

Annex

[Draft 1] Ministerial Statement

1. We, the Energy Ministers of [countries], met in Astana, Kazakhstan on 11 June 2017, to explore how to accelerate the transition to a new, sustainable and fair energy system. Energy plays a crucial role in global economic growth and underpins all areas of development. We recognize that it is essential for our nations to secure access to affordable, reliable, sustainable, and modern energy and reduce greenhouse gas emissions from the energy sector if the world is to develop sustainably.

2. Recognizing that energy is at the core of the 2030 Agenda for Sustainable Development and the Paris Climate Agreement, we emphasize the following points:

- **Equitable access to modern energy services requires mobilizing adequate resources.** Ensuring physical and economic access to quality energy services requires investment throughout the energy value chain, from primary energy development to end use. Enabling investment requires that governments have a long-term vision for providing sustainable energy services, and that we promulgate sustainable policies and regulations that are based on rational economics and that allow producers and consumers to respond to a dynamically changing energy market. The vision includes provision of access to modern energy services for vulnerable groups as part of national poverty reduction strategies and social development policy.
- **The net carbon intensity of the energy sector must be reduced.** The amount of CO₂ that can be emitted in a scenario that keeps global temperature rises **well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C, within 2°C**, the so-called carbon budget, has been estimated **at 1 trillion tons**. If the ambition is to keep the temperature rise well below 2°C, then that budget is necessarily lower. Over half of the 2°C budget has already been “spent”, and CO₂ emissions from energy production, transformation, and use are at the heart of the challenge. In order to avoid overshooting the remainder of the carbon budget and in order to set the stage for future reductions in atmospheric greenhouse gas concentrations, it is imperative that all options for reducing net carbon emissions be developed and deployed urgently to reduce the carbon intensity of providing energy services.
- **Energy efficiency needs to improve.** Improving energy efficiency is one of the most cost-effective options for meeting growing energy demand, and it contributes to energy security, a better environment, improved quality of life, and economic well-being. Significant potential for improving energy efficiency exists worldwide, but attempts to improve energy efficiency often fall short because of flawed national policies that artificially lower energy prices that encourage wasteful consumption, that distort markets through production and consumption subsidies, and that manage housing stocks and land use ineffectively. New participants face barriers to entry, there are inadequate norms and standards, and the statistics and information to manage energy and track progress are incomplete. In addition, there is often a lack of awareness and education about the long-term economic and social benefits of action to improve energy efficiency and industrial productivity.
- **Renewable energy policies need to be redesigned.** Renewable energy resources are becoming cost-competitive with conventional resources. They offer a way to reduce the net carbon intensity of the energy sector, improve energy security, and encourage economic development. Integrating renewables into the global energy mix will be important as future energy systems are optimized both on- and off-grid. However,

Commented [StR1]: Wording from Paris Agreement art.2 1(a); the full long term target of the Paris Agreement should not be should not be neglected

Commented [StR2]: Comment – Source: IPCC AR 5 WG I: “Limiting the warming caused by anthropogenic CO₂ emissions alone with a probability of >66% to less than 2°C since the period 1861–1880, will require cumulative CO₂ emissions from all anthropogenic sources to stay between 0 and about 0 and about 1000 GtC (3670 GtCO₂) since that period, respectively.” (https://www.ipcc.ch/pdf/assessment-report/ar5/wg1/WG1AR5_SPM_FINAL.pdf) Summary for Policy makers Page 27

Commented [GM3]: Why is environment mentioned under EE, but not under RE?

Commented [GM4]: Missing link to climate protection /GHG reduction

Commented [GM5]: Name subsidies

Commented [GM6]: Who are new participants

Commented [GM7]: This is already done, therefore suggested to say: ---“Further and improved integration of RE in

wider uptake of renewables requires addressing barriers to fair competition vis-à-vis conventional technology (without resorting to long-term subsidies), implementing stable long-term energy policy frameworks in a future energy system context, and deploying innovative and targeted financial mechanisms. Policies should be designed in light of the economic circumstances and development challenges of countries with renewable energy potential.

- **National and regional circumstances vary substantially.** While each country will make its contribution to both the 2030 Agenda and implement ambitiously its National Determined Contribution (NDC) to the Paris Climate Agreement, there is no one-size-fits-all solution and each country will choose its approach optimally given its national circumstances. We see significant value in international cooperation and functioning energy markets across regional corridors in the interest of all. We encourage the sharing of experiences and technologies to increase the uptake of successful technologies.

3. In light of the foregoing observations, we commit to the following actions to the extent they are relevant for our national circumstances:

A. Access to Modern Energy

4. Significantly accelerate the required energy transition while ensuring a high level of energy service reliability and equitable energy access.
5. Mobilize needed resources to provide universal access to modern energy services and ensure proper integration of other sectors and other development goals into our national energy plans.
6. Develop regional and international standards or other normative instruments throughout the energy system and share relevant information across areas with similar conditions.
7. Promote the use of quality-of-service regulation as a means of aligning the needs of suppliers and consumers of energy services and encourage the introduction of business models based on competitive companies offering sustainable energy services.
8. Develop well-functioning, resilient and interlinked energy markets with market-based pricing and with greater transparency, flexibility and liquidity.
9. Rationalize the use of energy subsidies by exploring efficient and effective ways to protect vulnerable groups and phase out inefficient energy subsidies that create market distortions and encourage wasteful consumption by 2025.

B. Energy and Climate Change

10. Implement strategic measures to develop energy systems that allow for sustainable economic growth alongside deep reductions in greenhouse gas emissions. Reduce systems costs with market reforms, normative instruments (such as standards), and business models that embrace demand responses, supply flexibility, emerging storage, energy efficiency, and efficient transmission and distribution.
11. Institute well-functioning carbon markets or other mechanism to establish a real price on carbon to promote low carbon growth.
12. Ensure policy parity among all low-carbon technologies, including renewables, clean fossil, and, to the extent countries wish to pursue the option, nuclear power.
13. Deploy clean energy technology and enhance research and development of innovative technologies. Encourage both sustainable development of untapped national resource potential and a transition from higher to lower carbon intensity thermal generation.

Commented [GM8]: This is already addressed under bullet point 1)

Commented [GM9]: Each country has RE potential

Commented [GM10]:
GER: no direct support of Nuclear Power, therefore we would not support policy parity

C. Energy and Resource Efficiency

14. Reshape energy markets so that energy price signals and energy policies are aligned with sustainable deployment and use of energy resources.
15. Create structural, institutional and regulatory framework conditions that enable substantial investments in energy and resource efficiency throughout the energy value chain.
16. Explore ways for energy suppliers to sell energy services rather than energy products to accelerate energy efficiency uptake and promote the creation of strong energy services companies through public-private partnerships to implement large-scale energy efficiency programmes.
17. Enhance cross-sectoral urban planning to improve energy efficiency in cities, including housing, transport, water, and municipal utility infrastructure.
18. Establish technology-driven energy performance standards and pursue ever-tightening, enforced minimum energy performance standards in all sectors. Institute testing and labelling standards and procedures that meet recognized international requirements and that generate transparent information about them. Implement official energy efficiency labelling for mass consumer equipment.
19. Limit commercialization and sales of appliances and equipment that do not meet internationally agreed minimum standards by 2030.
20. Establish education programmes to train professionals in all economic sectors on ways to reduce energy use and provide information to the public with respect to energy efficiency and family budgets.

Commented [GM11]: What is meant by this?

Commented [GM12]: Which budget?
There should not be a confirmation to establish such programmes as the financing is not clear.
Better to phrase ... "Intend to support..."

Furthermore there are already several programmes in place.

D. Energy Investment Framework Conditions

21. Develop energy infrastructure, markets, and trading arrangements that are resilient in the face of natural or geopolitical disruptions, including through well-functioning and transparent markets, diversified energy fuels, sources and routes, enhanced energy efficiency, and enhanced price elasticities.
22. Facilitate investments for secure and sustainable energy, including innovative investment to encourage clean energy technologies, upstream investment, and quality infrastructure investment.
23. Maintain an open dialogue among energy-producing, -transit and -consuming countries on energy security, technology and policy on neutral platforms.
24. Promote regional connectivity of energy infrastructure projects to enhance energy efficiency, to integrate renewable energy, and to optimize energy resource utilization. Enhance efforts to make regional energy integration a reality. Encourage interconnection infrastructure projects among countries with complementary energy resources as a cost-effective way to enhance mutual energy security and stabilize energy systems.
25. Engage in dialogue with financial institutions to align investment incentives with the objectives of the sustainable development goals, including climate change. Create structural, institutional and regulatory framework conditions that enable investment throughout the value chain that reward efficient provision of energy services rather than use of energy resources.
26. Establish capacity building and qualification programmes for developers, engineers, technicians and workers involved in the design of bankable project proposals to be submitted to institutional, private investors, national and international financial institutions.

E. Technology

27. Increase government investment in clean energy innovation, private sector engagement, and dissemination of advanced technologies to facilitate joint research and information sharing. Encourage collaboration among relevant research laboratories and institutes to promote the development of innovative clean energy technologies.

Commented [GM13]: Tbd if this can be agreed without specific budget foreseen

28. Launch and fund a green energy technology center in Astana to achieve the goals of the Clean Energy Ministerial Mission Innovation and like approaches to encourage technology development, promotion, transfer and capacity building towards a green economy.

Commented [GM14]: Who shall launch and fund this?

So far there are no sufficient information on the center available.

For GER it is not possible to confirm funding this center within this statement.

29. Support research and development and the commercial introduction of clean energy technology, capital, and management skills to support needed transitions.

30. Encourage local manufacturing of energy efficient and cleaner energy equipment that contributes to cost-effective job creation.

Commented [GM15]: -Pkt. 30 „Encourage local manufacturing...“ mag aus entwicklungs- und industriepolitischen Erwägungen verständlich sein. Wenn die Förderung der Steigerung lokaler Wertschöpfung im Energiesektor allerdings die Form verbindlicher Lokalisierungsanforderungen annimmt – etwa um an staatlichen Ausschreibungen teilnehmen zu können –, sehen wir dies aber aus handelspolitischer kritisch. Frage auch ob dies WTO konform wäre.

31. Establish capacity building and qualification programmes for engineers, technicians and workers involved in the design and implementation of energy efficiency and cleaner energy solutions.

F. Energy Data, Indicators, and Analysis

32. Collaborate with the United Nations regional commissions and other international partners to develop appropriate indicators of progress to the energy-related sustainable development goals, to build needed capacity to collect the sound data needed to populate the indicators, and to provide input systematically to track progress towards the aspirations of the 2030 Agenda and the Paris Climate Agreement.

33. Strengthen the analytical capacity of the different interactions involving energy policy, especially the water-energy nexus and the water-food-energy nexus, in order to provide innovative sustainable policy approaches to address multidisciplinary energy-related issues.