KIREC Seoul 2019 Declaration

Section I

1. Ministers and Government Representatives, representatives from the private sector and civil society including NGOs, academia, business and industry as well as international organisations from 108 countries gathered in Seoul, Korea, 23-25 October 2019 for the Korean International Renewable Energy Conference (KIREC). KIREC, the 8th meeting in the series of the International Renewable Energy Conferences (IRECs), builds upon successful outcomes of MEXIREC 2017 (Mexico City/Mexico), SAIREC 2015 (Cape Town/South Africa), ADIREC 2013 (Abu Dhabi/UAE) , DIREC 2010 (Delhi/India), WIREC 2008 (Washington DC/US), BIREC 2005 (Beijing/China) and renewables 2004 (Bonn/Germany).

2. Importance of a global energy transition. Currently, the world is not on track to meet the 2°C climate objective, and even further from attaining the aspirational target of limiting warming to 1.5°C. Two-thirds of total greenhouse gas emissions and roughly 80 percent of carbon dioxide (CO2) emissions come from the production of energy. Since the energy demand will rise globally, an increase in energy efficiency and an increasing the share of renewable energy play a fundamental role to achieve the Paris Agreement.

3. Addressing fine dust air pollution and resulting health benefits. We see a central need for addressing air pollution, in particular in the urban environment, as an increasing health concern globally. Improved energy efficiency in the building and industrial sectors and increased use of renewables can directly offset negative health impacts. Considering the transboundary nature of air pollution, we recognise the importance of aligning policies and regulations for air pollution at national, regional and global levels, which will expand the opportunities to promote sustainable energy systems and therefore improve social welfare.

4. Sustainable energy as the key to achieving other SDGs. Without sustainable energy other SDGs like poverty reduction (SDG 1); access to effective social, health and education systems (SDG 3, SDG 4); gender equality (SDG 5); promotion of productive employment (SDG 8); safe drinking water and adequate sanitation (SDG 6) as well as adequate and safe housing (SDG 11) will not be achieved. The increased use of renewable energy also contributes to reducing the contamination of air, water, soil and land with hazardous chemicals (SDG 6, 14 and 15). It is also a key factor in the development of sustainable production and consumption (SDG 12).

The delegates at KIREC recognise the key role of renewable energy and energy efficiency in contributing to the Paris Agreement and Agenda 2030 and see the following action elements as the key to transition towards a sustainable future.

5. Recognising the crucial role of cities and citizens. Given the current rapid urbanisation, we highlight the importance of the integration of renewable energy and energy efficiency in urban planning. Driven by their high-energy demand, cities are the frontrunners of the energy transition. Renewable energy coupled with, inter alia, sustainable transport can tremendously enhance the quality of life in the urban areas globally. Citizens play a key role in mobilizing the resources needed for the energy transition far beyond being just consumers of energy. In many countries, citizens have been the drivers by owning and operating renewable energy systems, based on community energy models. New prosumer models can better distribute the socioeconomic benefits of renewable energy. Citizens are crucial in fostering needed changes in overall patterns of consumption and production.

6. Fast-tracking sustainable energy access to leave no one behind. Ensuring access to affordable, reliable, sustainable and modern electricity, cooking as well as cooling and heating solutions in line with people's needs is a key condition for reducing inequalities and promoting development. 840 million people still lack access to electricity and without sustained and increased efforts 650 million will still live without access in 2030 the bulk of which will be in rural and remote areas (SDG7 Tracking 2019). Decentralized renewable energy solutions, such as mini-grids, have the potential to close this gap by powering local productive uses and by catalyzing job creation in rural economies. Furthermore, 2.9 billion people currently lack access to clean forms of cooking energy, which needs to be addressed.

7. Policy frameworks to massively scale up renewables at the regional, national and local level. We need to establish policies to massively expand renewable energy uptake and widely integrate energy efficiency measures at all levels of government. We need to set up new initiatives, foster public-private partnerships and form coalitions with NGOs. We need to strengthen existing initiatives, which link energy, climate, and sustainable development, stressing the importance of renewable energy and energy efficiency in the end-use sector in NDCs in particular.

8. Inclusive market designs for sector coupling and a sustainable transition. We see integrated planning along the entire value chain with reliable and secure infrastructure as critical for the energy markets of the future. Renewable energy has to be an integral part of the whole energy system. At the forefront, we have to enable more technologies for system flexibility: from generation, distribution and transmission to storage and demand-side management. We have to further pursue sector coupling, meaning the integration of renewable energy into the transport, heating and cooling sectors for greater efficiency and climate protection.

9. Mobilising and channeling the finance where needed. We see the urgency in mobilising of finance for renewables and energy efficiency. Leveraging private finance through de-risking instruments, direct financial incentives, and digital finance solutions are critical. We are convinced that the key constraint to the effective execution of both small and large-scale renewable energy projects is the lack of resources for project preparation and development. Therefore, the early-stage project finance is crucial, especially for LDCs and SIDS. With increasing decentralisation of the energy sector, the focus should be given to small-scale renewable finance.

10. Localising supply chains for industrialisation. Increased localisation of supply chains for equipment, operation and maintenance directly contribute to job creation and therefore to greater economic and social growth. Gender considerations must be mainstreamed into job creation efforts, including building enabling environments for women entrepreneurs. Participation of the citizens and local communities in building up strong and resilient energy systems is the key to sustainability, inclusiveness and local acceptance.

11. Stimulating innovation. Low carbon resilient infrastructure is now more cost-effective than the conventional one. We are convinced that 100% decarbonisation is technically and economically viable. It will require technological innovation (e.g. Power to X, digitalisation, innovative storage solutions etc.) as well as innovative business models, market design and system operation. Supporting research and development is central for innovation.

12. Advancing the Just Transition. We urge the countries to set the targets for phasing-out coal as an energy source. While phasing-out coal and other fossil fuels, we have to ensure that the global energy transformation is accompanied by policies that enable a Just Transition that takes into account job loss in the fossil fuel sector. We highlight the necessity of phasing-out fossil-fuel subsidies while: effectively integrating the large shares of renewables; guaranteeing the highest possible degree of security of supply; keeping cost down for consumers and industry and thereby further increasing the acceptance for renewables. We are convinced that economic growth and development of countries go hand-in-hand with the transition to renewable energy and energy efficiency. Community Energy and similar citizens-based ownership and operation models can contribute to maximizing and distributing democratic, participatory and socioeconomic benefits. Drawing on all available talent of women and men is needed for a successful energy transition.

13. Sending the right economic signals for the energy transition. Energy markets must be fair and transparent, reflecting the true environmental cost of different energy technologies. Putting a price on carbon will enable decision-makers to create an enabling environment for the renewables and energy efficiency, private sector to be informed and to make forward-looking investment decisions. Overall, it will accelerate the deployment of renewable energy and energy efficiency and foster innovation for a clean energy future.

14. Strengthening existing partnerships and networks. We recognize REN21 as a key driver for the sustainable transition, with its unique advantage of a multi-stakeholder network. We need to foster innovative partnerships not only between donor organisations, industries, and financial institutions but also between developing and developed countries. We believe that this is a chance for new cooperation and collaboration on all levels.

15. We acknowledge the government of Korea and the City of Seoul for successful organisation of this conference and for KIREC 2019 being a further fundamental milestone towards achieving the Paris Agreement and Agenda 2030.

Section II

HOST COUNTRY REPUBLIC OF KOREA

1. Energy Transition in Korea. Since 2017, Korea has actively promoted the energy transition by fostering renewable energy with a view of mitigating climate change and of supporting sustainable development.

2. Under the "Renewable Energy 3020" Initiative. the Government of Korea has set the target of reaching 20 % of electricity from renewable energy by 2030, especially from solar and wind, with due consideration given to mitigating possible negative environmental impact. The participation of citizens and local communities is actively encouraged, including through a Korean FIT scheme for small solar plants. The participation from the private sector is encouraged through the "RE 100" scheme.

3. Hydrogen with Renewable Energy. The Hydrogen-Economy Roadmap Initiative boosts relevant R&D of large-scale electrolysis including demonstration in 2022 with a view of Korea producing hydrogen based on renewable energy by 2030 and reducing 27 million tons of CO2 with 23 million tons of fine dust by 2040.

4. Blue Sky Initiative lead by The National Council on Air Pollution and Climate Change. The National Council on Climate and Air Quality is a presidential committee dedicated to tackling particulate matter air pollution. Launched on April 28th 2019, the committee led by the 8th UN Secretary General Ban Ki-moon aims to propose solutions for particulate matter air pollution based on a "bottom-up" approach that reflects social consensus. In 2016, Korea's power generation accounts for 12% of Korea's particulate matter air pollution, with coal power generation taking the lion's share. As part of its short-term mitigation goals, the NCCA will pursue steps to reduce Korea's coal power generation. In the mid to long-term, the NCCA intends to revamp Korea's national energy mix by increasing renewable energy use.

The Korean government is implementing a national ETS, connected to CDM of UNFCCC, a first in Asia. New national policies and targets on GHG emissions and long-term low carbon development will be adopted in 2020.

5. Global Cooperation. Korea supports effective global cooperation to assist developing countries with the challenges of adapting to climate change. Korean companies contribute to the global energy transition through cooperation with many stake-holders, sharing of experiences and technologies.

6. Cities and Renewable Energy. Seoul Metropolitan Government pursues an ambitious plan (One Less Nuclear Power Plant) to reduce GHG emissions, achieve significant self-reliance in electricity and total energy production. The "2022 Solar City Seoul" will transform Seoul into an energy producing city. The cooperation between the City of Seoul and the Government of Korea will be further strengthened through the co-hosting of KIREC Seoul 2019.

7. Renewable Energy Day Korea. We commend the launch of the Korean Renewable Energy Day by industry associations, academia and NGOs which aims at strengthening awareness and mobilizing action by all actors.

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