

Akademia WSB

Dąbrowa Górnicza, Gliwice, Olkusz, Żywiec, Kraków

WSB University

National Technical University of Ukraine
"Igor Sikorsky Kyiv Polytechnic Institute"



**VSB TECHNICAL
UNIVERSITY
OF OSTRAVA**

supported by

Visegrad Fund

The Ecological Environment of Ukraine as a Factor in Climate Change within the Context of Achieving SDGs

Alla GRECHKO, Oksana KAVTYSH



**PAN-EUROPEAN
UNIVERSITY**



UNIVERSITY OF ŽILINA
Faculty of Mechanical
Engineering

No. 22320037

www.visegrad.fund

Forecasting factors influence on climatic changes as a part of Sustainable Development Goals 2030



National Technical University of Ukraine «Igor Sikorsky Kyiv Polytechnic Institute»

supported by

• Visegrad Fund



Our team



*Alla
GRECHKO
Professor*



*Oksana
KAVTYSH
Associate
Professor*



*Nataliia
KUZMINSKA
Associate
Professor*



*Valentina
MARCHENKO
Professor*

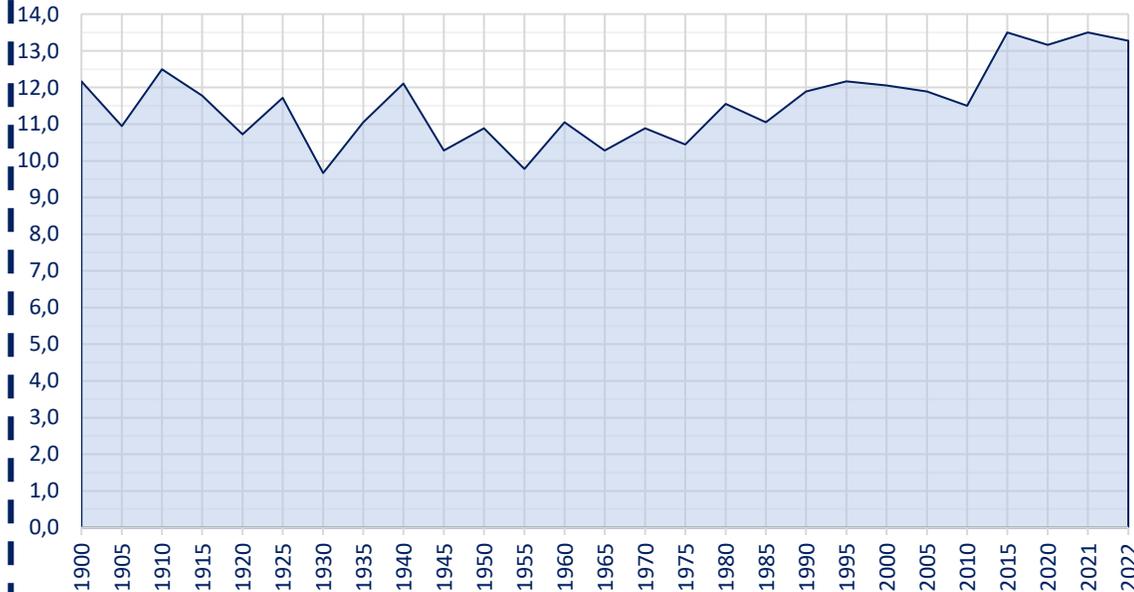


Global air temperature

supported by

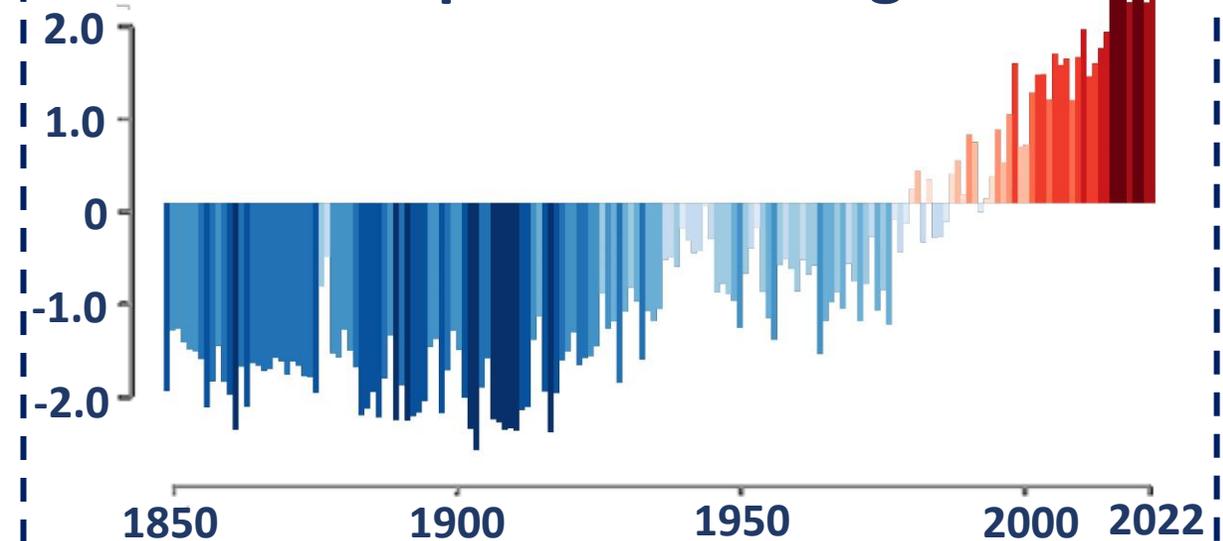
- Visegrad Fund
- •

Average year



<http://www.cgo-sreznevskyi.kyiv.ua/en/activity/klimatolohichna/16-klimatolohiia/317-climate-data-for-ukraine>

Temperature change



<https://www.nci.noaa.gov/>

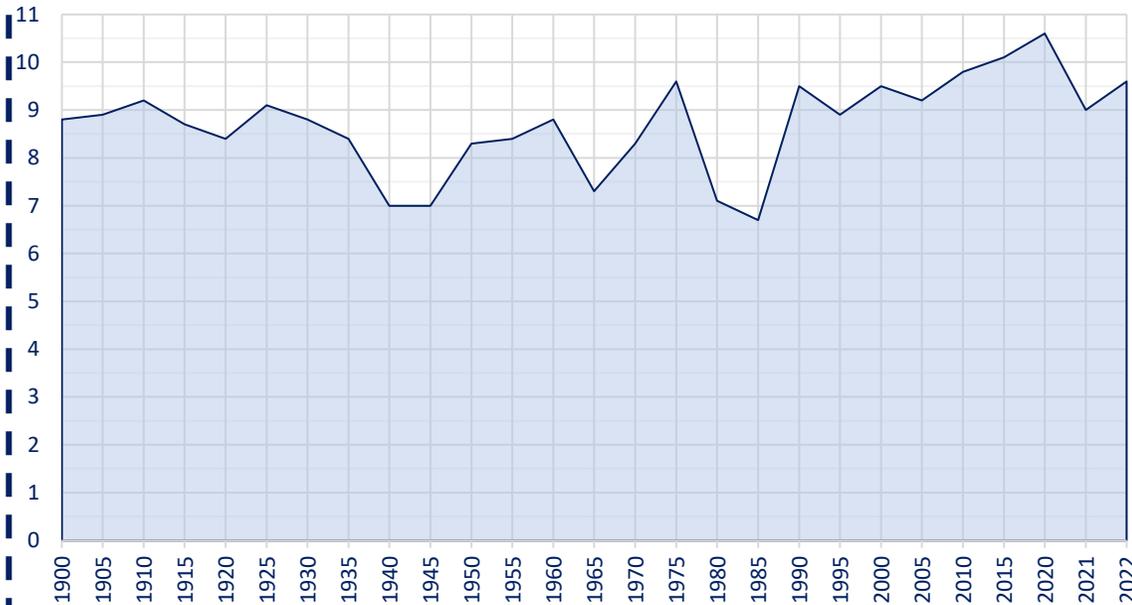


Air temperature in Ukraine

supported by

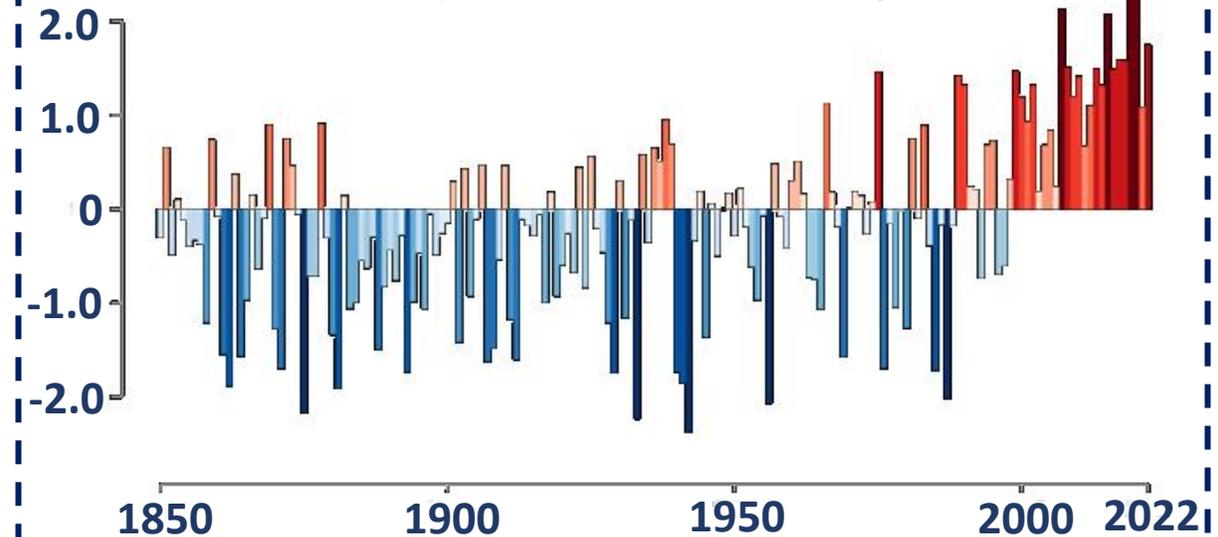
- Visegrad Fund
- •

Average year



<http://www.cgo-sreznevskiy.kyiv.ua/en/activity/klimatolohichna/16-klimatolohiia/317-climate-data-for-ukraine>

Temperature change

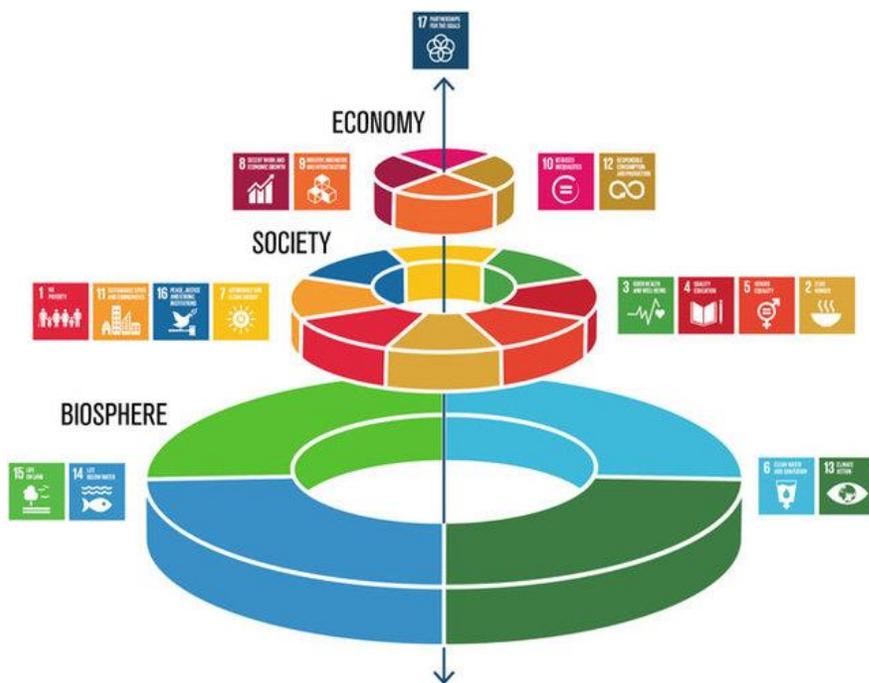


<https://showyourstripes.info/c/europe/ukraine/all>



Clustering of the SDGs that relate to the biosphere (earth life supporting system), society and economy

Draft Sustainable Development Strategy of Ukraine until 2030 goal is ensuring a high level and quality of life for the population of Ukraine, creating an environment conducive to the activities of current and future generations, and stopping the degradation of natural ecosystems by implementing a new model of economic growth based on the principles of sustainable development.



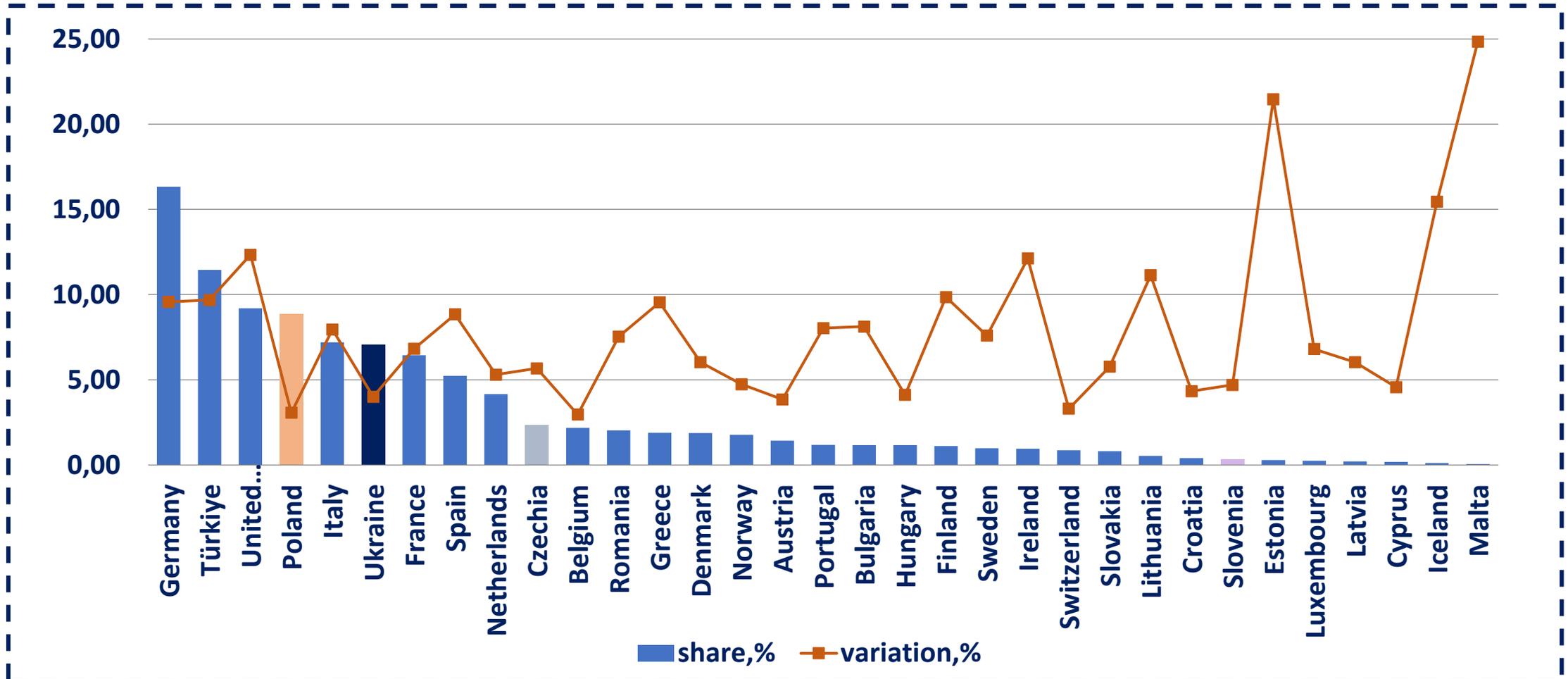
The Low emission development strategy (LEDS) goal is to determine strategic directions for Ukraine's economy **sustainable development** based on national priorities accordant transition to low emission growth trajectory.



Share of CO_2 Emissions in the Total Volume 2020 (variation 2016 – 2020)

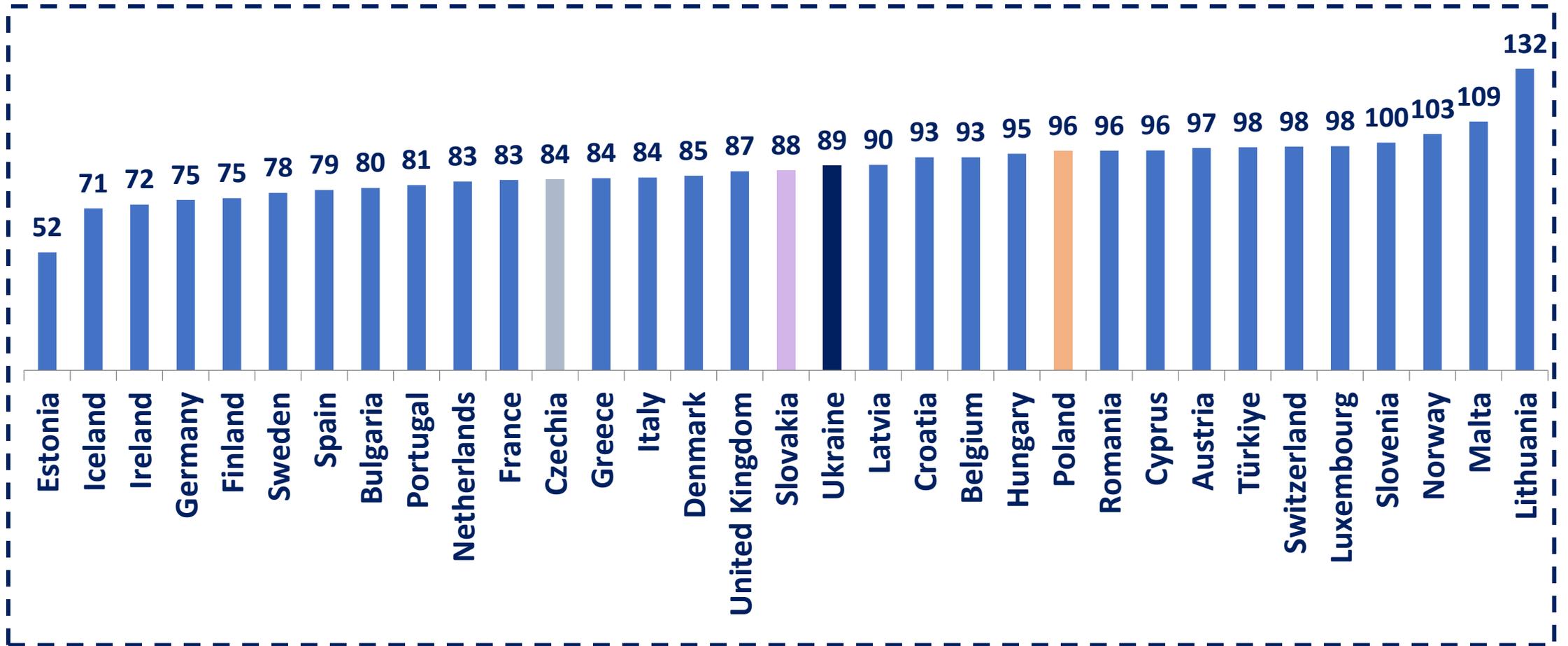
supported by

Erasmus+ / Erasmus Fund



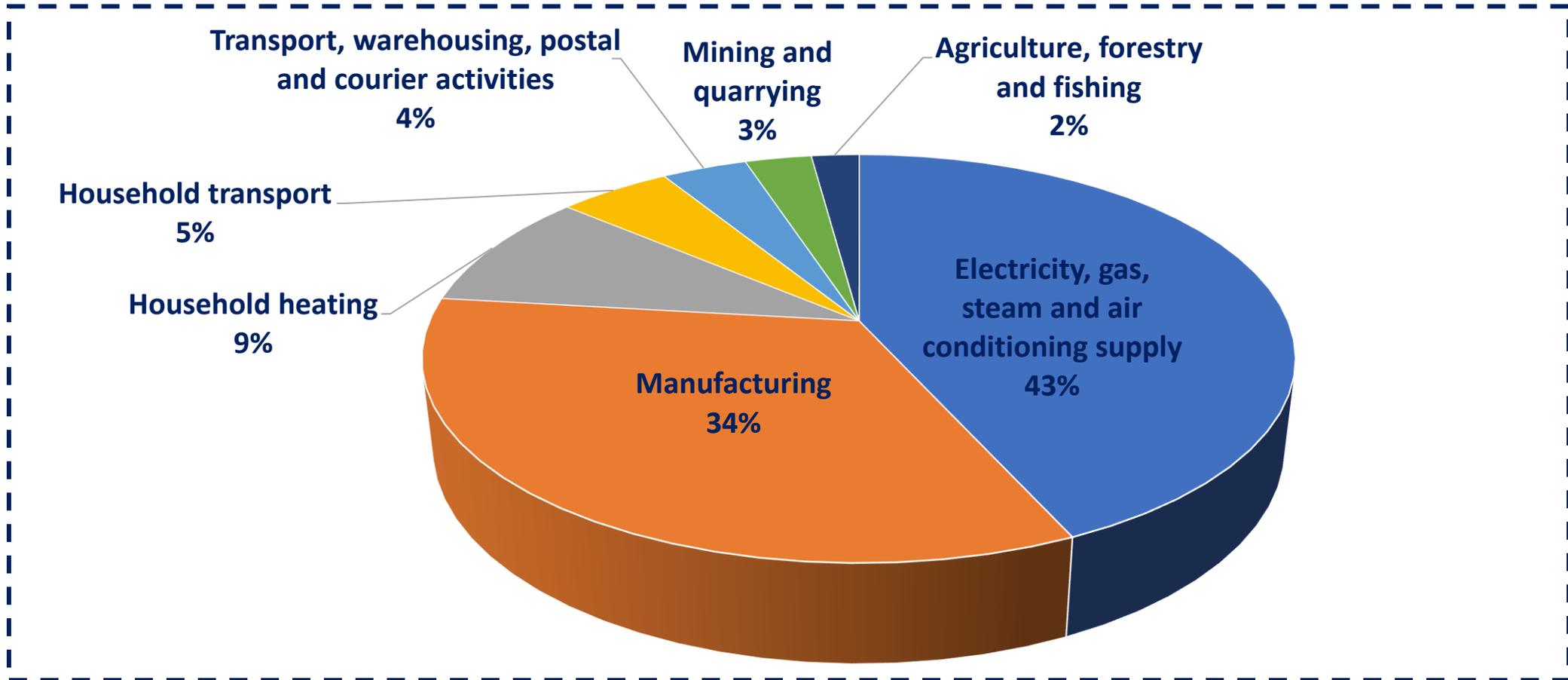


Rate of Change in CO_2 Emissions from 2016 to 2020, %





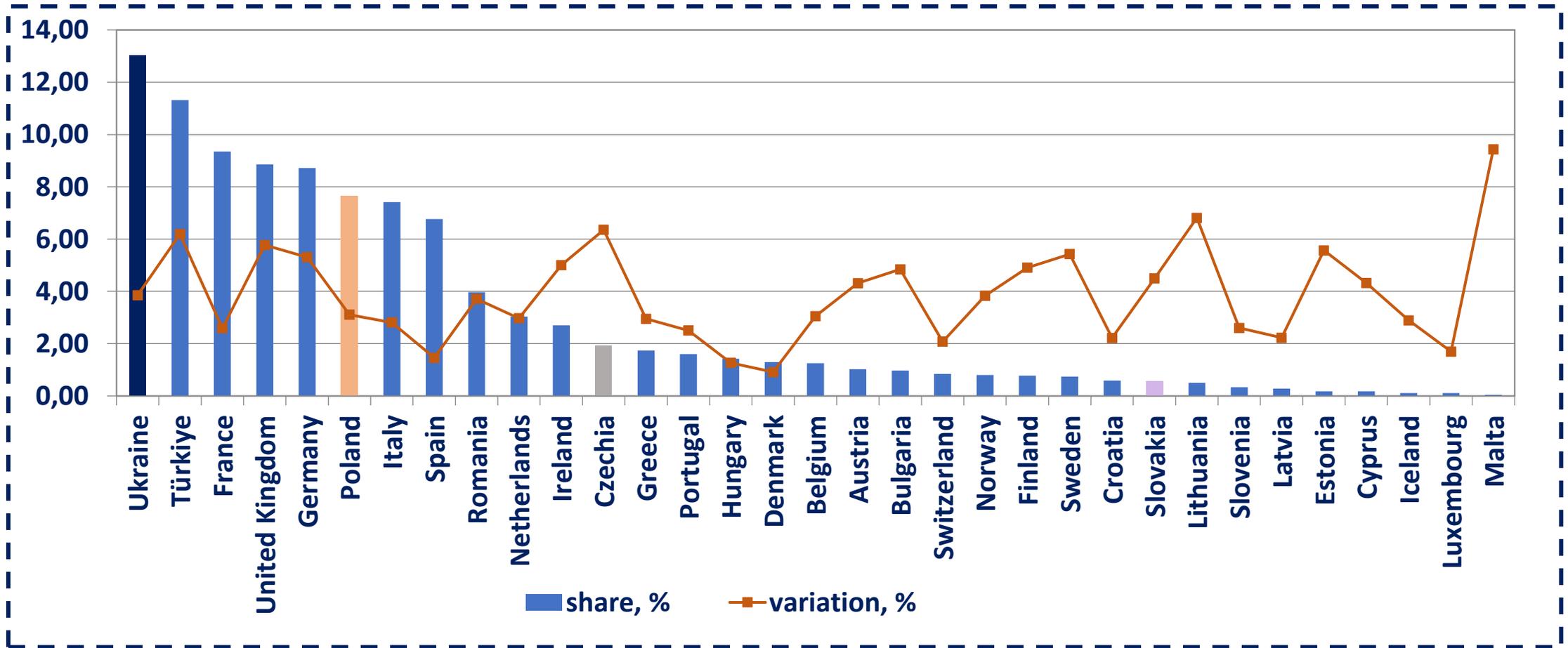
Structure of CO_2 Emissions by Economic Entities and Households into the Atmospheric Air in Ukraine 2020





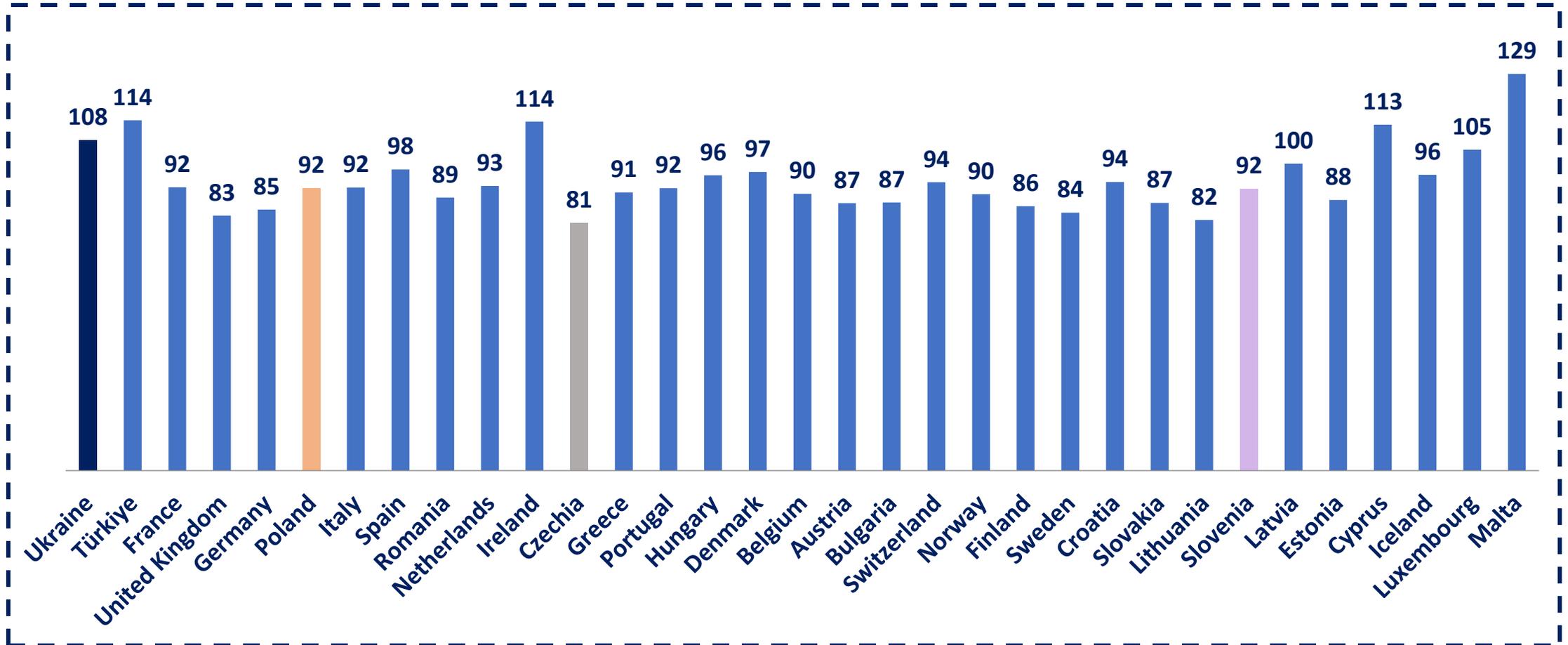
Share of Methane Emissions in the Total Volume 2020 (variation 2016 – 2020)

supported by
• Visegrad Fund





Rate of Change in Methane Emissions from 2016 to 2020, %

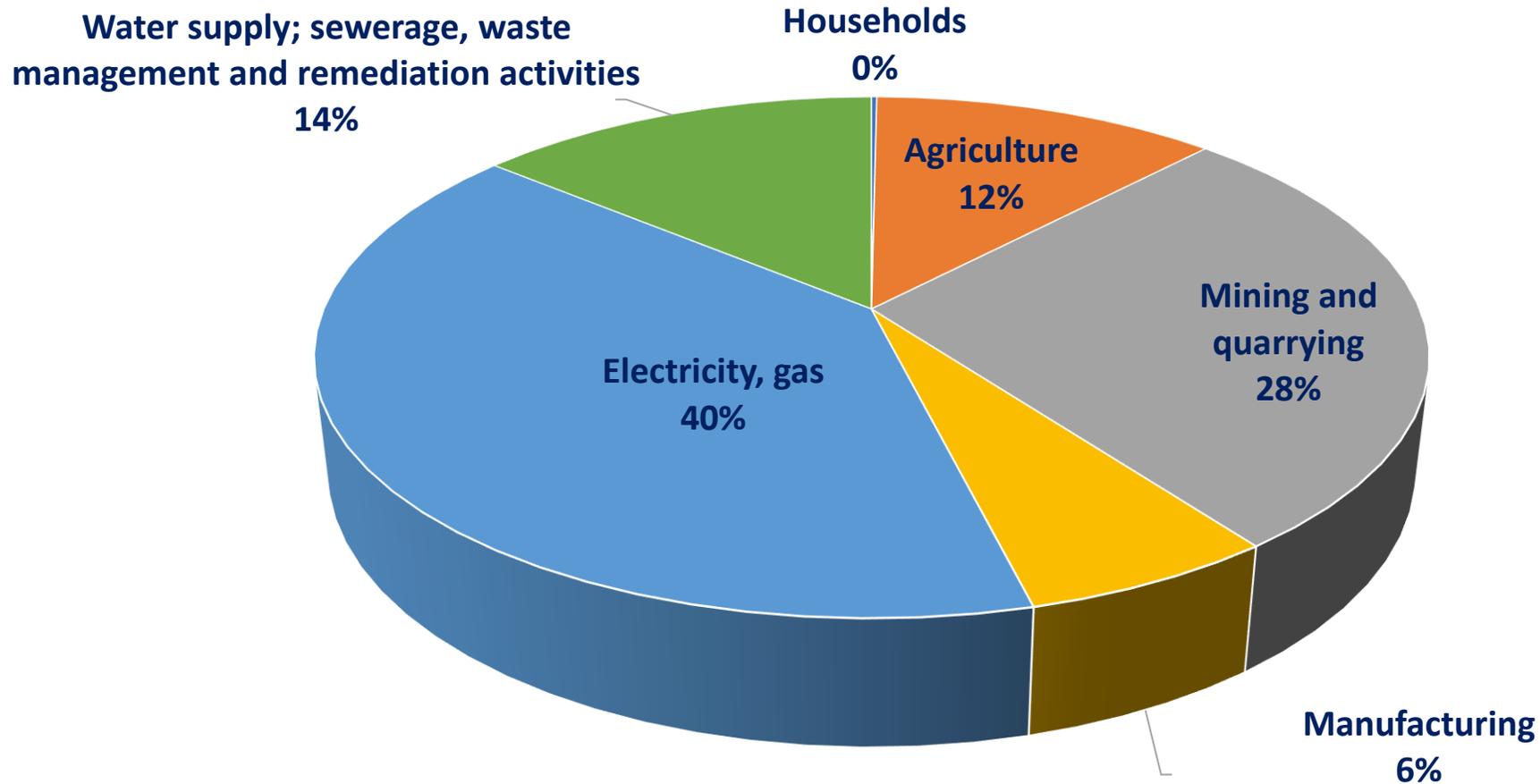




Structure of Methane Emissions by Sectors into the Atmospheric Air in Ukraine 2020

supported by

• Visegrad Fund

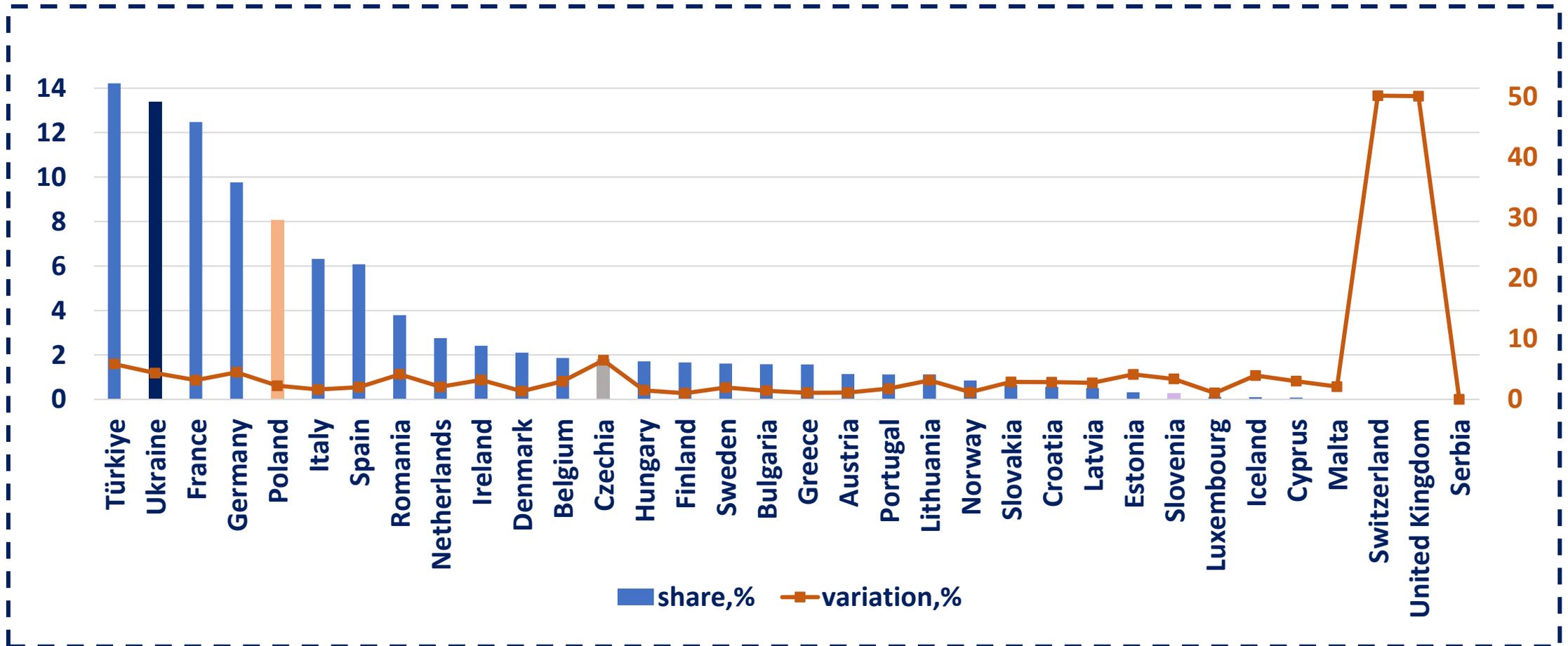




Share of N_2O Emissions in the Total Volume 2020 (variation 2016 – 2020)

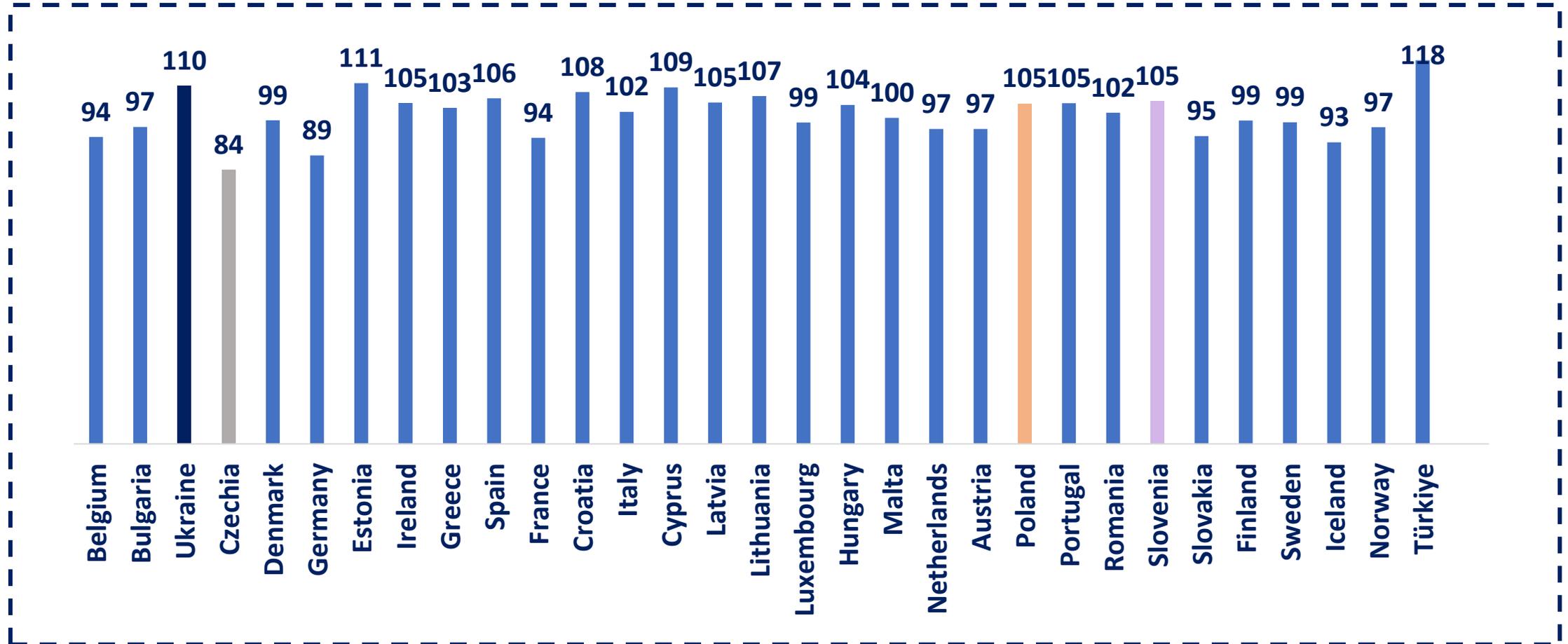
supported by

• Visegrad Fund





Rate of Change in N_2O Emissions from 2016 to 2020, %

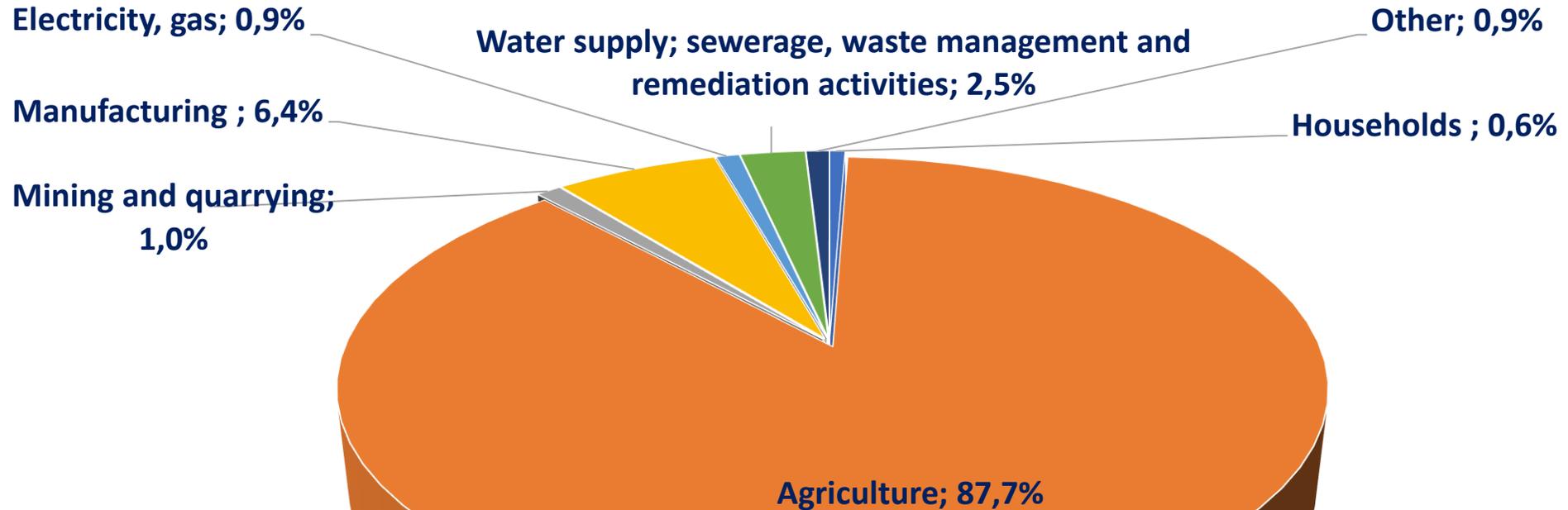




Structure of N_2O Emissions by Sectors into the Atmospheric Air in Ukraine 2020

supported by

• Visegrad Fund

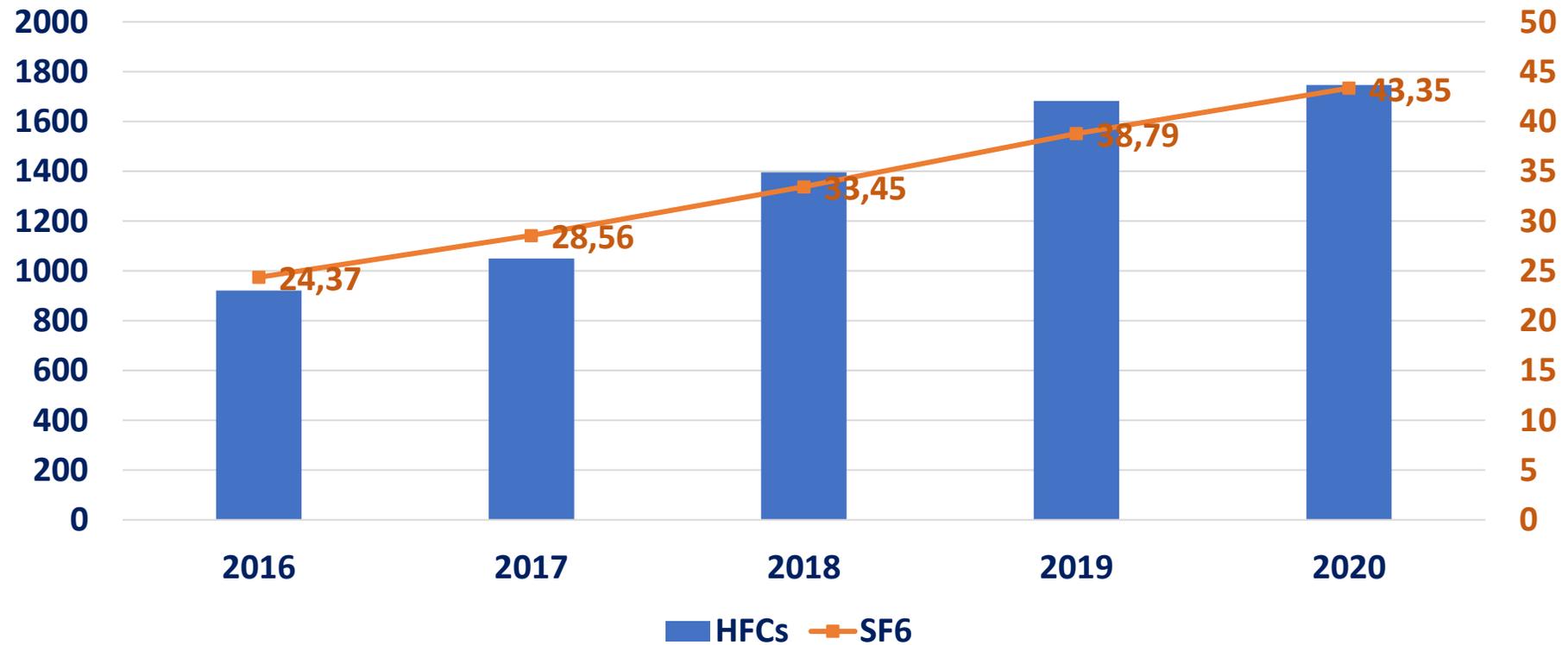




Emissions of *HFCs*, *SF₆* in Ukraine, kt *CO₂*-eq.

supported by

• Visegrad Fund

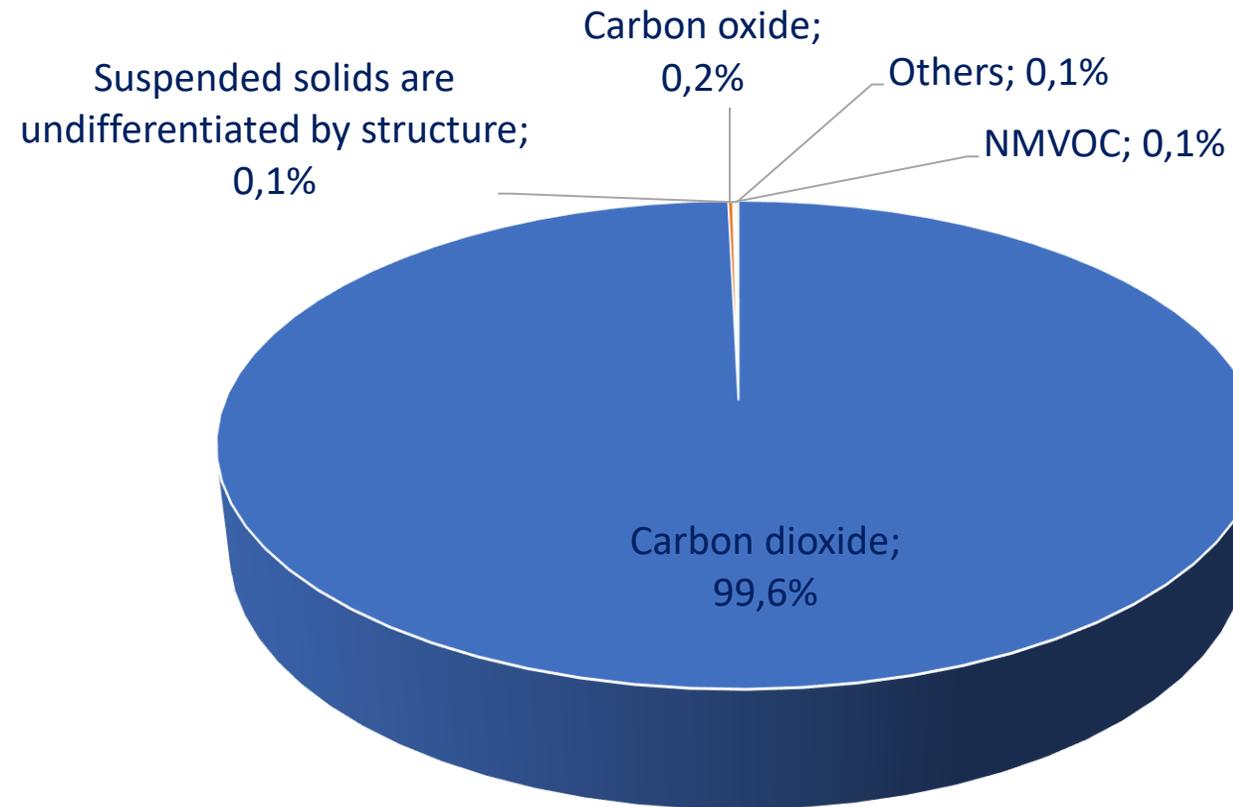




Structure of the pollutants Across All Types of Russian military hardware on 1.11.2023

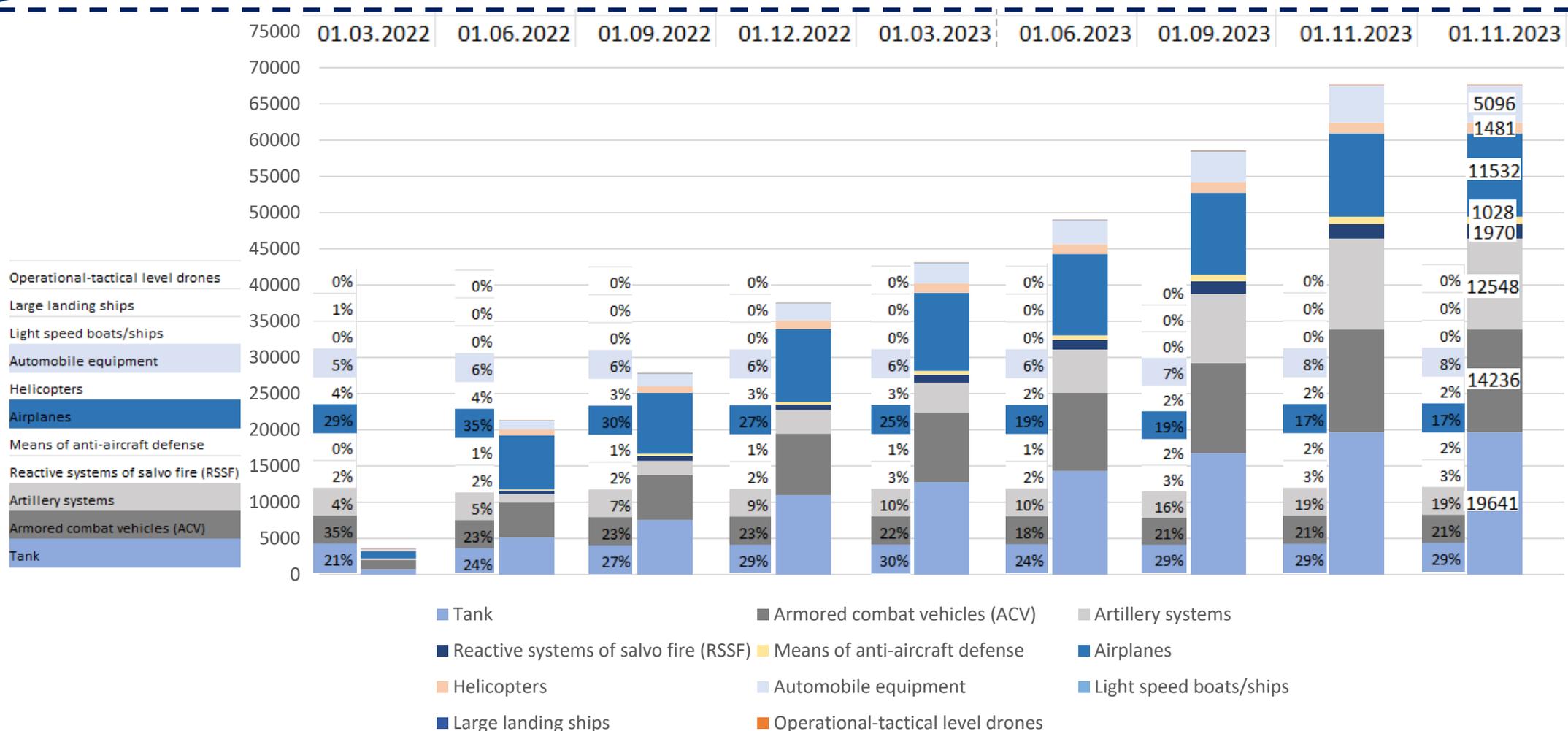
supported by

• Visegrad Fund





CO₂ (Carbon dioxide), tons





Damages Caused on 11.2023

supported by

- Visegrad Fund
- •

Atmospheric air

Land resources

Aquatic resources

	Discharge into atmospheric air, ton
Forest fires	4 330 569
Burning of other objects	5 926 937
Oil product fires	499 473
Emissions of poisonous substances into the air	97

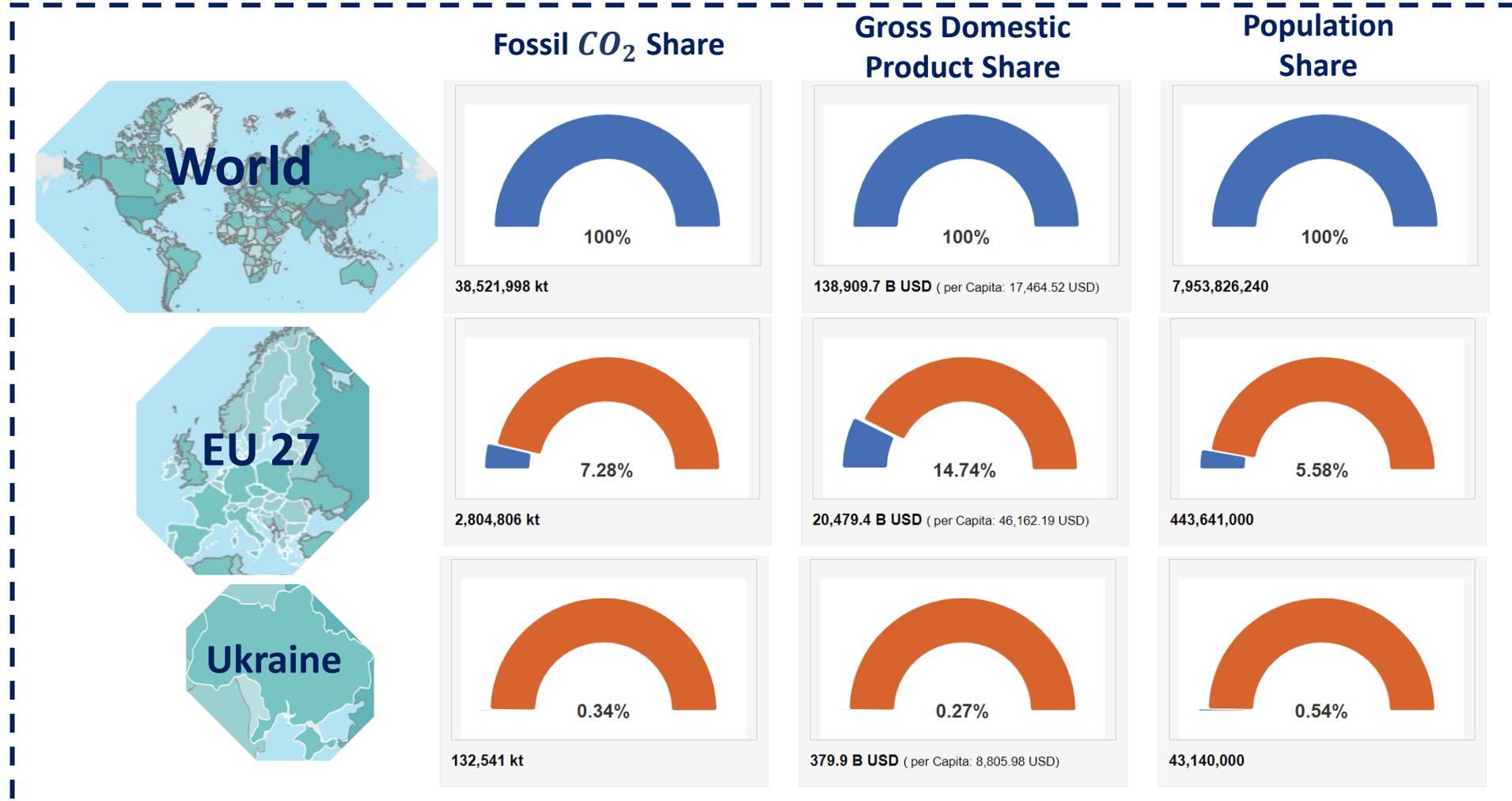
Clogging of lands	17 980 307 m ²
Soil pollution	615 767 m ²

Water pollution	1 682 ton
Clogging of water bodies	33 865 704 kg
Pollution of sea waters	66 ton
Arbitrary use of water	658 000 000 m ³

<https://ecozagroza.gov.ua/en>



Fact Sheets 2022





Greenhouse Gases 2022



World

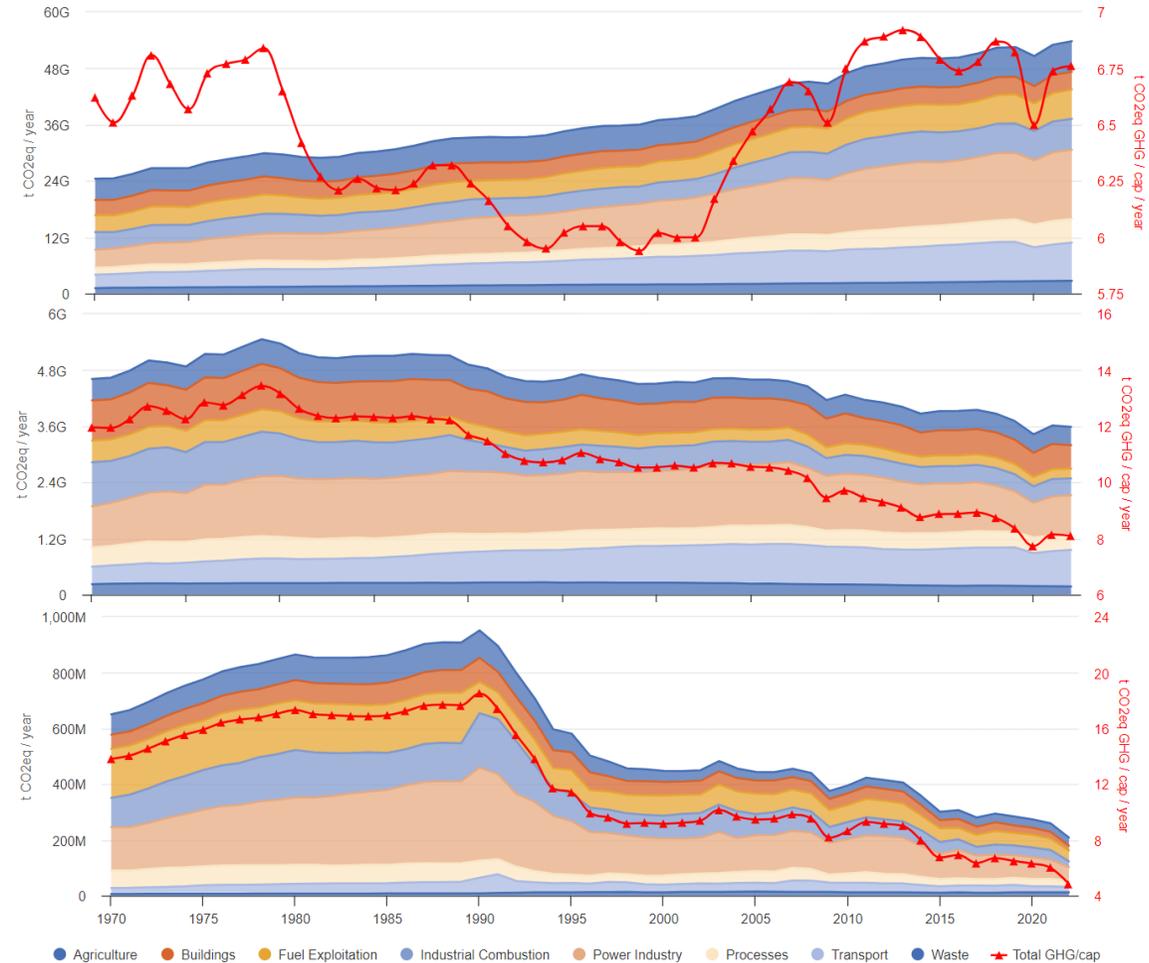


EU 27



Ukraine

GasesGHG emissions by Sector

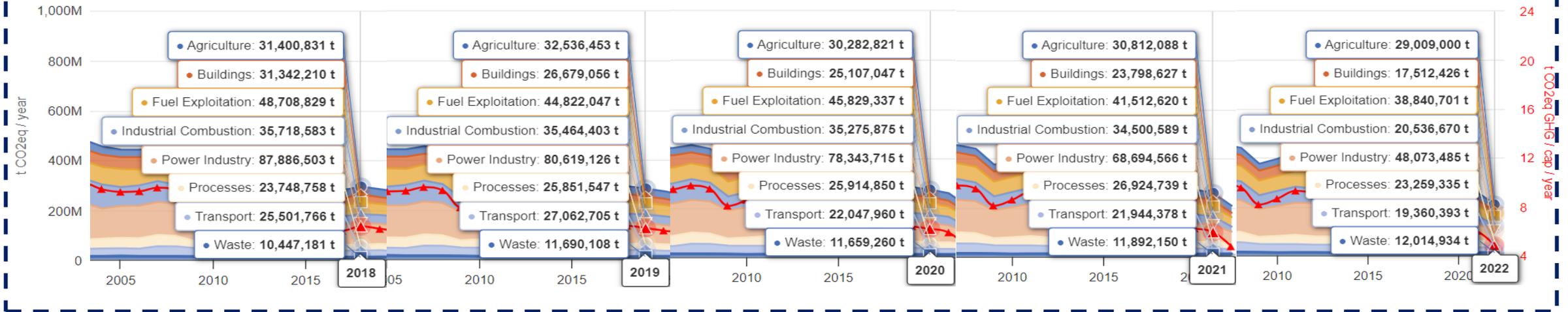




Ukraine Fact Sheet 2018 – 2022



GasesGHG emissions by Sector





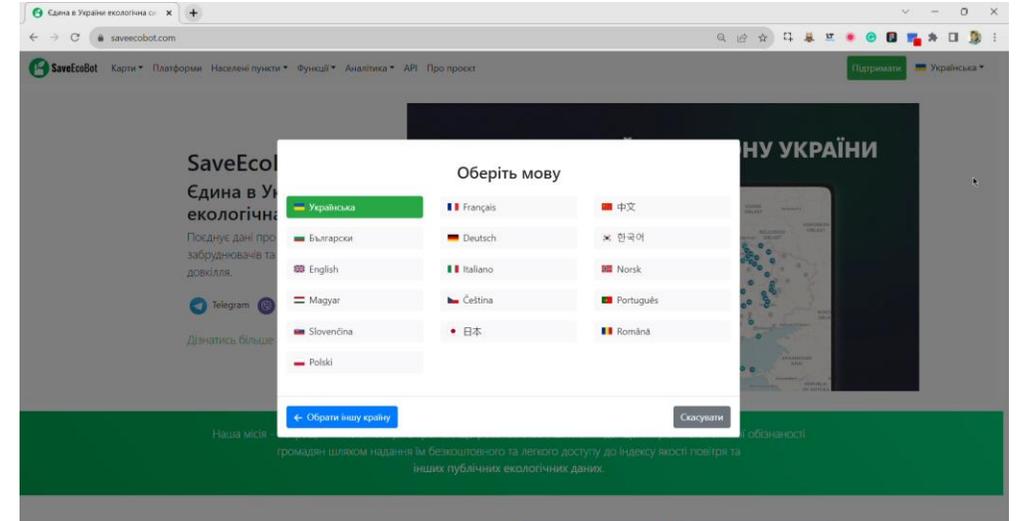
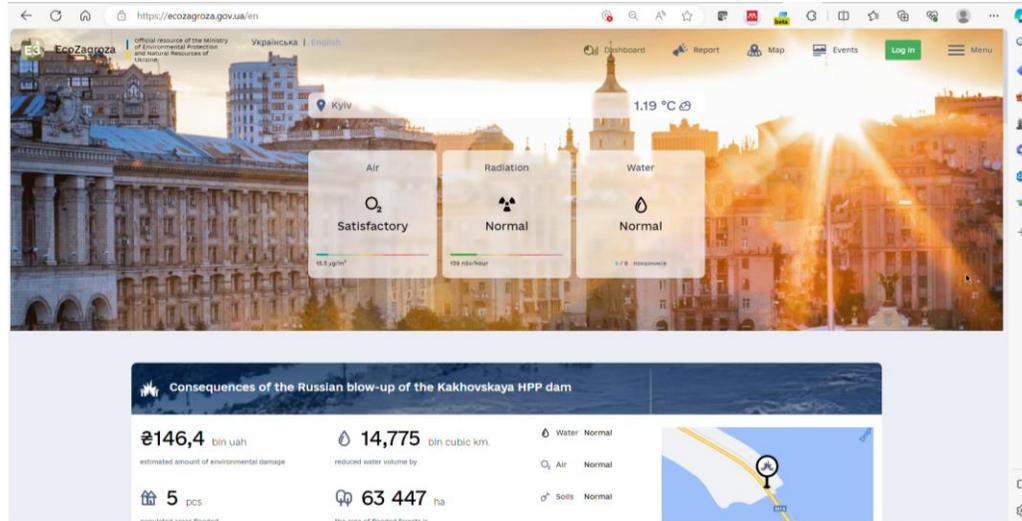
Sources of Statistics

<https://edgar.jrc.ec.europa.eu/>

<https://ec.europa.eu/eurostat>

<https://ecozagroza.gov.ua/en>

<https://www.saveecobot.com/en>





- Visegrad Fund
- •

Thank you for your attention

