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RISKS & OPPORTUNITIES FOR RUSSIA UNDER GLOBAL LOW- CARBON TRANSFORMATION

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CHALLENGES OF LOW-CARBON TRANSITION FOR FOSSIL-FUEL EXPORTING COUNTRIES (FFEC)

Climate-related risks:

- Exposure to volatile commodity markets that generate macroeconomic instability
- Risks of real exchange rate fluctuations – reduced competitiveness of the rest of the economy
- The concentration of large resource rents can result in poor governance, which undermines longer-term growth

- Physical impacts of climate change associated with weather-related events
- Macrostructural risk of a global transition to a low-carbon development

Reduced demand
for fossil-fuel
exports

Reduced demand
for fossil-fuel
assets

Reduced demand
for fossil-fuel
technologies



RISKS OF GLOBAL LOW CARBON TRANSITION: RUSSIA

- **Reduction in demand for Russian energy exports**
 - if the parties to the Paris Agreement fulfill their NDC targets, Russia would experience a 1.8% loss in welfare by 2030 (Orlov and Aaheim, 2017);
 - under the NDC scenario, climate policies outside Russia would lower Russia's GDP growth rate during the period 2020-2030 by 0.2-0.3 of a percentage point; If global mitigation ambition increases in line with the 2°C trajectory after 2030, this would add almost a half of a percentage point to the decline in Russia's GDP growth rate during the period 2035-2050 (Makarov et al., 2020)

- **EU Carbon Border Adjustment Mechanism, annual loss of Russia**

Pessimistic scenario	KPMG (2020)		ERCST (2020)		BCG (2020) 3–4,8 bn USD
	Basic scenario	Optimistic scenario	Min estimation	Max estimation	
4-8 bn euro	8 bn euro	2 bn euro	61 mn euro	1,2 bn euro	

- **Investment & Technological risks**



DECARBONIZATION DILEMMA FOR FFEC AND RUSSIA

- RISKS of low-carbon transition vs. RISKS missed opportunities due to the non-use of the huge fossil-fuel related part of national natural wealth
- Emissions reduction policy in fossil-fuel exporting countries is associated with high opportunity costs for the fuel and energy complex, related industries and could lead to the reduction of international competitiveness of national businesses in the short run
- FF exporting countries with higher resource rents tend to have less ambitious climate policies [Tørstad et al., 2020]
- In FF importing countries, energy security concerns and goals to decrease energy import dependency often strengthen climate policies [H.Schmitz, 2017]. They tend to have more ambitious emissions reduction policies and more often use advanced instruments like carbon pricing



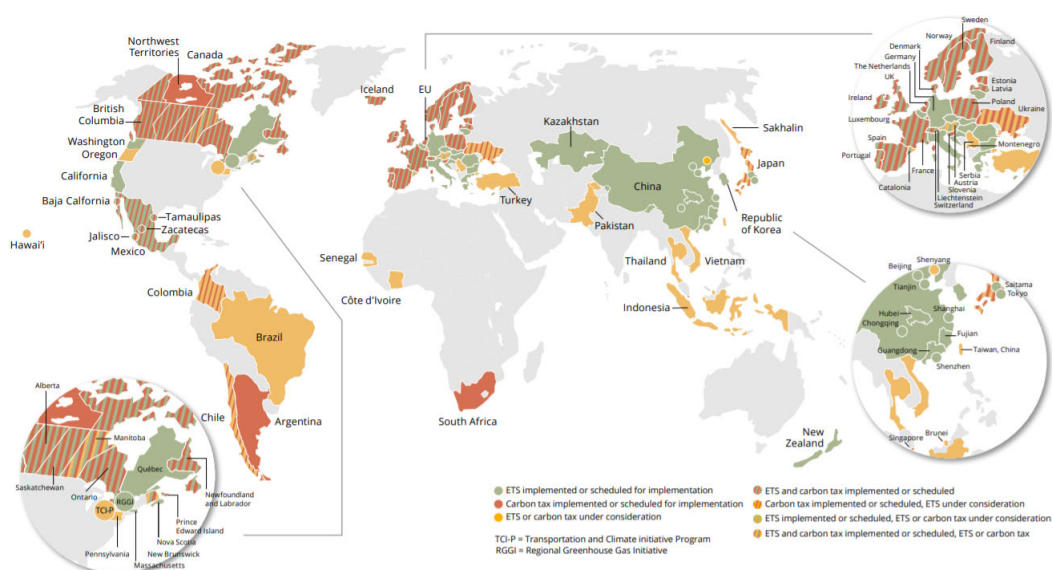
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CLIMATE POLICY IN RUSSIA

- 2019 г. – adoption of the Paris Agreement; 2020 – First draft of the strategy for low-carbon development, 2021 – Federal Law on GhG emissions reporting and regulation, Draft of the law on the “Sakhalin’s experiment”: a regional emissions trading system in Sakhalin oblast needed to help achieve carbon neutrality of the region by 2025
- October 2021: New Draft of the Strategy for the long-term Development with low level of GhG emissions until 2050
 - Goal is to reduce net emissions by 79% by the year of 2050 and achieve carbon neutrality by 2060. One of the main climate policy instruments – price on carbon.



Implemented or scheduled for implementation carbon pricing initiatives at national and subnational level



Source: [World Bank, 2021]



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ONLY 9 OUT OF 64 CARBON PRICING INITIATIVES GLOBALLY IMPLEMENTED BY FF EXPORTING ENTITIES

Name of the initiative	Year of implementation	Share of emissions covered	Sectors and/or fuels covered	Description
Alberta TIER	2007	48%	Industry and power sectors except for industrial process emissions	Baseline-and-credit ETS that allows the use of facility-specific benchmarks and covers facilities that emit at least 100 ktCO ₂ e per year
Australia ERF Safeguard Mechanism	2016	50%	Industry and power sectors including industrial process emissions	Baseline-and-offset system that intends to ensure that emission reductions purchased through the ERF are not offset by significant increases in emissions above business-as-usual levels elsewhere in the economy
BC GGIRCA	2016	0%	Liquefied natural gas (LNG) facilities	Baseline-and-credit system that enables a price to be put on emissions of industrial facilities or sectors exceeding a specific limit. 100% overlap with BC carbon tax
BC carbon tax	2008	70%	All sectors with some exemptions for the industry, aviation, transport and agriculture sectors	Tax that aims to encourage people and businesses to innovate and find the most cost-efficient methods of reducing emissions
Canada federal OBPS	2019	9%	Electricity generation and industrial facilities that emit 50 ktCO ₂ e per year or more	
Canada federal fuel charge	2019	19%	All sectors with some exemptions for industry, agriculture and transport sectors; covers 21 types of fuel	System that consists of two components: a tax-like component that is a regulatory charge on fuels and a baseline-and-credit ETS for emissions-intensive and trade-exposed industrial facilities
Kazakhstan ETS	2013	50%	Power sector, certain industry sectors and centralized heating	Recently restarted system that aims to achieve cost-effective GHG emissions
Norway carbon tax	1991	62%	All sectors with some exemptions for certain sectors; covers natural gas, liquid and gaseous fossil fuels	Tax that aims to achieve cost-effective GHG emissions: it is split into an excise tax on mineral products and a separate law for petroleum activities on the continental shelf
South Africa carbon tax	2019	80%	Industry, power, buildings and transport sectors with some exemptions (irrespective of the fossil fuel used)	Tax that aims to price carbon by obliging the polluter to internalize the external costs of emitting carbon, and contribute towards addressing the harm caused by such pollution



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CHALLENGES AND “SOFTER” OPTIONS OF CARBON PRICING IN FFEC

- **Possible adverse effects of carbon pricing:** (a) Decreased competitiveness of some vulnerable and carbon-intensive industries, (b) Regressive (in fiscal terms) redistribution of wealth between social groups, etc.
- “Softer” options of carbon pricing:
 - Free allocations & different exceptions from regulation
 - Compensatory measures
 - System of carbon offsets



POTENTIAL FOR GREEN GROWTH IN RUSSIA

- Carbon pricing (in a soft form) to help mitigate external risks of low carbon transition, such as EU CBAM, and create long-term incentives for economic rebalancing and diversification
- Both traditional and asset diversification is a necessary condition for economic development in the low-carbon future
- System of carbon offsets (as a backbone of carbon pricing), green finance to provide funds for low-carbon industries and attract foreign investment



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