Energy Transition Partnership (JETP), which will be a strong chain between countries. He noted that Germany's national phase-out is encouraged by the low cost of renewable energy. He affirmed the commitment to share experience and expressed his expectation for strong leadership in Asia. He also underlined the importance of secure supply chain for hydrogen, chips, electrolysers, off-shore and on-shore wind, and rare earth materials, amongst others.

149. Mr Abdul Razib bin Dawood, the Chief Executive Officer of the Energy Commission of Malaysia, shared the plan and priorities for energy transition in Malaysia. He announced strong commitment by Malaysia to achieve net zero by 2050 and to deliver the NDC by 2030 with a 45% reduction in carbon emission density. He introduced the ways to decarbonisation, including increasing renewable energy mix in national power mix with PV solar at the core, and addressing the challenges that power grid will face, such as intermittency and variability on renewable energy. He stressed the importance on battery storage system and interconnection of ASEAN power grid. He also introduced Green Corporate PPA and voluntary carbon exchange as part of the 2050 strategy.

150. Mr Geoffrey Pyatt, Assistant Secretary for Energy of the United States of America introduced the Inflation Reduction Act, which is considered the most significant climate legislation in the USA history and will trigger the largest investment in clean energy. He further stated that the Act will accelerate deployment of renewables in the USA and will also drive investment and innovation, which will directly help Southeast Asia to meet its climate goals. He also stressed the importance of supply chain and noted that the Inflation Reduction Act will help to create and fortify a resilient supply chain.

151. H.E. Ms Kadri Simson, Commissioner for Energy of the European Union highlighted the critical role of strategies that maintain growth while decarbonising from the energy use, stating that this is "particularly true in this current moment where the Russian invasion of Ukraine has caused

global hardship and disruption and driving energy prices higher and creating supply risks". She commended that ASEAN countries have updated early the targets on promoting renewable electricity and reducing energy intensity, and she noted that setting goals is crucial as it will lead the direction and send clear signal to investors. She further advised to make full use of the potential of renewables and to create a regional integrated power market. She also underlined the importance of energy efficiency.

152. Mr Ngiam Shih Chun, Chief Executive of Energy Market Authority of Singapore, shared lesson learned from the climate change action in Singapore, as a small country with limited renewable energy resources. He stated that one of the lessoned learned is that every country and regional has to find its own decarbonisation pathways to achieve net zero, as each has unique constraints. On the other hand, he also noted that decarbonisation in solo is difficult for countries, and hence he welcomed the effort of IRENA in promoting international and regional cooperation. He pointed out approaches for IRENA to play bigger role in Southeast Asia, including setting up a regional office in Asia, as well as joint reports and high-level forums.

153. H.E. Kei Takagi, Parliamentary Vice-Minister of Ministry of Foreign Affairs of Japan introduced the complex features of Southeast Asia regional. He commended countries that have set ambitious goals and called for tailored support from IRENA. He unscored the importance of attaining an energy mix that is best suited for this regional while achieving stability, affordability, and cleanliness. Recognising the difficulty to achieve all three targets at the same time, he advised to set priorities depending on local conditions. He reiterated Japan's commitment to support energy transition in Southeast Asia based on its experience as an island country, and to share technologies such as micro-grids.

154. Ms Damilola Ogunbiyi, CEO and Special Representative of the UN Secretary-General for Sustainable Energy for All and Co-Chair of UN-Energy, highlighted the ambition of ASEAN countries in the energy transition and called for technical assistance as well as investment grade policies. She referred to the access to clean cooking, sustainable cooling, and technology transfer as key elements in the energy transition. She also affirmed the commitment form SEforAll and the UN family to make ASEAN as an example to the other developing countries in energy transition.

155. Mr Demetrios Papathanasiou, Global Director for Energy and Extractives of the World Bank started by stating the importance of modern energy to modern economy and thus, he added that the key is to ramp up financing that will bring renewable energy at scale and at reliability around the world. With introducing World Bank's strategy and progress, he reiterated that World Bank is can support both in the leveraging financing and the know-how.

156. During the discussion, delegations and participants outlined their efforts on initiatives, collaboration as well as their partnership projects, and they discussed the progress and challenges encountered. One participant mentioned their search to ensure future ready, resilient, reliable, and secure energy delivery systems for a grid modernisation containing systems that are able to allow for large-scale renewable energy integration, including deployment of utility-scale energy storage battery systems. Another recommended that to improve grid services in a vertical integrated environment, the regulatory framework is originally needed to transport battery and storage potential benefits into national utility planning. One participant informed the panel the Bezos Earth fund, together with Rockefeller Foundation and IKEA Foundation, established the Global Energy Alliance for People and Planet is already working intensively in Southeast Asia on various issues, including policy design with government, pipeline development, as well as de-risking. A participant stated that to realise a long-term energy transition at global level calls for strengthened

partnerships to help mobilise investments and financing, as well as access, deploy cost-competitive technologies, and to acquire technical capacities.

157. In his summary of the discussion, Mr Achim Steiner, Administrator of UNDP and moderator of this session, summarised the way forward is through technology, decarbonisation, and ultimately access to clean and affordable energy. To enable the energy revolution underway, he stressed the need to close the gap for hundreds of millions of people without access. He advised that to make the energy transition inclusive, move at a faster pace, and instil it in the overall economic transformation, will begin with political leadership, deliberate policy frameworks, as well as bold engagement with the private sector. He further advised it is necessary to ensure that not only those who can afford to be part of that new renewable energy but those who will sustain an economy in the long term must be included.

158. In concluding, H.E. Mr Arifin Tasrif, Vice-President of the Assembly expressed his appreciation to IRENA for organising the meeting and supporting Indonesia throughout its transition development, including with the Indonesia Energy Transition Outlook, which became one of the inputs for the Indonesia Net-Zero Roadmap. He highlighted, with the support of IRENA, Indonesia's ASEAN chairmanship anticipates working to adopt robust energy efficiency measures, increase the electrification, and optimise renewable energy resources in the Southeast Asia regions. He noted the common factor shared is the aim for a clean energy future which may include different routes that require essential collaboration with IRENA, partner countries and relevant stakeholders. He stated this will enable Indonesia presidency to achieve the ASEAN Plan of Action for Energy Cooperation.

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

## Agenda Item 10: Ministerial Dialogue on Critical materials for the Renewables-Centred Energy Transition: How to jointly harness opportunities (A/13/BN/4)

160. H.E. Mr Zhemu Soda, Vice-President of the Assembly and Minister of Energy and Power Development of Zimbabwe presided over the dialogue, the appointed moderator was H.E. Mr Patrick Moody, Ambassador of the United Kingdom to the UAE and co-facilitator of the Collaborative Framework on Critical Materials. Keynote speakers included the Director-General of IRENA, Ms Kadri Simson of the European Union Commissioner for Energy, Mr Selwin Hart, United Nations Special Adviser to the Secretary-General on Climate Action and Just Transition, and Mr Roland Roesch, Acting Director of IRENA Innovation and Technology Centre.

161. The Director-General of IRENA observed the growth in political momentum to ensure a reliable supply of critical materials to meet increased demand, whilst avoiding mistakes made in the past with respect to the environmental, social and governance impacts of extractive industries. He relayed IRENA's findings on the availability of critical materials will not be a barrier to the energy transition in the long term, yet he underscored the short and mid-term need for a scaled-up supply of critical materials with a larger geographical diversification, strong commitments to sustainability standards and their enforcement. He emphasised a need for innovation in technology to reduce or eliminate the use of critical materials as well as the recycling of products and technologies.

162. He recalled that the Collaborative Framework on Critical Materials was launched subsequent to the need to explore ways to address gaps in collective knowledge and capabilities. He expressed

his appreciation to the co-facilitators, the United Kingdom and Peru, for their efforts in shaping the work of this framework. He also highlighted the importance to collaborate with the Collaborative Framework on Geopolitics in an ongoing report on the geopolitics of critical material that will include the existing analysis of supply chains. He announced the plan to use this report as a basis for the high-level forum on the energy transition in the spring of 2023.

163. Ms Kadri Simon, the European Union Commissioner for Energy, underscored that the increased demand for affordable and sustainable sourced critical raw materials for large-scale deployment of renewables risks the creation of new vulnerabilities and dependencies that require a policy response. She then outlined the EU response to strengthen domestic sourcing of raw and advanced materials including the Action Plan on critical raw materials, the creation of the European Raw Materials Alliance and a 'European Critical Raw Materials Act' to be proposed in Q1/2023. She also mentioned the EU partnerships with like-minded partners including Canada, Ukraine, Namibia, and Kazakhstan to avoid being overdependent on a few countries, with the Mineral Security Partnership to share information on critical raw materials and investment opportunities and works within the G7 and G20 to build strong, responsible, sustainable, and transparent critical mineral supply chains. She expressed the EU's appreciation of IRENA's overall work and the creation of the Collaborative Framework in particular and encouraged the Agency to continue to leverage its wide membership to force international cooperation on this crucial issue.

164. Mr Selwin Hart, the United Nations Special Adviser to the Secretary-General on Climate Action and Just Transition, outlined four essential actions to be taken to build sustainable supply chains to power the renewable energy revolution. Firstly, governments must provide clear policy and regulatory signals to ensure all investments are directed toward achieving the climate goal. Secondly, environmental sustainability and respect for human rights and labor laws must not be compromised. Thirdly, he unscored the need to build and diversify manufacturing capacities in host communities to ensure that the supply of critical materials truly benefits them through the creation of jobs, especially for women and the youth in the developing world. Lastly, he urged international cooperation and collaboration to be strengthened to avoid unilateral approaches and small groups of countries or companies distorting the supply and demand for these critical materials and minerals. He also emphasised the importance of transparency and equal opportunity for all countries and conveyed the United Nations stands ready to support this important effort.

165. Dr Roland Roesch, Acting Director of the IRENA Innovation and Technology Centre recapped the significant progress in the renewables sector in the past decade and emphasises the need to increase installed capacity threefold by 2030 and tenfold by 2050 to meet climate goals. He noted that such a level of ambition reveals an existing mismatch with the current availability of critical materials, which prompts concerns that the rapid ramp-up of supply will contribute to increasing pollution and injustice.

166. He shared that IRENA has been assisting countries to identify associated risks and develop solutions through the Collaborative Framework on Critical Materials, which consists of three working groups and explores links and dependencies between critical materials and the energy transition. He commended the efforts of the two co-facilitators, Peru and the United Kingdom, to shape the work under this Framework to serve as a platform for dialogue, a vehicle to coordinate actions, as well as to leverage expertise and prevent complementarities overlapping. He revealed the EV battery report, soon to be published, indicates that lithium-ion cathodes and graphite anodes will dominate this decade, but increased production will start for other chemistries (e.g., sodium-ion batteries) and that gigafactories are on the rise. He advised the ramp up of supply,

diversification of the supply chain, and investment in material innovation and recycling are needed to mitigate supply risks in the short and mid-term without compromising environmental, social and governance aspects.

167. After introducing the panel members, the moderator highlighted the unanimous call from countries for an international platform, that includes the private sector, and for a balanced dialogue to jointly address the issues. He highlighted the crucial aspect of securing access and developing new sources of critical materials. He relayed the perspective from the United Kingdom's initiatives and mentioned that while limited data is available, the United Kingdom's work with IRENA is focused on data collection analysis, supply risks and the ESG aspects.

168. Mr Li Jiang, Contemporary Amperex Technology Co. Ltd (CATL), reiterated previous concerns on material supply short-term lithium supply and demand mismatch. He suggested industry supply shortage will be relieved through the proactive development of lithium minerals worldwide and predicted an increase in the mature recycling industry. He announced that CATL is committed to investing in research and development and will continue to promote innovation in technology, manufacturing, business models, as well as battery chemistries. On EVs, he announced CATL has rolled out an AB battery system solution, using sodium and lithium-based cells in one EV pack, that provides a driving range of approximately 500 km.

169. Ms Helaina Matza, Director of Energy Transformation from the United States Department of State, shared the US experiences and plans which include the Bipartisan Infrastructure Law and the Inflation Reduction Act, the introduction of new national programmes that provide grants and loans including the Department of Energy USD 700 million loan for domestic lithium production. She emphasised that collective global climate ambition and collaboration as essential to ensure supply is met in a value-based way to attract investment. She shared an example of the collaboration of 12 governments and the EU under the Mineral Security Partnership, launched in June 2022 across 4 pillars - information sharing, development of an investment network, ensuring ESG standards are upheld, and the promotion of recycling.

170. From the World Bank's perspective, Mr Demetrios Papathanasiou, the Global Director of Energy and Extractives, referred to World Bank's extensive work under Climate-Smart Mining and related Climate Mineral Explorer application that currently covers the lithium supply chain in detail. He emphasised governments' responsibility to promote transparent policies and regulations to facilitate the engagement of the private sector, and to find quick and responsive methods to discover and develop the much-needed minerals around the world. He also noted the need for a visible differentiated price in the commodity markets for responsibly produced metals and minerals with a guaranteed supply chain. He pointed out strong opportunities and resources in Africa to be developed responsibly to benefit Africa and the world. Regarding hydrogen, he mentioned a joint World Bank-Hydrogen Council report looking at materials needs, particularly platinum and iridium.

171. Mr Darren Robertson, Managing Director of GreenSpur, showcased permanent magnet generators without rare earth elements and emphasised that policymakers need to encourage the development of such alternative chemistries to address supply chain vulnerabilities, their environmental impact, and the energy security concerns while acknowledging potential fear from the industry. He mentioned several innovative applications by GreenSpur relying on different materials and outlined trade-offs in terms of their performance and costs. He urgent policymakers to introduce policies and programmes to encourage innovations and the collaboration between SMEs and innovators to scale up their market uptake.

172. Delegations outlined their associated national technology developments, mobilisation efforts and investment initiatives. One delegation announced they are creating a Critical Minerals Centre of Excellence to support targeted research and development for upstream critical minerals processing and battery precursors and related materials engineering, as well as funding to implement a critical materials strategy. Another mentioned a national inter-ministerial platform on critical minerals to define strategies on actions to secure the country's adequate supply of raw materials for energy and other sectors.

173. Delegations recognised the immediate need to establish highly transparent and fair markets to attract investment. A delegation suggested that a rule-based market built on transparency and respect for human dignity is the fastest pathway to the investment needed to accelerate the transition. A delegation highlighted the importance to build a highly resilient supply chain for critical mineral resources and identified the need to strengthen environmental, social, and governance rules. Delegations stressed the importance of recycling and the need to consider the issues of critical minerals circularity, traceability, and the recovery of critical minerals from waste. One delegation suggested that private companies that operate in this sector can also contribute to the transition. Another stressed the importance of developing recycling and reuse technology that complies with international rules that respect the human rights of workers.

174. Delegations declared IRENA is best placed to promote the discussions around critical minerals. One delegation recommended IRENA should explore the appropriate global governance structures in place and ways to ensure price volatility is kept to a limit. Another recommended IRENA should continue promoting the diversification of the supply chain. One delegation suggested IRENA's role can be extended to matters of the development of an equitable critical minerals market worldwide. Delegations stressed the importance of international cooperation and the need for it to be enhanced. One delegation suggested IRENA can bring suppliers and consumers together with the aim to contribute to the establishment of a common regulatory framework. An observer stressed the importance of the topic and informed about their work in this area.

175. In his concluding remarks, Dr Roesch thanked the panel for the rich discussion and acknowledged countries' serious commitments around critical materials to avoid stalling the energy transition through investment, innovation, and clean recycling methods. He affirmed that strong political will combined with private-sector engagement is both essential and encouraging. He derived from the discussion that there is a huge challenge to diversify supply chains and noted the encouraging number of options for solutions. He also reflected on the forewarning not to compromise on the environmental, social and governance sustainability standards. On the need for IRENA to continue to lead this workstream and provide practical support, he assured Members that IRENA will respect suggestions made for further work and priorities and recalled the request for IRENA's Collaborative Framework for Critical Materials to play a central role in the fostering close partnership among countries, companies, NGOs, and other intergovernmental organisations. He took inspiration from the determined and innovative mindset of policymakers and businesses involved in the dialogue, as it assures IRENA's confidence that in working together all goals can be delivered.

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

Agenda Item 11: Ministerial Dialogue on Energy Transition Accelerator Financing (ETAF) Platform (A/13/BN/5)

177. H.E. Mr Philippe Henry, Vice-President of the Assembly and Minister of Climate, Energy, Mobility, and Infrastructure of the Walloon Region of Belgium presided over the deliberations under this agenda item and invited the Director-General to introduce the topic. The introductory remarks were followed by a panel discussion, moderated by Dr Melinda Crane, Chief Political correspondent at Deutsche Welle TV. During the panel discussion, keynote remarks were delivered by Dr Ahmed Mohamed Mohina, First Undersecretary of Ministry of Electricity and Renewable Energy of Egypt, representing H.E. Dr Mohamed Shaker El-Markabi, Minister of Electricity and Renewable Energy of Egypt, H.E. Dr Nawal Al-Hosany, the Permanent Representative of the UAE to IRENA, and Dr Mahmoud Mohieldin, United Nations Secretary General Special Envoy on Financing the 2030 Sustainable Development Agenda and United Nations Climate Change High-Level Champion for COP27, followed by discussion with the panellists.

178. H.E. Mr Philippe Henry, Vice-President of the Assembly, introduced the objectives of this Ministerial dialogue, which are to exchange views on ways IRENA and ETAF can increase investments in renewable energy to meet the developing world's energy transition ambitions and potential whilst fulfilling their sustainable development and climate goals, also to generate discussions on ways to lower barriers to investment in energy transition assets through steps to be taken to reduce project risk and to structure blended funding packages, as well as to share non-ETAF partners' lessons learned on the effective use of the financial instruments to scale up renewable energy projects.

179. In his introductory remarks, the Director-General commented on his continuous goal to increase support to IRENA Members and States in Accession to achieve their energy transition targets. He noted the Agency's efforts in establishing the division of Project Facilitation and Support (PFS) to steer support to attract investment for IRENA Members and States in accession's energy projects through initiatives that are directly focused on mobilising projects of various scopes and sizes, as well as funding and de-risking solutions to push them forward. He added the initiatives have a targeted mandate to support the funding of partners whilst remaining complementary in terms of supporting the energy transition. He stated that IRENA acts as facilitator only, not as a funding institution, and that IRENA's coordination role provides platforms to match priorities of project developers with financing solutions. He declared the ETAF is an inclusive multi-stakeholder climate finance platform, launched by the UAE at COP26 and anchored with funding from the Abu Dhabi Fund for Development (ADFD). He announced three additional partners were welcomed at COP27 - the Asian Infrastructure Investment Bank (AIIB), the Abu Dhabi Future Energy Company (Masdar), and Swiss Re (insurance) Group, and that announced that evidence of the momentum to continue discussion with partners was witnessed in the signing of an intention by the OPEC Fund for International Development to join the ETAF platform in 2023.

180. The Director-General explained that, aside from mobilising funding, ETAF's second role is to present a robust pipeline of projects to match the funding partners' conditions to support them. He added that funding facility solutions for projects requires continuous focused engagements, in addressing the demand and supply issues, to reduce barriers to financial closure. He stated the Agency anticipates the representatives of IRENA Members to support this effort by mobilising eligible public and private projects to join the platform. He conveyed his expectation that the dialogue will highlight key takeaways, such as to utilise the opportunity presented through the ETAF platform to deliver renewables in developing countries. He clarified the intention to diligently work with partners to help them to be ready to present projects assigned for finalised funding at the COP28. He announced IRENA will support Members and States in accession to refine the project documentation and get them ready for the ETAF partners' due diligence process.

He confirmed IRENA will stand alongside IRENA Members in the dialogue with the funders. He emphasised the important implications this work may have on the future of the Agency, and he expressed his appreciation to the ETAF partners.

181. Dr Ahmed Mohamed Mohina, Undersecretary of Ministry of Electricity and Renewable Energy, presented on behalf of H.E Dr Mohamed Shaker El-Markabi, Minister of Electricity and Renewable Energy of Egypt. He highlighted that the fossil fuels' impact on all areas of the environmental, social, and economic development emphasised the necessity for the global renewable transition, which is the way forward for a sustainable economy with unlimited opportunities for international cooperation efforts. He recalled that Egypt supported the IRENA/ADFD Project Facility throughout its seven cycles with the active participation of several volunteer experts in its committee's work. He stated the ETAF platform will contribute to the realisation of United Nations' SDGs whilst serving strategic national objectives. He said Egypt, as co-chair with Austria for Collaborative Framework on Project Facilitation to Support on-the-ground Energy Transition, looks forward to enhancing these efforts in cooperation with IRENA through the Collaborative Framework on Project Facilitation to Support on-the-ground Energy Transition, announced in May 2022.

182. Dr Mohina shared that Egypt's initiatives to create an enabling environment for the clean energy transition. Recognising Egypt as a major renewable energy producer due to its rich wind and solar renewable energy resources, he mentioned that Egypt is working to supply wind resources nationally, as well as to modify networks to maximise the potential of renewable energy. He announced that the integrated Sustainable Energy Strategy for 2035 was approved, indicating renewable energy will increase to 42% in the energy mix by 2035. He announced Egypt's national platform for the nexus of water, food, and energy programme (NWFE programme) was launched in July 2022, as part of Egypt's declaration on the 2050 Country Climate Strategy and the Nationally Determined Contribution. He advised that this programme aims to accelerate the national climate agenda and provides opportunities to mobilise climate finance and private investments to support the national green energy transition.

183. Dr Mohina recalled that the Africa Just and Affordable Energy Transition Initiative was announced at COP27, which aims at securing access to affordable energy by 2027 for at least 300 million people in Africa through consolidating and facilitating technical and policy support to countries that are financially viable. The other goals include the transition towards clean cooking by 2027, and transition towards green energy by increasing the share of the renewable electricity generation by 25% by 2027. On the subject of hydrogen, noting its increasing recognition as one of the future's decarbonised fuels, he mentioned that broader cooperation was developed and more MoUs were signed in the area of green hydrogen. He referred to the initiative activities for Renewable Hydrogen Global Forum launched by H.E Mr Abdel Fattah El-Sisi, President of Egypt, during COP27. He stressed that it is crucial to ensure that climate finance represents a progression beyond previous efforts and is scaled up with concrete steps to meet new goals. He mentioned the predictability and accessibility as a means of implementation, especially climate finance, is a cornerstone in addressing climate challenges. He expressed the hope that the ETAF platform will achieve its targets for mobilising investments for large-scale renewable projects and will also support the implementation of ambitious Nationally Determined Contributions (NDCs) to meet the Paris Agreement targets.

184. Dr Nawal Al-Hosany, Permanent Representative of the UAE to IRENA, mentioned that the UAE is keen to continue building on the long history of cooperation with IRENA to finance renewable energy projects in developing countries around the world. She stated that mobilising

finance for the energy transition will be a crucial differentiator, that determines the achievement of the goals of the Paris Agreement and the reduction of 43% in emissions by 2030. She noted the scaling and approving of climate finance will also spur a raft of new economic opportunities across the globe. She said ETAF will lead the charge of a future where climate finance is actually the norm. She stated that the geopolitical and socioeconomic backdrop is marked by multiple complex challenges for which the role of finance is essential to stem the tide of climate change. She stressed climate action must drive the international agenda and advised that the challenge of balancing energy security and driving climate progress must be met, bearing in mind over 700 million people continue to live without access to electricity. She highlighted the necessity to improve affordability, expand accessibility and secure energy for all. She mentioned that to deliver on this urgent need the mobilisation of finance must sit at the heart of the efforts for which the ETAF platform is a direct response. She said that to expand clean energy investments, within the membership of IRENA, that focus on accelerating support across the global south is purposeful. She explained this purpose is well served as it carries the benefit of expanding energy access to those who need it whilst simultaneously reducing emissions. She recalled the renewable energy access has correctly been referred to as an accelerator of sustainable development with a capacity to boost progress across each of the sustainable development goals. She noted the potential of renewable energy is indisputable, as it is the future of our energy systems. She further noted renewable energy enhances healthcare and expands access to education, drives economic prosperity, as well as providing developing economies the chance to leapfrog development for new growth, jobs, and opportunities. She recalled two-thirds of the cheapest renewables are less expensive than the cheapest coal.

185. Dr Al-Hosany referred to recent findings that suggest in the next five years renewable energy would equal the total capacity added over the last 20 years. She announced that, alongside the global stocktake, financing for the energy transition will be a priority agenda item at COP28. In reference to IRENA's estimates on investments of USD 100 trillion being needed in green energy technologies by 2050, she advised this is an investment that no country and no company can manage alone. She emphasised the need to convene government budgets, multilateral agencies, development banks, and private sector investment to work together to achieve the objectives. She pointed out the COP28 will facilitate this. She confirmed the UAE's hope is to respond to the global stocktake with a bold and practical action to address mitigation and accelerate the energy transition. She emphasised the need to drive renewables forward, through decarbonisation and the investment in breakthrough technologies. She recognised the central challenge, and the key opportunity, is to leverage private finance. In noting that renewables offer a clear-cut and compelling case for investment, she stated there are many countries plagued by perceived risk resulting in the high cost of capital, thus slowing down the development of renewables. She affirmed ETAF is a crucial part of the solution as it can help move beyond traditional concessional finance to raise ever-greater multiple private finance. She echoed ETAF has secured USD 1 billion since its inception at COP26 with USD 400 million anchored by the UAE. She mentioned the solid foundation of ETAF can catalyse the next generation of climate finance. She announced that several projects are already in the pipeline which include the first pipeline meetings held on the side-line of this IRENA Assembly. She mentioned this allows IRENA to assess its scope, geographic coverage, and impact, as well as ensuring that the projects directly contribute to the Paris Agreement, the national climate commitments, and SDG7 on renewable energy. On behalf of the UAE, she commended those who have submitted projects and are committed to getting them off the ground. She advised such concrete, action-oriented projects are precisely what the UAE hopes to galvanise at COP28. She mentioned the UAE anticipates continued collaboration with IRENA and the partners of ETAF to showcase these successes and mobilise more action, more resources, and more progress that will protect people, the planet, and share the prosperity for this and future generations.

186. Dr Mahmoud Mohieldin, United Nations Secretary General Special Envoy on Financing the 2030 Sustainable Development Agenda and United Nations Climate Change High-Level Champion for COP27, noted the realisation that investments in the benefits of human capital is more important than all sources of energy or other assets. He recalled the electricity sector presently stands responsible for 75% greenhouse gas emissions which requires efforts to invest more to meet targets and have an all-inclusive access, particularly for Africa where almost 1 billion suffer from energy poverty. He noted the conflict in Ukraine serves as a reminder that it's important to diversify the sources of energy. He commended the renewed interest in investments and referred to the World Bank's recent figures that predict a decline of 7% in investments compared to the 2019-2020 figures. On a positive note, he mentioned investment is still strong as there is a 90% global energy growth from renewable energy sources. He referred to the priority to ensure all renewable energy sources are the priority on the COP28 as it is well connected to a nexus linking with water, food systems, and agricultural development. He declared the acceleration of SDG 7 is also deeply connected to investments in related activities on sustainable development. He advised to remain mindful to the fact that figures are depicting the existence of a great deal of discrepancy. He stated a holistic approach is needed when designing the transition at an accelerated pace.

187. Dr Mohieldin recommended that several elements should be in place. First, that the logic in the prevention of harm is much more important than delivering benefits and not relying on debt. Second, a 1% maximum of cost funding, coupled with longer grace periods, needs to be available for developing countries to ensure the 1.5 °C goal. He mentioned at the IDA of the World Bank Group there is a facility to avail of funds for seven years as grace period, along with maturities that could exceed 30 to 40 years. He further mentioned the IMF's Resilience on Sustainability Trust Fund now offers funding with grace periods of 10.5 years, with such grace periods extending to over 20 years. He noted the cost of funding is actually more than the 1%. He recalled the USD 100 billion that was promised since the convention in Copenhagen, the EU, and Paris, could be used to reduce the cost of borrowing for developing economies at large, and not limited to lowincome countries. He mentioned the work on a proposal to support the reform enhances the role of the international financial institutions on which the outcomes will be delivered soon in the MDBs (Multi-development banks) reforms. He noted the gaps of USD 4-6 trillion per year are being identified which means the MDBs need to work extensively to leverage private sector finance, as a capital increase will not be sufficient to close the gap. The third aspect of work he mentioned was to examine the ways to include different stakeholders to provide more work in the future. He referred to the serious work by COP27 to build on the outcomes of the GFANZ (Glasgow Financial Alliance for Net Zero), and to provide a pipeline of projects that can be translated into action with guidance from IRENA. He affirmed the accelerator to see the energy transition is through adequate financing at the country level. He referred to promises by South Africa during Glasgow that led to other projects, as well as objective projects in Vietnam and Indonesia. He suggested more of these projects are needed to translate all global efforts into projects that link them to a suitable holistic approach through the acceleration of the critical vehicle of energy for the transformation. He commended the excellent work by IRENA in this area. He concluded by saying significant progress is needed to go forward, and he anticipates more meetings at the COP and the next Assembly.

188. The moderator introduced a short institutional video on the aims and endeavours of the ETAF platform. Thereafter, she introduced the panel which included Mr Rodrigo Salvado, the Director-General of the Operational Partnership Development Department at the Asian Infrastructure Investment Bank (AIIB), Ms Veronica Scotti, Chairperson of the Public Sector

Solutions and Group Managing Director at Swiss Re Ltd., Mr Martin Nagell, Advisor in the Office of the Chief Executive Officer at Masdar, Dr Abdulhamid Alkhalifa, Director-General at the OPEC Fund for International Development, Mr Vivek Pathak, Director and Global Head for Climate Business at the International Finance Corporation, Ms Hong Patterson, Chief Financial Officer and Chief Operating Officer at the Green Climate Fund, and Ms Mafalda Duarte Chief Executive Officer of the Climate Investment Fund at the World Bank.

189. Mr Roderigo Salvado, Director-General of the Operational Partnership Development Department at the Asian Infrastructure Investment Bank (AIIB) announced the bank has USD 100 billion in capital. He described the AIIB as a green capital project bank with a mission to move existing funds for existing initiatives into the pipeline. He mentioned the AIIB's commitment to have at least 50% of their portfolio in climate-related investments, which they intend to match in the private sector by 2030. To fulfil the two components of mobilisation, to raise and to spend, he declared a need to identify projects at an early stage to allow an opportunity to ensure full preparation.

190. Ms Veronica Scotti, Chairperson of the Public Sector Solutions and Group Managing Director at Swiss Re added that acceleration needs a bias towards action. She outlined that their dedication to assessing risks explores the speedy upstream and bankability of projects through a worthy risk-informed set of principles. She highlighted the emphasis financiers place on resilience within the infrastructure of a project by applying areas of measurement on the resilience of cashflow, shock resilience to ensure business continuity, and revenue reliability resilience for which insurance can serve as a cost-effective solution. She announced Swiss Re, the largest provider of non-funded capital for renewables, financed 9,100 projects in 2022. She suggested they must be included in the innovative design principle of the other forms of renewables such as biomass, water and ocean tides. She announced Swiss Re will be anchoring investors through the provision of insurance and crowding.

191. Mr Martin Nagell, Advisor in the Office of the CEO of Masdar, the Abu Dhabi Future Energy Company stated that Masdar views the ETAF programme as a systematic tool to assess the shortcomings and regulations that each particular project has when it comes to bankability. He confirmed the global presence of the existing collaboration in Masdar results in numerous further requests for collaboration.

192. Dr Abdulhamid Alkhalifa, Director-General at the OPEC Fund for International Development provided a brief background on their long-established development institution that continues to expand around the world and has portfolios in over 125 countries. He reported that their Climate Finance Action Plan, announced in September 2022, was magnified by Arab-based development institutes. He further reported the Fund's announcement on a USD 24 million package for climate finance during COP27. He outlined three elements for the OPEC Funds' cooperation with IRENA – to direct more financing at climate change, to expand partnerships, and to establish an innovation hub with IRENA.

193. Mr Ahmed Saeed, Vice-President for East Asia, Southeast Asia, and the Pacific at the Asian Development Bank underscored one of the lessons learned is the need to build risk-taking capacity within the system to ensure risk is not misappropriately priced or misaligned in the system. He clarified what is needed is organisations' willingness to take risk as well as an investment in building the instruments of risk transfer. He provided examples of ADB's ownership of risks to make projects bankable in Cambodia.

194. Mr Harry Boyd-Carpenter, Managing Director of Climate Strategy and Delivery at the European Bank for Reconstruction and Development (EBRD) noted long-lived projects demand strong partnerships. He mentioned the EBRD views their role as being a strong partner with the ETAF amongst others, such as co-financiers, governments, contractors, and suppliers. He stressed the primary element is to ensure that the underlying commercial and contractual framework for a project is operational as it would be counterproductive to invest in such large and long-lived projects if they are not fundamentally commercially sound without the appropriate underlying economics and a fair allocation of risk. He anticipated a collaboration with ETAF and other partners to upstream the design of the frameworks and collate robust mutually beneficial frameworks across the entire project cycle.

195. Mr Vivek Pathak, Director and Global Head for Climate Business at the International Finance Corporation stated that necessary requisites include the rule of law to be fair, transparent and have a system in place for dispute resolution, as well as to introduce blended finance at scale, to upstream project preparation innovation in technology, to have an end-to-end value chain analysis, and also to develop domestic capital markets as most tariffs around the world are denominated in US currency which inflicts conversion currency costs. He added the additional consideration on the perception of risk needs a more accurate analysis as all countries are not equal.

196. Ms Hong Patterson, Chief Financial Officer and Chief Operating Officer at the Green Climate Fund outlined the Fund's portfolio has the largest climate-focused fund at USD 42 billion, with a quarter of investment assigned to energy generation and access. She highlighted there is no single financial instrument that suits all. She described an example of the Fund's country-driven work in Egypt through the creation of a renewable energy financing framework which had USD 150 million in concessional loans for the entire lifecycle. She conveyed this project enabled the government of Egypt to execute reverse auctions that reduced the price of bids from 8.5 cents to 3 cents. She also mentioned the loans had an 18-year repayment plan but were successfully repaid in five years through bond issuances.

197. Ms Mafalda Duarte, Chief Executive Officer of the Climate Investment Fund at the World Bank presented an outline of their strategic investment areas which include their joint efforts with a set of multilateral development banks. She mentioned their investment of more than USD 6 billion in clean energy access and the energy transition, as well as the mobilisation of USD 60 million of investment. She stated the financing investments are low-cost, risk-taking, and also have long grace periods with long maturities in order to reduce the cost of capital and tackle unfavourable risks. She highlighted the need for ample flexibility in terms of the financial toolkit and the further need for input on project preparation with governments on policy and regulation. She emphasised the large scale of the related necessary aspects can only be achieved through strong partnerships and by convening key players into larger investment plans so technical and financial comparative advantages and capacities can be shared. She mentioned the World Bank's investment in co-transition, renewable energy integration investments for storage, transmission, infrastructure, smart grid management, along with commencing their efforts on the industrial decarbonisation front.

198. The panel pointed out their key priorities for ETAF are pipeline, affordability, innovation, strong and relevant partnerships, streamlining and rapid triaging, and proper pricing through unsubsidised prices for conventional energy and lowered prices for renewables. A further key recommendation mentioned for ETAF's success was to ensure that ETAF is a force multiplier.

199. In concluding the panel discussion, the Vice-President declared that the important matter of financing to accelerate the transition will be on the agenda at the forthcoming COP.

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

### Agenda Item 12: Reports from Ministerial meetings and other events

# Report from the Ministerial Roundtable: Decarbonising Shipping: The role of ports in addressing supply, demand and trade of renewable-based fuels

201. H.E. Mr Tomas Anker Christensen, Climate Ambassador of Denmark at the Ministry of Foreign Affairs and the Ministry of Climate, Energy, and Utilities, reported on the Ministerial Roundtable on Decarbonising Shipping: the role of ports in addressing supply, demand, and trade of renewable-based fuels and noted that the rich discussion proved insightful and of high political relevance. He also noted the form of discussion within the shipping sector has changed from highlighting the problems in addressing an emitting sector to a narrative around the new opportunities that the transition towards renewable fuels will provide to the sector. He mentioned the increasing commitments heard on multiple initiatives from governments and the private sector, as well as the emphasis of agreement by governments and the private sector on calling for a net zero goal by 2050 in the new strategy of the International Maritime Organization (IMO).

202. H.E. Mr Christensen reported on the encouraging discussions from countries and ports sharing various initiatives and progress, as well as on the developments in engine technology. He highlighted the need to simultaneously build both supply and demand for fuels across all end-use sectors, to bridge the competitive gap of green fuels, and to create economies of scale and new business opportunities around the trade of green fuels. He further emphasised that the key to creating conditions offering long term security to investors is to increase demand, and to provide long term clarity on policy and regulation, preferably through an IMO agreement, on net zero shipping by 2050, which would be in alignment with the 1.5 °C goal. He further emphasised the need for clarity on harmonised certification of green fuels and safety standards to further enable trade and investments.

203. H.E. Mr Christensen reported that many countries highlighted the fact that specific emerging collaborative instruments – between ports, creating green shipping corridors – help demonstrate and scale the decarbonisation of the sector. He highlighted the promising announcements made reflect that bottom-up bilateral and multilateral actions can pave the way to broader multilateral agreements. He also reported that participants emphasised the key point that there will be no unique fuel as the future of shipping will be multi-fuel based, which has clear implications for the development of those with a pivotal role in the transformation such as the ports, bunkering infrastructure, ship builders and maritime technology providers.

204. H.E. Mr Christensen stressed the importance of international cooperation between governments, as well as with the public and the private sectors, coalitions, and alliances such as those like the Getting to Zero Coalition, the Clydebank Declaration for Green Shipping Corridors, the Zero-Emission Shipping Mission under Mission Innovation, the Green Shipping Challenge, and the Global Offshore Wind Alliance (GOWA). In noting IRENA's analytical competence and convening power, he reported that the participants called upon IRENA to bring actors together to share experiences and to provide the knowledge needed for countries to develop and implement the solutions needed. He concluded by expressing his appreciation to the panellists and IRENA for the informative discussion.

# Report from the SIDS Ministerial Meeting – Climate Pledges to Action: Amplifying Energy Transition for Sustainable Development in Small Island Developing States

205. H.E. Mr Surangel Whipps Jr, President of the Republic of Palau, reported on the key messages conveyed at the SIDS Ministerial meeting held on 13 January 2023. He reported that SIDS are speaking with a strong unified voice in their call for appropriate financing, technology, and capacity support that must be provided to SIDS at scale and further reported that participants acknowledged that the time has come to move from formulation (assessment and negotiations) to implementation, for which less talk and more action is needed. Participants highlighted the critical necessity to simplify the bureaucratic processes to access the necessary financial support that SIDS need to accelerate energy transition and climate action efforts.

206. He stated the global community must focus on getting back on track to 1.5°C pathway in the lead up to COP28, for the sake of SIDS and other vulnerable communities and conveyed SIDS, as large-ocean States, must accelerate the development of ocean energy technologies and examine emerging technologies such as green hydrogen, battery storage and the accelerated deployment of other renewables such as geothermal, solar wind, biomass and hydro. On the matter of frameworks, he recommended energy policy and regulatory frameworks include fossil fuel mitigation frameworks that are critical to engagement with the international community.

207. H.E. Mr Surangel Whipps Jr recognised that the uptake of renewables in SIDS is not only about climate mitigation but is also about adaptation and the resilient development in addressing food and water security, health, socio-economic development, lives and livelihoods. He reported that one of the key drivers to accelerate the energy transition in SIDS, that must be realigned with SIDS priorities, is the private sector engagement and genuine strategic partnerships and emphasised the importance SIDS placed on appropriate financing mechanisms, as well as the implementation of the 'Loss and Damage Fund' to be operational by COP28. He concluded by reiterating that SIDS need more than handshakes and requested support from IRENA with financing and meaningful partnerships to secure the future of SIDS. He referred to a Palauan proverb that serves as a reminder that if two people in one canoe steer in opposite directions the canoe risks being capsized, which imparts a wisdom that by working together the destination will be safely and efficiently reached. He said this gives hope for a healthy and resilient net-zero future that our children and grandchildren depend upon and deserve.

# Report from the Public-Private Dialogue – Towards Just and Inclusive Energy Transitions: Social Dialogue, Skills, and Decent Jobs for All

208. On behalf of the IRENA Coalition for Action, Ms Elvira Lopez Prados, Chief of Staff at ACCIONA Energía, reported to the Assembly on the Seventh Public-Private Dialogue which was held on 13 January 2023. She introduced that the Coalition has been expanding at a steady pace, with over 130 members across the private sector, industry associations, civil society, and research institutes, whereby it acts as a platform for the key renewable energy players to share knowledge and best practices and to identify actions to accelerate the energy transition. Ms Lopez Prados shared the views of the participants on some key issues in relation to the energy transition. She noted the recent intensifying climate events, and the global energy crisis underscored the close interlinkages of the environment, society and economy. She mentioned this highlights the need for socioeconomic considerations to be placed at the core of the energy transition beyond mere technological and cost debate. She also reported that during the dialogue, it was agreed that an energy transition that is just for workers and communities is needed and further noted the concept of a just transition is gaining traction in climate policies and discussions.

209. She referred to IRENA's analysis on increased job creation in the energy transition and relayed that stakeholders affirmed that once adequate policies and scaled-up investment are in place, jobs in renewable energy have the potential to reach almost 40 million by 2030. She added these job opportunities can improve gender balance to further expand on the present one-third female renewable workforce and noted the energy transition provides an opportunity to render the energy systems more sustainable, equitable and inclusive. Ms Lopez Prados reported that proactive efforts and enabling policies are needed to address potential misalignments and protect and reskill workers losing their jobs.

210. Ms Lopez Prados highlighted three key points from the dialogue. The first key point was that from the number of positive existing examples there are opportunities to learn and scale up the elements of success on these initiatives, such as social dialogue and inclusive processes, building on local strengths, anticipating changes, and advance planning, as well as the crucial exchange in best practice to enable capacity building and knowledge sharing. Second, governments and the private sector have a role to play to equip the workforce with the appropriate skills to drive the transition towards a net-zero future. She stressed the key in diversity is important as women, youth, and minorities represent a critical talent pool for which there are demands for more efforts to remove biases and barriers and render the energy sector more attractive. Third, as countries face different challenges, with many having limited resources to address them, it is crucial to mobilise resources for developing counties and engage all stakeholders in the social dialogue, particularly for those livelihoods reliant on fossil fuels for which an advanced plan for workers is needed.

211. She emphasised the need to go beyond the numbers of jobs created and focus on their quality, as current industry-wide cost pressures are unhelpful. In concluding, Ms Lopez Prados reported that decisive action is needed from governments to lead the system transformation and should be guided by long-term commitment, just transition principles and adequate financing to tackle misalignments in labour markets and beyond. She noted that the energy transition can only progress at the scale and pace needed if the welfare of people are at its core.

#### Report from the IRENA Legislators Forum

212. H.E. Dr Kandeh Yumkella, Member of Parliament of Sierra Leone, reported on the outcome of the 2023 Legislators Forum. He stated that 100 Legislators representing over 50 countries met to hold the eighth IRENA Legislators Forum, held on 13 January 2023. He declared the Forum convened to discuss "Ensuring a More Sustainable Energy Transition through International Cooperation - National Strategies on Green Hydrogen".

213. He conveyed the discussions focused on the significant role that green hydrogen can have in accelerating the energy transition whilst also contributing to energy security, industrial competitiveness, reduced air pollution, economic growth, and job creation. He relayed that participants emphasised how green hydrogen can support the implementation of national and international commitments under the Paris Agreement and achieve the 2030 Agenda for sustainable development, and noted participants stressed the key role of parliaments in promoting the adoption of policy priorities to support the deployment of green hydrogen projects.

214. He further noted the need to include local and regional co-ordination, as well as international cooperation, and highlighted that the participants encouraged IRENA to facilitate and coordinate regional parliamentary groups to discuss and promote actions to accelerate the energy transformation, with a focus on renewable energy. To enable the transformation, participants underscored parliamentary and regulatory actions, that may be necessary for promoting green

hydrogen deployment, need to be adapted and tailored to the needs of specific countries and confirmed the emphasis on international cooperation as the means to foster fair access to technology, knowledge, and capital on green hydrogen.

215. H.E. Dr Yumkella listed the needs mentioned for parliaments and regulators are:- to define national green hydrogen strategies with a clear indication of the level of ambition for hydrogen; to outline the amount of support required; to provide a reference on hydrogen development for private investment and finance, to further enhance international cooperation whilst promoting the setup of local value chains; to stimulate the decarbonisation of industries; and to create new jobs and ensure greater social equity. He affirmed that participants of the 2023 IRENA Legislators Forum renewed their commitment and political will as parliamentarians to leverage their legislative oversight, and their representation functions, in promoting the deployment of renewable energy projects and accelerating the global energy transition. He informed the Assembly that the participants reiterated their appreciation of the IRENA Legislators Forum as an effective platform to facilitate the exchange of knowledge and national experiences, as well as to foster sustained constructive dialogue accentuating the multiple interlinkages of the energy transformation with the deployment of renewable energy.

# Report from the IRENA Youth Forum

216. Ms Ishita Yadav, Youth Delegate and Regional Focal Point for South Asia for SDG 7 Youth Constituency, reported the outcomes from the 2023 IRENA Youth Forum on behalf of the IRENA Global Council on Enabling Youth Action on SDG7 and all the youth delegates present. She stated that the discussions were held under the theme "Empowering Youth to Lead an Equitable Energy Transition for a Sustainable Future" and mentioned the Forum convened over 100 young leaders from 45 different countries with the objective to produce concrete recommendations to policymakers, legislators, the private sector, and other stakeholders.

217. Ms Yadav noted that in the existing complex environmental circumstances there are the record-breaking extremes in what scientists refer to as "code red for humanity" and mentioned that the current policies are set to increase warming temperatures by 3°C which will cause mass extinction to the species. She advised there is hope for a future that is 100% renewable before 30 years, as she believes 30 years is too late.

218. She presented the three youth recommendations that must be implemented for action to occur. Firstly, the unlocking of finance to enhance scalability of renewable energy. She highlighted that only 0.74% of climate finance currently goes toward youth and only a small fraction of that is dedicated to renewable energy solutions. She explained that without flexible and innovative financing mechanisms, those who are most impacted cannot scale their initiatives and confirmed that the appropriate skills and expertise required to serve the job market should be prioritised as funding youth without skills development will not yield results. She directed the second recommendation to the Members of the IRENA Assembly, to leave no one behind and relayed that the quest to achieve 100% renewable energy cannot be successful without empowering youth in energy policy at the national and international levels. She stated that youth are a source of capital that can be leveraged to achieve the future, as the future is all about the youth and declared the Forum calls upon the 168 Members of IRENA to include youth in their delegation to the Assembly.

219. Ms Yadav conveyed the youth call to Members and delegations to COP28 to use all strengths towards achieving 100% renewables, as climate change is energy change and mentioned to

# A/13/SR/1

demonstrate that true pro-renewables efforts and to be remembered for leadership, Members must deliver a 100% renewables agenda at COP28. On the existing political will and momentum from both the public and private sector, she emphasised the time to turn commitments into action is now and remarked that although achievements are recognised there is yet a long journey to accomplish the future being sought.

220. After Ms Yadav's report, Mr Howard Mwesigwa, Youth delegate and CEO of SDGs Academy Uganda, recited an impassioned inspirational poem he compiled entitled 'Renewables! Renewing Our Commitment'.

# Report from the High-level Meeting on the Energy Compact on Renewable Energy for United Nations Peacekeeping

221. Ms Victoria Holt, Director of the John Sloan Dickey Center for International Understanding, Dartmouth College, reported on the High-level Meeting on the Energy Compact on Renewable Energy for United Nations Peacekeeping, held on 13 January 2023. She noted that an innovative, first-of-its-kind meeting on this key initiative was held with high-level national representatives, United Nations Secretariat senior officials, peacekeeping operation and field leaders, host countries, civil society, business, research organisations, and international development funders. She further reported that participating countries, such as South Sudan, Cyprus, Mali, Central African Republic, Democratic of Congo, and Somalia, identified their goals and needs to increase renewable energy options.

222. Ms Holt mentioned that participants in the High-level Meeting aspire to work on specific projects under the Energy Compact initiative and would welcome a partnership with United Nations missions. She relayed that participants discussed how to develop specific projects with United Nations missions as an anchor client and explained the intention would be to increase access to renewable energy in countries impacted by conflict, as well as to meet their climate goals by leveraging the buying power of United Nations peacekeeping in the field. Participants noted that peacekeeping missions are often the largest energy generators and consumers in their host States, and such nations are characterised by low electrification rates. She conveyed that this was recognised as an opportunity to direct the investment, by both the United Nations and other partners, in a manner that contributes to the growth of host country sustainable energy infrastructure.

223. She reported that only 6% of energy in United Nations missions is renewables based, as the primary source of electricity is diesel, and explained that this means peacekeeping may account for the largest single source of greenhouse gas emissions in the host country and noted that some missions experience inefficient supply chains and highly expensive security for fuel. She relayed that participants noted that when shifting to more renewables the United Nations missions benefit from increased security, lower emissions, cost savings, efficiency, and can also act as an anchor client for greater development of energy options.

224. Ms Holt mentioned that meeting the ambitious goal to source 80% of its electricity from renewable energy by 2030, as announced by the UN Secretary-General at the 2019 Climate Summit, would require significant investment and that further SDG7 support peacebuilding, and improved positive legacy is needed. She also mentioned that participants acknowledged the host countries of United Nations missions called for a partnership to develop their energy capacity and access for their populations which would be in line with meeting their climate and SDG goals. She further highlighted that countries cited low rate of electrification and access, need investment, and would welcome the buying power of United Nations operations. Ms Holt also conveyed that the

participants welcomed the Energy Compact's specific projects across six countries and welcomed more projects and reported that participants also discussed implementing the Energy Compact with support of a research agenda, de-risking, financing, increasing private sector engagement, linking national ministries and peacekeeping missions, and working with development and finance actors. She said participants recognised that this is the beginning of a needed public-private partnership.

225. Ms Holt stated that proposed holding further discussions at 2023 events, including at the High-Level Political Forum, COP28, and the Peacekeeping Operations Ministerial in December 2023. She conveyed the participants' appreciation, and she congratulated IRENA, and the United Nations Department of Support and Peacekeeping for their MoU and for their leadership in moving the Energy Compact forward. She also expressed appreciation to the UAE and Norway for their leadership and collaboration with the 'Powering Peace' initiative, led by Energy Peace Partners and the Stimson Center, and acknowledged the enduring support of Denmark and other nations while emphasising that more nations are welcome to join this initiative in an effort to push its impact forward.

226. The Assembly took note, with appreciation, of the reports provided.

# Agenda Item 13: Report of the Chair of the Council

227. The President invited the Chair of the Council at its 23<sup>rd</sup> and 24<sup>th</sup> meetings, Uruguay, represented by H.E. Mr Alvaro Ceriani, Permanent Representative to IRENA and Ambassador of Uruguay to the UAE, to report on the deliberations of the Council in 2022.

228. H.E. Mr Alvaro Ceriani recalled that the Council's primary task is to support the work of the Assembly by facilitating consultation and cooperation amongst Members in preparation of each Assembly session. He reported that as the Council meetings gradually resumed to physical participation following the easing of travel measures, the Council met on 24-25 May and 27-28 October 2022 respectively, for its twenty-third and twenty-fourth meetings. He stated that the draft reports on the outcomes of both meetings were prepared and circulated to Council Members for approval. On behalf of the Council, he expressed his appreciation to the Host Country, the UAE, for facilitating the arrangements, including ensuring the health and safety of delegations. He reiterated that the inclusive format of the Council meetings continues to facilitate the incorporation of a wide range of views, as reflected in the documentation before the Assembly for its consideration.

229. He noted that the Council continues to provide an instrumental platform for Members to shape the Agency's work and reported that IRENA's Draft Medium-term Strategy 2023-2027 and the implementation of the Work Programme and Budget for 2022-2023 were discussed at both Council meetings in 2022. He further noted that the discussions highlighted the relevance of IRENA's work and activities, as well as the need for the Agency to remain efficient and agile in the evolving global energy landscape. He relayed that a number of programmatic discussions also provided the opportunity for Members to engage in exploring enabling frameworks for the energy transition, including priority topics such as agri-food and health value chains, financing the deployment of renewables, facilitating projects, advancing the work under the Collaborative Frameworks, and green hydrogen. He reported that the Council deliberated on matters relating to the administrative and institutional arrangements of IRENA, as presented for the consideration of the Assembly under Agenda Item 14: Administrative and Institutional matters.

230. H.E. Mr Alvaro Ceriani reported that the Council considered the Tenure Policy for Professional Staff and above at both meetings in 2022 and further mentioned that following extensive discussions, the Council, at its twenty-fourth meeting, took note of the reports by the Facilitator of the Open-ended Group on the Tenure Policy for Professional Staff and above, as well as by the Chair of the Administration and Finance Committee (AFC). He reported that the Council, taking into consideration the views expressed by Members, agreed to recommend to the Assembly that the current Tenure Policy for Professional staff and above is maintained as is. He relayed that the Secretariat also proposed two initiatives that are currently being considered by the Council - one to explore the possibility of joining the United Nations Joint Staff Pension Fund (UNJSPF), and the second on establishing an Inter-Agency Agreement. He confirmed that the Council will continue its deliberations on these two initiatives, and that the Secretariat has been requested to provide, to the twenty-fifth meeting of the Council, further information and analysis on shifting to the UNJSPF as well as more details regarding the scope of the Inter-Agency Agreement initiative.

231. H.E. Mr Ceriani reported that the Council took note of the Report of the Director-General-Secondment of Personnel and related matters and agreed to submit it to the Assembly. He informed that the present report before the Assembly contains an updated status of implementation of secondment and loan arrangements as of November 2022. He further reported that the Council considered and took note of the Audited Financial Statements of IRENA for 2021, as well as the Report of the Director-General on the Status of Implementation of the External Audit Recommendations, containing the progress on the implementation of a recommendation issued by the External Auditor in 2021. He noted that the Council agreed to submit both documents to the Assembly. He informed that the Council took note of the Report of the Director-General - Indicative IRENA Scale of Contributions for 2023, based on the 2022-2024 United Nations Scale of Assessments and adjusted to IRENA's Membership of 167 countries and the European Union, and agreed to submit the report, along with the related draft decision (A/13/DC/L.2), to the Assembly for its consideration and adoption.

232. H.E. Mr Ceriani stated that the Council took note of the Report of the Director-General -Status of Collection of Assessed Contributions and Advances to the Working Capital Fund and decided to submit it to the Assembly, and informed that the present report before the Assembly includes a complete status of collection as of 7 December 2022. He reported that the Council took note of the 2021 Annual Report of the Provident Fund Management Board on Operations of the Staff Provident Fund of IRENA at its twenty-third meeting and decided to submit it to the Assembly. On the Appointment of Management Board members, he reported that the Council took note of the proposal to designate the UAE as one of the representatives to the Management Board of the Staff Provident Fund for 2023-2024 at its twenty-fourth meeting and subsequently, informal outreach to Members was conducted to fill the remaining position. He informed the Assembly that subsequent to this outreach, Italy expressed its availability to serve as a Member representative to the Staff Provident Fund Management Board for 2023-2024, alongside the UAE. He also reported that the Council took note of the Report of the Ethics Officer on the Implementation of the Policy on Ethics and Conflict of Interest and agreed to submit it to the Assembly. He advised that several other issues were also discussed on which the Council will continue its deliberations at its next meeting, and highlighted that the Council, at its twenty-fourth meeting, agreed to establish an Open-Ended Group to discuss and exchange views on the creation and related processes, procedures, and policies on the establishment of regional offices of IRENA.

233. H.E. Mr Ceriani acknowledged the support of H.E. Mr Sten Arne Rosnes, Vice-Chair of the Council, Permanent Representative to IRENA and Ambassador of Norway to the UAE. He

expressed special gratitude to the Members who served on the two Committees of the Council, as well as the United States of America and Algeria - as Chair and Vice-Chair of the Programme and Strategy Committee; and Maldives and Germany - as Chair and Vice-Chair of the Administration and Finance Committee. He commended their contribution, which was essential in assisting the Council to prepare for this Assembly session. He thanked the Council's Rapporteur, Somalia, as well as all Council members and countries that participated in the 2022 meetings, for their commitment and active contribution to the work of the Council. On behalf of Uruguay and Norway, he expressed gratitude to the Council for their trust in leading the last two Council meetings.

234. The Assembly considered and took note, with appreciation, of the report of the Council Chair.

# Agenda Item 14: Administrative and Institutional matters

# a. Report of the Credentials Committee (A/13/5)

235. The President of the Assembly invited the Chair of the Credentials Committee, Fiji, represented by Mr Jaljeet Jeetendra Kumar, to introduce the Report of the Credentials Committee (A/13/5).

236. Mr Jeetendra Kumar reported that the Committee examined the credentials submitted to the Secretariat in accordance with Rule 24 of the Rules of Procedures of the Assembly, in respect of the representatives registered as of 13 January 2023, to participate at the thirteenth session of the Assembly. He advised that the Committee had before it the information provided by the Secretariat on the status of the credentials received as of 13 January 2023 and that the Committee determined that as of that date, the 118 Members listed in Section 4 of the report 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. He further advised that the Committee noted that five Members had not submitted credentials in the proper form, and he recommended that the Assembly accepts the credentials of the representatives of these Members on the understanding that an electronic copy of their credentials in the proper form will be submitted to the IRENA Secretariat as soon as possible. He reported that the Committee further noted that 24 Members with a registered delegation had not submitted any credentials. The Committee recommended that the representatives of these Members be permitted to participate provisionally at the thirteenth session of the Assembly on the condition that an electronic copy of their credentials would be submitted to the IRENA Secretariat as soon as possible.

237. He added that four new credentials issued by competent authorities in accordance with the Rules of Procedure of the Assembly had been submitted by 4:30 PM on 15 January 2023, and he informed the Assembly that these Members should be included in the official records of credentials submitted for the session.

238. In concluding his report, Mr Jeetendra Kumar affirmed that the Committee reiterates its recommendation from previous reports that the Assembly call upon all 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

# A/13/SR/1

Assembly, but in no event later than the opening of the session. He expressed his appreciation to all Committee members for their work and thanked the Secretariat for its assistance and support.

239. The Assembly considered and approved the Report of the Credentials Committee (A/13/5) and the recommendations contained therein.

# b. Staff Tenure Policy

- 240. The President referred the Assembly to the report of the Chair of the Council and recalled the recommendation of the Council to maintain the current tenure policy for Professional Staff and above.
- 241. The Assembly considered and agreed with the recommendation of the Council to maintain the current tenure policy for Professional staff and above.
  - c. Report of the Director-General Secondment of Personnel and related matters (A/13/6)
- 242. The President referred the Assembly to the Report of the Director-General Secondment of Personnel and related matters (A/13/6) as well as the report of the Chair of the Council, containing the updated status of implementation of secondment and loan arrangements as of November 2022.
- 243. The Assembly considered and took note of the Report of the Director-General Secondment of Personnel and related matters (A/13/6).
  - d. Audited Financial Statements of IRENA for 2021 (A/13/7) and Status of Implementation of the External Audit Recommendations (A/13/8)
- 244. The President referred the Assembly to the Audited Financial Statements of IRENA for 2021 (A/13/7) and Status of Implementation of the External Audit Recommendations (A/13/8), as well as the report of the Chair of the Council on these matters.
- 245. The Assembly considered and took note of the Audited Financial Statements of IRENA for 2021 (A/13/7) and Status of Implementation of the External Audit Recommendations (A/13/8).
  - e. Report of the Director-General Indicative IRENA Scale of Contributions for 2023 (A/13/9; A/13/DC/L.2)
- 246. The President referred the Assembly to the Report of the Director-General Indicative IRENA Scale of Contributions for 2023 (A/13/9), the related draft decision (A/13/DC/L.2), as well as the report of the Chair of the Council on the matter.
- 247. The Assembly considered and took note of the Report of the Director-General-Indicative IRENA Scale of Contributions for 2023 (A/13/9) and adopted the related decision A/13/DC/2.
  - f. Report of the Director-General Status of Collection of Assessed Contributions and Advances to the Working Capital Fund (A/13/INF/2)

- 248. The President referred the Assembly to the Report of the Director-General Status of Collection of Assessed Contributions and Advances to the Working Capital Fund (A/13/INF/2), containing a complete status of collection as of 7 December 2022, as well as the report of the Chair of the Council on the matter.
- 249. 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/13/INF/2).
  - g. 2021 Annual Report of the Provident Fund Management Board on Operations of the Staff Provident Fund of IRENA (A/13/10) and Appointment of Management Board members
- 250. The President invited the Assembly to refer to the 2021 Annual Report of the Provident Fund Management Board on Operations of the Staff Provident Fund of IRENA (A/13/10), as well as the report of the Chair of the Council on the matter.
- 251. The Assembly considered and took note of the 2021 Annual Report of the Provident Fund Management Board on Operations of the Staff Provident Fund of IRENA (A/13/10).
- 252. The President referred to the report of the Chair of the Council on the appointment of Italy and the United Arab Emirates as Member representatives to the Staff Provident Fund Management Board for 2023-2024.
- 253. The Assembly appointed Italy and the United Arab Emirates to serve as Member representatives to the Staff Provident Fund Management Board for 2023-2024 (A/13/10).
  - h. Report of the Ethics Officer on the Implementation of the Policy on Ethics and Conflict of Interest (A/13/11)
- 254. The President referred the Assembly to the Report of the Ethics Officer on the Implementation of the Policy on Ethics and Conflict of Interest (A/13/11) as well as the report of the Chair of the Council on the matter.
- 255. 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/13/11).
  - i. Council membership for 2023-2024 (A/13/DC/L.3)
- 256. The President introduced the item and referred the Assembly to the draft decision on the IRENA Council membership for the year 2023-2024 and the related annex containing the proposed list of Council members for 2023-2024, as contained in A/13/DC/L.3, as submitted by El Salvador, President of the twelfth session of the Assembly.
- 257. El Salvador, represented by H.E. Ms Vanessa Interiano reminded the Assembly that the two-year term of the current council membership ended on 31 December 2022. In preparation for the election of new council membership, she stated that the expressions of interest received, within the stipulated deadline of 4 March 2022, acted as the basis of further consultations for regional groups. She recalled that the four Vice-Presidents of the twelfth session of the Assembly Antigua and Barbuda, Bangladesh, Egypt, and Greece supported El Salvador in this process, and facilitated

consultations as necessary to reach consensus amongst the Members of the respective regional groups. She advised that regional facilitators provided updates on the status of ongoing consultations to the Council meetings in May and October 2022, and informed El Salvador upon ascertaining a final agreement. She announced there was one group pending resolution for which she requested the support of the Secretariat to conduct outreach on behalf of El Salvador.

258. H.E. Ms Interiano expressed her appreciation to all Vice-Presidents for their valuable support in guiding the respective groups towards a fair and equitable agreement. She thanked Members for their inclusive and constructive participation in the process and expressed her best wishes to the new Council members.

259. One Member expressed its dissatisfaction on the coordination process of regional consultations of the Asia and the Pacific group and informed the Assembly that a formal letter with more details was submitted to the Secretariat and the President of the Assembly. The delegation requested that their statement be placed on record. Another Member noted that owing to increasing interest in renewable energy combined with the cumulative interest of Members for Council membership, the process encounters limitations where no resolution guidelines exist for a non-consensus scenario. He also mentioned that challenges are faced during the consultation process within the group in which no Members expressed willingness for alternate membership and requested the Assembly to take note of the points made and suggested that an appropriate body of IRENA undertake a resolution strategy, for which the Member stands ready to contribute.

260. The Assembly took note of the interventions made and adopted the IRENA Council membership for 2023-2024, contained in document A/13/DC/3.

Agenda Item 15: Recommendation of the twenty-third Council meeting on the renewal of the appointment of the incumbent Director-General in accordance with Article XI.B of the IRENA Statute (A/13/DC/L.4)

261. The President invited the Chair of twenty-third meeting of the Council, H.E. Mr Alvaro Ceriani of Uruguay, to report to the Assembly on the Council's consideration of the appointment of the incumbent Director-General.

262. H.E. Mr Alvaro Ceriani recalled that as per the applicable provisions of the IRENA Statute, the Director-General shall be appointed by the Assembly upon recommendation of the Council for a term of four years, renewable for one further term. He reported the Council noted the first term of the incumbent Director-General will end in April 2023.

263. He also recalled that the Chair of the twenty-second meeting of the Council, Japan, informed the Membership of the intent of Mr Francesco La Camera to seek renewal of his appointment for a further term. He conveyed that, in accordance with the relevant procedures, the Director-General presented a summary of his achievements and the vision for the future four years. Thereafter, Japan invited IRENA Members to provide their views. He noted that 66 submissions expressing full support for the renewal of Director-General Francesco La Camera to serve for a further term, were received from Members, including all 21 Council members. He further noted Members' appreciation of Mr La Camera's leadership in successfully adapting the working methods, achieving the desired outcomes by accelerating and advocating the deployment of renewable energy despite the restrictions imposed by the COVID-19 global pandemic. He relayed that Members further recognised the Director-General's achievements and noted his ambitious and appropriate vision for IRENA's future with regard to supporting the efforts of Members and

stakeholders to realise the global energy transition. He advised a full account of the discussion during the Council meetings is available in the Summary Report of the twenty-third meeting of the Council (C/23/SR/1, paragraphs 87 to 109).

264. He reported that the Council unanimously decided to recommend to the Assembly the renewal of the appointment of the incumbent Director-General, Mr Francesco La Camera, for a further four-year term and the decision contained in document A/13/DC/L.4.

# 265. The Assembly considered and agreed, by acclamation, to renewal of the appointment of the incumbent Director-General for a further term and adopted the related decision A/13/DC/4.

266. The president congratulated the Director-General on the renewal of his appointment for a further term. Delegations expressed their sincere appreciation for the work and ambitions during the Director-General's present tenure, as well as for the work process associated with the Medium-Term Strategy 2023-2027 and expressed, under the Director-General's leadership, IRENA and Members must ensure to stay constantly on the right track. They conveyed high expectations on ambitions for COP28 and the Director-General's forthcoming term. Some delegations expressed their enthusiasm for continuous support on renewable energy technologies for SIDS and on accelerating efforts to move from a state of readiness to actual implementation of renewable energy programme to transform SIDS and Africa. Some delegations also expressed their support to ETAF and wished IRENA success in its objective to channel much needed private finance towards an accelerated path for a more sustainable world.

# Agenda Item 16: Arrangements for the fourteenth session of the Assembly

267. The President noted that an expression of interest was received from Rwanda to serve as President of the fourteenth session of the Assembly.

268. The President further noted that Angola, Dominican Republic, Georgia, and Iraq expressed their interest and availability to serve as Vice-Presidents of the fourteenth session of the Assembly.

# 269. The Assembly designated by acclamation Rwanda as President and Angola, Dominican Republic, Georgia, and Iraq as Vice-Presidents of the fourteenth session of the Assembly.

270. The President proposed 13 and 14 January 2024 as dates for the fourteenth session of the Assembly in Abu Dhabi, United Arab Emirates.

271. One delegation expressed its views on the dates of the Assembly, pointing out that the month of January being the summer season for countries in the southern hemisphere limits High-level officials participating at the Assembly session. Delegations also shared preference for the fourteenth session of the Assembly to take place during working days, rather than during the weekend. One delegation also suggested, based on its experience at other international fora, to consider changing the seating arrangement in plenary to enable countries who are seated at the back of the plenary, as per the current practice, to have chance to sit closer to the podium. One delegation also suggested that improvements could be made on a number of areas, including accreditation and protocol issues, and that working practices could be adapted to existing trends at other organisations. In this regard, the delegation suggested that the Council could consider a

series of measures that would facilitate and enable higher level and more substantive participation in future sessions of the Assembly, noting that such improvements would benefit the Agency.

# 272. The Assembly agreed to hold the fourteenth session of the Assembly on 13-14 January 2024 in Abu Dhabi, United Arab Emirates

273. To facilitate advanced planning for the fifteenth session of the Assembly in 2025, the President informed the Assembly that Members will be invited to submit, to the Secretariat, their expressions of interest for the positions of the President and four Vice-Presidents of the fifteenth session of the Assembly by 30 June 2023.

### Agenda Item 17: Any other business

274. The delegation of Ukraine highlighted the urgent and critical situation of the renewable energy infrastructure in the country, which in their intervention was referred to as a "situation, unthinkable for a country that, before the Russian attacks, used to export electricity to neighbouring European countries". The delegation outlined the serious challenges to the green agenda due to the "deliberate destruction of Ukraine's energy sector", including on economic activities, energy security, food security, and price stability. The delegation stressed that damage on energy infrastructure resulted in power and heating supplies disruption and expressed appreciation to all countries in the provision of humanitarian assistance. The delegation made an appeal to Members for their support in several initiatives. First, to endorse a joint IRENA/Ukraine initiative in preparing a special development strategy for Ukraine's energy sector that focuses on renewable energy projects. Second, to establish a special fund or fundraising platform, under the auspice of IRENA, for the recovery and further development of Ukraine's renewable sector. Lastly, to consider the creation of the 'Code of Ethics' or 'Code of Conduct' that would legally define responsibility and implications for Members who violate the principles, goals, and values enshrined in the IRENA Statute. The delegation made a call for Member States to consider the proposed initiatives at the next regular meeting of the Council.

275. In addressing the issues raised, the Director-General advised that the Secretariat would operate within its mandate to actively work on a potential Remap for Ukraine, as it does for all Members. He declared that IRENA is ready to support all Members and countries in accession within the limitations and capacity of the Agency. He mentioned, once detailed documentation is provided, Members may discuss the initiative to establish a special fund whilst bearing in mind that IRENA's Climate Investment Platform and ETAF initiatives are accessible.

276. Several delegations intervened on this matter and expressed their support for Ukraine. The delegation of the European Union, in its intervention, stated that it "stands by the people of Ukraine and firmly condemns the barbaric war perpetrated by Russia and the escalation of Russian attacks against critical energy infrastructure in Ukraine". The European Union provided an overview of initiatives to rebuild the energy system of Ukraine, harness its potential for renewables deployment and foster resilience, including through the REPowerEU Plan, the European Green Deal, and the EU-Ukraine Renewable Gases Partnership.

277. The delegation of the United States of America, in expressing its full support for Ukraine's efforts to protect and rebuild its energy infrastructure, stated that "the Russian aggression against the Ukrainian people is unacceptable, and the harsh tactic of depriving the population of energy supplied during the winter reflects the injustice of the broader war".

278. A number of other delegations in their interventions communicated their "condemnation of the Russian invasion of Ukraine". These delegations further outlined their existing and planned financial commitments and efforts to provide aid and facilitate green rebuilding of Ukraine's energy system. Several delegations in their interventions acknowledged the significant challenges and welcomed Ukraine's commitment to putting renewables at the centre of rebuilding and supported discussions on proposed initiatives at the next Council meeting.

### 279. The Assembly took note of the interventions.

## Agenda Item 18: Closing of the meeting

280. In his closing remarks, the President noted the rich discussions of the Assembly that covers a wide range of matters. He highlighted the voice from the youth, which conveyed the message that not enough efforts are being made and that these need to be addressed and ambitions raised. In noting the successes achieved so far, the President stressed challenges on both technology and finance. He pointed out that solely adding renewable energy capacity is not a full solution and explained that it should be combined with storage technology, to prevent waste and gride disturbances whilst increasing affordability. He further stressed that electricity accounts for 25-30% of energy consumption with rest being used by the industrial, transportation and residential sectors, which requires a comprehensive solution with new technologies at the core. He noted the move to green hydrogen and green ammonia is a frontier, in sectors of iron and shipping. The President stated that apart from technology, finance is another challenge. He mentioned the difficulty for poorer countries to secure finance and advised that unless finance is forthcoming from developed countries for investment, no improvement will be witnessed. He suggested using G20, which India is presiding over, and COP28 as platforms to address these challenges. He stressed IRENA is poised between these meetings to highlight the challenges. In his conclusion, he expressed his appreciation to the Vice-Presidents for their valuable support, and thanked Members and all participants for their contribution to the success of the thirteenth session of the Assembly.

281. In his closing remarks, the Director-General mentioned that he counts on the support of Members for IRENA's ambitious task and the important role the Secretariat will have for COP28. He stated this will include a new narrative on a forward direction that is based on the World Energy Transition Outlook to be launched in March 2023. He mentioned that the work on the agenda of the Assembly was the first moment for better integration since the restrictions and online working methods imposed by COVID-19. He declared that IRENA has built feasible and consistent narratives from data to inform Member States in their policymaking. On his reflections of the last four years, he recommended more efforts to clarify the relationship between the energy transition, the energy systems, and the existing inequality. He conveyed one objective will be the transfer from fossil fuels to renewables as an element for an equal and just transition. He reconfirmed that the Secretariat stands with modesty to support Members to the full capacity.

# 282. The President declared the thirteenth session of the Assembly closed.

Annex 1 A/13/1



14 January 2023

Thirteenth session of the Assembly Abu Dhabi, 14–15 January 2023

# 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. High-level Plenary session on World Energy Transition The Global Stocktake
- 5. Annual Report of the Director-General on the Implementation of the Work Programme and Budget for 2022-2023
- 6. Draft Medium-Term Strategy 2023-2027
- 7. General Member Statements
- 8. Ministerial Roundtable on Decarbonising Shipping: The role of ports in addressing supply, demand and trade of renewable-based fuels
- 9. Ministerial Dialogue on Regional Energy Transition Outlooks: Southeast Asia Energy Transitions
- 10. Ministerial Dialogue on Critical materials for the Renewables-Centred Energy Transition: How to jointly harness opportunities
- 11. Ministerial Dialogue on Energy Transition Accelerator Financing (ETAF)
  Platform

- 12. Reports from Ministerial meetings and other events
- 13. Report of the Chair of the Council
- 14. Administrative and Institutional matters
  - a. Report of the Credentials Committee
  - b. Staff Tenure Policy
  - c. Report of the Director-General Secondment of Personnel and related matters
  - d. Audited Financial Statements of IRENA for 2021 and Status of the Implementation of External Audit Recommendations
  - e. Report of the Director-General Indicative IRENA Scale of Contributions for 2023
  - f. Report of the Director-General Status of Collection of Assessed Contributions and Advances to the Working Capital Fund
  - g. 2021 Annual Report of the Provident Fund Management Board on Operations of the Staff Provident Fund of IRENA and Appointment of Management Board members
  - h. Report of the Ethics Officer on the Implementation of the Policy on Ethics and Conflict of Interest
  - i. Council membership for 2023-2024
- 15. Recommendation of the twenty-third Council meeting on the renewal of the appointment of the incumbent Director-General in accordance with Article XI.B of the IRENA Statute
- 16. Arrangements for the fourteenth session of the Assembly
- 17. Any other business
- 18. Closing of the meeting

Annex 2 A/13/2



13 January 2023

Thirteenth session of the Assembly Abu Dhabi, 14–15 January 2023

# List of applicants for observer status at the thirteenth session of the IRENA Assembly

as of 13 January 2023

# IRENA Signatories / States in Accession

- 1. Brazil
- 2. Burundi
- 3. Cambodia
- 4. Chile
- 5. Democratic Republic of Congo
- 6. Guatemala
- 7. Liberia
- 8. Syrian Arab Republic
- 9. Timor-Leste

# **Non-Member States**

- 1. South Sudan
- 2. Venezuela
- 3. Vietnam

# **Others**

- 1. 3 Trade Invest
- 2. Abu Dhabi National Energy Company (TAQA)
- 3. Abu Dhabi Ports Group
- 4. Abu Dhabi University
- 5. ACCESS SA
- 6. ACCIONA Energía
- 7. ACME Group

# A/13/2

- 8. ACWA Power
- 9. ADNOC
- 10. Aerospace Defense Security, UAE
- 11. Africa Adaptation Initiative
- 12. Africa Climate Foundation
- 13. Africa Enterprise Challenge Fund (AECF)
- 14. Africa Renewable Energy Initiative (AREI)
- 15. African Development Bank (AfDB)
- 16. African Energy Commission (AFREC)
- 17. African Union Commission
- 18. African Union Development Agency
- 19. Alectris
- 20. Alliance for Rural Electrification
- 21. ALP Sustainable Energy
- 22. Altyus Group
- 23. Amarenco Group
- 24. AMEA Power
- 25. Apraava Renewable Energy
- 26. ASEAN Center for Energy
- 27. Asian Development Bank (ADB)
- 28. Asian Infrastructure Investment Bank (AIIB)
- 29. Association of Power Utilities of Africa (APUA)
- 30. Avaada Group
- 31. Bezos Earth Fund
- 32. Bloomberg Philanthropies
- 33. Boston Consulting Group
- 34. Breakthrough Energy
- 35. CEEG (Electricity and Gas Engineering Company)
- 36. China University of Mining and Technology
- 37. Chinese Renewable Energy Industries Association
- 38. Clean Energy Ministerial
- 39. Climate Action Network International
- 40. Climate Champions
- 41. Climate Institute
- 42. Climate Investment Funds
- 43. ClimateWorks Foundation
- 44. CODES-Sarl
- 45. COMETAPP
- 46. Confederation of Indian Industry
- 47. Contemporary Amperex Technology Co Limited (CATL)
- 48. Council on Energy, Environment and Water (CEEW)

- 49. Desert Technologies
- 50. Deutsche Gesellschaft für Internationale Zusammenarbeit (GiZ)
- 51. Dii Desert Energy
- 52. East African Community
- 53. Eastern Africa Power Pool
- 54. Eclareon GmbH
- 55. ECOTEC
- 56. ECOWAS Center for Renewable Energy and Energy Efficiency (ECREEE)
- 57. Emirates Environmental Group
- 58. Emirates Green Building Council
- 59. Emirates Water and Electricity Company
- 60. ENEL
- 61. Enel Foundation
- 62. Enel Green Power
- 63. ENERGIA International Network on Gender and Sustainable Energy
- 64. Energinet Associated Activities
- 65. Energy Charter Secretariat
- 66. Energy Eurasia MEA, EBRD
- 67. Energy Peace Partners
- 68. Energy Transitions and Strategies Masdar City
- 69. Energy Watch Group
- 70. ENESEL PTE. Ltd.
- 71. Eni
- 72. Eni Corporate University
- 73. Entreprise Sahel BTP SARL
- 74. ENTREPRISE SAKHO BECI BTP ET ENERGIE
- 75. EU Global Technical Assistance Facility for Sustainable Energy (EU GTAF)
- 76. Eurelectric
- 77. European Bank for Reconstruction and Development (EBRD)
- 78. European Central Bank
- 79. European Climate Foundation
- 80. European Heat Pump Association
- 81. European Renewable Energies Federation
- 82. Export-Import Bank of India
- 83. Fannon Global Advisors
- 84. Fetiglobe
- 85. Finergreen
- 86. Fraunhofer Institute for Solar Energy Systems
- 87. Geothermal Cluster (GEODEEP)
- 88. Geothermal Resource Group Inc

# A/13/2

- 89. German Solar Association
- 90. Global Center for Maritime Decarbonisation
- 91. Global Energy Alliance for People and Planet (GEAPP)
- 92. Global Green Growth Institute
- 93. Global Solar Council
- 94. Global Wind Energy Council (GWEC)
- 95. Green Climate Fund
- 96. Green Hydrogen Organisation
- 97. GreenSpur Wind Limited
- 98. Guidehouse Germany
- 99. Gulf Cooperation Council Interconnection Authority (GCCIA)
- 100. HIF Global
- 101. Husk Power Systems
- 102. Hydrogen Council
- 103. Ignite Power
- 104. Imperial College London
- 105. India Power Corporation Ltd
- 106. Indian Renewable Energy Development Agency Limited
- 107. Indonesian Center for Renewable Energy Studies
- 108. IndustriALL
- 109. Industrial Technology Research Institute (ITRI), Chinese Taipei
- 110. Institut de la Francophonie pour le développement durable
- 111. Institute for Advanced Sustainability Studies (IASS)
- 112. Institute for Human Rights and Business
- 113. Institute for Sustainable Policies
- 114. InterContinental Energy
- 115. International Atomic Energy Agency (IAEA)
- 116. International Centre for Energy, Environment and Development
- 117. International Centre for Integrated Mountain Development
- 118. International Chamber of Shipping (ICS)
- 119. International Electrotechnical Commission (IEC)
- 120. International Energy Agency (IEA)
- 121. International Energy Charter
- 122. International Finance Corporation (IFC)
- 123. International Geothermal Association
- 124. International Hydropower Association
- 125. International Maritime Organization (IMO)
- 126. International Solar Alliance (ISA)
- 127. International Solar Energy Society
- 128. International Union for Conservation of Nature
- 129. Japan Renewable Energy Foundation

- 130. Jinko Solar
- 131. John Sloan Dickey Center for International Understanding, Dartmouth College
- 132. Joint Research Center (JRC), European Commission
- 133. JSW Group
- 134. KENGEN
- 135. Khalifa University
- 136. Korea Advanced Institute for Science and Technology (KAIST)
- 137. Korea Energy Economics Institute (KEEI)
- 138. Kube Energy
- 139. League of Arab States
- 140. Legislators Forum
- 141. Loughborough University
- 142. Mainstream Renewable Power
- 143. Mali Electric Service International (MES International)
- 144. Mali Folkecenter Nyeta (MFC)
- 145. MAN Energy Solutions
- 146. Masdar (Abu Dhabi Future Energy)
- 147. Mediterranean Shipping Company (MSC)
- 148. MENA Hydrogen Alliance
- 149. Mentari Programme
- 150. Modern Energy Cooking Services (MECS)
- 151. Moroccan Agency for Sustainable Energy (Masen)
- 152. National Renewable Energy Laboratory
- 153. National Solar Energy Federation of India
- 154. New York University, Abu Dhabi
- 155. Newcom LLC
- 156. Niupower Limited
- 157. Ocean Conservancy
- 158. OMV AG
- 159. OPEC Fund for International Development
- 160. Orbital Energy Lanka Pvt Ltd
- 161. Organisation of African, Caribbean and Pacific States (OACPS)
- 162. Pace Law School
- 163. Pacific Community
- 164. Pacific Islands Forum Secretariat
- 165. Power for All
- 166. Power Shift Africa
- 167. Practical Action South Asia Regional Office
- 168. Qamar Energy
- 169. Regional Center for Energy and Environmental Sustainability, UENR.

# A/13/2

- 170. Regional Center for Renewable Energy and Energy Efficiency (RCREEE)
- 171. ReNew Power
- 172. Renewable Energy Institute
- 173. Renewable Energy Policy Network for the 21st Century (REN21)
- 174. Renewables Academy AG (RENAC)
- 175. Renewables Grid Initiative
- 176. Res4Africa Foundation
- 177. Rockefeller Brothers Fund
- 178. Rocky Mountain Institute
- 179. Roland Berger
- 180. Ryse Energy International Limited
- 181. SADC Center for Renewable Energy and Energy Efficiency (SACREEE)
- 182. SAER Groupe
- 183. Sahelia Solar
- 184. SANY Renewable Energy
- 185. SEforAll
- 186. SELCO Foundation
- 187. Serbian Geological Association
- 188. Shell
- 189. SIDS Dock
- 190. Siemens Energy
- 191. Siemens Gamesa Renewable Energy
- 192. SkyPower Global
- 193. Smart Solar Technologies
- 194. SolarPower Europe
- 195. Southern African Power Pool (SAPP)
- 196. State Grid Corporation of China
- 197. Stimson Center
- 198. Stockholm Environment Institute
- 199. Suzlon Energy Limited
- 200. Swiss Re Management Ltd
- 201. Syndicat des Energies Renouvelables
- 202. Tata Steel Limited
- 203. The Energy Nexus Network (TENN)
- 204. The New Savannah Group
- 205. The Rockefeller Foundation
- 206. Tree Energy Solutions (TES)
- 207. United Nations (UN)
- 208. United Nations Convention to Combat Desertification (UNCCD)
- 209. United Nations Department of Economic and Social Affairs (UNDESA)
- 210. United Nations Department of Operational Support (UNDOS)

- 211. United Nations Department of Political and Peacebuilding Affairs (UNDPPA)
- 212. United Nations Development Programme (UNDP)
- 213. United Nations Economic and Social Commission for Western Asia (UNESCWA)
- 214. United Nations Economic Commission for Africa (UNECA)
- 215. United Nations Economic Commission for Europe (UNECE)
- 216. United Nations Environment Programme (UNEP)
- 217. United Nations Environment Programme Finance Initiative
- 218. United Nations Executive Office of the Secretary-General
- 219. United Nations Food and Agriculture Organisation (FAO)
- 220. United Nations Framework Convention on Climate Change (UNFCCC)
- 221. United Nations Industrial Development Organization (UNIDO)
- 222. United Nations Multidimensional Integrated Stabilization Mission in the Central African Republic (MINUSCA)
- 223. United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (UNOHRLLS)
- 224. United Nations Organization Stabilization Mission in the Democratic Republic of the Congo (MONUSCO)
- 225. United Nations Peacekeeping Force Cyprus
- 226. United Nations Rapid Environmental and Climate Technical Assistance Facility (REACT)
- 227. United Nations Support Office Somalia
- 228. University of Sarajevo
- 229. University of Southampton
- 230. University of Technology Sydney
- 231. USEK
- 232. Vestas Wind Systems
- 233. VITO ARABIA
- 234. Waaree Energies Limited
- 235. Wacker
- 236. World Bank
- 237. World Bioenergy Association
- 238. World Business Company
- 239. World Climate Foundation
- 240. World Future Council
- 241. World Green Economy Organization
- 242. World Health Organization (WHO)
- 243. World Resources Institute
- 244. World Wind Energy Association
- 245. World Wildlife Fund (WWF)
- 246. ZESA Holdings
- 247. Zhejiang Windey Co., Ltd.

Annex 3 A/13/DC/1



14 January 2023

Thirteenth session of the Assembly Abu Dhabi, 14–15 January 2023

# Decision on the Medium-term Strategy 2023-2027

The Assembly,

Reaffirming its desire to promote the widespread and increased adoption and use of renewable energy with a view to sustainable development and climate action;

*Emphasising* the vast opportunities offered by renewable energy to addressing energy security and the major role it can play in achieving net-zero strategies;

Underlining that renewable energy can enable and accelerate the achievement of the 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs), and provide practical and affordable solutions to development challenges;

Reaffirming its belief that renewable energy, combined with energy efficiency, can increasingly meet the global energy needs in the coming decades;

Recognizing the untapped renewable energy potential that can significantly contribute to the attainment of the objectives of the Paris Agreement on climate change and the Nationally Determined Contributions (NDCs);

*Mindful* of the need to decidedly accelerate energy transitions to realise Agenda 2030 and remain on a 1.5 degree pathway;

Noting with appreciation the efforts to consult broadly and extensively during the process of development of the Medium-term Strategy;

Underscoring IRENA's leading role in accelerating the global, renewables-based energy transition to fight climate change, enhance human welfare and drive an urgent and systemic shift for increased energy access, reduced inequalities, improved energy security, and prosperous and resilient economies and societies;

Having considered the report of the Director-General on the Draft Medium-term Strategy 2023-2027 contained in document A/13/L.4 and the views expressed by Members during the consideration of this Strategy;

- 1. Decides to adopt the Medium-term Strategy 2023-2027;
- 2. Requests the Director-General to submit to the Assembly, at its sixteenth session, a midterm evaluation of the Strategy with the view to its further refinement.

Annex 4 A/13/DC/2



15 January 2023

Thirteenth session of the Assembly Abu Dhabi, 14–15 January 2023

# Decision on the Indicative IRENA Scale of Contributions for 2023

The Assembly,

Recalling that the Assembly at its twelfth session, through decision A/12/DC/1/Rev.1, adopted the Work Programme and Budget for 2022-2023;

Noting that, pursuant to Article XII.A.1 of the IRENA Statute, mandatory contributions of Members are based on the scale of assessments of the United Nations, as determined by the Assembly;

Further noting that the Indicative IRENA Scale of Contributions for 2023 is based on the 2022-2024 Scale of Assessments as approved by the United Nations General Assembly in resolution A/RES/76/238;

Noting that the Council, at its twenty-fourth meeting, considered the Report of the Director-General on the Indicative IRENA Scale of Contributions for 2023, as contained in document C/24/7, and decided to transmit it to the Assembly for its consideration at its thirteenth session;

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;

Having considered the Report of the Director-General on the Indicative IRENA Scale of Contributions for 2023 as contained in document A/13/9;

Decides to adopt the Indicative IRENA Scale of Contributions for 2023, as contained in the Annex to document A/13/9, as the applicable scale of contributions for 2023.

Annex 5 A/13/DC/3



15 January 2023

Thirteenth session of the Assembly Abu Dhabi, 14-15 January 2023

# Decision on the IRENA Council membership for 2023-2024

The Assembly,

*Noting* that, pursuant to Article IX.G.1 of the IRENA Statute, the Assembly shall, by consensus of the Members present, elect the members of the Council;

Noting further that Article X.A of the Statute states that the members of the Council shall be elected on a rotating basis as laid down in the Rules of Procedure of the Assembly, with a view to ensuring effective participation of developing and developed countries and achieving fair and equitable geographical distribution and effectiveness of the Council's work;

Noting further that the election to the IRENA Council is also governed by Rules 69 and 70 of the Rules of Procedure of the Assembly, as contained in document A/5/5, with due regard being paid to the regional groupings set out in the annex thereto;

Recalling the decision to set 4 March 2022 as the deadline for Members to express interest in Council membership for the period 2023-2024 as a basis for further consultations as necessary;

Noting with gratitude the guidance received from the President of the twelfth session of the Assembly pertaining to the overall process and recalling the extensive consultations conducted in the spirit of cooperation and transparency within each regional grouping between March and December 2022 by the President and four Vice-Presidents of the twelfth session of the Assembly;

Commending the President and the four Vice-Presidents for their efforts to enable an inclusive and transparent consideration of the matter as well as the Members for their adherence to the procedure and deadlines and their efforts to reach agreement on Council seat allocation in a cooperative spirit;

Bearing in mind the need to ensure inclusiveness and engagement by all countries in the global effort to scale up the deployment of renewable energy and encouraging the Council in this context to ensure transparent and broad participation of all Members of the Agency in its work;

*Decides* to elect the members of the Council for 2023-2024 set out in the Annex to the present decision.

# **ANNEX**

# IRENA Council Membership for 2023-2024

# 2023

#### **Members**

- 1. Antigua and Barbuda
- 2. Argentina
- 3. Azerbaijan
- 4. Canada
- 5. China
- 6. Egypt
- 7. Germany
- 8. Ghana
- 9. Iraq
- 10. Italy
- 11. Japan
- 12. Nigeria
- 13. Panama
- 14. Portugal
- 15. Republic of Korea
- 16. Rwanda
- 17. Spain
- 18. Tonga
- 19. United Arab Emirates
- 20. United States of America
- 21. Zimbabwe

#### **Alternates**

- 1. Bangladesh
- 2. Cyprus
- 3. Denmark
- 4. Greece
- 5. Honduras
- 6. India
- 7. Malaysia
- 8. Mauritius
- 9. Saint Lucia
- 10. Togo
- 11. Uganda
- 12. Uruguay

#### 2024

#### **Members**

- 1. Antigua and Barbuda
- 2. Argentina
- 3. Azerbaijan
- 4. Bangladesh
- 5. Canada
- 6. China
- 7. Denmark
- 8. Egypt
- 9. Germany
- 10. Ghana
- 11. Honduras
- 12. India
- 13. Malaysia
- 14. Nigeria
- 15. Portugal
- 16. Rwanda
- 17. Spain
- 18. Tonga
- 19. United Arab Emirates
- 20. United States of America
- 21. Zimbabwe

#### **Alternates**

- 1. Cyprus
- 2. Greece
- 3. Iraq
- 4. Italy
- 5. Japan
- 6. Mauritius
- 7. Panama
- 8. Republic of Korea
- 9. Saint Lucia
- 10. Togo
- 11. Uganda
- 12. Uruguay

Annex 6 A/13/DC/4



15 January 2023

Thirteenth session of the Assembly Abu Dhabi, 14 – 15 January 2022

# Decision Appointment of the Incumbent Director-General of IRENA for a second term

The Assembly,

Recalling that, pursuant to Article XI.B of the Statute of the International Renewable Energy Agency (IRENA), "The Director-General shall be appointed by the Assembly upon the recommendation of the Council for a term of four years, renewable for one further term, but not thereafter";

Further recalling, that the Assembly, at the ninth session, in its decision A/9/DC/3, appointed Mr Francesco La Camera to serve as Director-General of IRENA for a four-year term beginning on 4 April, 2019;

Having taken note of the process and timelines contained in document C/22/INF/4;

Having considered the recommendation of the twenty-third Council meeting, pursuant to paragraph III(i) of the Addendum to document A/5/5, to renew the appointment of the incumbent Director-General for a second term;

Further noting that, in accordance with Article XI.C. of the Statute of IRENA, the Director-General shall be responsible to the Assembly and the Council;

Decides to renew the appointment of Mr Francesco La Camera as the Director-General of the International Renewable Energy Agency for one further term of four years;

Decides that the renewal of the appointment of the Director-General shall be subject to the Staff Regulations and Rules of IRENA, including the Code of Conduct, insofar as they are applicable to him and subject to any special condition that may be decided by the Assembly or established in his contract;

Authorises the President of the thirteenth session of the Assembly, acting in the name of IRENA, to conclude a contract with Mr Francesco La Camera, including the terms and conditions of the appointment.

Annex 7 A/13/5



15 January 2023

Thirteenth session of the Assembly Abu Dhabi, 14-15 January 2023

# Report of the Credentials Committee

- 1. At its thirteenth session, the Assembly appointed the Credentials Committee consisting of the following members: Belgium, Colombia, Cuba, Cyprus, Fiji, Mali, Spain, Uganda and the United Arab Emirates.
- 2. The Credentials Committee met on **14 January 2023**. The Committee elected Mr Jaljeet Jeetendra Kumar, the representative of Fiji 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 participate in the thirteenth session of the Assembly as of 13 January 2023. The Committee had before it the information provided by the Secretariat on the status of the credentials received as of 13 January 2023.
- 4. The Committee determined that, as of 13 January 2023, 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; Argentina; Austria; Bahamas; Bahrain; Bangladesh; Barbados; Belarus; Belgium; Belize; Bosnia and Herzegovina; Botswana; Brunei Darussalam; Canada; China; Colombia; Costa Rica; Cuba; Cyprus; Czech Republic; Denmark; Djibouti; Dominican Republic; El Salvador; Egypt; Eswatini; European Union; Fiji; Finland; France; Gambia; Georgia; Germany; Ghana; Greece; Grenada; Guinea; Hungary; Iceland; India; Indonesia; Iraq; Ireland; Israel; Italy; Japan; Jordan; Kazakhstan; Kenya; Kiribati; Latvia; Lebanon; Lesotho; Luxembourg; Malaysia; Maldives; Mali; Malta; Marshall Islands; Mauritania; Mauritius; Mexico; Micronesia (Federated States of); Montenegro; Mozambique; Nauru; Nepal; Netherlands (Kingdom of the); Nicaragua; Niger; Nigeria; Norway; Oman; Pakistan; Palau; Panama; Paraguay; Philippines; Poland; Portugal; Qatar; Republic of Korea; Republic of Moldova; Romania; Russian Federation; Rwanda; Saint Lucia; Saint Vincent and the Grenadines; Samoa; San Marino; São Tomé and Príncipe; Serbia; Seychelles; Singapore; Slovakia; Slovenia; South Africa; Spain; Sudan; Sweden; Switzerland; Tajikistan; Thailand; Tonga; Trinidad and Tobago; Türkiye; 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 an electronic copy of their credentials in the proper form will be submitted to the IRENA Secretariat as soon as possible.
- 6. The Committee noted that 24 registered Members had not submitted any credentials. The Committee recommends that the representatives of these Members attending the Assembly be permitted to participate

provisionally in the thirteenth session of the Assembly on the condition that an electronic copy of their credentials will be submitted to the 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 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 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.

Annex 8 A/13/INF/5



20 February 2023

Thirteenth session of the Assembly Abu Dhabi, 14-15 January 2023

# LIST OF PARTICIPANTS

# A. MEMBERS

#### **AFGHANISTAN**

Mr Ahmad Sayer Daudzai

Charge d' Affaires

Embassy of Afghanistan to the UAE, Abu Dhabi

#### **ALBANIA**

H.E. Ms Belinda Balluku

Deputy Prime Minister, Minister

Ministry of Infrastructure and Energy, Tirana

H.E. Mr Ermal Dredha

Ambassador

Embassy of Albania to the UAE, Abu Dhabi

Ms Sindi Dushku

Chief of Cabinet

Ministry of Infrastructure and Energy, Tirana

Mr Enea Karakaçi

Director-General

Ministry of Infrastracture and Energy, Tirana

Mr Edvin Barjami

First Secretary

Embassy of Albania to the UAE, Abu Dhabi

Mr Ergys Verdho

Chief Executive Officer

Albanian Power Corporation, Tirana

Mr Arber Avrami

Chief Executive Officer

Albanian Gas Service Company, Tirana

Ms Anisa Tresa

Assistant

Ministry of Infrastructure and Energy, Tirana

# **ALGERIA**

H.E. Mr Khemissi Arif

Ambassador

Embassy of Algeria to the UAE, Abu Dhabi

Mr Mourad Adjal

President, Director-General Sonelgaz Group, Algiers

Mr Fouad Layachi

Counsellor

Embassy of Algeria to the UAE, Abu Dhabi

Mr Sami Boukelia

Secretary

Ministry of Foreign Affairs, Algiers

#### **ANGOLA**

H.E. Mr Joao Borges

Minister

Ministry of Energy and Waters, Luanda

H.E. Mr Albino Malungo

Permanent Representative to IRENA and Ambassador

Embassy of Angola to the UAE, Abu Dhabi

Mr Kiala Pierre

Director of External Affairs

Ministry of Energy and Waters, Luanda

Mr Joao Landa

Acting Director of Renewable Energy and Rural Electrification

Ministry of Energy and Waters, Luanda

Mr Nelson Solano

First Secretary

Embassy of Angola to the UAE, Abu Dhabi

Mr Joao Fernandes

Senior Engineer

Ministry of Energy and Waters, Luanda

Mr Sérgio Congo

Attaché

Embassy of Angola to the UAE, Abu Dhabi

Mr Mateus Cavumbo

Press Attaché

Embassy of Angola to the UAE, Abu Dhabi

Ms Neusa Cumbe

Consultant

Ministry of Energy and Waters, Luanda

ANTIGUA AND

**BARBUDA** Mr Tumasie Blair

Deputy Permanent Representative to the United Nations

Permanent Mission of Antigua and Barbuda to the UN, New York

**ARGENTINA** 

H.E. Mr Jorge Agustín Molina Arambarri

Ambassador

Embassy of Argentina to the UAE, Abu Dhabi

Mr Gabriel Alejandro Jorquera

Minister Plenipotentiary

Embassy of Argentina to the UAE, Abu Dhabi

Mr Carlos Risso Domínguez

Counsellor

Embassy of Argentina to the UAE, Abu Dhabi

Mr Juan Ignacio Díaz

Head of the Consular Section

Embassy of Argentina to the UAE, Abu Dhabi

Mr Augusto Jose Jimenez Martinez

Officer

Embassy of Argentina to the UAE, Abu Dhabi

**AUSTRALIA** 

Ms Peta Olesen

Director

Department of Climate Change, Energy, the Environment and Water,

Canberra

Ms Alexandra Crofton

Second Secreatry

Embassy of Australia to the UAE, Abu Dhabi

**AUSTRIA** 

H.E. Mr Étienne Berchtold

Ambassador

Embassy of Austria to the UAE, Abu Dhabi

Ms Elfriede-Anna More

Deputy Director-General

Federal Ministry of Climate Action, Environment, Energy, Mobility,

Innovation and Technology, Vienna

Ms Jasmin Haider

Expert

Federal Ministry of Climate Action, Environment, Energy, Mobility,

Innovation and Technology, Vienna

**AZERBAIJAN** 

H.E. Mr Elchin Baghirov

Ambassador

Embassy of Azerbaijan to the UAE, Abu Dhabi

#### **BAHAMAS**

Hon Vaughn P. Miller

Minister

Ministry of Environment and Natural Resources, Nassau

H.E. Mr Tony S. Joudi

Ambassador

Embassy of Bahamas to the UAE, Abu Dhabi

Mr Gilles Deal

Energy Officer

Ministry of the Environment and Natural Resources, Nassau

Ms Samantha Black

Media and Public Relations Specialist

Ministry of the Environment and Natural Resources, Nassau

Mr Ashraf Badwan

Attaché

Embassy of Bahamas to the UAE, Abu Dhabi

#### **BAHRAIN**

H.E. Mr Yaser Bin Ebrahim Mohammed Humaidan

Minister

Ministry of Electricity and Water Affairs, Manama

Mr Khalid Jasim Mohamed Sowayed

Acting Director, Renewable Energy and Research Ministry of Electricity and Water Affairs, Manama

Ms Maryam Salman Husain Falamarzi

Acting Manager, Minister Office

Ministry of Electricity and Water Affairs, Manama

Mr Husain Alawi Sayed Baqer

**Engineering Specialist** 

Ministry of Electricity and Water Affairs, Manama

# **BANGLADESH**

H.E. Mr Md. Abu Zafar

Permanent Representative to IRENA and Ambassador Embassy of Bangladesh to the UAE, Abu Dhabi

Ms Munira Sultana

Chairman

Sustainable and Renewable Energy Development Authority, Dhaka

Mr Md. Habibur Rahman

Secretary, Power Division

Ministry of Power, Energy and Mineral Resources, Dhaka

Mr Nirod Chandra Mondal

Joint Secretary, Power Division

Ministry of Power, Energy and Mineral Resources, Dhaka

Mr Muhammad Mizanur Rahman

Deputy Chief of Mission

Embassy of Bangladesh to the UAE, Abu Dhabi

Mr Mazharul Islam

Second Secretary

Embassy of Bangladesh to the UAE, Abu Dhabi

**BARBADOS** 

Hon Lisa Cummins

Minister

Ministry of Energy and Business, Bridgetown

Ms Debra Anne Dowridge

Deputy Permanent Secretary

Ministry of Energy and Business, Bridgetown

Mr Bryan Anthony Haynes

Chief Project Analyst

Ministry of Energy and Business, Bridgetown

**BELARUS** 

H.E. Mr Andrei Luchenok

Ambassador

Embassy of Belarus to the UAE, Abu Dhabi

**BELGIUM** 

H.E. Mr Philippe Henry

Vice President and Minister

Ministry of Climate, Energy, Mobility and Infrastructure of the

Walloon Region, Brussels

H.E. Mr Antoine Delcourt

Permanent Representative to IRENA and Ambassador

Embassy of Belgium to the UAE, Abu Dhabi

Ms Annick Fourmeaux

Director-General

Service Public de Wallonie, Brussels

Mr Dominique Perrin

Deputy Head of Cabinet

Ministry of Climate, Energy, Mobility and Infrastructure of the

Walloon Region, Brussels

Ms Carole Pisula

Head of Energy Team

Ministry of Climate, Energy, Mobility and Infrastructure of the

Walloon Region, Brussels

Ms Marie Schippers

International Policy Advisor

Service Public de Wallonie, Brussels

Ms Quirina Huet

Policy Advisor

Department of Environment and Spatial Development, Brussels

Ms Eva-Marie Bruno

Project Management Advisor

Service Public de Wallonie, Brussels

Ms Laurence Degoudenne

Advisor Multilateral Department

Wallonie-Bruxelles International, Brussels

Ms Anja Heinen

Trade and Investment Commissioner

AWEX, Abu Dhabi

Mr Pierre Castelain

Communication Advisor

Ministry of Climate, Energy, Mobility and Infrastructure of the

Walloon Region, Brussels

Mr Joren Selleslaghs

First Secretary

Embassy of Belgium to the UAE, Abu Dhabi

Mr Jean-Yves Saliez

Advisor

Ministry of Climate, Energy, Mobility and Infrastructure of the

Walloon Region, Brussels

**BELIZE** 

Hon Michel Chebat Jr

Minister

Ministry of Public Utilities, Energy, Logistics and E-Governance,

Belmopan

Mr Jose Urbina

Chief Executive Officer

Ministry of Public Utilities, Energy, Logistics and E-Governance,

Belmopan

Mr Ryan Cobb

Energy Director

Ministry of Public Utilities, Energy, Logistics and E-Governance,

Belmopan

Mr Raul Ibanez

Senior Advisor

Ministry of Public Utilities, Energy, Logistics and E-Governance,

Belmopan

BOSNIA AND HERZEGOVINA

Mr Admir Softić

Assistant Minister of the Energy Sector

Ministry of Foreign Trade and Economic Relations, Sarajevo

H.E. Mr Šerif Mujkanović

Permanent Representative to IRENA and Ambassador

Embassy of Bosnia and Herzegovina to the UAE, Abu Dhabi

Mr Nihad Harbas

Secretary General

Regional Center for Energy Transitions- ReSET, Sarajevo

Ms Ružica Burić Executive Director

EPBiH Electricity Supply, Sarajevo

Mr Senad Salkić

Executive Director

EPBiH Electricity Supply, Sarajevo

#### **BOTSWANA**

Hon Lefoko Maxwell Moagi

Minister

Ministry of Minerals and Energy, Gaborone

Mr Nchena Z Mothebe

Deputy Permanent Secretary

Ministry of Minerals and Energy, Gaborone

Mr Amangwe Oageleng Madisakwana

Minister Counsellor

Ministry of International Affairs and Coperation, Gaborone

Mr Meshack Tshekedi

Chief Executive Officer

Botswana Oil Limited, Gaborone

Ms Mukani P Thapelo

Senior Energy Engineer

Ministry of Minerals and Energy, Gaborone

## **BRUNEI DARUSSALAM**

Mr Mohammad Nizam Haji Izmi

Acting Director, Energy Stakeholder Management Division

Department of Energy, Prime Minister's Office, Bandar Seri Begawan

H.E. Mr Harun Junid

Ambassador

Embassy of Brunei Darussalam to the UAE, Abu Dhabi

Ms Dk Nur Sajidah Rohana Pg Hj Roslan

Second Secretary

Embassy of Brunei Darussalam o the UAE, Abu Dhabi

Mr Muhammad Nazri Haji Ali

Officer

Department of Electrical Services, Prime Minister's Office, Bandar Seri

# Begawan

**BURKINA FASO** 

Mr Souleymane Hebie

Charge d'Affaires

Embassy of Burkina Faso to the UAE, Abu Dhabi

Mr Amadou Diallo

Official

Ministry of Energy, Mines and Quarries, Ouagadougou

**CANADA** 

H.E. Ms Catherine Stewart Ambassador for Climate Change Government of Canada, Ottawa

H.E. Mr Radha Krishna Panday

Ambassador

Embassy of Canada to the UAE, Abu Dhabi

Mr Jean-Philippe Bernier Senior Policy Advisor

Natural Resources Canada, Ottawa

Mr Nathaniel Lewis-George Senior Policy Advisor Government of Canada, Ottawa

Ms Elneda Dani Second Secretary

Embassy of Canada to the UAE, Abu Dhabi

Mr Loc Pham Counsellor

Embassy of Canada to the UAE, Abu Dhabi

CENTRAL AFRICAN REPUBLIC

Mr Moussa Ousman

Director-General of Energy Department

Ministry of Energy Development and Hydraulics Resources, Bangui

**CHAD** 

H.E. Mr Ramatou Houtouin

Minister

Ministry of Hydrocarbons and Energy, N'Djamena

Mr Al-Waly Haroun Tchong-Tchong Director of New and Renewable Energies

Ministry of Hydrocarbons and Energy, N'Djamena

Mr Kemnda Allarekingar Adviser in Charge of Energy

Ministry of Hydrocarbons and Energy, N'Djamena

**CHINA** 

Mr Ren Zhiwu

Deputy Administrator

National Energy Adminstration, Beijing

Ms Pan Huimin

Deputy Director-General

National Energy Adminstration, Beijing

Mr Wang Dapeng

Deputy Director-General

National Energy Adminstration, Beijing

Mr Lei Xiang

Deputy Director

National Energy Adminstration, Beijing

Mr Ji Daqian

Deputy Director

National Energy Adminstration, Beijing

Mr Ren Hongtao

Counsellor

Embassy of China to the UAE, Abu Dhabi

Mr Li Sheng

President

China Renewable Energy Engineering Institute (CREEI), Beijing

Mr Jiang Hao

Director of International Business Department

China Renewable Energy Engineering Institute (CREEI), Beijing

Mr Hu Xiaofeng

Acting Director of New Energy Department

China Renewable Energy Engineering Institute (CREEI), Beijing

Ms Huo Jingying

Assistant Director of International Business Department

China Renewable Energy Engineering Institute (CREEI), Beijing

Mr Xie Yuetao

Deputy Director of International Business Department

China Renewable Energy Engineering Institute (CREEI), Beijing

Mr Jing Shunli

Senior Engineer of International Business Department

China Renewable Energy Engineering Institute (CREEI), Beijing

Mr Qiao Yong

Senior Engineer of New Energy Department

China Renewable Energy Engineering Institute (CREEI), Beijing

COLOMBIA

H.E. Ms Irene Vélez Torres

Minister

Ministry of Mines and Energy, Bogotá

Mr Cesar Augusto Domínguez

Charge d'Affaires

Embassy of Colombia to the UAE, Abu Dhabi

Ms Jamie Pacheco Aranda

Adviser

Embassy of Colombia to the UAE, Abu Dhabi

**COSTA RICA** 

H.E. Mr Francisco Chacón Hernández

Permanent Representative to IRENA and Ambassador

Embassy of Costa Rica to the UAE, Abu Dhabi

Mr Alfonso Murillo

Minister Counsellor and Consul General

Embassy of Costa Rica to the UAE, Abu Dhabi

**CUBA** 

Ms Tatiana Amarán Bogachova

Deputy Minister

Ministry of Energy and Mines, Havana

Ms Marlenis Aguila Zamora

Specialist

Ministry of Energy and Mines, Havana

Ms Ailyn Martinez Third Secretary

Embassy of Cuba to the UAE, Abu Dhabi

**CYPRUS** 

Mr Marios Panayides Permanent Secretary

Ministry of Energy, Commerce and Industry, Nicosia

H.E. Mr Yannis Michaelides

Permanent Representative to IRENA and Ambassador

Embassy of Cyprus to the UAE, Abu Dhabi

Mr Georgios Partasides

Industrial Extension Officer A

Ministry of Energy, Commerce and Industry, Nicosia

**CZECH REPUBLIC** 

H.E. Mr Jiří Slavík

Permanent Representative to IRENA and Ambassador Embassy of the Czech Republic to the UAE, Abu Dhabi

Mr Michal Florus

Commercial Counsellor

Embassy of the Czech Republic to the UAE, Abu Dhabi

Ms Lenka Petrová

**Energy Officer** 

Ministry of Industry and Trade, Prague

**DENMARK** 

H.E. Mr Tomas Anker Christensen

Climate Ambassador

Ministry of Climate, Energy and Utilites, Copenhagen

H.E. Mr Anders Bjørn Hansen

Permanent Representative to IRENA and Ambassador Embassy of Denmark to the UAE, Abu Dhabi

Mr Ali Majid Saied

Deputy Head of Mission

Embassy of Denmark to the UAE, Abu Dhabi

Ms Dorthea Damkjær

Chief Adviser

Ministry of Foreign Affairs, Copenhagen

Ms Laura Skøt

Adviser

Ministry of Climate, Energy and Utilities, Copenhagen

Ms Marie Borrisholt Grevsen

Intern

Embassy of Denmark to the UAE, Abu Dhabi

**DJIBOUTI** 

H.E. Mr Yonis Ali Guedi

Minister

Ministry of Energy and Natural Resources, Djibouti City

H.E. Mr Moussa Mohamed Ahmed

Permanent Representative to IRENA and Ambassador

Embassy of Djibouti to the UAE, Abu Dhabi

Ms Saida Abdillahi

Director, Energy Efficiency and Management Department Ministry of Energy and Natural Resources, Djibouti City

Mr Gouled Djama

Director of Energy

Ministry of Energy and Natural Resources, Djibouti City

Ms Nadia Abdo Hachem

Second Counsellor

Embassy of Djibouti to the UAE, Abu Dhabi

Mr Mahdi Waberi Hassan

Technical Advisor

Ministry of Energy and Natural Resources, Djibouti City

**DOMINICA** 

Hon Vince Henderson

Minister

Ministry of Foreign Affairs, International Business, Trade and Energy, Roseau

H.E. Mr Avondale Paul

Ambassador

Embassy of Dominica to the UAE, Abu Dhabi

## **DOMINICAN REPUBLIC**

H.E. Mr Julio Simón Castaños Zouain

Ambassador

Embassy of the Dominican Republic to the UAE, Abu Dhabi

Mr Edward Veras

Executive Director

National Energy Commission, Santo Domingo

Ms Vanessa Gómez

Deputy Legal Director

National Energy Commission, Santo Domingo

Mr Samuel J Castro Martínez

Minister Counsellor

Embassy of the Dominican Republic to the UAE, Abu Dhabi

**EGYPT** 

H.E. Mr Sherif Issa

Ambassador

Embassy of Egypt to the UAE, Abu Dhabi

Mr Ahmed Mohamed Mohina

Undersecretary

Ministry of Electricity and Renewable Energy, Cairo

Mr Mohamed Omran

Executive Chairman

Egypt Regulatory Agency, Cairo

Mr Ali Ahmed Ali

Director of International Cooperation and Agreements

Ministry of Electricity and Renewable Energy, Cairo

Mr Ehab Ismail Amin

Deputy Chairman

New and Renewable Energy Authority, Cairo

Mr Ahmed Abdelmegid

General Manager of Public Relations

Ministry of Electricity and Renewable Energy, Cairo

Mr Amgad Said Mahmoud

Senior Legal Adviser

Ministry of Electricity and Renewable Energy, Cairo

Mr Ahmed Monib

First Secretary

Embassy of Egypt to the UAE, Abu Dhabi

Mr Ayman Nassar

Accountant

Ministry of Electricity and Renewable Energy, Cairo

### **EL SALVADOR**

H.E. Ms Vanessa Interiano

Permanent Representative to IRENA and Ambassador Embassy of El Salvador to the United Kingdom, London

Mr Sigfredo Figueroa Cruz Legal Advisor to the Presidency

Hydroelectric Commission of the Lempa River (CEL), San Salvador

#### **ESTONIA**

H.E. Mr Jaan Reinhold

Ambassador

Embassy of Estonia to the UAE, Abu Dhabi

## **ESWATINI**

Hon Jabulani Mabuza

Minister

Ministry of Natural Resources and Energy, Mbabane

H.E. Mr Sifiso M. Dlamini

Ambassador

Embassy of Eswatini to the UAE, Abu Dhabi

Mr Sikhumbuzo Tsabedze Chief Executive Officer

Eswatini Energy Regulatory Authority, Mbabane

Mr Ernest Mkhonta Managing Director

Eswatini Electricity Company, Mbabane

Ms Thabile Nkosi Director of Energy

Ministry of Natural Resources and Energy, Mbabane

Mr Mzwandile Thwala Senior Energy Officer

Ministry of Natural Resources and Energy, Mbabane

Mr Simphiwe Khumalo

General Manager, Regulation

Eswatini Energy Regulatory Authority, Mbabane

Mr Patrick Mathuniwa

General Manager, Finance

Eswatini Electricity Company, Mbabane

Ms Nonhlanhla Dlamini

Counsellor

Embassy of Eswatini to the UAE, Abu Dhabi

Mr Doctor Dube

Third Secretary

Embassy of Eswatini to the UAE, Abu Dhabi

Ms Sibongile Motsa

Administrative Attaché

Embassy of Eswatini to the UAE, Abu Dhabi

Ms Sthandatho Mncina

Private Secretary

Ministry of Natural Resources and Energy, Mbabane

#### **EUROPEAN UNION**

H.E. Mr Frans Timmermans

**Executive Vice-President** 

European Commission, Brussels

H.E. Ms Kadri Simson

**Energy Commissioner** 

European Commission, Brussels

H.E. Mr Andrea Matteo Fontana

Ambassador

Delegation of the European Union to the UAE, Abu Dhabi

Mr Stefano Grassi

Head of Cabinet

European Commission, Brussels

Ms Ditte Juul Jørgensen

Director-General for Energy

European Commission, Brussels

Mr Lukasz Kolinski

Head of Unit Renewable energy and Energy System Integration

European Commission, Brussels

Mr Stefano Signore

Head of Unit, Climate Change and Sustainable Energy

European Commission, Brussels

Ms Aleksandra Danuta Tomczak

Cabinet Member

European Commission, Brussels

Ms Estela Pineiro Kruik

Cabinet Member

European Commission, Brussels

Ms Damyana Rumyanova Stoynova

Cabinet Member

European Commission, Brussels

Mr Matthieu Ballu

Policy Officer

European Commission, Brussels

Mr Alessandro Polito

Policy Officer

European Commission, Brussels

Ms Silvia Crescimbeni

Policy Officer

European Commission, Brussels

Mr Sàndor Szelekovszky

First Counsellor, Head of Trade and Other Policies Section Delegation of the European Union to the UAE, Abu Dhabi

Ms Annikky Lamp

Communication Adviser

European Commission, Brussels

Ms Hanina Ben Bernou

Regional Advisor

Delegation of the European Union to the UAE, Abu Dhabi

Ms Giulia Pietrangeli

Officer

Delegation of the European Union to the UAE, Abu Dhabi

Mr Karim Djouimai

Press and Information Officer

Delegation of the European Union to the UAE, Abu Dhabi

Ms Sumayya M. Ramadan

Secretary

Delegation of the European Union to the UAE, Abu Dhabi

Mr Ryan Lim

Photographer

Delegation of the European Union to the UAE, Abu Dhabi

Hon Ro Filipe Tuisawau

Minister

Ministry of Public Works, Transport and Meteorological Services, Suva

H.E. Mr Naipote Tako Katonitabua

Permanent Representative to IRENA and Ambassador

Embassy of Fiji to the UAE, Abu Dhabi

Mr Mikaele Belena

Director of Energy

Ministry of Public Works, Transport and Meteorological Services, Suva

Mr Taniela Tabuya

Principal Scientific Officer

Ministry of Public Works, Transport and Meteorological Services, Suva

FIJI

Mr Sanaila Laqai

First Secretary

Embassy of Fiji to the UAE, Abu Dhabi

Mr Jaljeet Kumar Second Secretary

Embassy of Fiji to the UAE, Abu Dhabi

**FINLAND** 

Mr Pekka Grönlund Deputy Director-General

Ministry of Economic Affairs and Employment, Helsinki

**FRANCE** 

H.E. Mr Stéphane Crouzat

Ambassador for Climate Change Negotiations, Renewable Energy

and Climate Risk Prevention

Ministry of Europe and Foreign Affairs, Paris

Mr Quentin Perret

Sustainable Development Counsellor

Embassy of France to the UAE, Abu Dhabi

Ms Léa Sillard

Desk Officer, Gas and Energy Transition Ministry of Europe and Foreign Affairs, Paris

**GAMBIA** 

Hon Abdoulie Jobe

Minister

Ministry of Petroleum and Energy, Serrekunda

Mr Kemo K. Ceesay Director of Energy

Ministry of Petroleum and Energy, Serrekunda

Ms Kodou Njie

Principal Assistant Secretary

Ministry of Petroleum and Energy, Serrekunda

**GEORGIA** 

Mr Romeo Mikautadze

Deputy Minister

Ministry of Economy and Sustainable Development, Tbilisi

Mr Irakli Rogava Senior Consellor

Embassy of Georgia to the UAE, Abu Dhabi

**GERMANY** 

Mr Peer Stefan Wenzel

Parliamentary State Secretary

Federal Ministry for Economic Affairs and Climate Action, Berlin

H.E. Mr Alexander Schönfelder

Permanent Representative to IRENA and Ambassador

Embassy of Germany to the UAE, Abu Dhabi

Ms Vera Rodenhoff

Deputy Director-General

Federal Ministry for Economic Affairs and Climate Action, Berlin

Mr Norbert Gorißen

Deputy Special Envoy for International Climate Action

Federal Foreign Office, Berlin

Mr Michael Hackethal

Head of Division

Federal Ministry for Economic Affairs and Climate Action, Berlin

Mr Jan Weidner

Desk Officer

Federal Ministry for Economic Affairs and Climate Action, Berlin

Ms Ellen von Zitzewitz

Desk Officer

Federal Ministry for Economic Affairs and Climate Action, Berlin

Mr Eric Altmann

Desk Officer

Federal Ministry for Economic Affairs and Climate Action, Berlin

Mr Elias Spiekermann

Desk Officer

Federal Ministry for Economic Affairs and Climate Action, Berlin

Mr Holger Klitzing

Head of Unit

Federal Foreign Office, Berlin

Ms Katja Decker

Head of Economic Affairs

Embassy of Germany to the UAE, Abu Dhabi

Mr Ulf-Oliver Höesch

Third Secretary

Embassy of Germany to the UAE, Abu Dhabi

Ms Liga Bitane

Assistant

Embassy of Germany to the UAE, Abu Dhabi

Mr Maximilian Barth

Advisor

German International Cooperation Agency (GIZ), Bonn

Mr Ricardo Külheim

Advisor

German International Cooperation Agency (GIZ), Bonn

Ms Dorothea Otremba

Advisor

German International Cooperation Agency (GIZ), Bonn

## **GHANA**

Hon Mathew Opoku Prempeh Minister

Ministry of Energy, Accra

Hon Mohammed Amin Adam

Deputy Minister

Ministry of Energy, Accra

Hon William Owuraku-Aidoo

Deputy Minister

Ministry of Energy, Accra

Hon Justina Owusu Banahene

Minister

Bono Region

Ms Wilhelmina Asamoah

Chief Director

Ministry of Energy, Accra

Mr Solomon Adjetey

Director

Ministry of Energy, Accra

Mr Bradley Poku Amankwah

Minister's Special Aide

Ministry of Energy, Accra

Mr Seth Agbeve Mahu

Deputy Director

Ministry of Energy, Accra

Mr Oscar Amonoo Neizer

Executive Secretary

Energy Commission of Ghana, Accra

Mr Samuel Dzamesi

CEO

BUI Power Authority, Accra

Mr Wisdom Ahiataku-Togobo

Director

BUI Power Authority, Accra

Mr Frederick Appiah

Deputy Director

Energy Commission of Ghana

Mr Salifu Addo

Deputy Director

Energy Commission of Ghana, Accra

Mr Kwame Agyarpong

Personal Assistant to Minister

Ministry of Energy, Accra

**GREECE** 

H.E. Mr Antonis Alexandridis

Permanent Representative to IRENA and Ambassador

Embassy of Greece to the UAE, Abu Dhabi

Mr Vasileios Theocharidis

Deputy Head of Mission

Embassy of Greece to the UAE, Abu Dhabi

**GRENADA** 

Hon Kerryne James

Minister

Ministry of Climate Resilience, the Environment and Renewable

Energy, Saint George's

Mr Leslie Smith

National Ozone Officer

Ministry of Climate Resilience, the Environment and Renewable

Energy, Saint George's

**GUINEA** 

Mr Albert Saa Dembadouno

Head of Renewable Energy Division

Ministry of Energy, Hydraulics and Hydrocarbons, Conakry

Mr Mamby Doumbouya

National Director Energy

Ministry of Energy, Hydraulics and Hydrocarbons, Conakry

Mr Mohamed Kourouma

Counsellor

Embassy of Guinea to the UAE, Abu Dhabi

Mr Charlil Abdul Raheem

Public Relations Representatitve

Embassy of Guinea to the UAE, Abu Dhabi

**HUNGARY** 

H.E. Mr Osama Ibrahim Naffa

Ambassador

Embassy of Hungary to the UAE, Abu Dhabi

Mr László Márton

Trade Attache

Embassy of Hungary to the UAE, Abu Dhabi

Mr Bálint Varga

Advisor

Ministry of Energy, Budapest

## **ICELAND**

Mr Benedikt Höskuldsson Special Envoy for Climate

Ministry for Foreign Affairs, Reykjavik

## **INDIA**

Hon Raj Kumar Singh

Minister

Ministry of New and Renewable Energy, New Delhi

H.E. Mr Sunjay Sudhir

Permanent Representative to IRENA and Ambassador

Embassy of India to the UAE, Abu Dhabi

Mr Rajesh Kumar Sinha

Additional Secertary

Ministry of Ports, Shipping and Waterways, New Delhi

Mr Sanjay Dubey

Principal Secretary, Energy and New and Renewable Energy Dept.

Government of Madhya Pradesh

Mr Pradip Kumar Das

Chairman, Managing Director

Indian Renewable Energy Development Agency, New Delhi

Mr Jeevan Kumar Jethani

Senior Director

Ministry of New and Renewable Energy, New Delhi

Mr Anant Kumar

Director

Ministry of New and Renewable Energy, New Delhi

Mr Manoj Kumar Singh

Personal Secretary to Hon'ble Minister

Ministry of New and Renewable Energy, New Delhi

Mr Chintan Navinbhai Shah

Director

Indian Renewable Energy Development Agency, New Delhi

Mr Umar Farooque

First Secretary

Embassy of India to the UAE, Abu Dhabi

Ms Risha Oberai

Second Secretary

Embassy of India to the UAE, Abu Dhabi

Mr Dhruv Mishra

Second Secretary

Embassy of India to the UAE, Abu Dhabi

Mr Aneez Shahal

Third Secretary

Embassy of India to the UAE, Abu Dhabi

Ms Aayushi Pankaj Sutaria

Third Secretary

Embassy of India to the UAE, Abu Dhabi

Ms Harsha Bangari

Managing Director

Export-Import Bank of India

Mr Tejjas Parmar

**CEO** 

Suzlon Group, Pune

Mr Surender Rai

Manager

Confederation of Indian Industry, New Delhi

Mr Avdhesh Pandey

Manager

Indian Renewable Energy Development Agency Ltd., New Delhi

Mr Ajay Talegaonkar

Member, Central Electricity Authority

Ministry of Power, New Delhi

Mr Shailesh Kumar Mishra

Director

Solar Energy Corporation of India

H.E. Mr Arifin Tasrif

Minister

Ministry of Energy and Mineral Resources, Jakarta

H.E. Mr Husin Bagis

Ambassador

Embassy of Indonesia to the UAE, Abu Dhabi

Mr Dadan Kusdiana

Director-General

Ministry of Energy and Mineral Resources, Jakarta

Mr Harris Yahya

Director of Geothermal

Ministry of Energy and Mineral Resources, Jakarta

Mr Praptono Adhi Sulistomo

Deputy Director

Ministry of Energy and Mineral Resources, Jakarta

INDONESIA

Mr Trois Dilisusendi

Coordinator of Investment and Cooperation on Bioenergy Ministry of Energy and Mineral Resources, Jakarta

Ms Dianissa Scheherazade

Multilateral Cooperations Analyst

Ministry of Energy and Mineral Resources, Jakarta

Mr Mohammad Ridwansyah Saidi Ungsi

Director

Indonesia Investment Promotion Centre, Abu Dhabi

Mr Ahrul Tsani Fathurrahman

Counsellor

Embassy of Indonesia to the UAE, Abu Dhabi

Ms Karbela Rachman Adam

First Secretary

Embassy of Indonesia to the UAE, Abu Dhabi

Mr Muhammad Rayyaan

Economic Affairs Officer

Embassy of Indonesia to the UAE, Abu Dhabi

Mr Boby Wahyu Hernawan

Finance Attache

Embassy of Indonesia to the UAE, Abu Dhabi

Ms Ida Ayu Komang Yetri Citraseni

Staff

Ministry of Energy and Mineral Resources, Jakarta

Mr Debby Risky Ardiansyah

Staff

Ministry of Energy and Mineral Resources, Jakarta

IRAN

Mr Jafar Mohammadnejad Sigaroudi

Director-General

Renewable Energy and Energy Efficiency Organization, Tehran

**IRAQ** 

H.E. Mr Naeem Yasir

Minister

Ministry of Higher Education and Scientific Research, Baghdad

H.E. Mr Mudhafar Al Jbori

Permanent Representative to IRENA and Ambassador

Embassy of Iraq to the UAE, Abu Dhabi

Mr Saud Mohammed

Head of the Renewable Energy Center

Ministry of Electricity, Baghdad

Mr Hasanen Al-Saedi

Executive Chief of Staff

Ministry of Higher Education and Scientific Research, Baghdad

Ms Suzan Muhsen

First Secretary

Ministry of Foreign Affairs, Baghdad

Mr Muddathir Saber Othman

First Secretary

Embassy of Iraq to the UAE, Abu Dhabi

Mr AbdulBaqi Alsalait

Advisor on Energy Issues in the Ministry of Oil

Ministry of Oil, Baghdad

Mr Mohammed Saegh

Attache

Embassy of Iraq to the UAE, Abu Dhabi

**IRELAND** 

H.E. Ms Alison Milton

Permanent Representative to IRENA and Ambassador

Embassy of Ireland to the UAE, Abu Dhabi

Ms Emer Groarke

Second Secretary

Embassy of Ireland to the UAE, Abu Dhabi

**ISRAEL** 

H.E. Mr Amir Hayek

Permanent Representative to IRENA and Ambassador

Embassy of Israel to the UAE, Abu Dhabi

Mr Amir Rom

Political Counsellor

Embassy of Israel to the UAE, Abu Dhabi

**ITALY** 

Mr Giorgio Silli

Undersecretary

Ministry of Foreign Affairs and International Cooperation, Rome

H.E. Mr Lorenzo Fanara

Permanent Representative to IRENA and Ambassador

Embassy of Italy to the UAE, Abu Dhabi

Mr Nicola Bazzani

Deputy Head of Office

Ministry of Foreign Affairs and International Cooperation, Rome

Mr Sergio Maffettone

Counsellor

Ministry of Foreign Affairs and International Cooperation, Rome

Mr Simone Spezzano

Counsellor

Ministry of Foreign Affairs and International Cooperation, Rome

Mr Stefano Salomoni

Expert

Ministry of Foreign Affairs, Rome

Mr Jonas Badde

First Secretary

Embassy of Italy to the UAE, Abu Dhabi

Mr Yazam Al Momany

Scientific Attache

Embassy of Italy to the UAE, Abu Dhabi

Ms Noemi Magnanini

International Relations Officer

Italian Energy Services Agency (GSE), Rome

H.E. Mr Takagi Kei

Parliamentary Vice-Minister for Foreign Affairs

Ministry of Foreign Affairs, Tokyo

H.E. Mr Isomata Akio

Permanent Representative to IRENA and Ambassador

Embassy of Japan to the UAE, Abu Dhabi

Mr Kikuchi Nobuyuki

Director

Ministry of Foreign Affairs, Tokyo

Mr Hoshino Masashi

Director

Ministry of Economy, Trade and Industry, Tokyo

Mr Matsunaga Daiki

Executive Assistant to Parliamentary Vice-Minister

Ministry of Foreign Affairs, Tokyo

Mr Saito Kazuhiko

Deputy Director

Ministry of Foreign Affairs, Tokyo

Mr Hayamizu Daisuke

Assistant Director

Ministry of Economy, Trade and Industry, Tokyo

Mr Matsushita Satoshi

Officer

Ministry of Foreign Affairs, Tokyo

JAPAN

Mr Mori Takafumi

First Secretary

Embassy of Japan to the UAE, Abu Dhabi

Mr Iijima Ryoko

First Secretary

Embassy of Japan to the UAE, Abu Dhabi

Ms Ito Haruka

Third Secretary

Ministry of Foreign Affairs, Tokyo

Ms Makino Atsuko

Interpreter

Ministry of Foreign Affairs, Tokyo

Ms Lewis Aya

Interpreter

Ministry of Foreign Affairs, Tokyo

# **JORDAN**

H.E. Mr Saleh Ali Hamed Alkharabsh

Minister

Ministry of Energy and Mineral Resources, Amman

H.E. Mr Nassar Habashneh

Permanent Representative to IRENA and Ambassador

Embassy of Jordan to the UAE, Abu Dhabi

Mr Yacoub Marar

Director of Renewable Energy & Energy Efficiency Department

Ministry of Energy and Mineral Resources, Amman

Ms Nour Aljazi

First Secretary

Embassy of Jordan to the UAE, Abu Dhabi

## **KAZAKHSTAN**

Mr Zhandos Nurmaganbetov

Deputy Minister

Ministry of Energy, Astana

H.E. Mr Madiyar Menilbekov

Permanent Representative to IRENA and Ambassador

Embassy of Kazakhstan to the UAE, Abu Dhabi

Mr Talgat Karashev

Director of Department of International Cooperation

Ministry of Energy, Astana

Mr Gali Seilkhanov

Head of Investment and Economic Affairs

Embassy of Kazakhstan to the UAE, Abu Dhabi

Mr Rustem Kydyrbekov Chief Expert of the Department of Renewable Energy Sources Ministry of Energy, Astana

Mr Ayan Yerenov Chairman of the Board Chamber of International Commerce, Astana

Mr Raimbek Batalov Chairman Chamber of International Commerce, Astana

Mr Anuar Zhumagaliyev Adviser to the Minister Ministry of Energy, Astana

Ms Elvira Konakhbayeva Managing Director for Strategy and Sustainable development Kazakhstan Electricity Grid Operating Company JSC, Astana

Mr Almas Shamshidin Counsellor Ministry of Foreign Affairs, Astana

Mr Abay Altay Head of Events Department Minstry of Foreign Affairs, Astana

Mr Samat Ilyassov Chief Expert Ministry of Foreign Affairs, Astana

Mr Darkhan Nurgazinov Chief Expert Ministry of Foreign Affairs, Astana

Mr Timur Sakabayev Chief Expert Ministry of Foreign Affairs, Astana

Mr Yelzhan Smagulov Chief Expert Ministry of Foreign Affairs, Astana

Mr Madi Khabiyev Chief Expert Ministry of Foreign Affairs, Astana

Mr Daniyar Ustembayev Chief Expert Ministry of Foreign Affairs, Astana Mr Murat Zulpykharov

Chief Expert

Ministry of Foreign Affairs, Astana

Mr Adilkhan Mukhamedyarov

Chief Expert

Ministry of Foreign Affairs, Astana

Mr Shalkar Kozhayev

Chief Expert

Ministry of Foreign Affairs, Astana

Mr Nursultan Yershuov

Expert

Ministry of Foreign Affairs, Astana

Mr Nurlan Zhanulin

Expert

Ministry of Foreign Affairs, Astana

Mr Murat Zhumabayev

Expert

Ministry of Foreign Affairs, Astana

Mr Zhanybek Zhumabekov

Expert

Ministry of Foreign Affairs, Astana

Ms Nazgul Mukhtarova

Expert

Minstry of Foreign Affairs, Astana

Mr Daniyar Zhazykpayev

Expert

Ministry of Foreign Affairs, Astana

Mr Bagdat Shakabayev

Expert

Ministry of Foreign Affairs, Astana

Mr Amangeldy Yesmagambetov

Expert

Ministry of Foreign Affairs, Astana

Mr Serik Iliyas

Expert

Ministry of Foreign Affairs, Astana

H.E. Mr Davis K. Chirchir

Cabinet Secretary

Ministry of Energy and Petroleum, Nairobi

KENYA

H.E. Mr Kariuki Mugwe Permanent Representative to IRENA and Ambassador Embassy of Kenya to the UAE, Abu Dhabi

Mr Peter Mwendwa Consul General Consulate General of Kenya in Dubai

Mr Isaac N. Kiva Secretary Renewable Energy Ministry of Energy and Petroleum, Nairobi

Mr Benson Mwakina Senior Principal Superintending Engineer Ministry of Energy and Petroleum, Nairobi

Mr Michael Kirui Chief of Staff Ministry of Energy and Petroleum, Nairobi

Mr Chrisphine Mbugua Personal Assistant to the Cabinet Secretary Ministry of Energy and Petroleum, Nairobi

Mr Paul Nzomo Mbuthi Deputy Director of Renewable Energy Ministry of Energy and Petroleum, Nairobi

Ms Jacqueline Rono Technical Advisor to the Cabinet Secretary Ministry of Energy and Petroleum, Nairobi

Mr Jacob Chepkwony Principal Renewable Energy Officer Ministry of Energy and Petroleum, Nairobi

Ms Mercy Atieno Odongo First Counselor Consulate General of Kenya to the UAE, Dubai

Mr Cosmas Kimutai First Counselor Embassy of Kenya to the UAE, Abu Dhabi

Mr Ashraf Kassim First Counselor Embassy of Kenya to the UAE, Abu Dhabi

Ms Sharon I- Ekuam Second Secretary Embassy of Kenya to the UAE, Abu Dhabi Ms Mary Muchiri

Third Secretary

Ministry of Foreign Affairs, Nairobi

**KIRIBATI** 

Ms Miriam Iakobwa Energy Economist

Ministry of Infrastructure and Sustainable Energy, Betio

**LATVIA** 

H.E. Mr Atis Sjanīts

Permanent Representative to IRENA and Ambassador

Embassy of Latvia to the UAE, Abu Dhabi

**LEBANON** 

H.E. Mr Fouad Chehab Dandan

Permanent Representative to IRENA and Ambassador

Embassy of Lebanon to the UAE, Abu Dhabi

Mr Jean Claude El Khoury

Economic Attaché

Embassy of Lebanon to the UAE, Abu Dhabi

**LESOTHO** 

Ms Masekhobe Seeiso Moholobela

Principal Secretary

Ministry of Natural Resources, Maseru

Mr Mokhethi Seitlheko

Director

Ministry of Energy and Meteorology, Maseru

**LITHUANIA** 

H.E. Mr Ramunas Davidonis

Ambassador

Embassy of Lithuania to the UAE, Abu Dhabi

LUXEMBOURG

H.E. Mr Robert Lauer

Permanent Representative to IRENA and Ambassador Embassy of Luxembourg to the UAE, Abu Dhabi

Mr Jean-Marie Frentz Deputy Head of Mission

Deputy Tread of Mission

Embassy of Luxembourg to the UAE, Abu Dhabi

Ms Marianne Marcelle Geiben

Consul

Embassy of Luxembourg to the UAE, Abu Dhabi

**MALAYSIA** 

Hon Nik Nazmi Nik Ahmad

Minister

Ministry of Natural Resources, Environment and Climate Change,

Putrajaya

Dato Mohamed Razif Abd Mubin

Deputy Secretary General

Ministry of Natural Resources, Environment and Climate Change,

Putrajaya

Dato Abdul Razib Dawood

Chief Executive Officer

Energy Commission of Malayisa, Putrajaya

Ms Mega Nopija Khalidi

Principal Private Secretary

Ministry of Natural Resources, Environment and Climate Change,

Putrajaya

Ms Esther Lew

Principal Assistant Secretary

Ministry of Natural Resources, Environment and Climate Change,

Putrajaya

Mr Mohd Noor Zaky Mohd Nasir

Counsellor

Embassy of Malaysia to the UAE, Abu Dhabi

### **MALDIVES**

Hon Khadheeja Naseem

State Minister

Ministry of Environment, Climate Change and Technology, Malé

H.E. Ms Aminath Shabeena

Permanent Representative to IRENA and Ambassador

Embassy of the Maldives to the UAE, Abu Dhabi

Mr Mohamed Faisal

Deputy Ambassador

Embassy of the Maldives to the UAE, Abu Dhabi

Mr Ahmed Ali

Director-General

Ministry of Environment, Climate Change and Technology, Malé

Ms Aishath Raushan Adhil

Deputy Director, Foreign Relations

The President's Office, Malé

Mr Mohamed Hashim

Second Secretary

Embassy of the Maldives to the UAE, Abu Dhabi

Ms Fathimath Urooj Nizar

Second Secretary

Embassy of the Maldives to the UAE, Abu Dhabi

## **MALI**

H.E. Mr Mamary Camara

Ambassador

Embassy of Mali to the UAE, Abu Dhabi

Mr Souleymane Berthé

Director-General

Renewable Energy Agency of Mali, Bamako

Ms Aminata Fofana

President, National Director

National Directorate of Energy, Bamako

Mr Amadou Sidibe

Director-General

Agency for the Development of Domestic Energy and Rural

Electrification (AMADER), Bamako

Mr Abdoulaye Kaya

Director-General

National Agency for the Development of Biofuels, Bamako

Mr Allassane Ba

Director-General

Environment and Sustainable Development Agency, Bamako

Mr Koureissi Konare

Director-General

EDM-SA-Energy of Mali, Bamako

Mr Moussa Ombotimbe

Technical Advisor

Ministry of Mines, Energy and Water, Bamako

Ms Diahara Diabate

Project Manager

Ministry of Mines, Energy and Water, Bamako

Mr Barema Bocoum

Attache for Consular Affairs

Embassy of Mali to the UAE, Abu Dhabi

Mr Drissa Doumbia

Climate Change Focal Point

Environment and Sustainable Development Agency, Bamako

Mr Amidou Goita

Focal Point

Environment and Sustainable Development Agency, Bamako

Mr Joseph Caruana

Permanent Secretary

Ministry for the Environment, Energy and Enterprise, Valetta

H.E. Ms Maria Camilleri Calleja

Permanent Representative to IRENA and Ambassador

Embassy of Malta to the UAE, Abu Dhabi

Mr Manuel Sapiano

Chief Executive Officer

Energy and Water Agency, Qormi

MALTA

Mr Sandro Lauri

Chief Policy Officer

Energy and Water Agency, Qormi

Mr Aldo Joseph Giordano

Senior Counsellor

Embassy of Malta to the UAE, Abu Dhabi

Ms Walaa Alkhabbaz

PA to the Ambassador

Embassy of Malta to the UAE, Abu Dhabi

### **MARSHALL ISLANDS**

Ms Kathy Jetnil-Kijiner

Climate Envoy

Office of the President, Majuro

Mr Benjamin Wakefield

Deputy Director

National Energy Office, Ministry of Environment, Majuro

Mr Kazutoyo Wase

Chief of Administration and Finance

National Energy Office, Ministry of Environment, Majuro

Mr Francis Takatsuki

Administrator

Solar Department, Marshall's Energy Company, Majuro

Mr Jessie Capelle

Project Manager

National Energy Office, Ministry of Environment, Majuro

Mr Damien Milne

Manager

Solar Department, Marshall's Energy Company, Majuro

## **MAURITANIA**

Mr Mamadou Amadou Kane

Senior Advisor of the Minister

Ministry of Petroleum, Energy and Mining, Nouakchott

Mr Brahim Abdallahi

Director-General of Electricity and Energy Management Ministry of Petroleum, Mines and Energy, Nouakchott

## **MAURITIUS**

H.E. Mr Showkutally Soodhun

Permanent Representative to IRENA and Ambassador Consulate General of Mauritius to the UAE, Dubai

Mr Doumeraj Jahajeeah

Director Technical Services

Ministry of Energy and Public Utilities, Port Louis

Mr Chavansingh Dabeedin

Renewable Energy and Strategic Projects Manager

Central Electricity Board, National Electricity Utility, Port Louis

Mr Andy Kinsley Lai Kong Ling

Adviser to the Minister of Energy and Public Utilities Ministry of Energy and Public Utilities, Port Louis

Ms Amna Mohamed Personal Assistant

Consulate General of Mauritius to the UAE, Dubai

**MEXICO** 

H.E. Mr Luis Alfonso de Alba Góngora

Permanent Representative to IRENA and Ambassador

Embassy of Mexico to the UAE, Abu Dhabi

Mr Juan Manuel Sánchez

Second Secretary

Embassy of Mexico to the UAE, Abu Dhabi

**MICRONESIA** 

(FEDERATED STATE

OF)

Mr Faustino Yarofaisug

Assistant Secretary
Department of Resources and Development, Pohnpei

**MONTENEGRO** 

Ms Isidora Dabovic Chargé d'Affaires

Embassy of Montenegro to the UAE, Abu Dhabi

**MOROCCO** 

Mr Samir Rachidi

Acting General Manager

Institute of Solar Energy and Renewable Energy Research, Rabat

**MOZAMBIQUE** 

H.E. Mr Tiago Recibo Castigo

Permanent Representative to IRENA and Ambassador Embassy of Mozambique to the UAE, Abu Dhabi

Ms Inês Chalufo Deputy Director

Ministry of Mineral Resources and Energy, Maputo

Mr Damião Namuera

Head of Renewable Energy Department

Ministry of Mineral Resources and Energy, Maputo

Ms Telma Nkutumula

Director

Energy Regulatory Authority, Maptuo

Mr Eucides Dgedge

Head, On-Grid Systems Dept., Renewable Energy Directorate

Mozambique Electricity Company, Maputo

Mr Ismael Hilário Chale

Maintenance Coordinator

FUNAE - Energy Fund, Maputo

Mr Joao Francisco Macandia

CEO

INPETRO, Maputo

Mr Joaquim Comboio

First Secretary

Embassy of Mozambique to the UAE, Abu Dhabi

Ms Penalva Jorge Pene

Technician

FUNAE - Energy Fund, Maputo

**NAMIBIA** 

Mr Alfredo Hengari

Advisor

Presidency of Namibia, Windhoek

**NAURU** 

Mr Reagan Moses

Secretary

Department of Climate Change and National Resilience, Yaren District

Mr Midhun Ajaykumar

Director of Energy

Department of Climate Change and National Resilience, Yaren District

Ms Enolagay Edward

Director Higher Ground Initiative

Department of Climate Change and National Resilience, Yaren District

Ms Phaedora Harris

Project Manager

Department of Climate Change and National Resilience, Yaren District

**NEPAL** 

Mr Dinesh Kumar Ghimire

Secretary

Ministry of Energy, Water Resources and Irrigation, Kathmandu

H.E. Mr Krishna Prasad Dhakal

Permanent Representative to IRENA and Ambassador

Embassy of Nepal to the UAE, Abu Dhabi

Mr Baburam Bhandari

Joint Secretary

Ministry of Energy, Water Resources and Irrigation, Kathmandu

Mr Madhusudhan Adhikari

Executive Director

Alternative Energy Promotion Center, Kathmandu

Mr Bishal Bhattarai

Minister Counsellor and Deputy Chief of Mission Embassy of Nepal to the UAE, Abu Dhabi

Mr Bhuwan Ojha

First Secretary

Embassy of Nepal to the UAE, Abu Dhabi

# NETHERLANDS (KINGDOM OF THE)

H.E. Mr René van Hell

Ambassador for Sustainable Development Ministry of Foreign Affairs, The Hague

H.E. Mr Lody Embrechts

Ambassador

Embassy of the Kingdom of the Netherlands to the UAE, Abu Dhabi

Mr Frederik Wisselink

Energy Envoy

Ministry of Economic Affairs and Climate Policy, The Hague

Mr Ramoncito Chong

Senior Adviser

Ministry of Economic Development Curação, Willemstad

Mr Luelo Girigorie

Acting Permanent Secretary

Ministry of Economic Development Curação, Willemstad

Ms Natalie Petronella

Acting Policy Director

Ministry of Economic Development Curação, Willemstad

Mr Douwe Buzeman

Deputy Head of Mission and Economic Counsellor

Embassy of the Kingdom of the Netherlands to the UAE, Abu Dhabi

Mr Frank van der Vleuten

Coordinating Policy Officer Climate Finance

Ministry of Foreign Affairs, The Hague

Mr Mohamed Mahamuud

Political Officer

Embassy of the Kingdom of the Netherlands to the UAE, Abu Dhabi

Ms Pauline Blom

Senior Policy Officer

Ministry of Economic Affairs and Climate, The Hague

**NEW ZEALAND** 

Mr Mike Allen

Special Envoy for Renewable Energy

Ministry of Foreign Affairs and Trade, Wellington

Mr Sam O'Connor

Charge d'Affaires

Embassy of New Zealand to the UAE, Abu Dhabi

Ms Lucy McLeod

Second Secretary

Embassy of New Zealand to the UAE, Abu Dhabi

#### **NICARAGUA**

H.E. Mr Mohamed Mohamed Farrara Lashtar

Minister of State

Government of Nicaragua, Managua

#### **NIGER**

H.E. Mr Ibrahim Yacoubou

State Minister

Ministry of Energy and Renewable Energies, Niamey

Mr Wankoye Sabo Hamidou

Charge d'Affaires

Embassy of Niger to the UAE, Abu Dhabi

Mr Yagi Hakimi Salifou

Deputy Secretary General

Ministry of Energy and Renewable Energies, Niamey

Mr Schitou Maman Mansour

Director of Renewable Energies Promotion

Ministry of Energy and Renewable Energies, Niamey

Mr Boubacar Mahaman Bachir

Director of Financial Resources and Materials

Ministry of Energy and Renewable Energies, Niamey

Mr Hamidine Salouhou

Director-General

Nigerien Agency for the Promotion of Electrification in Rural Areas (ANPER), Niamey

Mr Maizoumbou Garba

Director Engineering

Nigerien Agency for the Promotion of Electrification in Rural Areas (ANPER), Niamsey

Mr Rabo Oubandawaki Mamane Tassiou

Project Coordinator

Nigerien Agency for the Promotion of Electrification in Rural Areas (ANPER), Niamey

#### **NIGERIA**

H.E. Mr Muhhammad Dansanta Rimi

Ambassador

Embassy of Nigeria to the UAE, Abu Dhabi

Mr Eli Jidere Bala

Director-General / Chief Executive

Energy Commission of Nigeria, Abuja

Ms Moradeke Ololade Adelekan

Desk Officer on Energy and Environment Federal Ministry of Foreign Affairs, Abuja

Mr Abdelnasser Musa Abdallah

Chief Scientific Officer

Energy Commission of Nigeria, Abuja

#### **NORTH MACEDONIA**

Mr Bekri Ajdini

Economic Counsellor

Embassy of North Macedonia to the UAE, Abu Dhabi

#### **NORWAY**

H.E. Mr Sten Arne Rosnes

Permanent Representative to IRENA and Ambassador

Embassy of Norway to the UAE, Abu Dhabi

Mr Hans Olav Ibrekk

Special Envoy, Climate and Security Ministry of Foreign Affairs, Oslo

Mr Øivind Johansen

Assistant Director-General

Ministry of Petroleum and Energy, Oslo

Mr Sjur Eigil Bratland

Managing Director

Norwegian Energy Partners, Stavanger

Ms Helene Kvam Sigmond

Second Secretary

Embassy of Norway to the UAE, Abu Dhabi

Ms Hilde Kvinge Skogseth

Administration Officer

Embassy of Norway to the UAE, Abu Dhabi

#### **OMAN**

Mr Abdulaziz Al Shidhani

Director-General, Renewable Energy and Hydrogen

Ministry of Energy and Minerals, Muscat

Ms Huda Al Aidid

Legal Advisor

Ministry of Energy and Minerals, Muscat

## **PAKISTAN**

H.E. Mr Faisal Tirmizi

Permanent Representative to IRENA and Ambassador

Embassy of Pakistan to the UAE, Abu Dhabi

Mr Muhammad Khan

Counsellor

Permanent Mision of Pakistan to the United Nations, New York

### **PALAU**

Hon Surangel Samuel Whipps Jr

President

Office of the President, Koror

Hon Kaleb Udui Jr

Minister

Ministry of Finance, Koror

Mr Eden Ridep Uchel

Director, Palau Energy and Water Administration (PEWA)

Ministry of Finance, Koror

Mr Tabesul Ngirailemesang

Executive Program Coordinator

Ministry of Finance, Koror

Mr Bridge Thomas

Special Assistant

Office of the President, Koror

Mr Alan Rechuldak Seid

Advisor to the President

Office of the President, Koror

### **PANAMA**

Ms Rosilena Lindo

Deputy Secretary of Energy

National Energy Secretariat, Panama City

H.E. Mr Ricardo Laviery

Ambassador

Embassy of Panama to the UAE, Abu Dhabi

Ms Guadalupe González

Director of Electricity

National Energy Secretariat, Panama City

Mr Odilio Villanero

First Secretary

Embassy of Panama to the UAE, Abu Dhabi

Ms Alexandra El Dbeissy

Personal Assistant

Consulate of Panama to the UAE, Dubai

#### PAPUA NEW GUINEA

Hon Thomas Opa

Deputy Minister

Ministry of Petroleum and Energy, Port Moresby

Mr Timothy Mais

Executive Manager

National Energy Authority (NEA), Port Moresby

Mr Ronald Meketa

Managing Director

National Energy Authority (NEA), Port Moresby

Ms Rensie Panda

Acting Manager Policy

National Energy Authority (NEA), Port Moresby

Mr Johnson Kilis

Senior Mitigation Officer

Climate Change and Development Authority, Port Moresby

## **PARAGUAY**

H.E. Mr José Rafael Agüero Ávila

Permanent Representative to IRENA and Ambassador

Embassy of Paraguay to the UAE, Abu Dhabi

Mr Diego Estigarribia

Consul

Embassy of Paraguay to Qatar, Doha

Ms Paola Subeldía Blasco

Commercial Attaché

Embassy of Paraguay to the UAE, Abu Dhabi

Mr Addisu Abebe Mekonnen

Senior Public Relations Officer

Embassy of Paraguay to the UAE, Abu Dhabi

Mr Chedy Mehrez

Personal Assistant to the Ambassador

Embassy of Paraguay to the UAE, Abu Dhabi

#### **PHILIPPINES**

Ms Mylene C. Capongcol

Assistant Secretary

Department of Energy, Manila

Mr Marford M. Angeles

Chargé d'Affaires

Embassy of the Philippines to the UAE, Abu Dhabi

## **POLAND**

Mr Adam Guibourgé-Czetwertyński

Undersecretary of State

Ministry of Climate and Environment, Warsaw

H.E. Mr Jakub Sławek

Ambassador

Embassy of Poland to the UAE, Abu Dhabi

Mr Marcin Scigan

Director

Ministry of Climate and Environment, Warsaw

Mr Radosław Podgórski

Senior Specialist in International Affairs Team Ministry of Climate and Environment, Warsaw

Mr Jacek Buda

Deputy Head of Mission

Embassy of Poland to the UAE, Abu Dhabi

Mr Jakub Piatkowski

Third Secretary

Embassy of Poland to the UAE, Abu Dhabi

## **PORTUGAL**

H.E. Mr Fernando Figueirinhas

Ambassador

Embassy of Portugal to the UAE, Abu Dhabi

Ms Isabel Soares

Head of Department

Directorate General for Energy and Geology, Lisbon

Mr Eduardo Bragança

Deputy Head of Mission

Embassy of Portugal to the UAE, Abu Dhabi

Ms Ana Andrade

Expert

Minister for the Environment and Climate Action, Lisbon

## **QATAR**

H.E. Mr Mishal Ben Jabor Al Thani

Senior Advisor for Energy Policy and International Relations

Qatar Energy, Doha

#### REPUBLIC OF KOREA

Mr Choi Yeon-woo

Director-General

Ministry of Industry, Trade and Energy, Sejong

Ms Han Min-young

Deputy Director-General for Climate Change, Energy,

Environmental and Scientific Affairs

Ministry of Foreign Affairs, Seoul

Mr Oh Seung-heon

Deputy Director, Renewable Energy Policy Division

Ministry of Industry, Trade and Energy, Sejong

Mr Shin Dong-ho

Assistant Manager

Korea Energy Agency, Ulsan

Ms Oh Eun-ju

Second Secretary

Ministry of Foreign Affairs, Seoul

Ms Im Hee-won

Researcher

Ministry of Foreign Affairs, Seoul

REPUBLIC OF MOLDOVA

Ms Dana Paiu

Chargé d'Affaires

Embassy of the Republic of Moldova to the UAE, Abu Dhabi

Ms Dumitrița Crăciun

Third Secretary

Embassy of the Republic of Moldova to the UAE, Abu Dhabi

**ROMANIA** 

H.E. Mr Virgil-Daniel Popescu

Minister

Ministry of Energy, Bucharest

H.E. Mr Octavian Bădică

Ambassador

Embassy of Romania to the UAE, Abu Dhabi

Mr Răzvan Popescu

CEO

ROMGAZ, Bucharest

Mr Bogdan-Nicolae Badea

**CEO** 

Hidroelectrica S.A., Bucharest

Mr Titus Tintean

Economic Secretary

Consulate of Romania to the UAE, Dubai

**RUSSIAN FEDERATION** 

Mr Andrey Maksimov

Head of Department

Ministry of Energy, Moscow

Mr Pavel Rassadin

Senior Counsellor

Embassy of the Russian Federation to the UAE, Abu Dhabi

Ms Albina Magdesian

Consultant, Department of International Cooperation

Ministry of Energy, Moscow

**RWANDA** 

H.E. Mr Emmanuel Hategeka

Permanent Representative to IRENA and Ambassador

Embassy of Rwanda to the UAE, Abu Dhabi

Ms Ines Mutoni

Counsellor

Embassy of Rwanda to the UAE, Abu Dhabi

Mr Pierre Muyombano Communication Specialist

Embassy of Rwanda to the UAE, Abu Dhabi

Mr Joanna Umuganwa Secretary of the Ambassador

Embassy of Rwanda to the UAE, Abu Dhabi

**SAINT LUCIA** 

H.E. Mr Malek El-Sayed

Permanent Representative to IRENA and Ambassador

Consulate of Saint Lucia to Lebanon, Beirut

SAINT VINCENT AND THE GRENADINES

Mr Lance Peters

Director Energy Unit

Ministry of Urban Development, Energy, Air and Sea Port,

Kingstown

Ms Malika Joseph Energy Officer

Ministry of Urban Development, Energy, Air and Sea Port,

Kingstown

**SAMOA** 

H.E. Ms Faalavaau Perina Jacqueline Sila-Tualaulelei Permanent Representative to IRENA and Ambassador

Embassy of Samoa to Japan, Tokyo

Ms Toiata Uili

Assistant Chief Executive Officer, Renewable Energy Division

Ministry of Natural Resources and Environment, Apia

**SAN MARINO** 

H.E. Mr Teodoro Lonfernini

Minister

Ministry of Labour, Economic Planning, Sport, Information and Relations with the Autonomous Public Utilities State Corporation,

San Marino

Ms Bojana Gruška First Secretary

Department of Foreign Affairs, San Marino

Ms Annalisa Marcucci

Secretary

Ministry of Labour, Economic Planning, Sport, Information and Relations with the Autonomous Public Utilities State Corporation,

San Marino

Ms Beatrice Borbiconi

Interpreter

Department of Foreign Affairs, San Marino

SAO TOME AND PRINCIPE

Hon Adelino Cardoso

Minister

Ministry of Infrastructure and Natural Resources, Sao Tome

Mr Gabriel Maquengo

Director of Energy

Ministry of Infrastructure and Natural Resources, Sao Tome

## **SAUDI ARABIA**

Mr Yasser Al Turki Assistant Deputy Minister Ministry of Energy, Riyadh

Mr Abdullah AlBrahim

Director-General, Business Development and Market Studies

Ministry of Energy, Riyadh

Mr Abdullah Alshehri

Business Development Head

Ministry of Energy, Riyadh

Ms Manal Alsheheel

Manager

Ministry of Energy, Riyadh

Mr Ahmed Al-Dowsary

Senior Business Development Specialist

Ministry of Energy, Riyadh

Mr Hussain Shibli

Head Assistant

King Abdullah City for Atomic and Renewable Energy, Riyadh

Mr Hosam Alnaser

Renewable Energy International Framework Office Manager King Abdullah City for Atomic and Renewable Energy, Riyadh

Mr Thamr Alhamoudi

Innovation Center Supervisor

King Abdullah City for Atomic and Renewable Energy, Riyadh

Mr Abdulmushen Alothman

Senior International Cooperation Specialist

King Abdullah City for Atomic and Renewable Energy, Riyadh

Mr Saad AlQahtani

Renewable Energy Engineer I

King Abdullah City for Atomic and Renewable Energy, Riyadh

#### **SENEGAL**

H.E. Mr Babacar Ndiaye

Ambassador

Embassy of Senegal to the UAE, Abu Dhabi

Mr Djiby Ndiaye

Director-General

National Agency for Renewable Energy, Dakar

Ms Adja Ndaw

Director for Promotion and Cooperation National Agency for Renewable Energy, Dakar

Mr Sidy Bouya Ndiaye Director of Projects and Programs National Agency for Renewable Energy, Dakar

Ms Baba Diallo Director-General Senegalese Rural Electrification Agency (ASER), Dakar

Mr Issa Dione Director of the Minister's Cabinet Ministry of Petroleum and Energy, Dakar

Mr Ibrahima Sarr President The Energy Sector Regulatory Commission, Dakar

Ms Oumy Khairy Diao Diop Director of Strategy and Legislation Ministry of Petroleum and Energy, Dakar

Mr Ibrahima Niane Director of Electricity Ministry of Petroleum and Energy, Dakar

Mr Mohamadou Thiam Deputy Director of Work Supervision and Control Senegalese Rural Electrification Agency (ASER), Dakar

Ms Ndeye Sow Head of Procurement Unit Senegalese Rural Electrification Agency (ASER), Dakar

Mr Sidatte Fall Chief of Division National Agency for Renewable Energy, Dakar

Ms Fatou Faty Chargé de Mission Ministry of Petroleum and Energy, Dakar

Mr Abasse Fall First Counsellor Embassy of Senegal to the UAE, Abu Dhabi

Mr Papa Assane Mbengue Second Counsellor Embassy of Senegal to the UAE, Abu Dhabi

H.E. Ms Dubravka Đedović

Minister

Ministry of Mining and Energy, Belgrade

**SERBIA** 

Ms Danica Savović

Charge d'Affaires

Embassy of Serbia to the UAE, Abu Dhabi

Ms Dajana Tanasijević

Economic Officer

Embassy of Serbia to the UAE, Abu Dhabi

Ms Aleksandra Lazarov Đurić

Media Advisor

Ministry of Mining and Energy, Belgrade

Mr Zoran Petrović

Media Representative

Ministry of Mining and Energy, Belgrade

## **SEYCHELLES**

H.E. Mr Flavien Joubert

Minister

Ministry of Agriculture, Climate Change and Environment, Victoria

Mr Tony Imaduwa

Principal Secretary

Department of Climate Change and Energy, Victoria

Mr Vincent Amelie

Chief Executive Officer

Seychelles Meteorological Authority, Cascade

Mr Joel Valmont

Chief Executive Officer

Public Utilities Corporation, Victoria

Ms Bernice Charles

Acting Chief Executive Officer

Seychelles Energy Commission, Victoria

Mr Terry Romain

Charge d'Affaires

Embassy of Seychelles to the UAE, Abu Dhabi

Mr Will Michel Agricole

Technical Advisor for Climate Change and Energy

Ministry of Agriculture Climate Change and Environment, Victoria

# **SINGAPORE**

Mr Ngiam Shih Chun

Chief Executive

Energy Market Authority, Singapore

H.E. Mr Kamal R Vaswani

Ambassador

Embassy of Singapore to the UAE, Abu Dhabi

Mr Jonathan Goh

Director

Energy Market Authority, Singapore

Ms Leow Lay May

Director

Ministry of Trade and Industry, Singapore

Ms Jolene Chung

Senior Assistant Director

Ministry of Trade and Industry, Singapore

Ms Huldah Chin

Senior Assistant Director

Ministry of Trade and Industry, Singapore

Ms Lee Ting Wong

Deputy Chief of Mission and Counsellor

Embassy of Singapore to the UAE, Abu Dhabi

Ms Nur Liyana Gafoor

Senior Analyst

Energy Market Authority, Singapore

Ms Kai Ting Yang

Country Officer

Ministry of Foreign Affairs, Singapore

Mr Nicholas De Silva

Second Secretary

Embassy of Singapore to the UAE, Abu Dhabi

Mr Lucius Tan Bing Han

Analyst

Energy Market Authority, Singapore

**SLOVAKIA** 

H.E. Mr Michal Kováč

Ambassador

Embassy of Slovakia to the UAE, Abu Dhabi

Mr Marián Mulik

Deputy Head of Mission

Embassy of Slovakia to the UAE, Abu Dhabi

**SLOVENIA** 

H.E. Mr Igor Jukič

Ambassador, Coordinator for Energy Ministry of Foreign Affairs, Ljubljana

H.E. Ms Natalia Al-Mansour

Permanent Representative of IRENA and Ambassador

Embassy of Slovenia to the UAE, Abu Dhabi

Mr Jaka Miklavčič

Deputy Head of Mission

Embassy of Slovenia to the UAE, Abu Dhabi

## **SOLOMON ISLANDS**

Hon Bradley Tovosia

Minister

Ministry of Mines, Energy and Rural Electrification, Honiara

Mr Christopher Vehe Sagapoa

Permanent Secretary

Ministry of Mines, Energy and Rural Electrification, Honiara

# **SOMALIA**

H.E. Mr Mohamed Abdullaahi Farah

State Minister

Ministry of Energy and Water Resources, Mogadishu

Mr Abdifatah Mohamed Ibrahim Director, Department of Energy

Ministry of Energy and Water Resources, Mogadishu

## **SOUTH AFRICA**

H.E. Mr Saa'D Cachalia

Permanent Representative to IRENA and Ambassador Embassy of South Africa to the UAE, Abu Dhabi

Mr Francois Hentschel Deputy Head of Mission

Embassy of South Africa to the UAE, Abu Dhabi

## **SPAIN**

H.E. Ms Teresa Ribera Rodríguez

Deputy Prime Minister, Minister

Ministry for Ecological Transition and Demographic Challenge, Madrid

Ms Sara Aagesen

State Secretary for Energy

Ministry for Ecological Transition and Demographic Challenge,

Madrid

H.E. Mr Iñigo de Palacio Espana

Permanent Representative to IRENA and Ambassador

Embassy of Spain to the UAE, Abu Dhabi

Mr Joan Groizard Payeras

Director-General

Ministry for Ecological Transition and Demographic Challenge,

Madrid

Ms Irina Sanchís Vives

Deputy Head of Mission

Embassy of Spain to the UAE, Abu Dhabi

Ms Marisa Olano

Head, International Relations Department

IDAE, Madrid

Mr Andrés Angulo Maenza

Economic and Commercial Councelor

Embassy of Spain to the UAE, Abu Dhabi

Mr Víctor Marcos Morell

Renewal Energies and Electric Market Director

Ministry for Ecological Transition and Demographic Challenge,

Madrid

Mr Borja Sastre Mata

Advisor to Deputy Prime Minister

Ministry for Ecological Transition and Demographic Challenge,

Madrid

Mr Alvaro Angulo Maenza

Commercial Attaché

Embassy of Spain to the UAE, Abu Dhabi

**SRI LANKA** 

H.E. Mr Kanchana Wijesekera

Minister

Ministry of Power, Colombo

Ms Medhavi Peiris

Minister Counsellor

Embassy of Sri Lanka to the UAE, Abu Dhabi

SUDAN

H.E. Mr Abdelrahman Khalid Sharfi

Ambassador

Embassy of Sudan to the UAE, Abu Dhabi

Mr Yasir Abdalla Saied Elhag

Director-General

Renewable Energy General Directorate, Khartoum

Ms Zeinab Mohamed Hassan Mahgoub

Ms Azza Mohammed AbdAlla Hassan

International Cooperation Department Manager Renewable Energy General Directorate, Khartoum

First Secretary

Embassy of the Republic of Sudan to the UAE, Abu Dhabi

**SWEDEN** 

H.E. Ms Liselott Andersson

Permanent Representative to IRENA and Ambassador

Embassy of Sweden to the UAE, Abu Dhabi

Mr Ola Pihblad

Counsellor

Embassy of Sweden to the UAE, Abu Dhabi

## **SWITZERLAND**

H.E. Mr Jean-Christophe Fueeg

Ambassador, Head of International Energy Affairs

Federal Department of the Environment, Transport, Energy and

Communications, Bern

H.E. Mr Massimo Baggi

Permanent Representative to IRENA and Ambassador

Embassy of Switzerland to the UAE, Abu Dhabi

Ms Laura Wyss

Diplomatic Advisor for the Energy Sector

Federal Office of Energy, Bern

Ms Hanna Capeder

Regional Head, Sustainable Development and Intl. Cooperation

Embassy of Switzerland to the UAE, Abu Dhabi

Ms Rania Kirreh

Advisor for Cooperation and Sustainable Development

Embassy of Switzerland to the UAE, Abu Dhabi

**TAJIKISTAN** 

H.E. Mr Bahodur Mahmudzoda Sharifi

Permanent Representative to IRENA and Ambassador

Embassy of Tajikistan to the UAE, Abu Dhabi

Mr Akramjon Abdulloev

First Secretary

Embassy of Tajikistan to the UAE, Abu Dhabi

**THAILAND** 

Mr Pisut Painmanakul

Secretary

Ministry of Energy, Bangkok

Ms Patranant Thongprapan

Assistant of Secretary

Ministry of Energy, Bangkok

Ms Krittiya Petsee

Plan and Policy Analyst

Ministry of Energy, Bangkok

Ms Sutthasini Glawgitigul

Chief of Energy Cooperation Section

Ministry of Energy, Bangkok

Ms Tantita Jungprasertchai

Plan Policy Analyst, Professional Level

Ministry of Energy, Bangkok

Ms Boonnian Na thalang

Foreign Relations Officer

Ministry of Energy, Bangkok

Ms Nattaorn Limpichati

First Secretary

Embassy of Thailand to the UAE, Abu Dhabi

**TOGO** 

Mr Abbas Aboulaye

Director-General of Energy

Ministry of Mines and Energy, Lomé

Mr N'boueke Afanou

Senior Officer

Ministry of Mines and Energy, Lomé

**TONGA** 

H.E. Mr Siaosi 'Ofakivahafolau Sovaleni

Prime Minister

Government of Tonga, Nukuálofa

H.E. Mr Honourable 'Akau'ola

Permanent Representative to IRENA and Ambassador

Embassy of Tonga to the UAE, Abu Dhabi

Ms 'Ofa Finau

Director for Leadership Division Prime Minister's Office, Nukuálofa

Mr Kakau Moe Loa Foliaki

Director of Energy

Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communications, Nukuálofa

Mr Paula Pouvalu Ma'u Chief Executive Officer

Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communications, Nukuálofa

Mr Sione Sonata Tupou Minister-Counsellor

Embassy of Tonga to the UAE, Abu Dhabi

TRINIDAD AND TOBAGO

Ms Sheena Gosine

Sustainable Energy Analyst Professional

Ministry of Energy and Energy Industries, Port of Spain

**TUNISIA** 

H.E. Mr Moez Ben Mime

Ambassador

Embassy of Tunisia to the UAE, Abu Dhabi

Mr Fethi Hanchi

Director-General

National Agency for Energy Conservation, Tunis

Mr Abdelkarim Nebli

Counsellor

Embassy of Tunisia to the UAE, Abu Dhabi

Mr Mohamed Bechikh

Attaché

Embassy of Tunisia to the UAE, Abu Dhabi

Ms Lamia Ghazouani

Expert

Ministry of Industry, Tunis

# TÜRKIYE

H.E. Mr Alparslan Bayraktar

Deputy Minister

Ministry of Energy and Natural Resources, Ankara

H.E. Mr Tugay Tunçer

Permanent Representative to IRENA and Ambassador

Embassy of Türkiye to the UAE, Abu Dhabi

Ms Halime Semerci

Head of Department

Ministry of Energy and Natural Resources, Ankara

Mr İhsan Emre Kadıoğlu

First Counsellor and Deputy Head of Mission Embassy of Türkiye to the UAE, Abu Dhabi

Mr Hakan Şener Akata

Energy Expert

Ministry of Energy and Natural Resources, Ankara

Mr Sultan Gümüş

Third Secretary

Embassy of Türkiye to the UAE, Abu Dhabi

# **TURKMENISTAN**

Mr Annageldi Saparov

Deputy Minister

Ministry of Industry and Construction, Ashgabat

H.E. Mr Serdarmammet Garajayev

Permanent Representative to IRENA and Ambassador Embassy of Turkmenistan to the UAE, Abu Dhabi

Mr Azat Satlykuliyev

Second Secretary

Embassy of Turkmenistan to the UAE, Abu Dhabi

# **TUVALU**

Hon Nielu Meisake

Minister

Ministry of Transport, Energy and Tourism, Funafuti

H.E. Mr Aunese Makoi Simati

Permanent Representative to IRENA and Ambassador

Embassy of Tuvalu to the UAE, Abu Dhabi

Ms Silati Tofuola Timo

Assistant Secretary

Ministry of Transport, Energy and Tourism, Funafuti

Mr Simona Kilei

Director of Energy

Ministry of Transport, Energy and Tourism, Funafuti

Ms Sunema Pie Simati

First Secretary

Embassy of Tuvalu to the UAE, Abu Dhabi

#### **UGANDA**

Hon Ruth Nankabirwa Ssentamu

Minister

Ministry of Energy and Mineral Development, Kampala

Mr Simon Kalanzi

Commissioner

Ministry of Energy and Mineral Development, Kampala

Mr Daniel Wadada

Second Secretary

Embassy of Uganda to the UAE, Abu Dhabi

Mr Michael Ahimbisibwe

Principal Energy Official

Ministry of Energy and Mineral Development, Kampala

## **UKRAINE**

H.E. Mr Dmytro Senik

Permanent Representative to IRENA and Ambassador

Embassy of Ukraine to the UAE, Abu Dhabi

Mr Iaroslav Linkevych

Second Secretary

Embassy of Ukraine to the UAE, Abu Dhabi

# UNITED ARAB EMIRATES

H.E. Ms Mariam AlMheri

Minister

Ministry of Climate Change and Environment, Abu Dhabi

H.E. Dr Sultan Al Jaber

Minister, Managing Director & Group CEO of ADNOC, Chairman

of Masdar, COP28 President Designate

Ministry of Industry and Advanced Technology, Abu Dhabi

H.E. Dr Nawal Al-Hosany

Permanent Representative of the UAE to IRENA

Permanent Mission of the UAE to IRENA, Abu Dhabi

H.E. Ms Razan AlMubarak

High Level Champion

Environment Agency, Abu Dhabi

H.E. Mr Majid Al Suwaidi COP28 Director-General United Arab Emirates

Mr Essa Abdulrahman Hashmi Assistant Undersecretary Ministry of Climate Change and Environement, Abu Dhabi

Mr Mohamed Jameel Al Ramahi CEO Masdar

Mr Khalifa Al Qubaisi Deputy Director-General Abu Dhabi Fund for Development

Ms Muna Al Amoodi Director of Climate Change Department Ministry of Climate Change and Environment, Abu Dhabi

Ms Fatima Alhabshi Head of International Affairs of Climate Change Section Ministry of Climate Change and Environment, Abu Dhabi

Ms Aisha Alsouqi Head of Green Development Section Ministry of Climate Change and Environment, Abu Dhabi

Ms Hana Al Hashimi UAE Chief Climate Negotiator for COP27 and COP28 COP28

Mr Adnan Amin Senior Adviser to the COP28 President COP28

Ms Alyazia Al Sayegh Analyst Office of the UAE Special Envoy for Climate Change, Abu Dhabi

Mr Omar Al Braiki Head of Negotiations Office of the UAE Special Envoy for Climate Change, Abu Dhabi

Ms Iman Ustadi Head, Negotiations COP28

Ms Thureya Al Ali Senior Negotiator, Global Stocktake COP28 Ms Shaima Al Marzooqi Senior Negotiator COP28

Ms Fatima Abbasi Partnerships Specialist Office of the UAE Special Envoy for Climate Change, Abu Dhabi

Ms Gianni Santiago Senior Advisor, Negotiations COP28

Mr Chris Marshall Advisor, Negotiations COP28

Ms Marri Janeka Advisor, Negotiations COP28

Mr Juan Lomba Partnerships Specialist Office of the UAE Special Envoy for Climate Change, Abu Dhabi

Mr Dane McQueen Director, International Programs and Partnerships COP28

Mr Omar Al Teneiji CEO Office Manager Masdar

Mr Adel Al Hosani Director of Operations Department Abu Dhabi Fund for Development

Ms Fatima Al Hallami Negotiator COP28

Mr Mohammed Alhamedi Project Manager Abu Dhabi Fund for Development

Ms Nawal Al Hanaee Director of Future Energy Department Ministry of Energy and Infrastructure, Abu Dhabi

Ms Beatrix Schmuelling Senior Advisor, Renewable Energy and Climate Change Ministry of Climate Change and Environment, Abu Dhabi Ms Hanadi Al Nasa Community Outreach Officer Permanent Mission of the UAE to IRENA, Abu Dhabi

Ms Lamya Fawwaz Executive Director for Brand Strategic Initiatives Masdar

Mr Mohammed Qudaib AlKaabi VP Government Affairs, Director of Minister Office Ministry of Industry and Advanced Technology, Abu Dhabi

Ms Hajar Alketbi Director, Government Communication Ministry of Climate Change and Environment, Abu Dhabi

Ms Fatima Al Mulla Director, Partnerships and Special Projects Ministry of Climate Change and Environment, Abu Dhabi

Mr Khalil AlMansouri Acting Director-General Abu Dhabi Export Office

Mr Hamad Almarzooqi Director, MD and GCEO Office ADNOC

Ms Abeer Al Suwaidi Manager, Executive Affairs ADNOC

Ms Serene Sarhan Communications Advisor ADNOC

Mr Martin Nagell Senior Advisor Office of the CEO Masdar

Ms Moza Al Dhaheri International Affairs Expert Ministry of Climate Change and Environment, Abu Dhabi

Mr Yahya Alzeraihi Administrative Services Assistant Expert Ministry of Climate Change and Environment, Abu Dhabi

Ms Deborah Bernadi Senior Office Coordinator Office of The Special Envoy for Climate Change, Abu Dhabi Ms Sabrin Rahman Director of Domestic Engagement Office of The Special Envoy for Climate Change, Abu Dhabi

Ms Shahbano Tirmizi Senior Adviser Office of The Special Envoy for Climate Change, Abu Dhabi

Ms Fatin Elkhalil Senior Public Relations Executive Ministry of Climate Change and Environment, Abu Dhabi

Mr Mohammed Abdulla Account Executive Ministry of Climate Change and Environment, Abu Dhabi

Ms Lisa Gittos Senior Specialist, Strategy COP28

Mr Huw Davis Senior Advisor, Strategy COP28

Ms Helena de Jong Senior Specialist, Partnership COP28

Mr Paul Watkinson Senior Advisor Ministry of Climate Change and Environment, Abu Dhabi

Ms Khadija Mestor Executive Assistant to CEO Masdar

Mr Peter Govindasamy Advisor COP28

Mr Zaheer Fakir Expert COP28

Mr Anuar Tassymov Specialist, Diplomatic Engagement COP28

Mr Hamza Tber Associate Director Ministry of Climate Change and Environment, Abu Dhabi Ms Selda Dimah Al Nazer

Consultant

Ministry of Climate Change and Environment, Abu Dhabi

Mr Khaled Al Khatib

Consultant

Ministry of Climate Change and Environment, Abu Dhabi

Mr Elizabeth Chavolla

Advisor

Ministry of Foreign Affairs and International Cooperation, Abu Dhabi

Ms Florencia Caro

Head of the American Affairs at the Diplomatic Engagement Team Office of the Special Envoy for Climate Change, Abu Dhabi

Ms Anaoly Hernandez

American Affairs Specialist at the Diplomatic Engagement Team Office of the Special Envoy for Climate Change, Abu Dhabi

Ms Jourie Kolthoum

European Affairs Specialist at the Office of the Special Envoy for Climate Change

Office of the Special Envoy for Climate Change, Abu Dhabi

Mr Obaid Aldhanhani

African Affairs Specialist at the Diplomatic Engagement Team Office of the Special Envoy for Climate Change, Abu Dhabi

Ms Mandi Watt

Executive Office Coordinator

Office of the Special Envoy for Climate Change, Abu Dhabi

Mr John Addo-Obiri

African Affairs Specialist at the Diplomatic Engagement Team Office of the Special Envoy for Climate Change, Abu Dhabi

Ms Kathleen Keene Jones

Senior Specialist

Office of the Special Envoy for Climate Change, Abu Dhabi

Mr Emil Ammari

Media

Ministry of Climate Change and Environment, Abu Dhabi

Mr Mohamed Madgy

Media

Ministry of Climate Change and Environment, Abu Dhabi

Mr Abdelrahman Gad

Media

Ministry of Climate Change and Environment, Abu Dhabi

# UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND

The Rt Hon Grant Shapps

Secretary of State

Department for Business, Energy and Industrial Strategy, London

H.E. Mr Patrick Moody

Ambassador

Embassy of the United Kingdom to the UAE, Abu Dhabi

Ms Marina Skrinar

Director, International Net Zero - Energy and Trade

Department for Business Energy and Industrial Strategy, London

Mr Stephen Jones

Director, Core Cities

Department for Business, Energy and Industrial Strategy, London

Ms Mahek Mehta

Head of Clean Energy and Advanced Economies

Department for Business Energy and Industrial Strategy, London

Ms Gemma Habens

Climate Change Policy Manager

Embassy of the United Kingdom to the UAE, Abu Dhabi

Mr Paul Durrant

Senior Policy Adviser

Department for Business, Energy and Industrial Strategy, London

Mr Oladipo Okusaga

Senior Policy Adviser

Department for Business, Energy and Industrial Strategy, London

Mr Ed Webber

Deputy Director

Department for Business, Energy and Industrial Strategy, London

Ms Lydia Elphick

Private Secretary to the Secretary of State

Department for Business Energy and Industrial Strategy, London

Ms Alison Hall

Deputy Consul General

Embassy of the United Kingdom to the UAE, Abu Dhabi

Ms Rosy Meek

First Secretary Development

Embassy of the United Kingdom to the UAE, Abu Dhabi

Ms Hebe Trotter

Special Adviser to the Secretary of State

Department for Business, Energy and Industrial Strategy, London

Ms Sameena Rizwi

Head of Visits for the Business Secretary and Junior Minister's

Department for Business, Energy and Industrial Strategy, London

Mr Adam Gordon

Policy Advisor

Department for Business, Energy and Industrial Strategy, London

Ms Amy Norris

International Strategy and Engagement

Department for Business, Energy and Industrial Strategy, London

Mr Timothy Hammond

Communications Officer

Department for Business, Energy and Industrial Strategy, London

# UNITED STATES OF AMERICA

Hon John F. Kerry

Special Presidential Envoy for Climate Change

Department of State, Washington D.C.

H.E. Mr Geoffrey Pyatt

Assistant Secretary for Energy Resources

Department of State, Washington D.C.

Ms Isabel Munilla

Deputy Assistant Secretary

Department of Energy, Washington, D.C.

Ms Susan Biniaz

Senior Advisor

Department of State, Washington, D.C.

Ms Camilla DiMartino

Chief of Staff

Department of State, Washington, D.C.

Ms Whitney Smith

Communication Director

Department of State, Washington, D.C.

Mr Joel Hansen

Senior Energy Officer

Department of State, Washington, D.C.

Ms Sandra Dickison

Senior International Affairs Advisor

Department of Energy, Washington, D.C.

Mr Cora Dickson

Senior Renewable Energy Trade Specialist

Department of Commerce, Washington, D.C.

Ms Catherine Goldberg

Senior Climate Policy Officer

Department of State, Washington, D.C.

Mr David Livingston

Senior Advisor

Department of State, Washington, D.C.

Mr Eric Williams

Acting Economic Counsellor

Embassy of the United States of America to the UAE, Abu Dhabi

Ms Emily Sandys

International Relations Specialist

Department of Energy, Washington, D.C.

Mr David Horn

**Energy Officer** 

Department of State, Washington, D.C.

Mr Alexander Nassikas

Policy Analyst

Department of State, Washington, D.C.

Ms Ashley Thomson

Climate and Peacekeeping Advisor

Department of State, Washington, D.C.

Mr Matthew Pagett

**Economic Officer** 

Embassy of the United States of America to the UAE, Abu Dhabi

Mr Samuel Juh

Economic Officer

Embassy of the United States of America to the UAE, Abu Dhabi

**URUGUAY** 

H.E. Mr Alvaro Ceriani

Permanent Representative to IRENA and Ambassador

Embassy of Uruguay to the UAE, Abu Dhabi

Ms Karen Meyer Faure

Counselor

Embassy of Uruguay to the UAE, Abu Dhabi

Ms Bárbara El Dbeissy

Commercial Counselor

Embassy of Uruguay to the UAE, Abu Dhabi

**VANUATU** 

Hon Ralph Regenvanu

Minister

Ministry of Climate Change, Port Vila

Mr James E.Harris

Honorary Consul

Honorary Consulate of Vanuatu to the United Kingdom, London

Mr Antony Garae

Director

Department of Energy, Port Vila

**YEMEN** 

H.E. Mr Manea Bin Yameen

Minister

Ministry of Electricity and Energy, Sana'a

H.E. Mr Fahad Saeed Al-Menhali

Ambassador

Embassy of Yemen to the UAE, Abu Dhabi

Mr Rami Ali Mohammed Al-Shaibani

Director-General, Planning and Statistics Department

Ministry of Electricity and Energy, Sana'a

Mr Mohammed Al-Shabi

Director-General, Renewable Energy Department

Ministry of Electricity and Energy, Sana'a

Mr Mohammed Al Awlaqi

First Secretary

Embassy of Yemen to the UAE, Abu Dhabi

**ZIMBABWE** 

Hon Zhemu Soda

Minister

Ministry of Energy and Power Development, Harare

H.E. Mr Lovemore Mazemo

Permanent Representative to IRENA and Ambassador

Embassy of Zimbabwe to the UAE, Abu Dhabi

Ms Gloria Sibusisiwe Magombo

Permanent Secretary

Ministry of Energy and Power Development, Harare

Mr Edington Mazambani

Chief Executive Officer

Zimbabwe Energy Regulatory Authority, Harare

Mr Shaw Chimombe

Minister Counsellor

Embassy of Zimbabwe to the UAE, Abu Dhabi

Mr Onismo Chigejo

Counsellor

Embassy of Zimbabwe to the UAE, Abu Dhabi

Mr Arthur Kaitano

Minister's Assistance

Ministry of Energy and Power Development, Harare

# **B. SIGNATORIES AND STATES IN ACCESSION**

**BRAZIL** 

Ms Eliana Zugalib Chargé d'Affaires

Embassy of Brazil to the UAE, Abu Dhabi

Mr Leonardo Vieria Silva Minister Counselor

Embassy of Brazil to the UAE, Abu Dhabi

Ms Nadia El Kadre Second Secretary

Embassy of Brazil to the UAE, Abu Dhabi

**CAMBODIA** 

Mr Jona Victor

Undersecretary of State

Ministry of Mines and Energy, Phnom Penh

Mr Sambath Chhuon

Director

Ministry of Mines and Energy, Phnom Penh

**CHIILE** 

H.E. Mr Patricio Diaz Broughton

Ambassador

Embassy of Chile to the UAE, Abu Dhabi

Mr Giovanni Cisternas

Consul

Embassy of Chile to the UAE, Abu Dhabi

**DEMOCRATIC** 

**REPUBLIC OF CONGO** Mr Bruno Kabwika Mbaya

Advisor to the Minister

Ministry of Hydraulic Resources and Electricity, Kinshasa

**LIBERIA** 

Mr George L Gontor

Deputy Minister for Energy

Ministry of Mines and Energy, Monrovia

SYRIAN ARAB REPUBLIC

Mr Ghassan Al Zamel

Deputy Minister

Ministry of Energy, Damascus

H.E. Mr Ghassan Abbas

Ambassador

Embassy of the Syrian Arab Republic to the UAE, Abu Dhabi

Mr Sinjar Tomeh

Director

National Energy Research Center at the Ministry of Electricity, Damascus

Mr Fadi Massa

Secretary

Prime Ministry Resources and Energy Committee, Damascus

Ms Bayan Taofik Personal Assistant

Embassy of the Syrian Arab Republic to the UAE, Abu Dhabi

# C. OBSERVER STATES

**SOUTH SUDAN** 

Mr Joseph Africano Bartel

Undersecretary

Ministry of Environment and Forestry, Juba

**VENEZUELA** 

Mr Nabil Khalek

Advisor

Embassy of Venezuela to the UAE, Abu Dhabi

**VIETNAM** 

Mr Vu Thai Ha First Secretary

Embassy of Vietnam to the UAE, Abu Dhabi