

Methane is a carbon unit of the Kazakhstan Emissions Trading System?

National Methane Forum

July 5, 2023





Cap and trade

Type of system launched
in 2013



CO2

Type of greenhouse
gas in the system



199

Number of installations in the
system



175.2

Volume of GHG emissions
covered by the system, million
tons of CO2



20 000

Participation threshold,
tons CO2



Industry
Energy

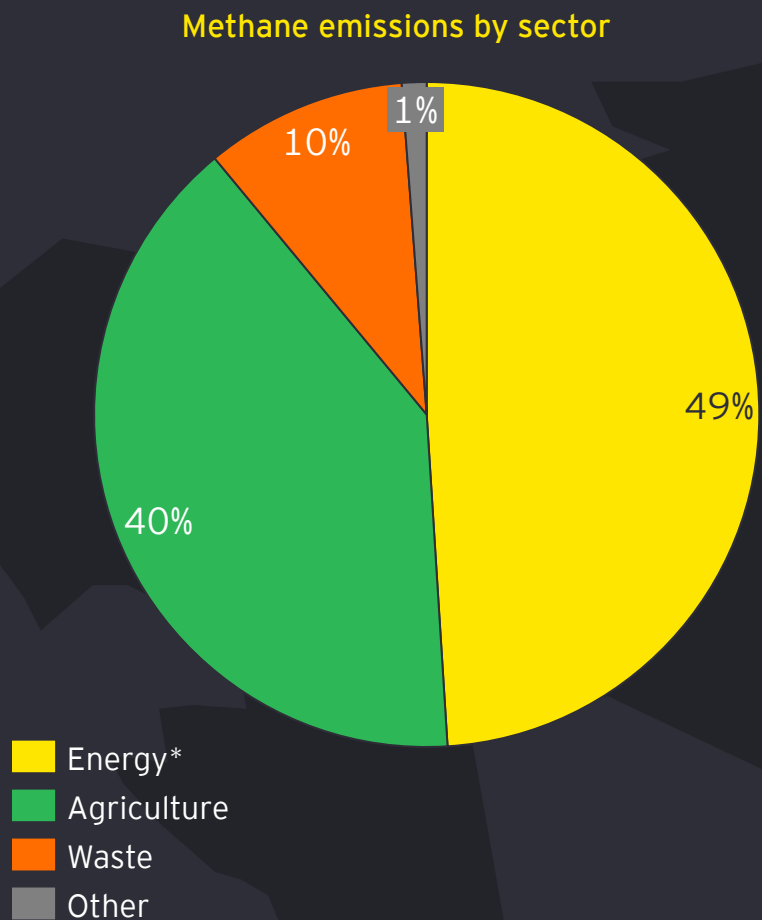
Sectors in the system

-15%

2030 г.

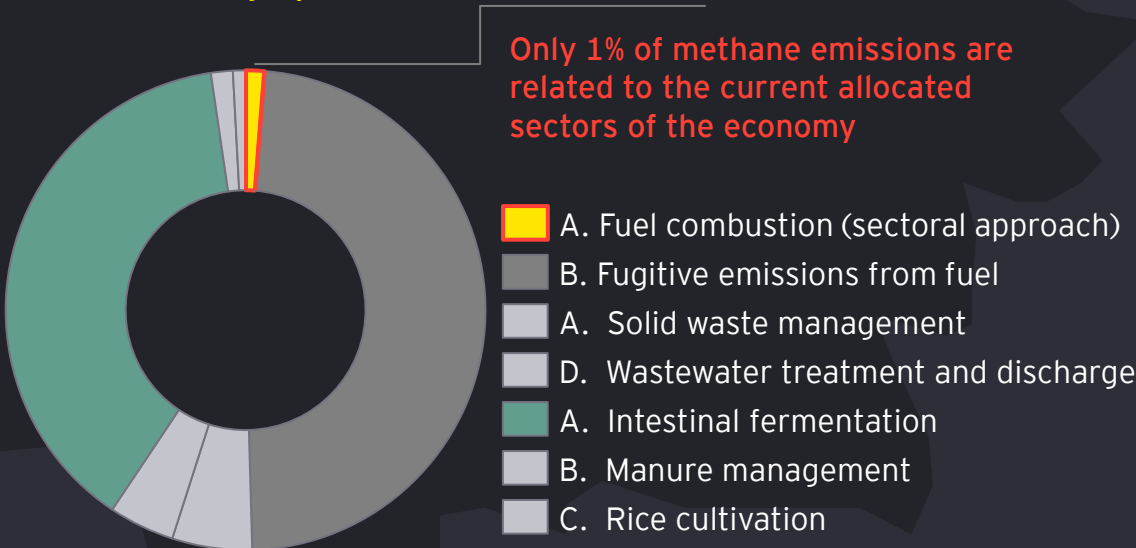
The only tool for carbon
regulation

Methane (CH₄) emissions in Kazakhstan in 2021, according to the UNFCCC












59.9 MtCO₂e

Methane emissions by sector category



Regulation of methane (CH4) emissions in the emissions trading system

Страна									
ETS	Korean ETS	New Zealand ETS	Alberta OBPS	Canada Nova Scotia	Canada Quebec	USA California Cap and Trade	USA Oregon	USA Washington	China Chongqing pilot system
GHG	CO2, CH4 , N2O, PFCs, HFCs, SF6	CO2, CH4 , N2O, SF6, HFCs, PFCs	CO2, CH4 , N2O, NFCs, SF6, PFCs, NF3	CO2, CH4 , N2O, SF6, NF3, HFCs, PFCs	CO2, CH4 , N2O, SF6, HFCs, PFCs, NF3	CO2, CH4 , N2O, SF6, HFCs, PFCs, NF3	CO2, CH4 , N2O and HFCs, PFCs, SF6, NF3	CO2, CH4 , N2O, SF6, HFCs, PFCs, NF3	CO2, CH4 , N2O, HFCs, PFCs, SF6
Cap/ Total emissions, million tons of CO2-e	589,3/727	32.2 /78.8	-/153.9	12.1/14,6	52.8/74.1	294.1/ 369.2	28/62	63 /102.1	78.39/ 142.89
Sectors	<ul style="list-style-type: none"> ▸ Industry ▸ Energy ▸ Waste ▸ Domestic aviation ▸ Transport ▸ Building 	<ul style="list-style-type: none"> ▸ Industry ▸ Energy ▸ Waste ▸ Domestic aviation ▸ Transport ▸ Building ▸ Forestry 	<ul style="list-style-type: none"> ▸ Industry ▸ Energy 	<ul style="list-style-type: none"> ▸ Industry ▸ Energy ▸ Transport ▸ Building 	<ul style="list-style-type: none"> ▸ Industry ▸ Energy ▸ Transport ▸ Building 	<ul style="list-style-type: none"> ▸ Industry ▸ Energy ▸ Transport ▸ Building 	<ul style="list-style-type: none"> ▸ Industry ▸ Energy ▸ Transport ▸ Building 	<ul style="list-style-type: none"> ▸ Industry ▸ Energy ▸ Transport ▸ Building 	<ul style="list-style-type: none"> ▸ Industry

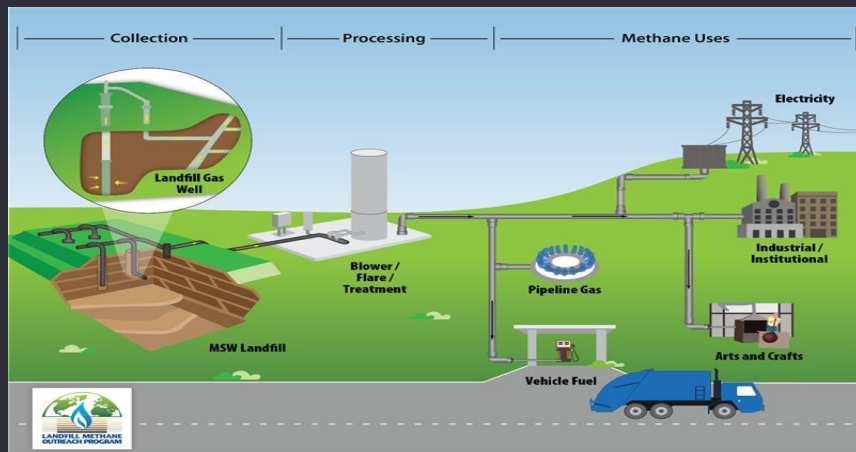


Alberta Offset System

Approved protocols (methods):

- 19 approved protocols;
- Verification by independent auditors in accordance with ISO approaches;
- The offset price is pegged to the price set by the regulator for OBPS loans (65 CAD in 2023).
- 55.3 MtCO₂-eq of offsets and 270 offset projects are registered in the system (8.5 MtCO₂-eq are active).

A study of world practice shows that it is possible to implement offset projects related to methane emissions to generate carbon units that can be used by plant operators to offset liabilities.



Methodologies for offset projects in the field of reducing methane emissions

Aerobic Composting Quantification Protocol

Quantification protocol for an aerobic bioreactor at a landfill

Biofuel Production and Use Quantification Protocol

Biogas Production and Combustion Quantification Protocol

Energy production from waste biomass combustion

Protocol for the Quantification of Greenhouse Gas Emission Reductions from Pneumatic Devices

Landfill Gas Capture and Flare Quantification Protocol

Protocol for Quantifying Greenhouse Gas Emission Reductions from Fattened Cattle

Quantification Protocol for Selection of Low Residual Feed Consumption in Beef Cattle

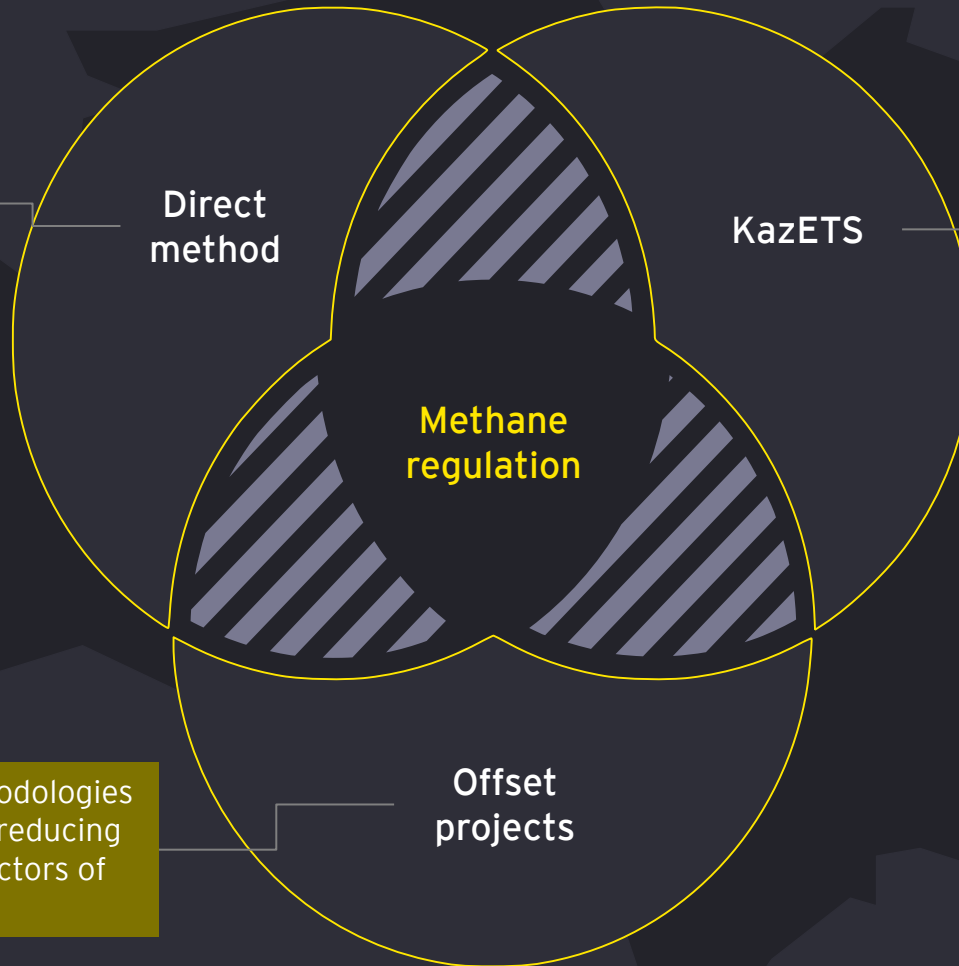
Protocol for quantifying the reduction of off-gas emissions

Regulation of methane emissions in Kazakhstan



Establishment by the state of direct obligations to reduce methane emissions, implementation of:

- ▶ LDAR programs in Oil and Gas sector are part of the Fir for 55 in the EU - not guaranteed to be covered by EU ETS;
- ▶ MRV - quality improvement (core);
- ▶ Orders/permits, state strategies;



Expansion of the existing ETS by:

- ▶ Cover of methane in ETS;
- ▶ Allocate the agriculture and the waste sector in the future;
- ▶ Regulation of fugitive (fugitive) methane emissions from the industry and energy sector;

Development / approval of methodologies for offset projects in the field of reducing methane emissions in various sectors of the economy

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