



# Global Methane Tracker 2023

SPE Italian Section Methane Emission Event

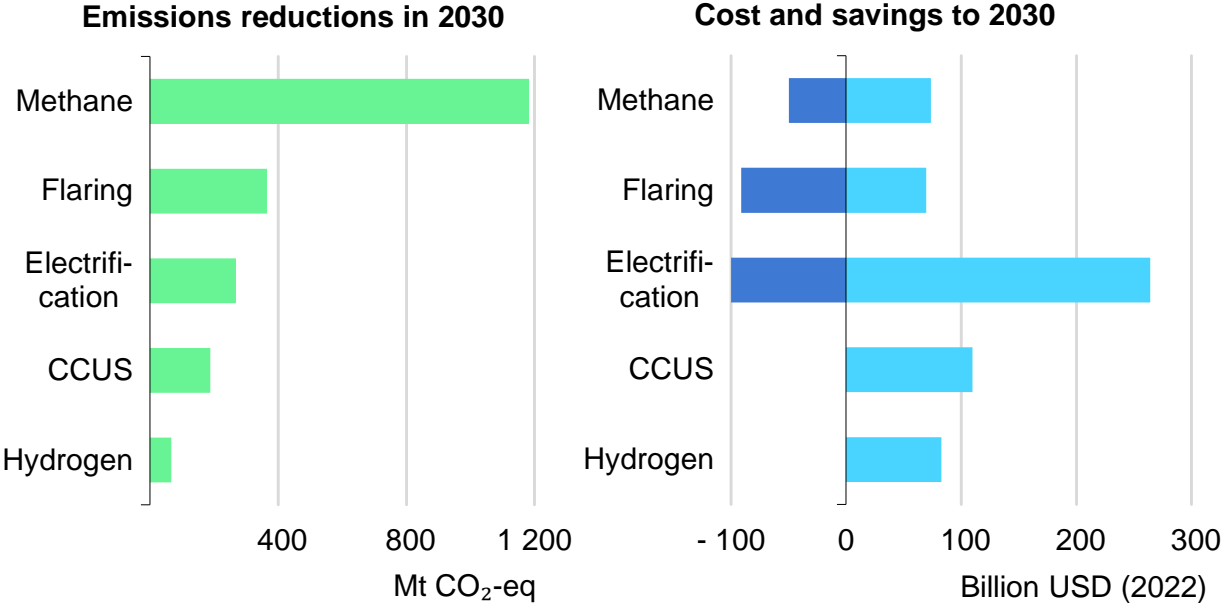
Tomás de Oliveira Bredariol, Energy and Environmental Policy Analyst

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# Emissions from Oil and Gas Operations in Net Zero Transitions

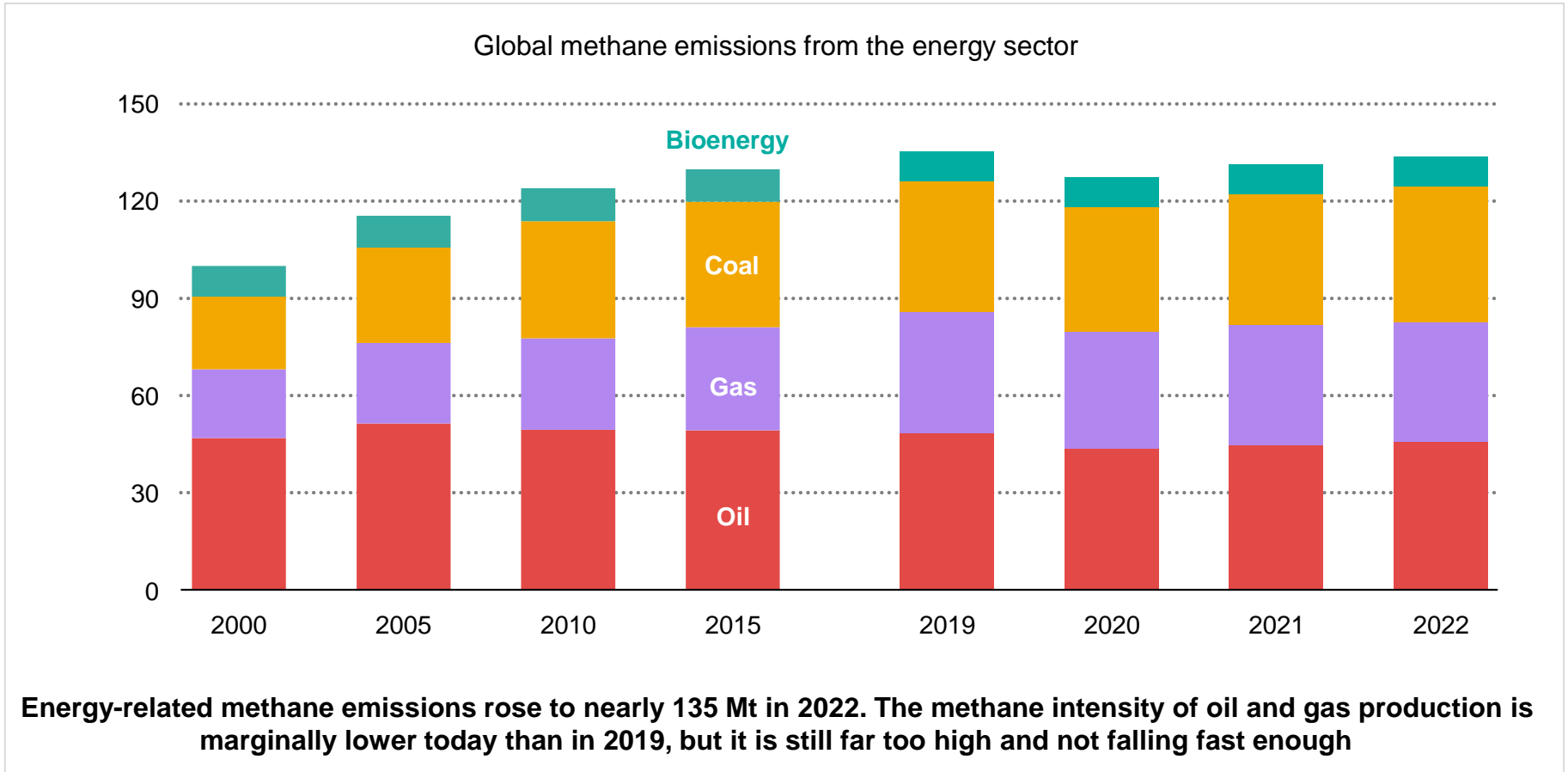


Reductions in emissions from oil and gas operations in 2030 in the NZE Scenario and cumulative cost and savings of deploying these measures from 2022 to 2030



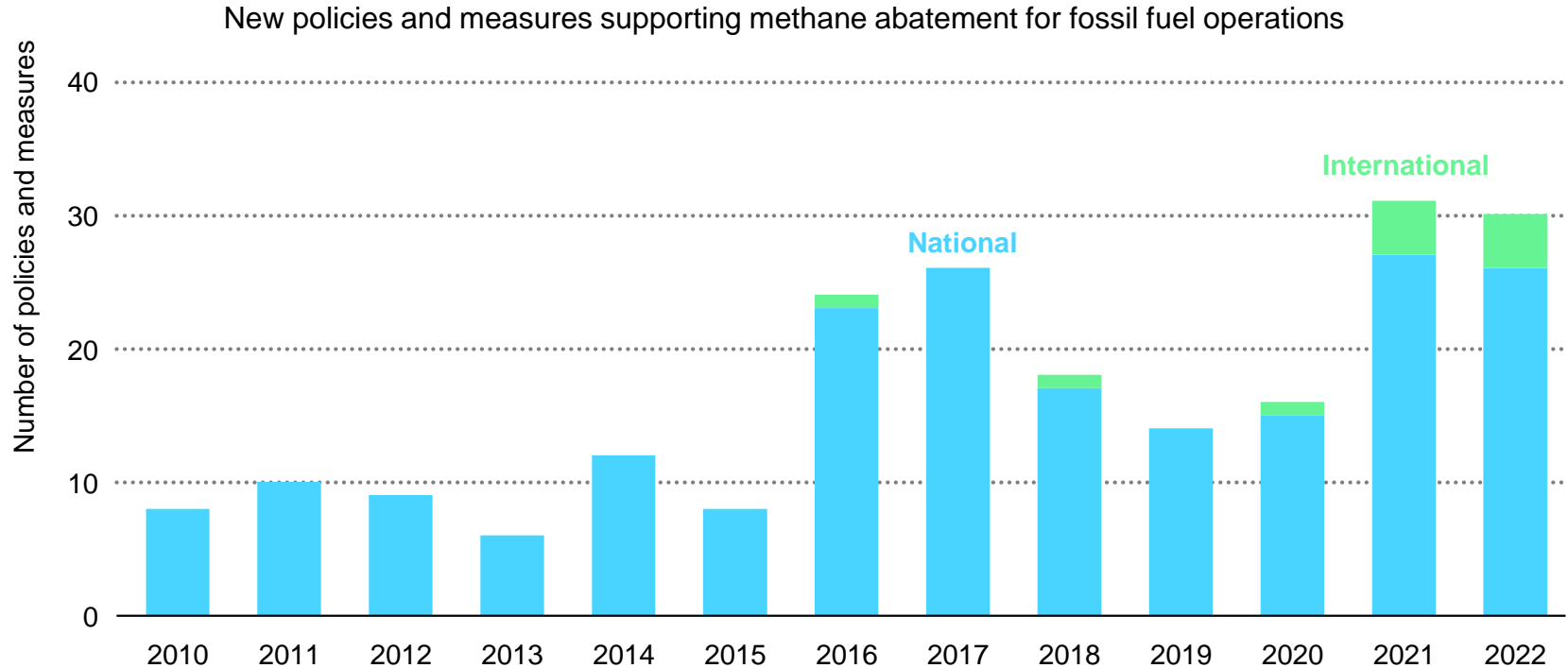
**Tackling methane emissions is the single most important measure that contributes to the overall fall in emissions from oil and gas operations in the Net Zero Emissions by 2050 Scenario**

# High gas prices in 2022 did not drive deep reductions in methane



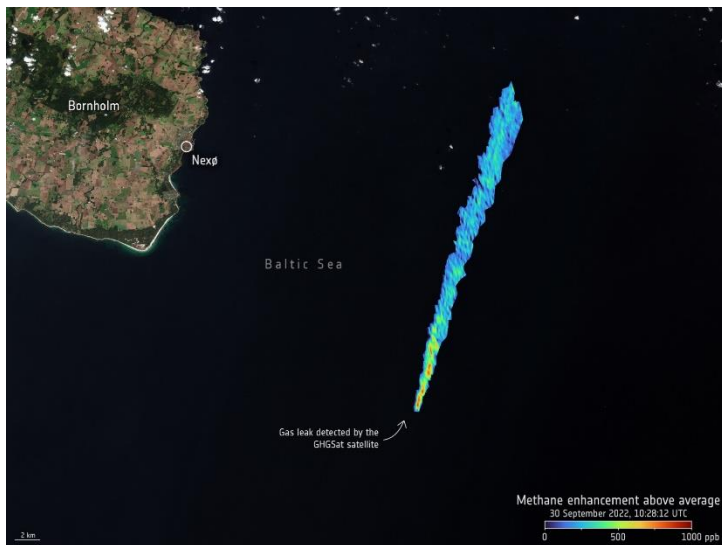
**Energy-related methane emissions rose to nearly 135 Mt in 2022. The methane intensity of oil and gas production is marginally lower today than in 2019, but it is still far too high and not falling fast enough**

# Methane action is gaining momentum, but needs to show results

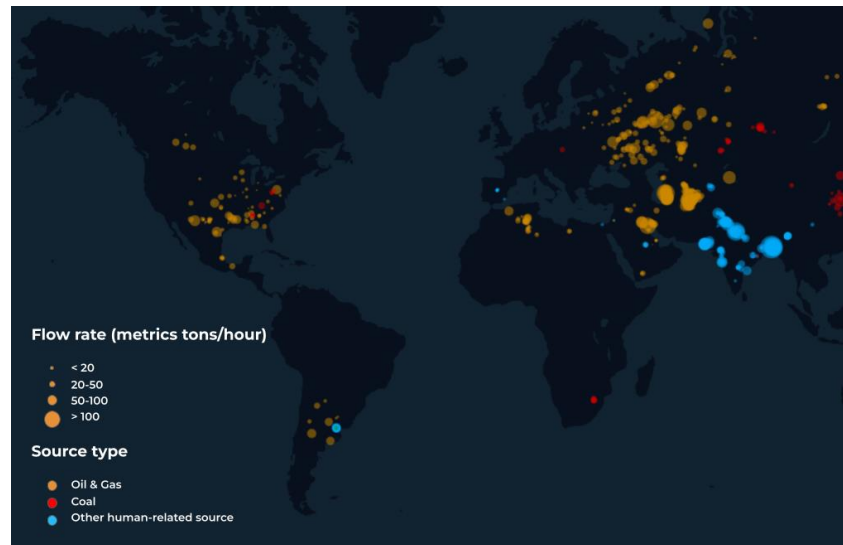


**Around 150 countries, representing 55% of methane emissions, have now signed the Global Methane Pledge. Fossil fuel producers need to step up and policy makers need to step in – and both must do so quickly**

## Nordstream leak and other super-emitting events, 2022



Source: GHGSat, 2022

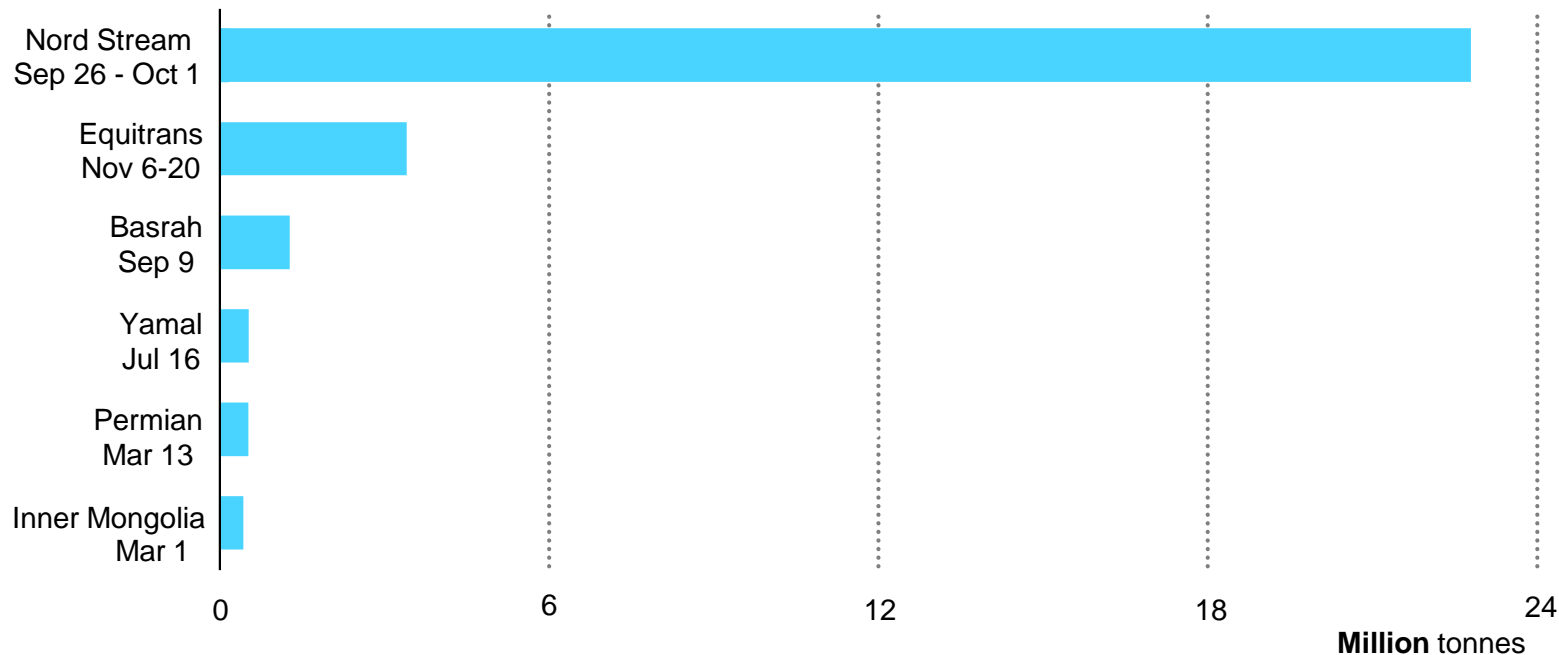


Source: Kayrros, 2023

**More than 500 super-emitting events were seen by satellites at oil and gas operations in 2022. Preventing and quickly addressing these very large leaks is a key opportunity to rapidly reduce emissions**

# Putting accidents and super-emitters into context

Methane emissions from oil and gas operations in selected countries and events, 2022



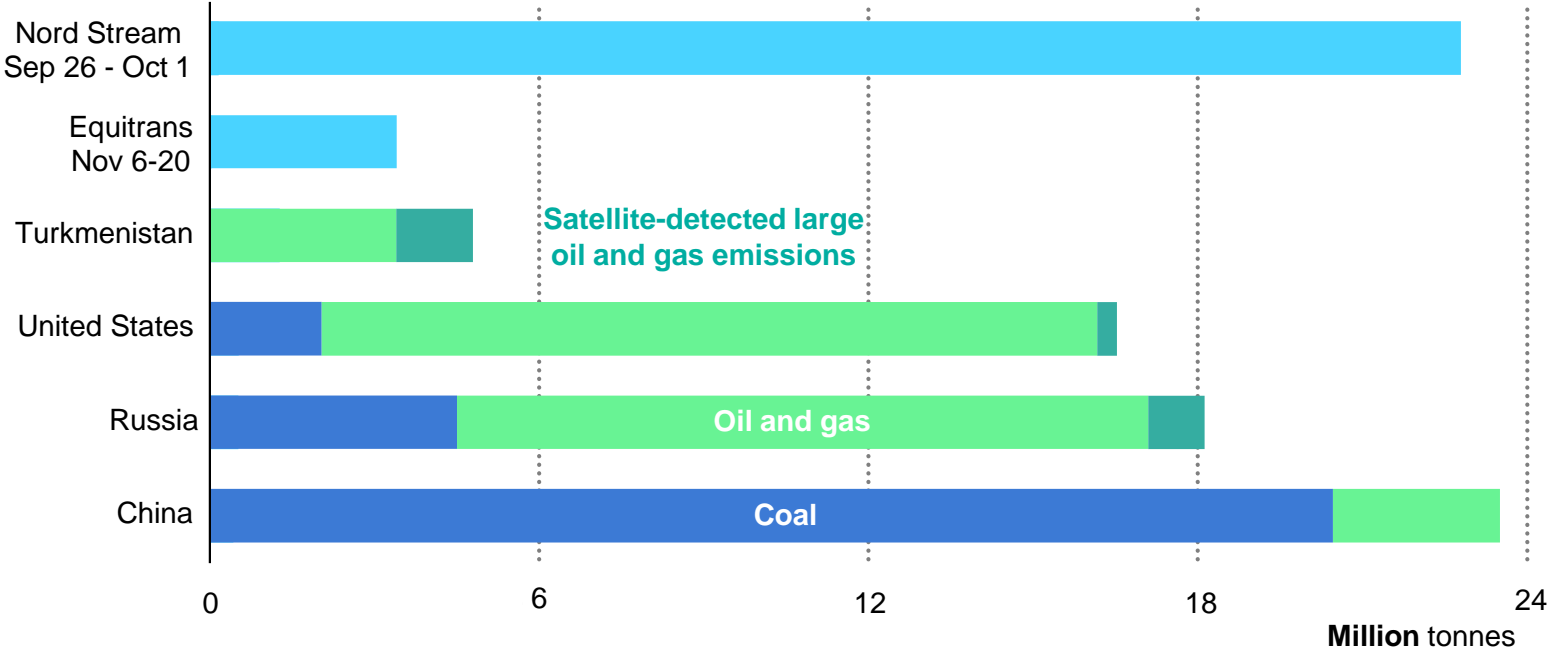
Source: IEA based on data from IMEO (2023), Kayrros (2023) and the Department of Environmental Protection of Pennsylvania (2022)

**The Nordstream pipeline explosion released a huge amount of methane**

# Putting accidents and super-emitters into context



Methane emissions from oil and gas operations in selected countries and events, 2022

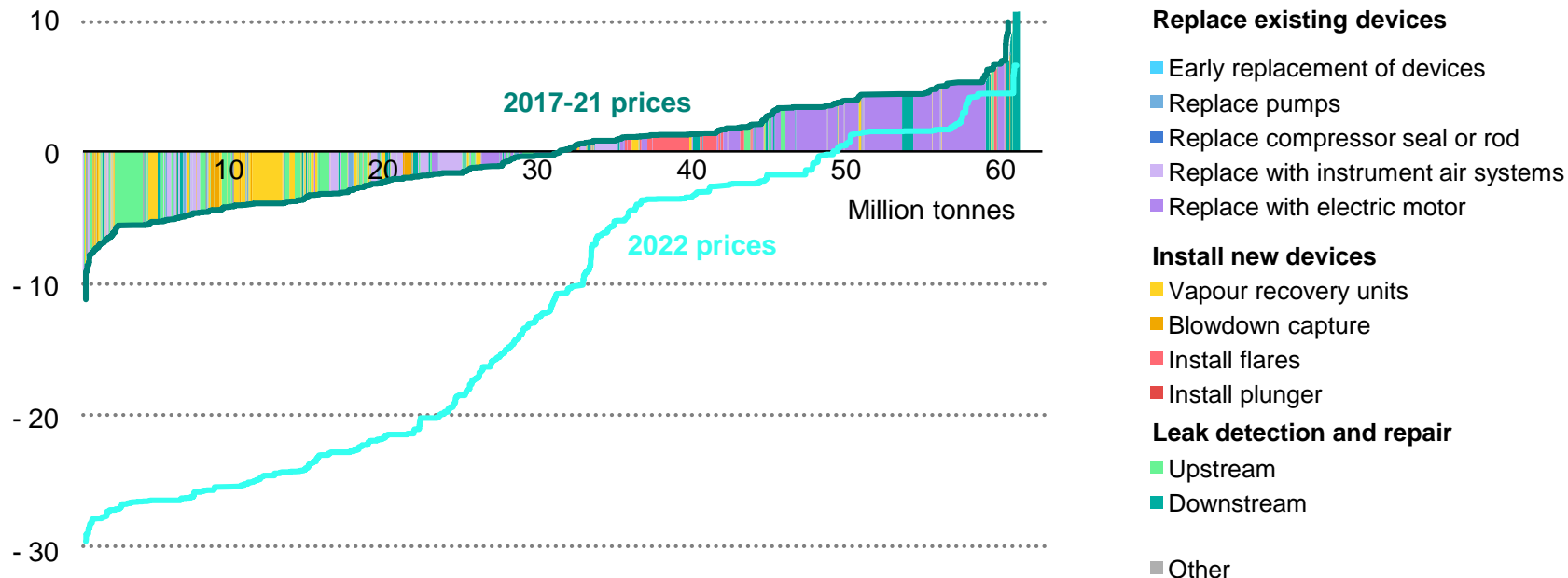


Source: IEA based on data from IMEO (2023), Kayrros (2023) and the Department of Environmental Protection of Pennsylvania (2022)

**The Nordstream pipeline explosion released a huge amount of methane, but normal oil and gas operations globally cause the equivalent of a Nord Stream size event every single day**

# Cutting methane is one of the cheapest ways to limit near-term global warming

Oil and gas methane abatement cost curve at 2017-21 prices

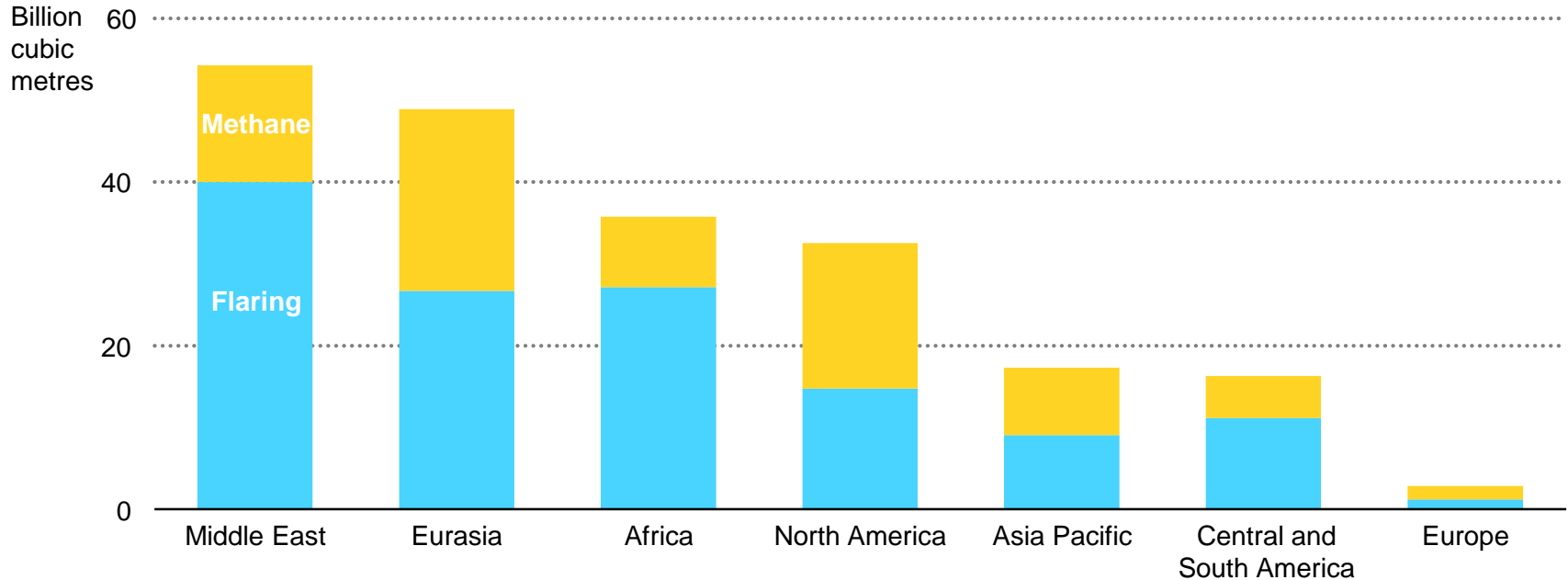


**High prices in 2022 meant most abatement measures could have been deployed at no net cost. Less than 3% of the net income received by the oil and gas industry in 2022 would be enough to cut emissions by 75% to 2030**



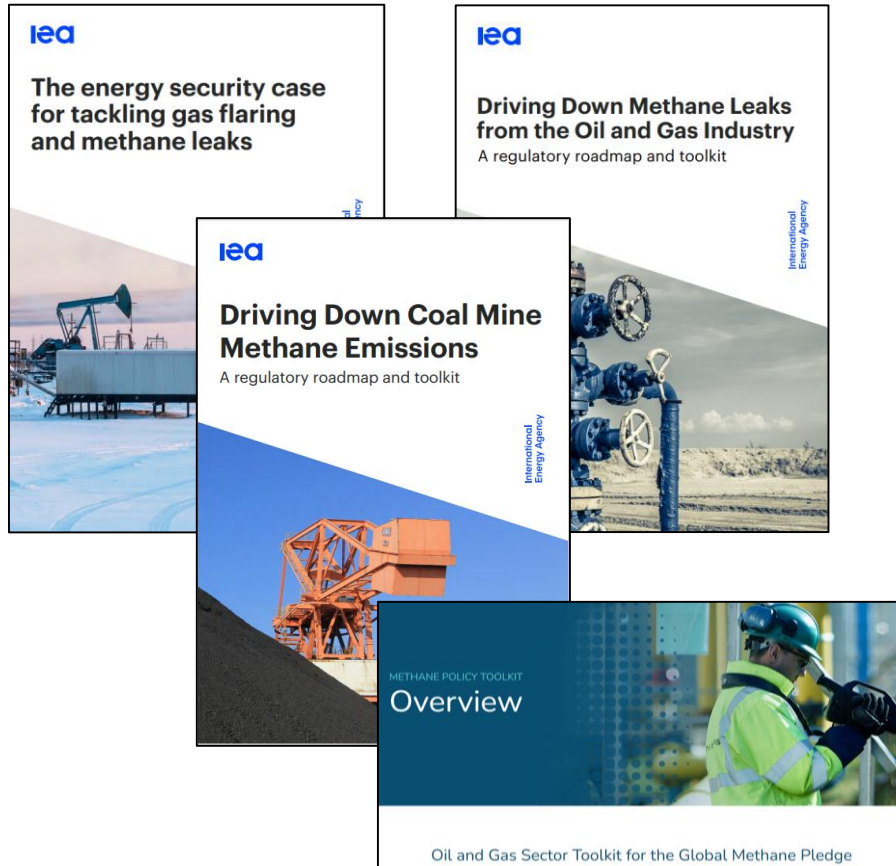
# Combined approaches can better tackle methane emissions & flaring

Potential additional gas supply from stopping all non-emergency flaring and curtailing methane emissions



Source: Flaring data from World Bank (2022)

**More than 200 billion cubic metres of natural gas could be brought to markets by stopping flaring methane emissions, more than the European Union's annual gas imports from Russia prior to the invasion of Ukraine**



- We have developed a number of resources for regulators and policy-makers looking to cut methane emissions highlighting the steps required and the benefits of doing so
- Our new 10-step roadmap on coal mine methane sits alongside our publication on oil and gas that is already the primary “go-to” reference for countries looking to introduce or enhance methane policies
- We partner with the International Methane Emissions Observatory and many other organisations to advance smart and effective policy action

iea