Speech by Mr Olzhas Agabekov, Director of the Climate Policy and Green Technologies Department of the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan,

at the 10th meeting of the EU–CA Working Group on Environment and Climate Change

"Green Recovery: new opportunities for cooperation"

4 October, 15:30, online

## Decarbonisation by 2060 and the parallel development of Green Economy in Kazakhstan

Climate change and its consequences are catastrophic, hindering sustainable development and affecting the social and economic development of our countries. We are increasingly witnessing glaciers receding, water resources shrinking, land degradation and desertification.

In this vein, Kazakhstan recognises its shared responsibility to achieve the global temperature goal set out in the Paris Agreement, despite its dependence on natural resources for a major share of economic development.

Kazakhstan has created an institutional framework for reducing greenhouse gas emissions; there is a national system of emissions inventory and monitoring, emissions trading system, reporting on greenhouse gas emissions, and approval of the national plan for allocation of emission quotas. An important mechanism for reduction is the implementation of offset projects.

At the same time, as part of updating the environmental law, work has

been done to strengthen the functioning of the trading system for greenhouse gas emissions, which covers about 40% of total national emissions. We do not stop working to improve the system for regulating greenhouse gas emissions and aim to achieve a transparent system for monitoring and reporting emissions, as well as linking the emissions trading market to other international similar platforms.

**For reference:** The distribution of allowances in the national plan is based on a benchmark, an annual emission reduction rate of 1.5% of the previous year for the operators of the emissions trading system is provided, and a carbon budget is approved.

The emissions trading system is to ensure a 15% reduction in emissions from the regulated sector, as well as to stimulate the implementation of projects to reduce emissions (offset projects).

These plans will be supported by new provisions of the Environmental Code on the introduction of green technologies and green taxonomy. The mechanisms of state support for economic incentives ("green" credits and "green" bonds) will apply to projects under the green taxonomy and are aimed at improving the efficient use of existing natural resources, reducing the negative impact on the environment, improving energy efficiency, energy conservation, climate change mitigation and adaptation to climate change.

The current projected increase in greenhouse gas emissions, which without measures to reduce emissions, is projected to be 435 million tons by 2035, where the 2018 inventory already exceeds 1990 levels by 4.05%, confirming the ambition of the updated nationally determined contributions, despite the previous figure of -15% by 2030 from 1990 levels.

The new NDC is supported by a roadmap for 2021-2025 for its implementation. The required main institutional measures needed: the introduction of a domestic carbon tax, the creation of the Carbon Fund, the creation of a bank of climate projects and tightening the emissions trading system.

The Carbon Fund will ensure the accumulation of funds generated from the carbon tax for the implementation of climate projects to achieve the goal of deep decarbonisation of the economy.

The envisaged institutional and sectoral measures to reduce greenhouse gas emissions should ensure the implementation of NDC and lay the foundation for further achievement of the goals of carbon neutrality.

Implementation of the Roadmap measures will provide reductions in the energy sector by 39.3%, in agriculture by 25.2%, in the coal industry by 7.9% and in the transport sector by 1.9%.

The additional investment needed to implement the recommended decarbonisation measures in the economy, during 2021-2030, is \$293.5 billion.

*For reference*: In the structure of the estimated additional investment need, attention should be paid to the investment needs:

- Energy industry in the amount of \$24.88 billion for construction of new RES facilities, conversion of coal-fired generating capacities to gas, construction of new gas-fired power plants;

- Manufacturing industry in the amount of \$38.81 billion for the transition to BAT for energy efficiency;

- The Residential Utilities and Households, \$70.25 billion to improve the energy efficiency of buildings in need of major renovations and switch to gas and renewable energy to meet heating needs;

- Ground transportation passenger and freight in the amount of \$138.51 billion improve energy efficiency and switch to cleaner energy sources;

Decarbonisation investment needs in all other sectors requires mobilisation of \$21.07 billion.

In continuation of the course announced by the Head of State to achieve carbon neutrality, we have completed work on the Doctrine of Carbon Neutrality until 2060 of the Republic of Kazakhstan.

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The doctrine describes the potential of reducing greenhouse gas emissions in Kazakhstan, necessary investments to reduce emissions from major sectors of the economy and technological solutions required for this.

The document contains two scenarios of development: baseline and scenario of achieving carbon neutrality.

The baseline scenario describes a path of economic development, which does not provide for significant technological changes or political measures aimed at strengthening decarbonisation in Kazakhstan.

The carbon neutrality scenario includes the implementation of the commitments under the Paris Agreement (the conditional target of START-25%) and the statement of the Head of State on achieving carbon neutrality in Kazakhstan until 2060 at the Summit on Climate Ambitions (December 13, 2020).

In this case, the results of work on the Doctrine showed the need to improve energy efficiency, electrification and achieve the share of renewable energy of about 83% by 2060 in relation to 3% in 2020. The share of coal generation should be reduced to zero compared to the current level of 69%. Given that Kazakhstan's economy is energy-intensive, this is a very difficult but important step for our country.

The share of coal-fired generation should be 0.03% by 2060 from the current 69%, which is quite difficult at the moment given the dependence of our economy on coal consumption, especially for coal mining regions. Closure of coal plants will lead to the loss of jobs among the population employed in this industry, which will affect the social and economic situation in the regions.

At the same time, the sharply continental climate of the country and harsh weather conditions create additional difficulties in replacing the established historical technological base of coal-fired power plants.

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For reference: 8th place in the world in terms of coal reserves, more than a hundred coal deposits, where 11 are the largest in the world.

Decarbonisation of the economy is also impossible without the development of technologies of carbon capture and storage and use of hydrogen energy. Thus, given the predicted growth in the use of hydrogen energy, Kazakhstan is interested in cooperation with international financial institutions and investors in order to find technological solutions for the development, storage, transportation and commercialization of technologies in the field of infrastructure for hydrogen energy.

The doctrine defines the volume of required additional investments, which already under the deep decarbonisation scenario is about 504 billion US dollars, which is the main challenge for Kazakhstan.

The doctrine will be a long-term benchmark for the public and private sector, including international investors in planning a vision for low-emission development and the necessary transformations in all sectors of the economy.

Currently, active work is underway to prepare Kazakhstan's delegation to participate in the 26th session of the Conference of the Parties to the UN Framework Convention on Climate Change, where the delegation of Kazakhstan will be represented at the highest level by the Head of State.

We hope that the measures taken by Kazakhstan will slowing down and mitigating the effects of climate change on food, energy and water security in the region.

In conclusion, I would like to note that only joint efforts of all Central Asian countries, the scientific community and the public can contribute to combating climate change and turn challenges into opportunities for sustainable development of the region.

## Thank you for your attention!