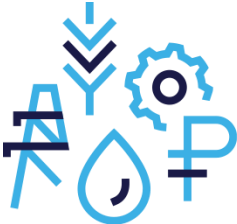


Discussion on climate policy in Russia

Andrey Kolpakov

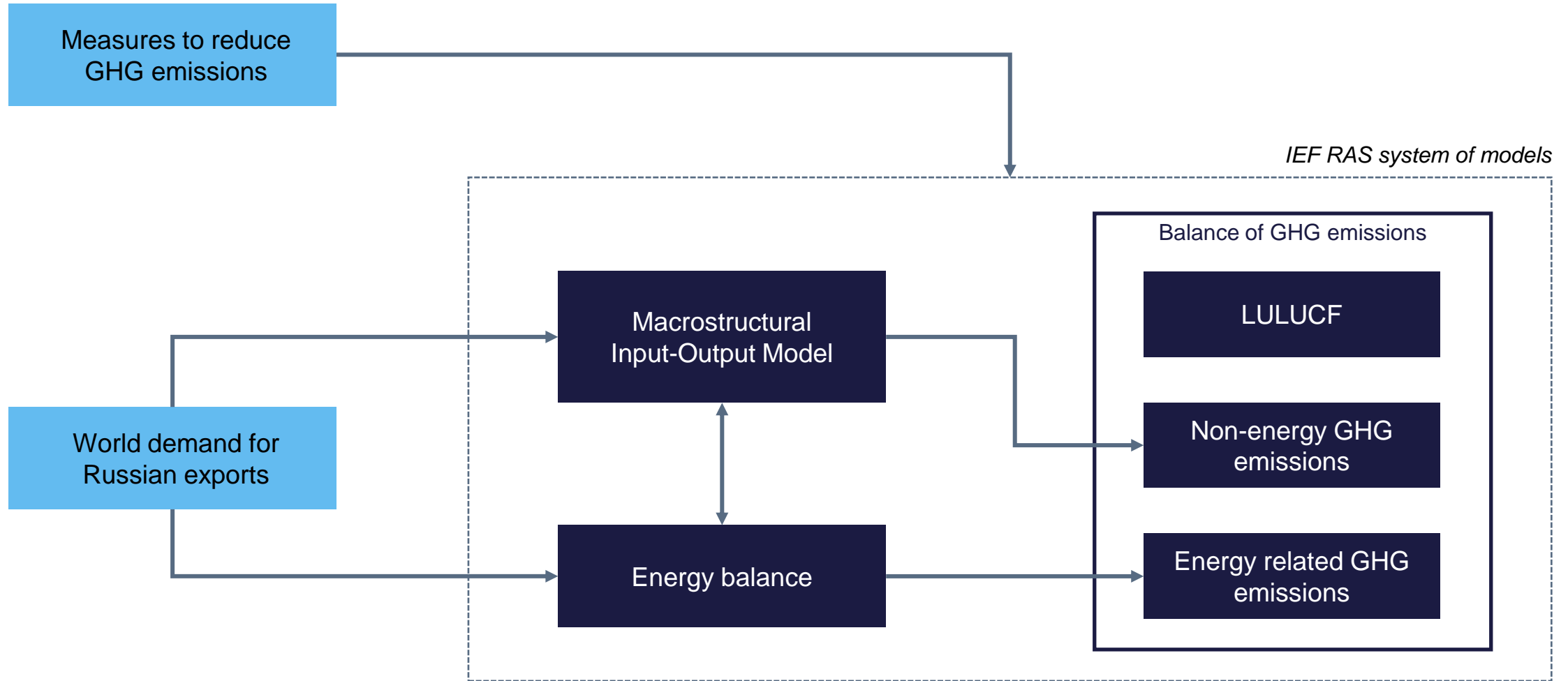
INFORUM World Conference 2021

October 11, 2021



Institute of
Economic Forecasting
RAS





Leading executive body: **Ministry of Economic Development of the Russian Federation**

Presidential Decree No. 666 (November 2020):

- to ensure by 2030 a reduction in greenhouse gas emissions within 70% compared to the 1990 level, taking into account the maximum possible absorptive capacity of forests and other ecosystems and provided sustainable socio-economic development of Russia
- to develop the Strategy for the socio-economic development of Russia with a low level of greenhouse gas emissions until 2050

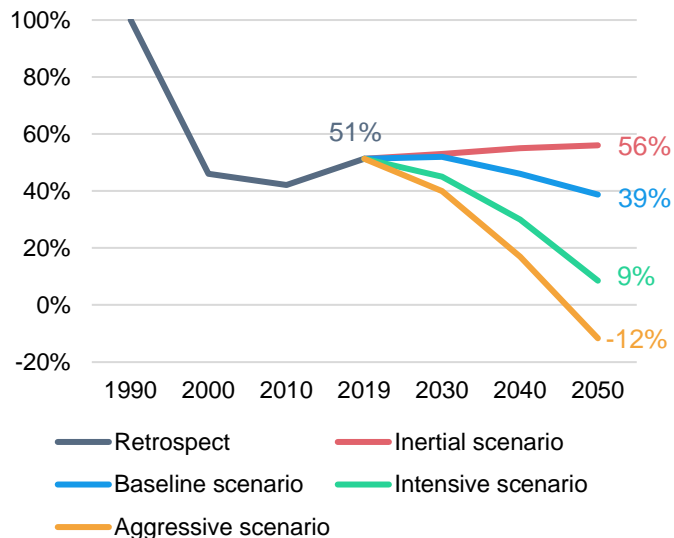
To date, approved:

- ✓ Federal law "On limiting greenhouse gas emissions" (establishes the legal framework for the implementation of climate projects and a reporting system for organizations that emit greenhouse gases)
- ✓ Taxonomy of green finance (criteria of low-carbon projects to support)
- ✓ Concept for the development of production and use of electric road transport until 2030 (domestically oriented)
- ✓ Concept of hydrogen energy development (exports oriented)

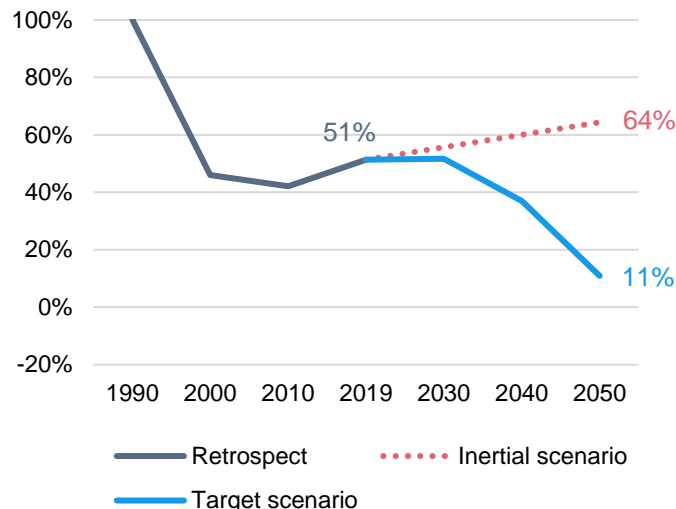
Evolution of scenarios for the socio-economic development of Russia with a low level of GHGs emissions



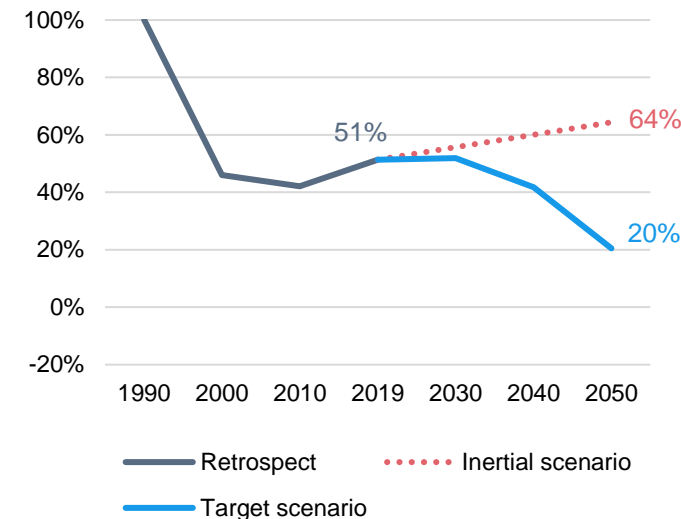
GHG emissions (with LULUCF), % of 1990 level: First iteration



GHG emissions (with LULUCF), % of 1990 level: Second iteration



GHG emissions (with LULUCF), % of 1990 level: Next iteration



- + Detailed set of decarbonization measures
- All scenarios are the same in terms of economic dynamics

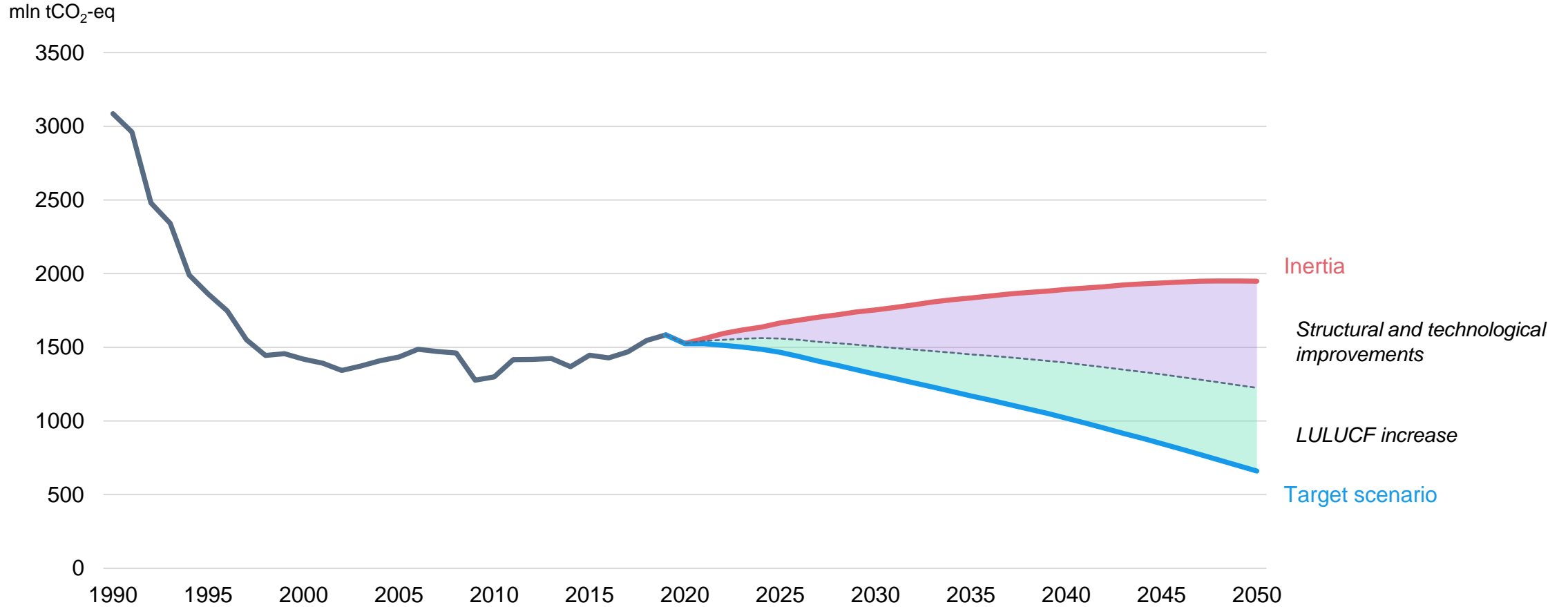
- + Scenarios differ in terms of economic dynamics
- Target scenario is too expensive which slows down economic growth
- ✓ IEF RAS provided support by calculations of economic consequences

- + Attempt to build ambitious but balanced Target scenario
- ✓ IEF RAS provides support by complex calculations

Equivalent impact of technologies and ecosystems



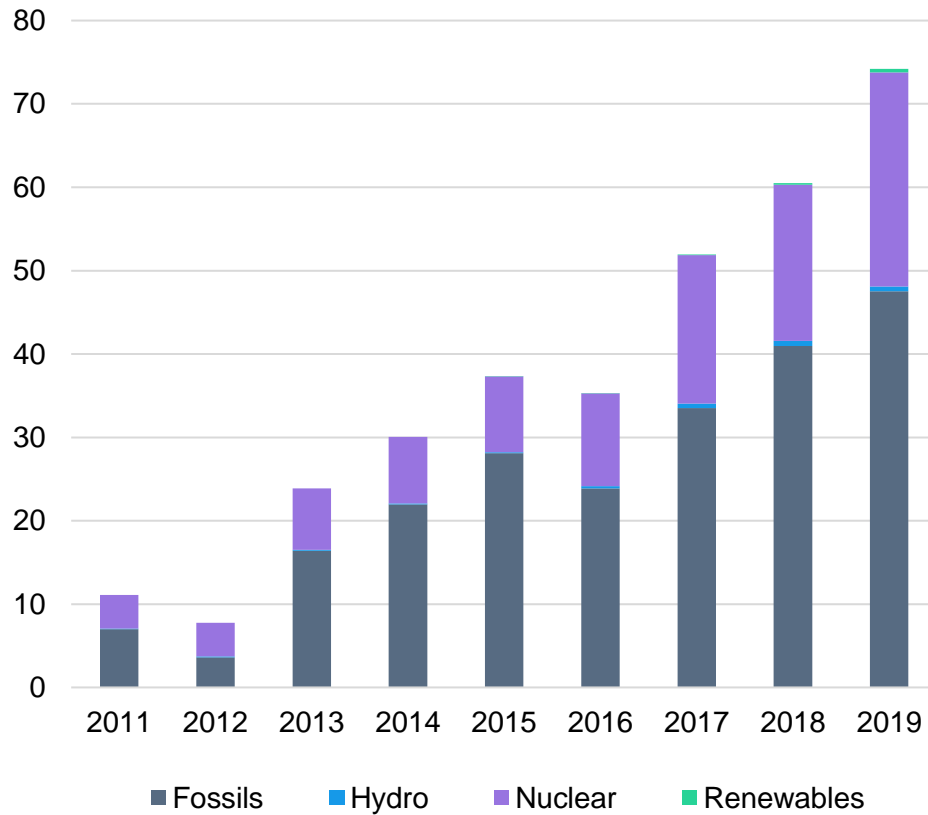
GHG emissions (with LULUCF) in Target scenario



Efficiency of GHG emissions reduction in the Russian power sector



Emissions “saved” by new power plant projects, mln tCO₂

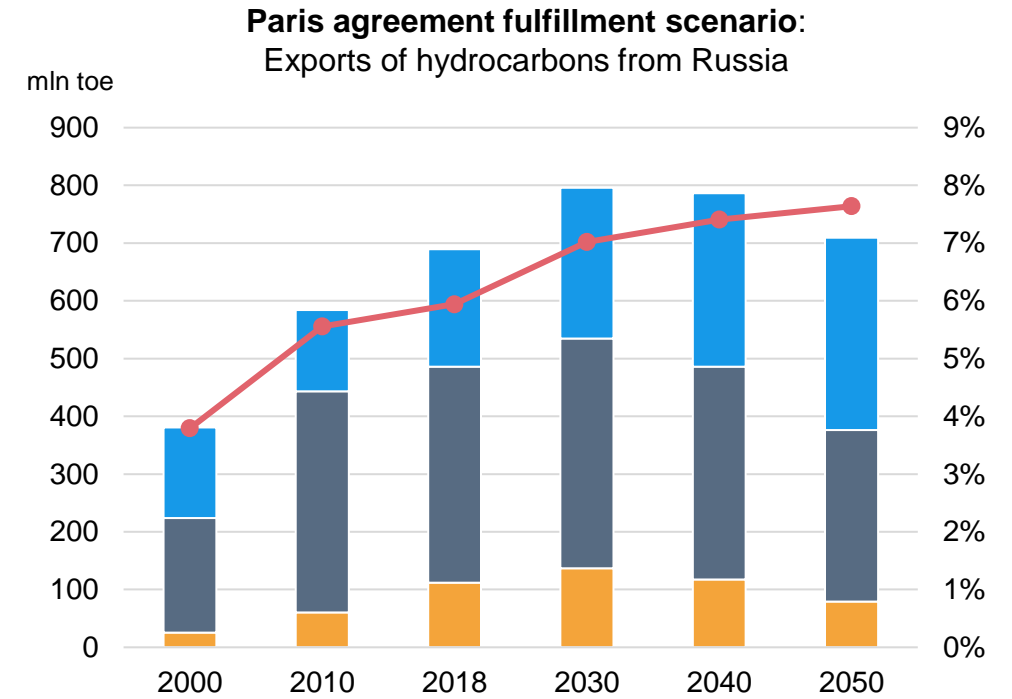
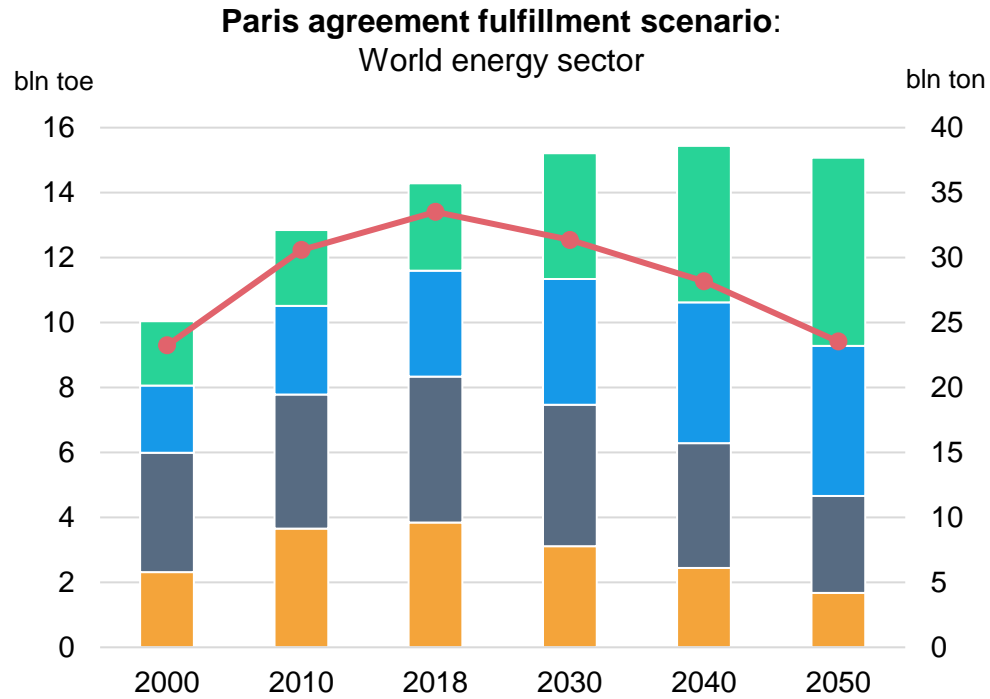


Cost of “saved” emissions by new power plant projects, euro per tCO₂

	2017	2018	2019	2017-2019 weighted average
Nuclear	83	84	94	88
Hydro	168	143	136	148
Renewables	995	808	826	854
Thermal (Fossils)	116	89	79	92

- The least costly “carbon-saving” way is the construction of new nuclear power plants. “Saving” emissions due to building new hydro power plants is 1.5 times more expensive; due to renewables – almost 10 times more expensive
- Even though new thermal power plants use carbon-containing fuels, they are comparable to nuclear power plants in terms of improving the carbon intensity of electricity generation

Impact of international climate policy on the exports of hydrocarbons from Russia



- Carbon-free energy consumption, bln toe
- Natural gas consumption, bln toe
- Oil consumption, bln toe
- Coal consumption, bln toe
- Energy related CO2 emissions, bln ton

- Natural gas, mln toe
- Petroleum, mln toe
- Coal, mln toe
- Total as share of world energy consumption, %

CBAM: impact on Russia



	Carbon footprint of exports to the EU, mln tCO ₂ -eq	Potential income loss due to CBAM, mln EUR (given carbon price of 50 EUR per ton)
Electricity	6.2	310
Ferrous metals + products	10.7	536
Aluminium + products	1.6	78
Fertilizers	4.0	201
Cement, clinker	0.01	1
Total	22.5	1125

- Under given parameters of CBAM potential income loss of Russian companies is about 1 bln EUR annually (when CBAM reaches full coverage in 2035). It is only 0.03% of Russian exports. Russia loses such amount of income when oil price decreases by 0.4 USD per bbl. Such scale of risk is too low to take meaningful actions
- As the EU is dependent on imports of raw and primary products, a quick and significant tightening of CBAM parameters is unlikely

Contacts



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