



Sustainable Energy Connectivity in Central Asia



Funded by
the European Union

The Policy Dialogue Global Methane Pledge: World Experience And Kazakhstan ROUND TABLE

Rixos President Astana Hotel, 8 September 2023

Global Methane Pledge: priority and implementation in Central Asia

Paata Janelidze, Team leader, Key Expert in Energy Engineering, SECCA



General information on Global Methane Pledge

- The **Global Methane Pledge (GMP)** has been launched at COP-26 in November 2021 in Glasgow
- The overall goal of the GMP is to reduce global methane emissions at least 30 % from 2020 levels by 2030, which could eliminate over 0.2°C warming by 2050
 - Contributions from emissions to the 2010–2019 warming relative to 1850–1900 assessed from radiative forcing studies are: CO₂ 0.8°C; **methane 0.5°C**; nitrous oxide 0.1°C and fluorinated gases 0.1°C
 - In modelled pathways that limit warming to 1.5°C, global methane emissions are reduced by 34 % (IPCC, CLIMATE CHANGE 2023, Synthesis Report)

General information on Global Methane Pledge (2)

- Parties joining the GMP agree to take voluntary actions
- Parties also commit:
 - to moving towards using the highest tier IPCC good practice inventory methodologies (Tier 1 are simple methods with default values; Tier 2 are similar but with country specific emission factors and other data; Tier 3 are more complex approaches, possibly models)
 - working to continuously improve the accuracy, transparency, consistency, comparability, and completeness of national GHG inventory reporting under the UNFCCC and Paris Agreement
 - to provide greater transparency in key sectors

General information on Global Methane Pledge (3)

- At present, about 150 countries endorsed the GMP
 - Parties included in Annex 1 to the UNFCCC (Among them: Australia, Canada, European Union and EU Member States, Japan, New Zealand, Norway, Sweden, Switzerland, United Kingdom, United States)
 - Parties not included in Annex 1 (Among them: Brazil, Egypt, Indonesia, Iraq, Kuwait, Mexico, Nigeria, Pakistan, Qatar, Republic of Korea, Saudi Arabia, United Arab Emirates)
- More than 50 countries have developed national methane action plans

GMP Pathways

- For directing sufficient funds for the implementation of the national methane action plans, “pathways” of policies and initiatives to drive methane reductions in key methane-emitting sectors, were launched in 2022
 - GMP Energy Pathway
 - GMP Food and Agriculture Pathway
 - GMP Waste Pathway

GMP Energy Pathway

- **Uniting importers and exporters to cut fossil energy methane:** The EU, USA, Japan, Canada, Norway, Singapore, and the UK issued a Joint Declaration from Energy Importers and Exporters on Reducing GHG Emissions from fossil fuels, committing to working towards the creation of an international market for fossil energy that minimizes flaring, methane, and CO2 emissions.
- **Leveraging satellite data to respond to super-emitter sources:** The UNEP International Methane Emissions Observatory (IMEO), a core implementing partner of the GMP, launched the Methane Alert and Response System (MARS) to scale up detection of major emission events, notify relevant stakeholders, and support and track mitigation progress.
- **Mobilizing multilateral funding for methane action:** The World Bank Global Gas Flaring Reduction Partnership will launch the next phase of its trust fund in 2023.

GMP Food and Agriculture Pathway

- **Boosting Support for Smallholder Farmers:** The Green Climate Fund, in partnership with the International Fund for Agricultural Development, the Food and Agriculture Organization, Global Dairy Platform and Global Methane Hub, approved \$3.5 million of project preparation funding aimed at leveraging up to \$400 million in financing in number of developing countries.
- **Increasing Innovation:** The Global Methane Hub announced raising \$70 million for a new Enteric Methane Research and Development Accelerator to advance research on reducing methane emissions from enteric fermentation. Under the Agricultural Innovation Mission for Climate (AIM4C), 7 methane innovation sprints were launched related to livestock and rice methane mitigation with total funding of \$123 million.
- **Highlighting Ambitious National Actions:** In the EU, the new Common Agricultural Policy starting in 2023 increases the emphasis on climate action, including methane from livestock. The EU has published a Biomethane Actions Plan with the goal of doubling production to reach 35 billion cubic meters by 2030.

GMP Waste Pathway

- **Enhancing Measurement and Tracking:** Carbon Mapper will use airborne and space-based instruments to develop a global waste sector methane baseline assessment of over 10,000 landfills and dumpsites. RMI and Clean Air Task Force will develop an open-source Waste Methane Assessment Platform with waste sector information to drive methane action.
- **Scaling up Subnational Action:** SCALE-Methane, a new initiative of the Subnational Climate Action Leaders' Exchange, will support accelerated subnational action on waste methane.
- **Reducing Food Loss and Waste:** a new USAID Food Loss and Waste Partnerships Facility will scale efforts in number of developing countries.
- **Mobilizing Investment:** The initiatives outlined above will focus on removing barriers to and scaling up investment in waste methane abatement.

Progress in the implementation of the GMP

National methane targets and policies (standalone action plans or as part of NDCs), **are critical to achieving the GMP**

- More than 50 countries have methane action plans or are working to develop them. These plans include major new policies and initiatives.
- The EU has issued a methane action plan covering its 27 member states.
- ***Support for continued national planning and implementation:*** The Climate and Clean Air Coalition (CCAC), a core implementing partner of the GMP, has launched a Methane Roadmap Action Program to support national planning and policies, sector-specific and country specific-mitigation needs, and national capacity building and institutional strengthening. In 2022, the CCAC approved methane-related support for 27 countries.

Implementation of the GMP in CA

- Kyrgyzstan joined the GMP
- Uzbekistan joined the GMP in May 2022 - Development of national methane emissions programme (under the EBRD assistance). Domestic actions focused on energy, solid waste and agribusiness sectors, based on close cooperation with international partners
- Tajikistan – The Government will determine its position after conducting the assessment
- Turkmenistan - In November 2022, SECCA assisted the Government in organization of International workshop “Green energy and EU strategies for the use of hydrogen and the reduction of methane emissions”. Discussion on the accession of the GMP ongoing

Brief Overview of Methane Emissions in Kazakhstan

- According to the National GHG Inventory, in 2020, total GHG emissions in Kazakhstan amounted to 351.24 million tons of CO₂-eq., including LULUCF (Land Use, Land Use Change and Forestry)
- Methane emissions in 2020, amounted to 1 million 742 thousand tons (43 million 600 thousand tons of CO₂-eq.): Agriculture - 53%; Energy - 30.6%; Waste - 16%; Land use and industrial processes - 0.4%
- In 2021, methane emissions amounted to 2 million 400 thousand tons (59 million 977 thousand tons in CO₂-eq.). Energy - 49.5%, agriculture - 40.58%, waste - 9.81%, land use and industrial processes sector - 0.1%.

The data on GHG emissions were provided by the experts of Green Academy and IGTIC

Methane Emissions Considered in the NDC of Kazakhstan

- In general, 95 % of NDCs now include methane or will by in their next revisions
- More than 70 GMP-endorsing countries included targeted methane reduction measures in their NDCs
- According to the updated NDC of Kazakhstan, submitted on June 27, 2023, “Several actions have already been planned in the 2021-2030 Action Plan. Actions already partially undertaken in the agricultural sector include [...] change in fodder for animals to reduce methane emissions from cattle and prevention of overgrazing”

Roadmap for the implementation of the updated NDC of Kazakhstan for 2021-2025

- In February 2021, under the World Bank's project "Updating Kazakhstan's NDC and Development of a Roadmap for the Implementation of NDCs beyond 2020", JSC "Zhasyl Damu" in partnership with the international consulting company Ernst & Young, has developed the Roadmap for the implementation of the updated NDC for 2021-2025
- Sectoral targets were established and decarbonization measures identified for:
 - Coal mine methane utilization for power and heat supply
 - Production of motor fuel from coal mine methane and coalbed methane
 - Utilization of methane from abandoned and closed mines
 - Landfill methane capture for electricity and heat generation

Planned Assistance of SECCA in Assessing the advantages for Kazakhstan to join the GMP

SECCA will provide a short-term expert support focused on:

- Analysis of methane emissions dynamics for 1990-2021 by sectors
- Development of scenarios of methane emissions up to 2030, taking into account NDC
 - determination of the baseline scenario of methane emissions by sectors
 - development of the scenario of methane emissions by sectors taking into account NDC
 - justification of mechanisms and measures to reduce methane emissions by sectors of by 2030

Preparation materials for ppt presentation



THANK YOU FOR YOUR ATTENTION!