

Creating conditions for greener and more resilient growth



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Outline

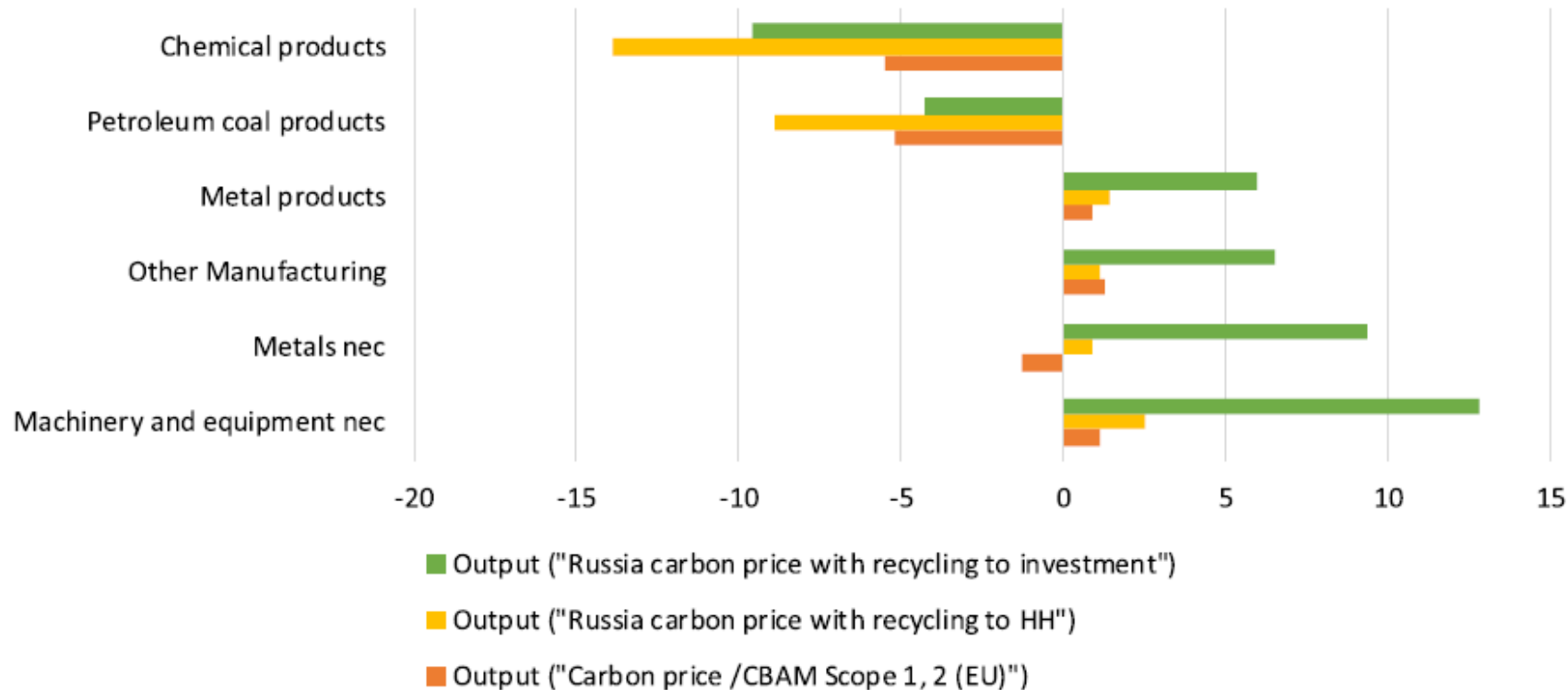
- Diversification
- Creating the conditions for green transition:
 - Climate policies and carbon pricing
 - Green finance
- New sectors for green transition

Diversification

- **Traditional diversification:** development of sectors that are linked to fossil fuels and offer additional opportunities for value creation (e.g., from oil and gas extraction to refining oil and producing petrochemicals, gas chemicals, steel, cement, and fertilizers)
- **Asset diversification:** diversification of the broader asset base aimed at shifting the economy towards other comparative advantages, for instance, human capital, renewable natural capital (such as ecosystem services used in agriculture, the renewable energy sector, and tourism), physical capital (such as factories and infrastructure), and institutional capital.
 - Investment in strengthening assets that may be used by various sectors
 - Support of specific economic sectors, which may become the core for a new specialization in a decarbonized world

Diversification in CBAM scenarios

Output, by industry, change in % relative to the no-CBAM baseline, 2035



Climate policy implemented as a response to CBAM not only mitigates the effects of CBAM but also leads to diversification!

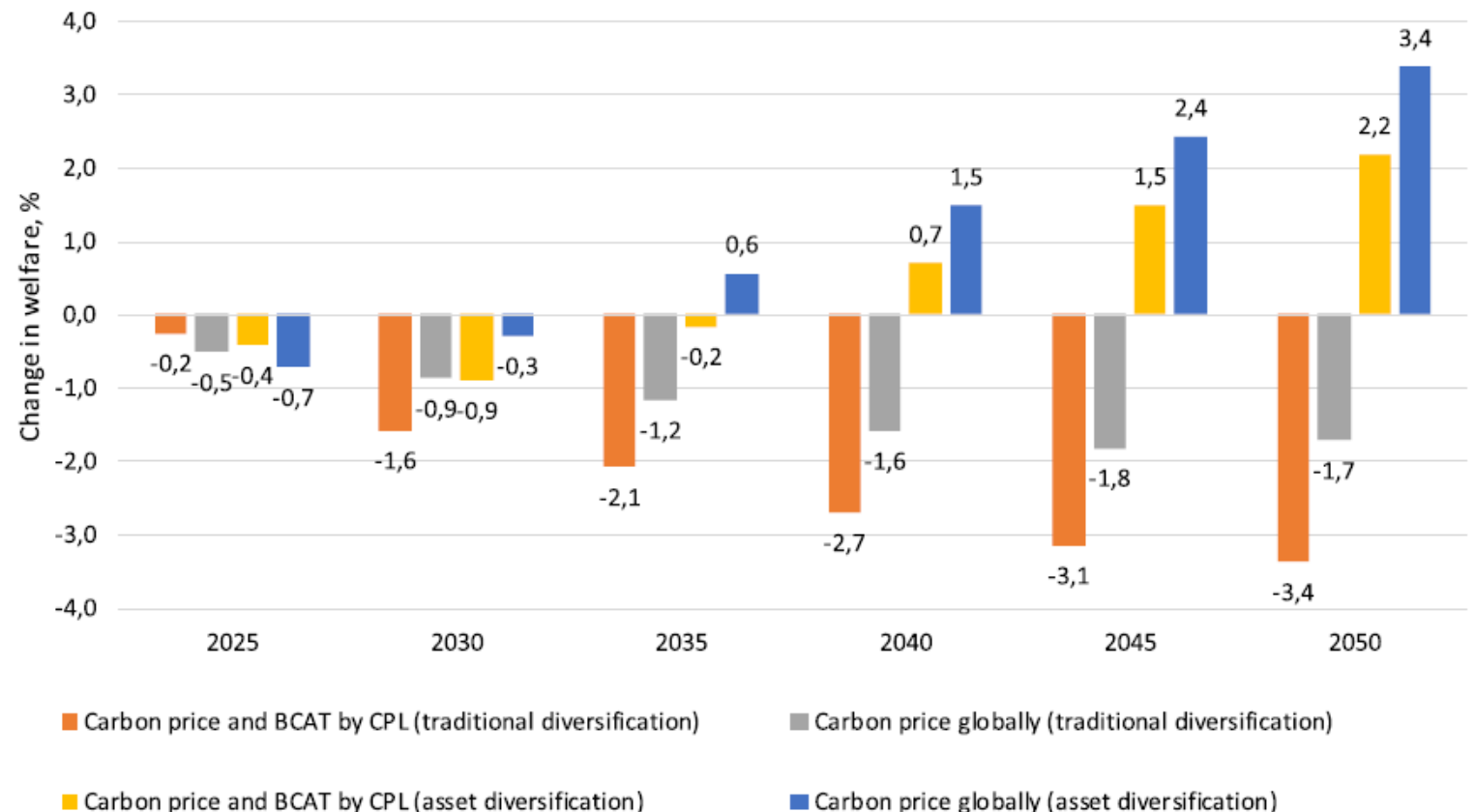
Diversification in long-term decarbonization scenarios

Diversification:

- **Traditional diversification scenario** - a share of rents from fuel extraction (1% of GDP) is allocated to subsidize energy-intensive industrial production activities
- **Asset diversification scenario** - a share of rents (1% of GDP) is allocated into education and R&D

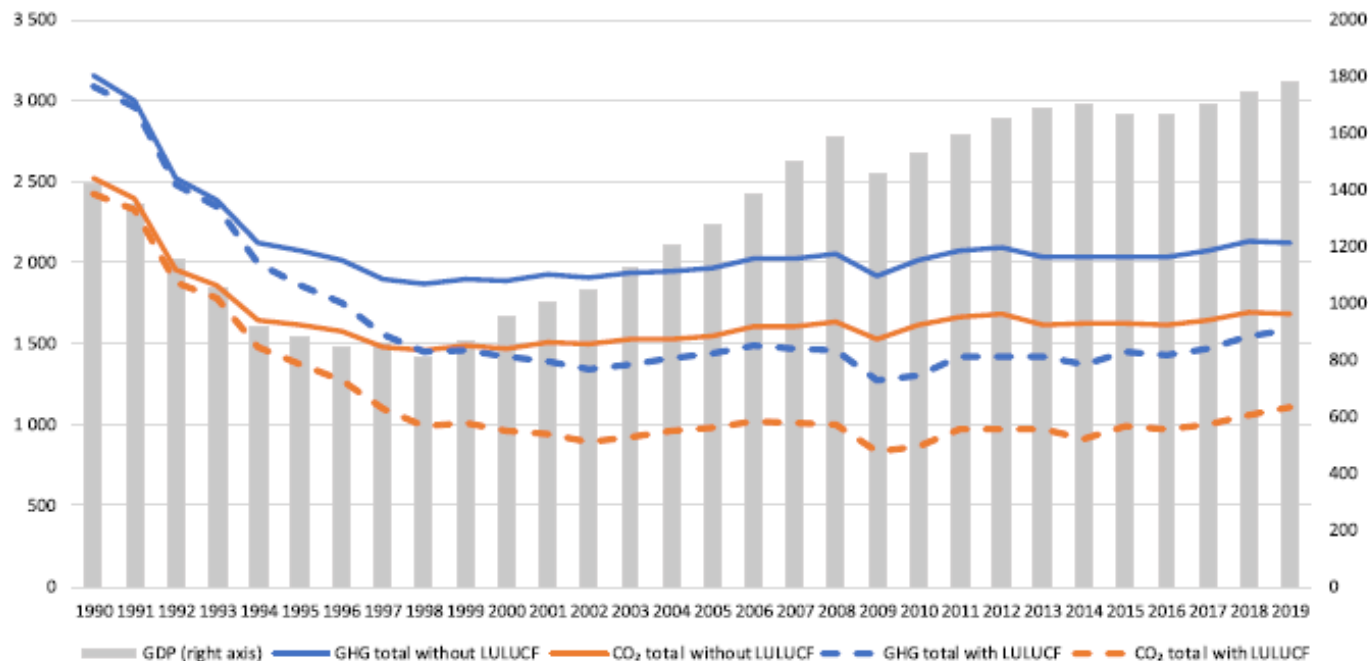
Participation in international cooperation together with asset diversification domestically provides the best outcomes among all combination of scenarios!

Change in welfare by scenarios, % relative to baseline



Russian climate policies

GHG emissions (Mt, left axis) and GDP (2010 US\$ billion, right axis) in Russia in 1990–2019



Source: Based on data from UNFCCC and World Bank.

- Russia joint Paris Agreement (September 2019)
- Presidential Decree on the Reduction of GHG Emissions (adopted in 2020)
- Federal Law on the Control of GHG Emissions (adopted in 2021)
- Long-term low-emission development strategy (adopted on October 29, 2021)
- The President declared the objective to achieve carbon neutrality by 2060 (October 2021)
- Pilot project to regulate emissions in Sakhalin region (2022-2028)

Recommendations

- **Detailing and specification.** Fragmented elements of the Russia's climate policy would need to be systematized, while framework legislation would need to be supplemented by more specific regulations and, ultimately, integrated into a comprehensive system. Various climate-related strategies and plans would need to be followed by roadmaps with milestones, costing, and responsibilities.
- **Integration into energy and economic strategy.** GHG emissions reduction plans should be coordinated with other green policies, including those promoting energy efficiency, development of renewables, and the hydrogen economy. They should also be integrated into Russia's energy strategy and the programs and forecasts for economic development.
- **Carbon pricing.** The introduction of carbon price may be beneficial for Russia as: 1) it mitigates some of export-related risks; 2) it is a means of diversification of the economy; 3) would help Russia attract green investment from global markets. The impacts of carbon pricing on the Russian economy will depend on the way how the governmental revenues would be spent. To strike the right balance between potential benefits and the costs like possible adverse social impacts and challenges to competitiveness of national producers, the design of carbon price and the way how it is integrated with associated fiscal, social and industrial policies is crucial.

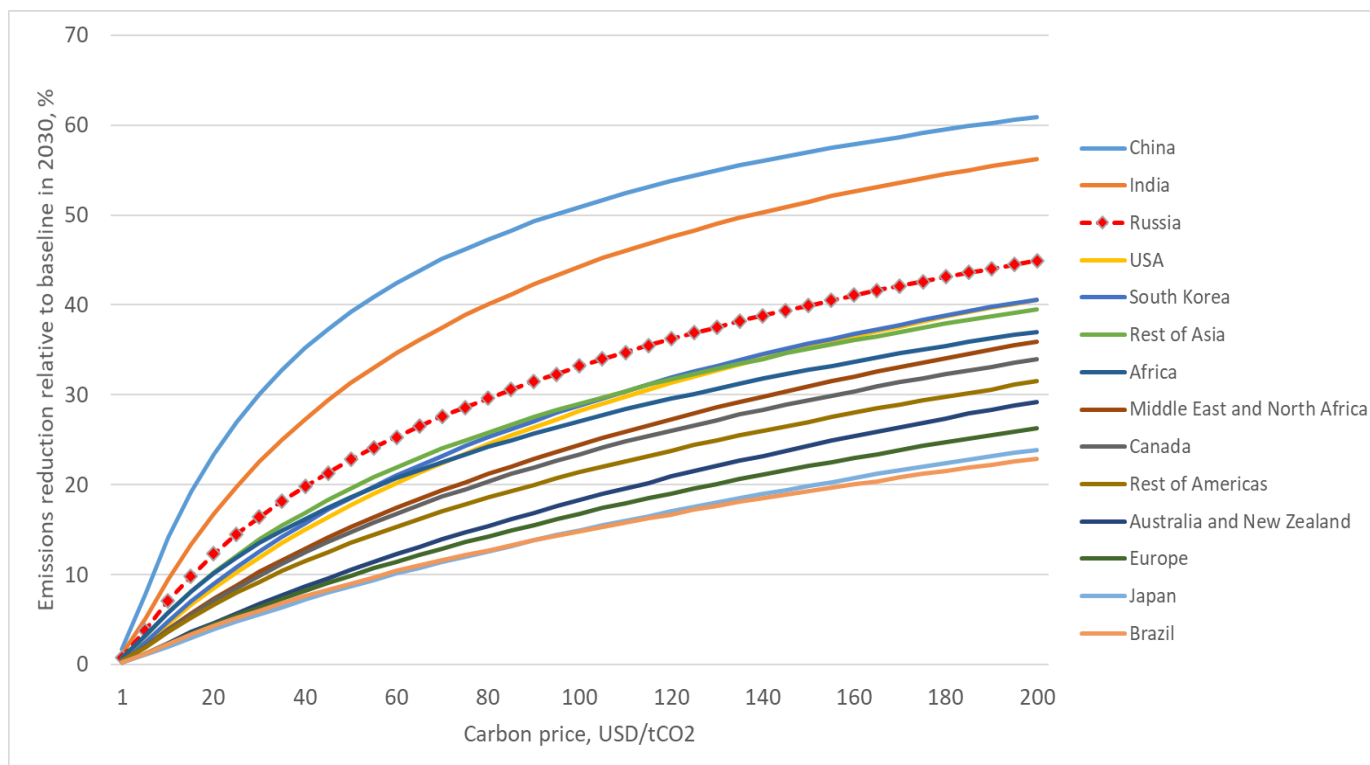
The effects of carbon pricing in CBAM scenarios

GDP and its demand-side components in “Russia carbon price” scenarios, deviations from “Carbon price /CBAM Scope 1, 2 (EU)” scenario, in %



Integration to the global carbon markets

Marginal abatement cost curves by regions in 2030, % change relative to baseline



- It is cheaper to reduce emissions in Russia than in all the major countries except China and India
- It gives an opportunity to attract investment to low-carbon projects from the global market
- It is possible if the full-scale system of carbon regulation and green finance is built in Russia and synchronized with the global green developments
- The important step is the taxonomy of green projects developed by VEB.RF (development corporation) in 2020

Opportunities of green transition: summary

- *Renewable energy generation:* in Russia has a significant untapped potential for growth. However, the limited scale and specifics of the current national renewable support program do not create sufficient incentives for noticeable changes in the conditions of inter-fuel competition favoring solar, wind and other renewable sources of energy. Among other things, remote regions of Russia represent a very attractive market segment for the expansion of renewable energy solutions. These regions, however, do not fall under the government support program, which only covers the wholesale market.
- *Other low-carbon energy technologies* have substantial opportunities for their development and scaling. These technologies are both traditional and well-established in Russia, like nuclear or hydro energy, and new ones, including hydrogen and carbon capture and storage (CCS).
- *Adopting climate-smart mining* practices to supply climate action minerals (for lithium, nickel, cobalt, or rare earth metals) may become one of the major contributors to the country's economy to meet rising global demand for minerals to produce batteries for electric vehicles, wind and solar energy equipment, electricity networks.

Climate smart forestry

- Russia's forests represent a vast and largely untapped renewable natural capital, yet currently they are performing below their full economic and carbon sequestration potential.
- Recommendations:
 - introducing improved forest management practices (particularly shifting from clear cutting to selective logging, sustainable intensification approaches to optimize harvest rates, and promoting multi-purpose forestry);
 - strengthening resilience to natural disturbances (particularly investing in forest fire prevention and management);
 - expanding forest landscape restoration with future-adapted species;
 - enabling a forest-based circular bioeconomy with a focus on long-lived and other wood products that substitute energy-intensive materials;
 - reclaiming abandoned agricultural lands; and
 - strengthening forest carbon monitoring and accounting systems.

Net carbon balance of Russia forests



Source: Shvidenko and Schepaschenko (2014).

Notes: Green: positive CO₂e balance; Red: negative CO₂e balance; value: g/cm²*year

Thanks for your attention!

My digital business card

