## Session SECONDMA2021 (2021)

Session starts: 02-08-2021 00:00:00 [GMT+1] Session ends: 29-10-2021 23:30:00 [GMT+1]



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A compilation of questions to - and answers by - Kazakhstan [exported on 01-11-2021] by the UNFCCC secretariat

Question by European Union at Tuesday, 31 August 2021

Category: All emissions and removals related to its quantified economy-wide emission reduction target

Type: Before 31 August

Title: Fugitive emissions of methane

According to the CTF tables submitted together with Kazakhstan's Fourth Biennial Report, fugitive emissions from fuels (solid fuels, oil and gas) constitute the most important source of methane emissions in the country. Which adopted or planned measures in the energy sector can help mitigate these fugitive emissions from fuels?

Answer by Kazakhstan, Friday, 29 October 2021

There are no clear plans to reduce methane emissions.

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Question by United Kingdom of Great Britain and Northern Ireland at Tuesday, 31 August 2021

Category: Assumptions, conditions and methodologies related to the attainment of its quantified economy-wide emission reduction target

Type: Before 31 August

Title: Estimated impacts of policies and measures in the energy and IPPU sectors

We congratulate the Republic of Kazakhstan on the approval of the strategic development plan until 2025. We note that at the time of publication of the Fourth Biennial Report and subsequent technical review, the Republic of Kazakhstan did not provide estimated impacts for some policies and measures in the energy and IPPU sectors due to lack of relevant data. Could you elaborate on whether there are plans to address this data gap in future UNFCCC reporting?

Answer by Kazakhstan, Friday, 29 October 2021

The area of statistics are all the time under the process of improving. Besides the statistics, there are more and more data become available on different platforms and websites of governmental and other bodies. On the work in future UNFCCC reporting all the sources of data will be elaborated to extract necessary information.

Besides, if the data are not publicly available, but it exists then appropriate request will be made.

Also, it should be noted that the country is constantly improving the methodology, gradually reducing the inaccuracy of calculations. The Party plans to fill data gaps in future UNFCCC reports as far as possible.

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Question by European Union at Tuesday, 31 August 2021

Category: Progress towards the achievement of its quantified economy-wide emission reduction target

Type: Before 31 August

Title: Development of the renewable energy sector

In Kazakhstan's Fourth Biennial Report, Table 4 provides target indicators for the renewable energy sector development for the year 2020, including total installed capacities of various renewable energy sources. Could you provide an update on these indicators: For which energy sources were the targets achieved in 2020, and for which energy sources did achievement of the targets prove difficult?

Answer by Kazakhstan, Friday, 29 October 2021

According to information from the website of KOREM JSC[1], the total installed capacity of renewable energy sources for the 1st half of 2021 is 1,897 MW, which is higher than the indicator of 1,700 MW. Including:

WPP - 601.3 MW, which is lower than in Table 4.3 - 933 MW;

small HPPs - 255.08 MW, which is lower than in Table 4.3 - 290 MW;

SPP - 1032.6 MW, which is higher than in Table 4.3 - 467 MW;

BioPP - 7.82 MW, which is lower than in Table 4.3 - 10 MW.

The website of KOREM JSC says that "the share of generated electricity from renewable energy sources in the total volume of electricity production is 3.5%."

As you can see, the total installed capacity of RES is higher than the installed indicator. A large share falls on SPP, which exceeds the corresponding indicator for the development of renewable energy sources. This is due to the fact that the construction period of a solar power plant takes less time than a wind farm. For WPP, the power is lower than the indicator.

Statistics on the share of gas-fired power plants in electricity generation are not explicitly provided.

[1] https://vie.korem.kz/rus/uchastie\_v\_torgah/info\_torgi/

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Question by United States of America at Tuesday, 31 August 2021

Category: Progress towards the achievement of its quantified economy-wide emission reduction target

Type: Before 31 August

**Title:** Institutional Arrangements

How has the establishment of the Ministry of Ecology, Geology and Natural Resources helped improve the administrative process for the development of BR reports.

Answer by Kazakhstan, Friday, 29 October 2021

The process of preparing Biennial Reports has not experienced notable changes.

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Question by United States of America at Tuesday, 31 August 2021

Category: All emissions and removals related to its quantified economy-wide emission reduction target

Type: Before 31 August
Title: Emission Trends

From an emissions standpoint, how does Kazakhstan balance the difference between the overall trends that can be identified when comparing the most recent year – 2017 – to the base year – 1990 – versus the lowest point in the last three decades? For instance, overall, energy sector greenhouse gas emissions have declined from the base year, but they have increased significantly from their lowest point and are approaching the levels of the base year. Similar trends can be seen in other sectors.

Answer by Kazakhstan, Friday, 29 October 2021

The lowest point in terms of emissions is also the lowest point for economic development. From this moment on, the growth of GHG emissions is associated with the economic growth of the country. Thus, during this period, there is an obvious trend that with the growth of GDP there is an increase in emissions.

The base year is the year against which current emissions are compared and the country's

NDC is set.

The recovery of the country's economy after the post soviet union crisis has also led to the intensification of industry, the expansion of the types of products. But the equipment is being modernized with the high energy efficiency of production, which leads to a decrease in specific emissions per ton of products. In Kazakhstan, the emissions trading system switched to a mixed approach, which includes a historical approach and a benchmarking method with an annual reduction of allocated quotas by 2%.

The downward trend in 1990<sup>th</sup> in GHG emission was caused by economy decline. Economy increase in early 2000 was the reason to gradual GHG emission increase.

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Question by United States of America at Tuesday, 31 August 2021

Category: Progress towards the achievement of its quantified economy-wide emission reduction target

Type: Before 31 August

Title: lessons learned: carbon trading system

Kazakhstan first adopted a carbon trading system in 2013, can you provide any further details on the impact of that system and share any lessons learned for other countries considering adopting such a system?

Answer by Kazakhstan, Friday, 29 October 2021

The Greenhouse Gas Emission Control System is a good tool for increasing transparency of the entire production sector.

The system for monitoring greenhouse gas emissions at the enterprises creates conditions for reducing not only GHG emissions, but also other pollutants.

The system creates conditions for long-term planning of activities to reduce greenhouse gas emissions at large enterprises. In Kazakhstan, large mining, energy and oil companies have or are preparing their own carbon strategies.

The main lessons learned are as follows:

1. It is necessary to implement digital solutions as much as possible when implementing the system

- 2. It is necessary to have a national long-term goal to reduce greenhouse gas emissions
- 3. It is necessary to develop and completely switch to a benchmarking system that, in general, is more consistent with the goals of reducing greenhouse gas emissions than the historical method
- 4. Together with the system for limiting GHG from the business sector, it is necessary to introduce national standards for sectors not included in the system for limiting emissions.
- 5. It is necessary to eliminate overallocation in the system and it is necessary to switch to the auction system as soon as possible when allocating quotas.
- 6. Strengthen the capacity of inspectors of state control over the quality of enterprise reporting and a verifier.


Question by European Union at Tuesday, 31 August 2021

Category: All emissions and removals related to its quantified economy-wide emission reduction target

Type: Before 31 August

Title: Emissions in the target year

In Kazakhstan's Fourth Biennial Report, which was submitted in April 2020, greenhouse gas emissions (without LULUCF) were projected to be approx. 367 Mt CO<sub>2</sub>eq in the target year 2020, which is above Kazakhstan's economy-wide target under the Convention. Now that the year 2020 has passed, could you provide an updated estimate of total greenhouse gas emissions in that year? Which main factors affected any changes in emissions in that year?

Answer by Kazakhstan, Friday, 29 October 2021

GHG emission data for 2020 (inventory) will be prepared by April 15, 2022.



Question by Japan at Monday, 30 August 2021

Category: All emissions and removals related to its quantified economy-wide emission reduction target

Type: Before 31 August

Title: Emissions and removals trend in the LULUCF sector

The emissions and removals trend of the LULUCF sector shows almost liner changes for the period 1990-2009 (ex. Fig 2.13). If this trend is more relevant to the calculation method in which area cumulation is started since 1990 than the real emissions or removals, is there any merit or demerit to use this data as the basis of policy and measures of climate change?

Answer by Kazakhstan, Friday, 29 October 2021

Linear trend in farmland emissions since 1990 to 2009 was caused by collapse of centralized planning in cropland management. Cropland became private and farmers did not have either money or interest to use fertilizers and maintain agricultural technology. As a result humus level was linearly decreasing, causing linear GHG emission increase from 1990 to 2009.

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Question by Japan at Monday, 30 August 2021

Category: Assumptions, conditions and methodologies related to the attainment of its quantified economy-wide emission reduction target

Type: Before 31 August

Title: A measure for reduction of logging

It is explained that measures reducing domestic logging has been introduced and that logging for some types of domestic forest is temporary prohibited. How do the wood demands previously met by domestic logging change through these bans?

Answer by Kazakhstan, Friday, 29 October 2021

Demand was met by import of wood mainly from Russia.

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Question by Japan at Monday, 30 August 2021

Category: Progress towards the achievement of its quantified economy-wide emission reduction target

Type: Before 31 August

Title: Measures for achieving the 2030 target

For both WEM and WAM scenarios reported in CTF Tables 6(a) and 6(c), GHG emissions in 2030 are projected to exceed 1990 levels. What additional measures will be taken to achieve the 2030 target (15% reduction against 1990 levels)? Could Kazakhstan provide the priority areas and schedule for consideration regarding additional measures?

Answer by Kazakhstan, Friday, 29 October 2021

To decrease the GHG emissions to the level of minus 15% from 1990 year, the updated NDC were prepared and now it is under the process of approvement. The updating of NDC were accompanied with the elaboration of the roadmap with the set of required measures to decrease emissions. The measure are divided to the two types – institutional and sectoral measures. The risks, required investments, responsible bodies identified.

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Question by Japan at Monday, 30 August 2021

Category: Progress towards the achievement of its quantified economy-wide emission reduction target

Type: Before 31 August

Title: Estimation of mitigation impacts in the energy and IPPU sectors

Of the policies and measures reported in CTF Table 3, no mitigation impacts are reported for the measures in the energy and IPPU sectors. What are the challenges in estimating the mitigation impacts?

Answer by Kazakhstan, Friday, 29 October 2021

The estimated effect of P&M was not provided as there was not enough data for them to assess and they are methodologically difficult to assess.

In the IPPU sector, the main influence on GHG growth comes from the metallurgy and minerals sector. Due to the cross -connections of the sectors, the P&M effect was methodologically difficult to assess.

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Question by Japan at Monday, 30 August 2021

Category: Progress towards the achievement of its quantified economy-wide emission reduction target

Type: Before 31 August

Title: Method of monitoring the progress of emission reduction measures

According to p.23 of the BR4, the Ministry of Ecology, Geology and Natural Resources, which was established in 2019, is responsible for formulating and implementing national climate change policies. Is the Ministry of Ecology, Geology and Natural Resources also responsible for monitoring the progress of mitigation measures and considering additional measures? Could Kazakhstan provide the details of the agency in charge of monitoring the progress of mitigation measures, the schedule, and the method of monitoring?

Answer by Kazakhstan, Friday, 29 October 2021

Yes, the Ministry of Ecology, Geology and Natural Resources monitors the implementation of national policies. Its structure for climate policy has remained the same as it was in the Ministry of Energy.

The ministry has a Climate Policy and Green Technologies Department. All data on the inventory of greenhouse gases (at the national and at the level of individual enterprises) are collected in the organization subordinate to the ministry, JSC Zhasyl Damu. Accordingly, the Ministry, with the help of its organizations, can monitor mitigation policies.

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Question by Germany at Monday, 30 August 2021

Category: Assumptions, conditions and methodologies related to the attainment of its quantified economy-wide emission reduction target

Type: Before 31 August

Title: Reporting on Action for Climate Empowerment

What challenges and solutions were identified in the reporting on Action for Climate Empowerment, i.e. climate education, training, information and public participation and access to information?

Answer by Kazakhstan, Friday, 29 October 2021

Among challenges there is a need to nominate a National Focal Point for ACE under article 6 of the Convention and article 12 of the Paris Agreement and find a solution how to be more

involved in the ACE platform.

At the national level it will be needed to strengthen activities and capacities to implement its six interconnected elements: climate change education, training, public awareness, public participation, public access to information, and international cooperation.

In the years when BR is submitted as a separate report information on Action for Climate Empowerment, i.e. climate education, training, information and public participation and access to information will be reported in the BTR.

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Question by New Zealand at Friday, 27 August 2021

Category: All emissions and removals related to its quantified economy-wide emission reduction target

Type: Before 31 August
Title: Emissions Trading

- 1. Does Kazakhstan have any intentions to reinstate the emissions trading scheme as a mechanism to drive emissions reductions?
- 2. If so, is there a target year for this to be achieved?

Answer by Kazakhstan, Friday, 29 October 2021

- 1. Yes, the national system for regulating greenhouse gas emissions is in place in Kazakhstan, and the government is planning to use it to cut greenhouse gas emissions. However, in addition to the system itself, which requires reduction in the energy, industrial and oil and gas industries, Kazakhstan is developing policies in the field of energy consumption (housing and communal services, construction, household energy consumption)
- 2. The national system for regulating greenhouse gas emissions operates in Kazakhstan. There was a break in its operation in the period 2016 2017. There was the National Allocation Plan (NAP) 2018 2020 and currently the ETS is functioning under NAP2021 and it is envisaged to develop a 4 year NAP

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Category: All emissions and removals related to its quantified economy-wide emission reduction target Type: Before 31 August Title: Industry 1. Noting the agricultural emissions reduction scenario based on additional biogas plant operations, what are the current uses of biogas in Kazakhstan? 2. What are the potential uses of biogas based on additional production? Answer by Kazakhstan, Friday, 29 October 2021 1. Currently there is very low level of biogas use in Kazakhstan. There are few chicken and cattle farms in Kazakhstan which installed 2. Biogas can be used mainly for heating, cooking purposes. Additionally it can be used to generate electricity. Question by New Zealand at Friday, 27 August 2021 Category: Assumptions, conditions and methodologies related to the attainment of its quantified economy-wide emission reduction target Type: Before 31 August Title: Agriculture 1. BR4 Table 4.5 suggests that fertiliser subsidies will reduce emissions by 8,000 kilo tonnes by 2030 (by reducing humus depletion). Have the emissions associated with fertiliser use (such as nitrous oxide emissions) been taken into account in these calculations? Answer by Kazakhstan, Friday, 29 October 2021 Yes, increase of nitrous oxide emissions was taken into account. Stop of humus reduction

effect on GHG emission will prevail increase in nitrous oxide emissions.

Question by New Zealand at Friday, 27 August 2021

Category: All emissions and removals related to its quantified economy-wide emission reduction target

Type: Before 31 August

Title: Agriculture

- 1. Section 4.2.13 of BR4 identifies Kazakhstan's main LULUCF emitter as humus depletion in cultivated soil and attributes this to the lack of mineral fertilisers in the soil. Could Kazakhstan please clarify the link between the mineral fertilisers and the reduction in humus level for its cultivated soils?
- 2. To address the loss of humus in the soil Kazakhstan has proposed a mitigation policy of subsidising fertilisers for its farmers. Noting the relationship between fertilisers and nitrous oxide emissions, what impact is Kazakhstan expecting on nitrous oxide emissions?
- 3. Could Kazakhstan please provide more information on its agricultural mitigation action of upgrading breeds of cattle, sheep and horse in its agricultural sector, including on the breed characteristics focused on and the organisations involved?
- 4. Could Kazakhstan please provide more information on its agricultural mitigation action of Transferring technology (production of biogas), including the main objectives, how the plan was implemented, the organisations involved, and the number of farms involved?

Answer by Kazakhstan, Friday, 29 October 2021

- 1. Literature review on humus reduction reveals clear connection between fertilizer use and humus level in soil. Additionally it is known that fertilizer level decreased significantly since 1990.
- 2. nitrous oxide emission increase was taken into account for proposal of fertilizer increase. The latter overcome negative effect of former. Overall emissions from humus reduction are very large reaching around 37mln tones of CO2 per year.
- 3. Kazakhstan has several programs such as importing and funding cattle from abroad. Low interest credits were given to farmers for these purposes. Also international organizations such as world bank provides funds for similar purposes through Kazakhstan's government
- 4. Use of biogas has a very high potential in Kazakhstan, but very few farms use biogas. This technology can be transferred through cheap biogas plant on Kazakhstan market in future. Currently the price seems to high because of currency devaluation and limited offer in the Kazakhstan market of biogas plant.

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Question by New Zealand at Friday, 27 August 2021

Category: All emissions and removals related to its quantified economy-wide emission reduction target

Type: Before 31 August

Title: Waste

1. Given the current challenges associated with waste recycling and disposal, does Kazakhstan have any additional planned policy measures?

Answer by Kazakhstan, Friday, 29 October 2021

In summer 2021 Kazakhstan's government contracted to build 6 waste incineration plant in 6 largest cities. These plants will burn waste that was accumulated in the waste storage fields. Utilization of accumulated waste will contribute to GHG emission reduction.

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Question by New Zealand at Friday, 27 August 2021

Category: Assumptions, conditions and methodologies related to the attainment of its quantified economy-wide emission reduction target

Type: Before 31 August

Title: Mitigation quantification

1. Could Kazakhstan please provide more detail on how the mitigation potentials of the policies and measures in BR4 Table 4.5 have been estimated?

Answer by Kazakhstan, Friday, 29 October 2021

in the Energy and IPPU sectors, qualitative assessments and expert opinions were used, due to the cross -connections of the sectors, in some P&Ms methodologically it was not possible quantify the effect of certain P&Ms.

Forest related emission reduction was assessed using emission raise in 1990<sup>th</sup> when there was lack of funding and increase in forest fires and cuts.

Currently cropland's humus decrease causes around 20 millions tons of CO2-eqv emissions, which was mainly caused by absence of fertilizers. The reduction in emission was calculated by estimation part of land covered by fertilizer subsidies times total emissions from cropland minus increase in CO2 due to nitrous oxide increase.

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Question by New Zealand at Friday, 27 August 2021

Category: Progress towards the achievement of its quantified economy-wide emission reduction target

Type: Before 31 August

Title: Agriculture

1. Does Kazakhstan have any sector specific target for agricultural emissions in its emissions reduction budgets?

Answer by Kazakhstan, Friday, 29 October 2021

There is no specific target for agriculture. However there is overall target for Kazakhstan to reduce emissions by 2030 on 15% compare to base year of 1990.

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## Session SECONDMA2021 (2021)

Session closes at 29-10-2021 UNFCCC - LAST PAGE OF EXPORT