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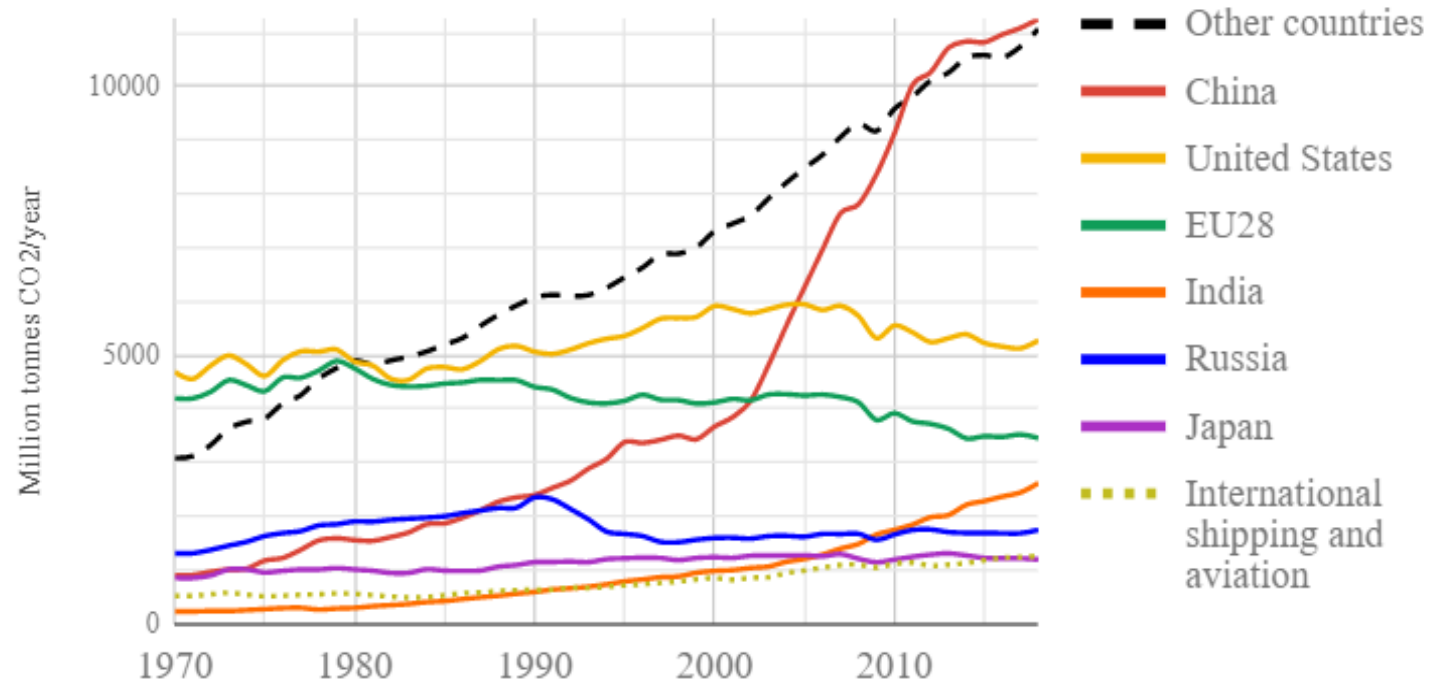
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Russian climate policy & COVID-19



Russia has decreased emission by 50% starting from 1990-ies, but it still ranks #5 carbon emitter globally and...

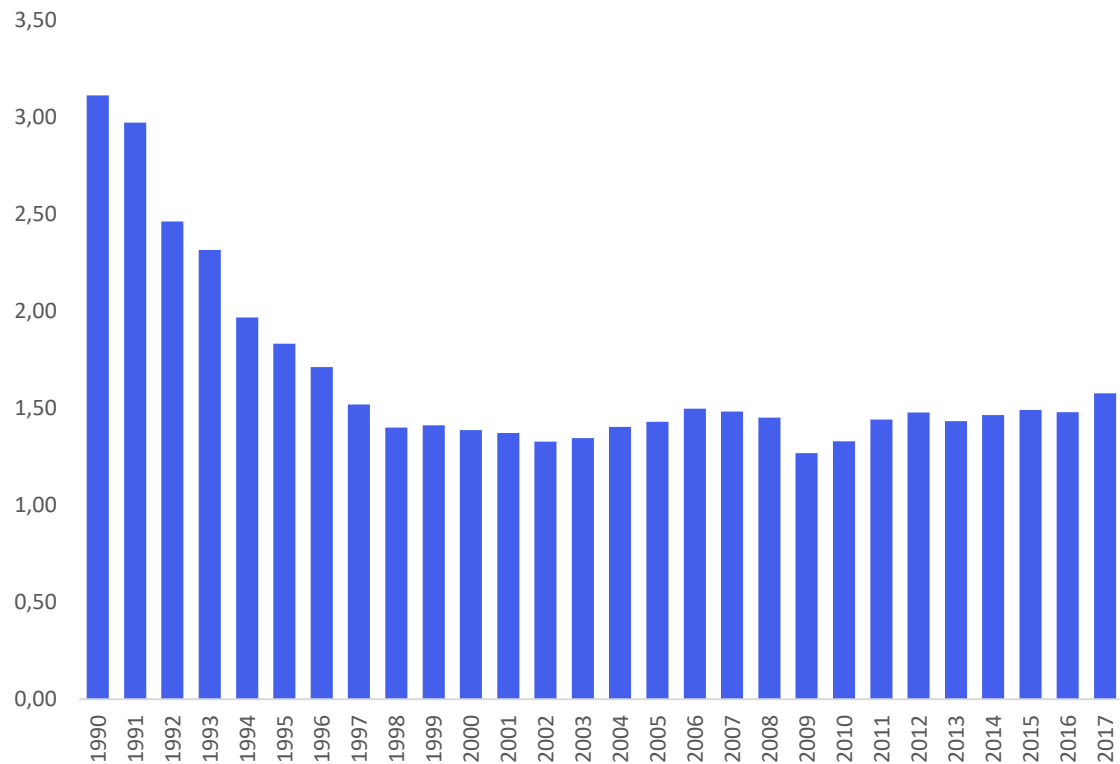
World fossil carbon dioxide emission 1970-2018



- In 1990-1998 emissions were reduced by more than 40% due to the economic collapse
- In 1998-2008 emissions were increasing in line with the GDP growth, by 2014 they constituted ~70% of the level of 1990.
- Russia has joined Paris Agreement in September 2019
- Detailed NDAs are not yet clear

...since 2009 Russian GHG emissions are increasing

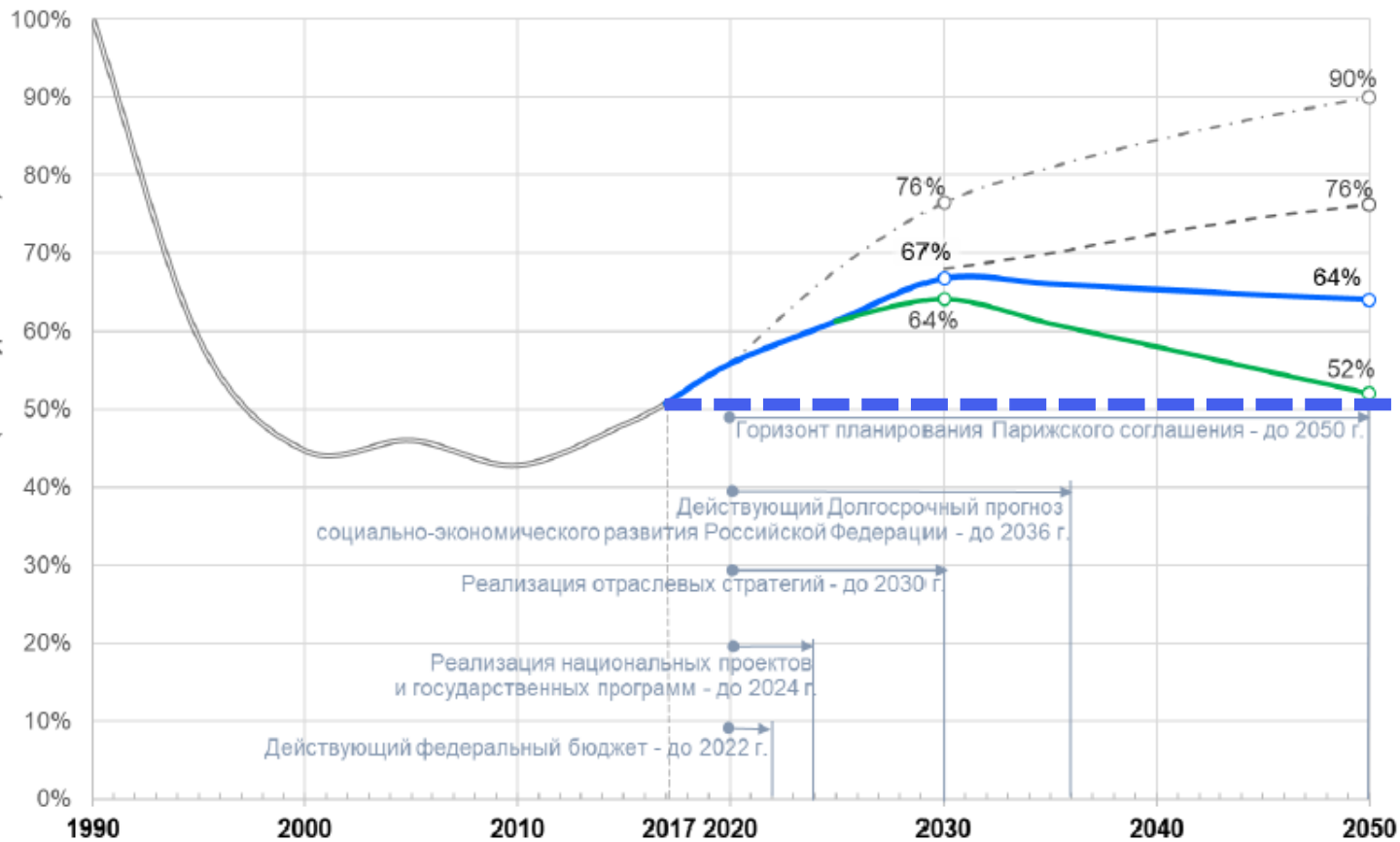
Russia`s total GHG emissions with LULUCF (Land use, land-use change, and forestry) in kt CO₂e



Russia`s GHG emissions by sector with LULUCF

Sectors	GHG emissions (Mt CO ₂ e)	% total emissions
Energy supply	1 068	68%
Industry	414	26%
Transport	248	16%
Commercial & residential	159	10%
Agriculture	144	9%
Waste	94	6%
LULUCF/LUCF	-578	-37%
Other	27	2%
Total	1 578	100%

Source: World Bank



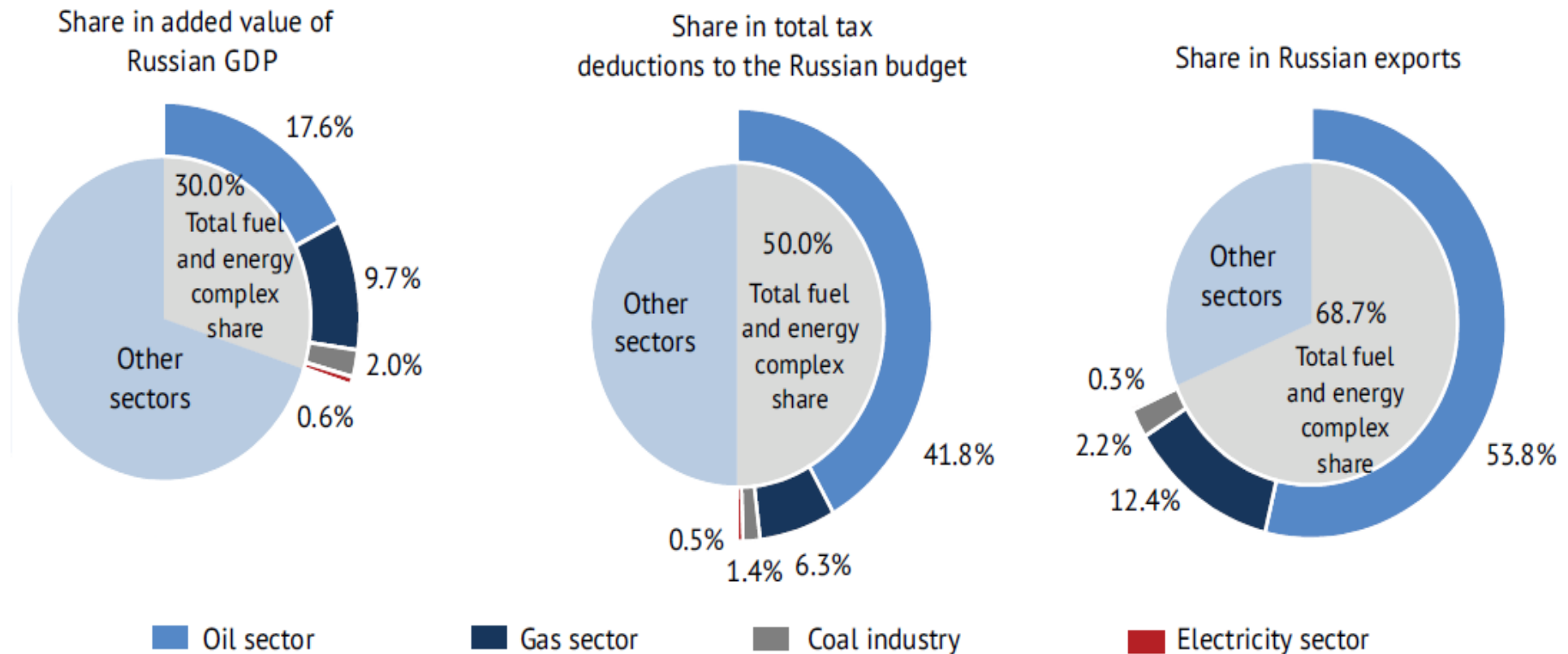
52% of the 1990 level

- Energy efficiency improvement is considered as the main driver of GHG emissions reduction
- Powerfuels are not the case

Anthropogenic GHG emissions targets in Russia are planned at the same level by 2050 as in 2017 (best case)

The role of oil&gas revenues for the Russian economy is extremely high

Shares of energy sector in Russian GDP, exports and budget



Source: Global and Russian Energy Outlook up to 2040

Energy transition globally and challenges for the Russian oil&gas exports

- Growing share of RES limits the demand growth for fossil fuels, thus resulting in lower than expected export volumes for hydrocarbons.
- Creation of border carbon adjustments (BCAs) as part of the carbon taxation mechanism might become a long-term source of instability for economies relying on fossil fuels.
- Banks and financial institutions are assessing climate risks and becoming more reluctant to provide financing for fossil fuel projects.



What could be Russia's stakes in the energy transition?

- ✓ **Energy efficiency**
 - ✓ **Renewables** (solar, wind, tidal, biomass – biomethane, pellets, small hydro), including potential export projects (Arctic wind, Yakutia solar + DC transmission)
 - ✓ **Nuclear** (next generation reactors on fast neutrons)
 - ✓ **Natural gas** replacing oil in transportation (maritime, road), LNG leadership
 - ✓ **Hydrogen** (blue, green, yellow, turquoise?)
 - ✓ **CCUS** (including for EOR)
 - ✓ **Offsets** (including reforestation/ natural sinks investment projects)
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