

# Impact of EU CBAM on Russia – Russia and Global Green Transition report



World Bank  
December 2021

# Sectors to watch for Russia

Russia is relatively exposed to the EU in most Emissions Intensive and Trade Exposed (EITE) sectors. Key sectors to watch among those likely to be covered by CBAM are **petroleum products, metals processing, and chemicals and fertilizers**.

| Potentially covered sectors       | Value of Russia's exports to EU (US\$ million, 2018-2019 average, WITS) | Share of Russia's total annual export value that goes to the EU | Share of sectoral exports which go to the EU |
|-----------------------------------|---|---|--|
| Electricity                       | 599   | 0.14%   | 70%  |
| Cement, lime and plaster          | 106   | 0.02%   | 34%  |
| → Iron, Steel and ferro-alloys    | 6,252   | 1.42%   | 28%  |
| → Refined petroleum products      | 44,532  | 10.14%  | 58%  |
| → Chemicals, fertilizers, related | 7,217   | 1.64%   | 34%  |
| Pulp and paper                    | 687   | 0.16%   | 16%  |
| → Non-ferrous metals incl. copper | 7,811   | 1.78%   | 42%  |
| Glass and Ceramics                | 261   | 0.06%   | 36%  |
| <b>At risk? Crude oil</b>         | <b>65,109</b>   | <b>14.83%</b>   | <b>50%</b>                                   |
| <b>Coal and Gas</b>               | <b>7,991</b>  | <b>1.82%</b>  | <b>27%</b>                                   |

# Policy scenarios – baseline and CBAM (1)

## SCENARIOS

1. Reference Scenario with no CBAM: ‘Business-as-usual’ scenario with no CBAM and no country-level policy response (i.e., existing climate policy only).
  - NDC level of ambition for all countries
2. With CBAM: EU adopts CBAMs in two phases in 2023 and 2025; exporters pay the forecast EU ETS price after factoring in free allocation
  - a) only covering scope 1 emissions
  - b) covering scope 1 and 2 emissions
  - c) EU expands CBAM to fossil fuels
  - d) USA also adopts CBAM
  - e) Other ECA countries introduces a carbon price consistent with EU levels.

| Phase 1: 2023 |                             | Phase 2: 2025                        |                               |
|---------------|-----------------------------|--------------------------------------|-------------------------------|
| Sectors       | GTAP match                  | Sectors                              | GTAP match                    |
| Steel         | Ferrous metals (i_s)        | Coking coal                          | Petroleum, coal product (p_c) |
| Cement        | Non-metallic minerals (nmm) | Asphalt bitumen                      | Other extraction (oxt)        |
| Electricity   | Electricity (ely)           | Petroleum products                   | Petroleum, coal product (p_c) |
| Fertilizer    | Chemical products (chm)     | Iron Ores                            | Other extraction (oxt)        |
| Chemicals     | Chemical products (chm)     | Aluminium                            | Metals nec (nfm)              |
|               |                             | Glass                                | Non-metallic minerals (nmm)   |
|               |                             | Non-ferrous metals (lead, tin, zinc) | Metals nec (NFM)              |

# Policy scenarios – baseline and CBAM (2)

## SCENARIOS

3. CBAM and policy responses from countries: Russia introduces carbon price, starting from zero to reaching EU level in 2030;

- a) revenues are recycled to households
- b) revenues are recycled to investments



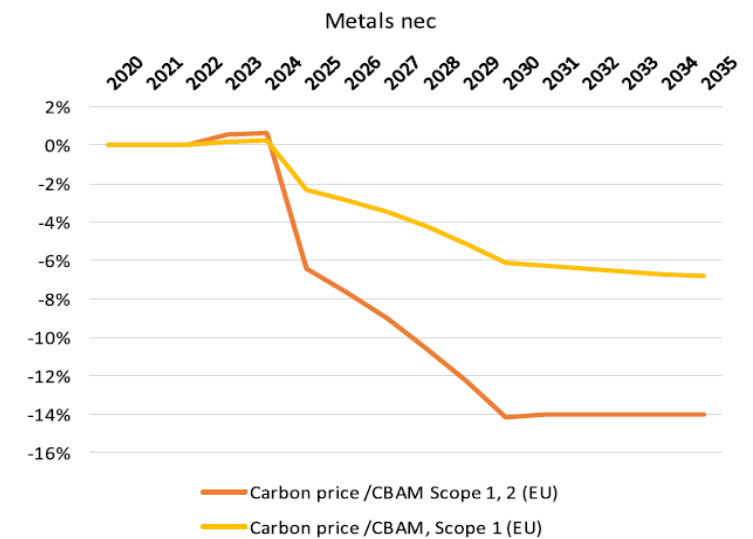
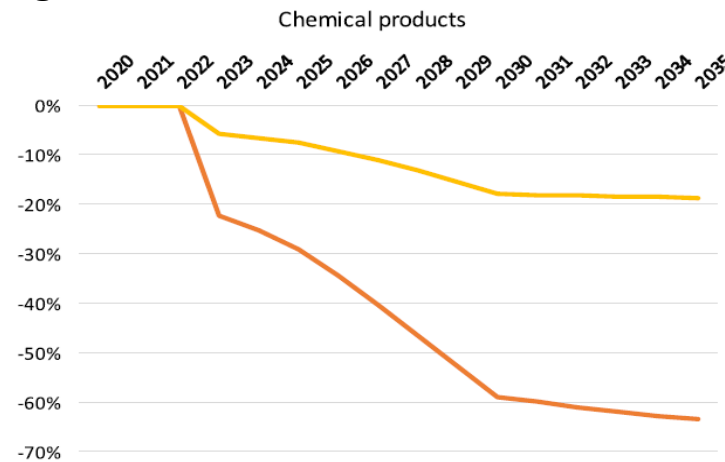
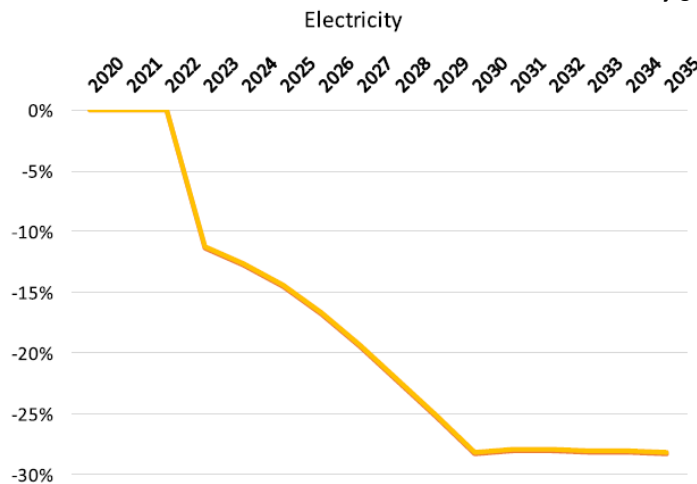
# Modelling results for Russia



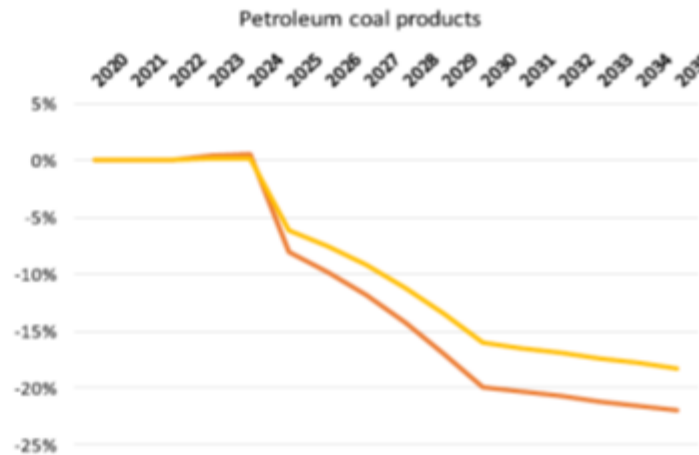
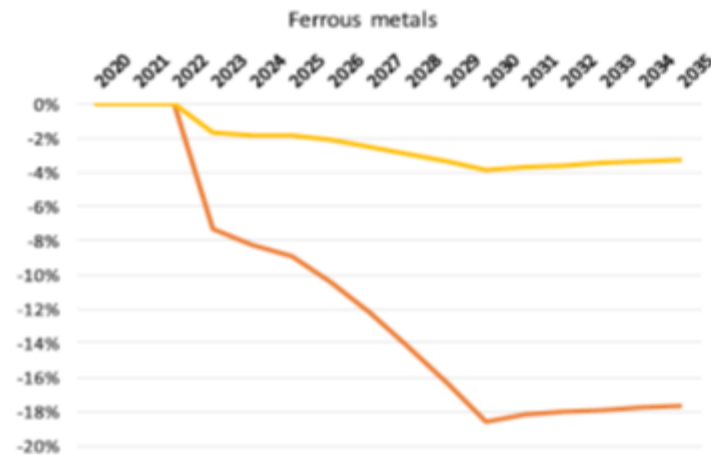
# CBAM exports to EU decline significantly; chemicals, minerals products and refined petroleum are the most affected sectors

## Exports to EU

% change from no-CBAM reference scenario

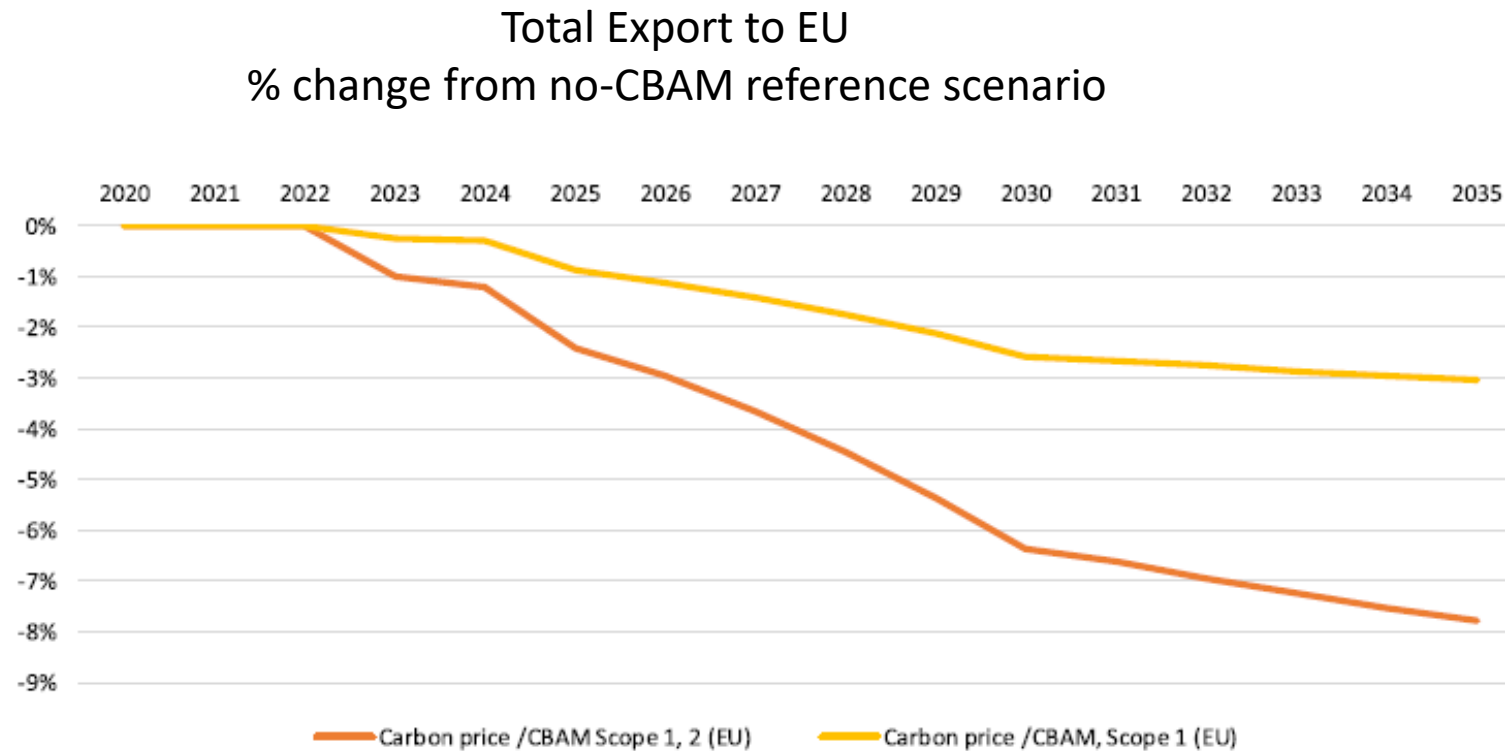


Carbon price /CBAM Scope 1, 2 (EU)  
Carbon price /CBAM, Scope 1 (EU)



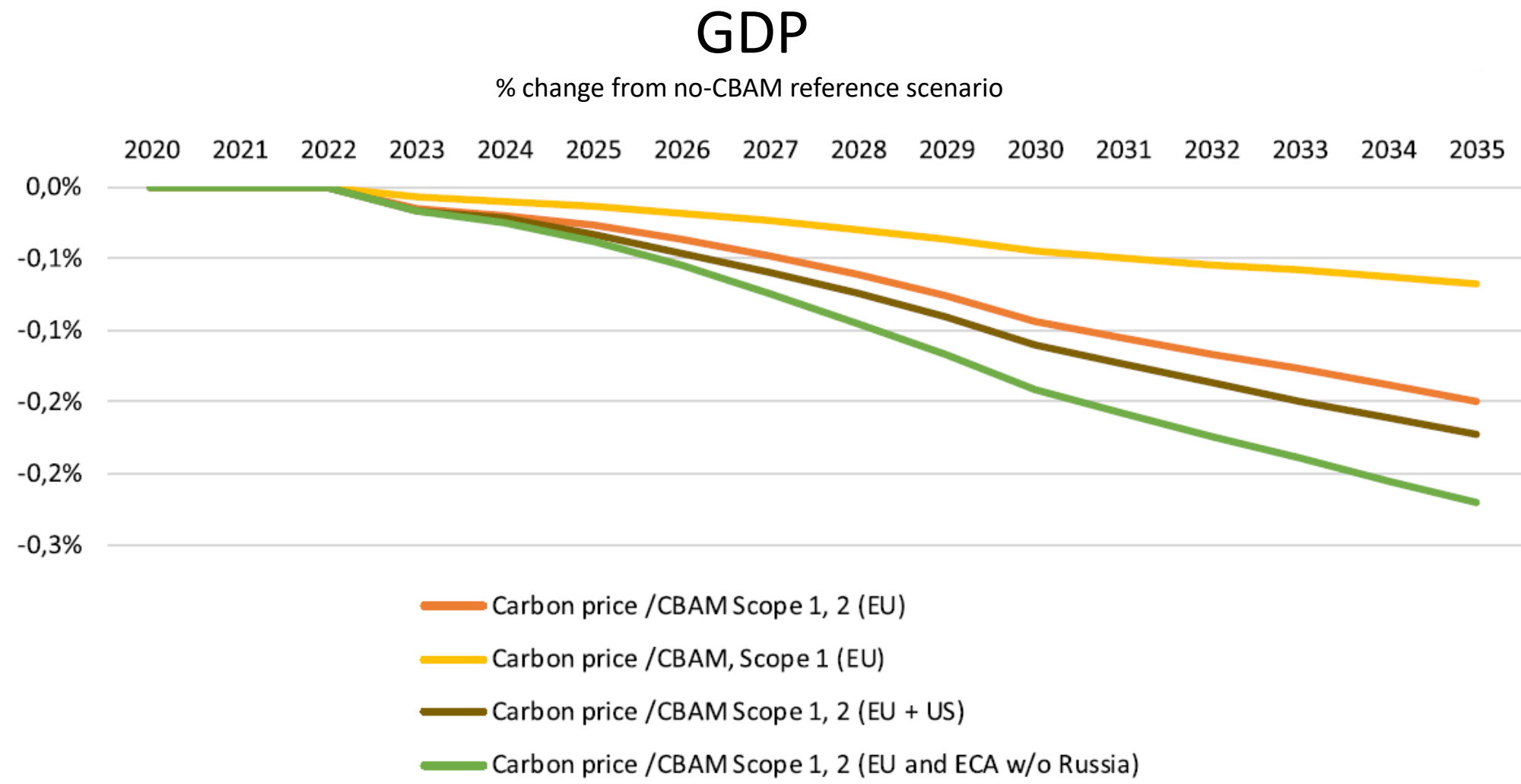
- Chemicals are hit most
- Losses in other sectors also significant with 15-20%

# Decline in CBAM commodity exports on total exports is significant



- Total exports of Russia declines significantly, especially if scope 2 is covered
- The decline when the EU carbon price increase slows down, however damage is permanent if no action is taken

# Macroeconomic impact of CBAM is small; increases with scope and coverage

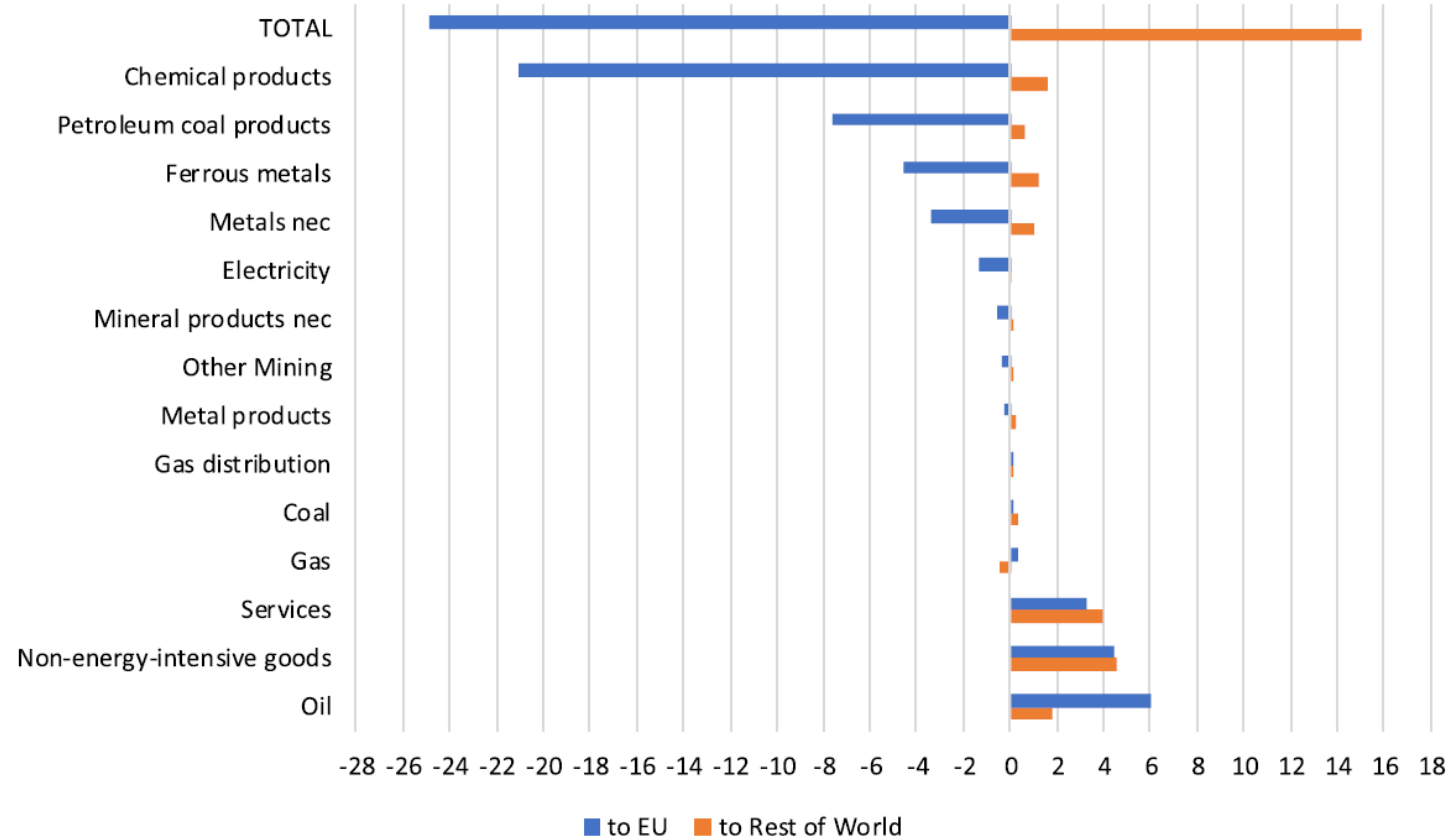




There is a significant trade diversion; Russian exports to non-EU countries increase significantly

## Total Exports to EU, CBAM Scope 1 & 2 Scenario

% change from no-CBAM reference scenario; 2035

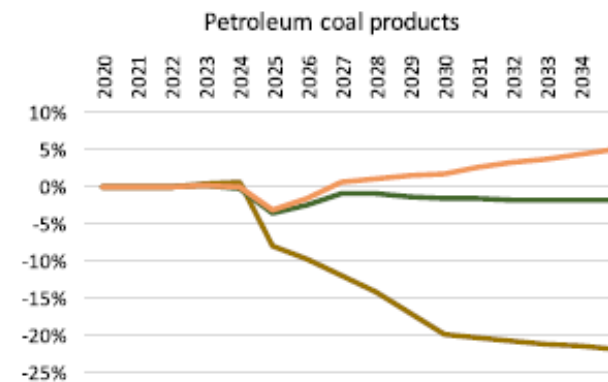
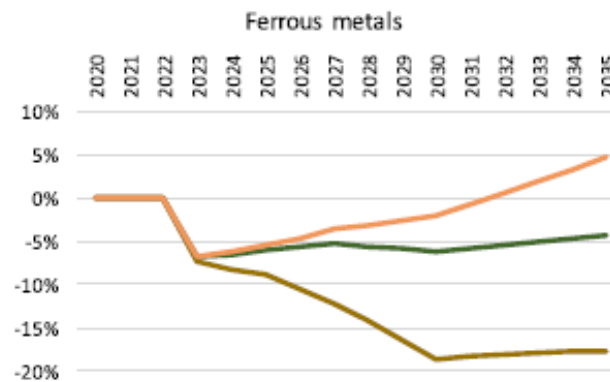
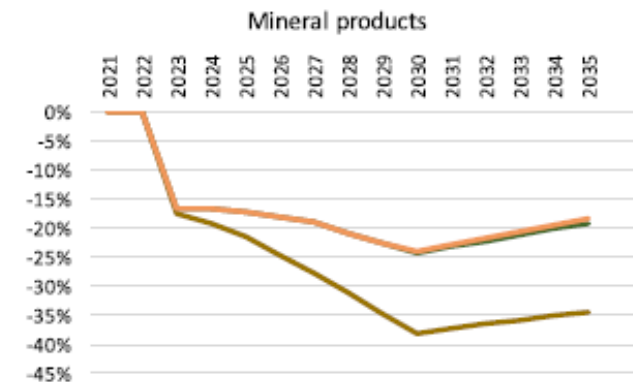
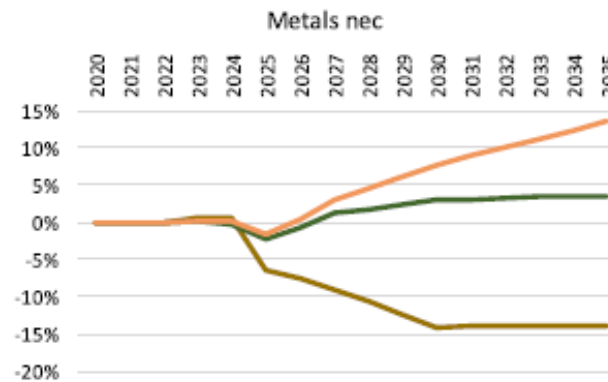
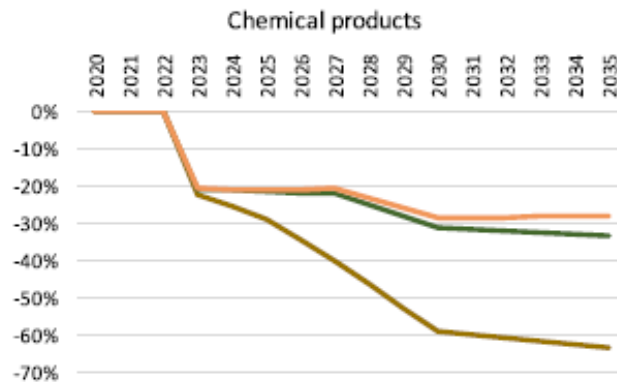


- Russian oil exports to EU might increase as a result of CBAM
- Since EU will import less of CBAM commodities, they will need to produce them domestically
- As CBAM commodities are energy intensive, EU will export more oil and gas

Climate action helps recovering exports in CBAM sectors;  
and might further increase them with right revenue recycling

## Exports of CBAM commodities;

% change from no-CBAM reference scenario



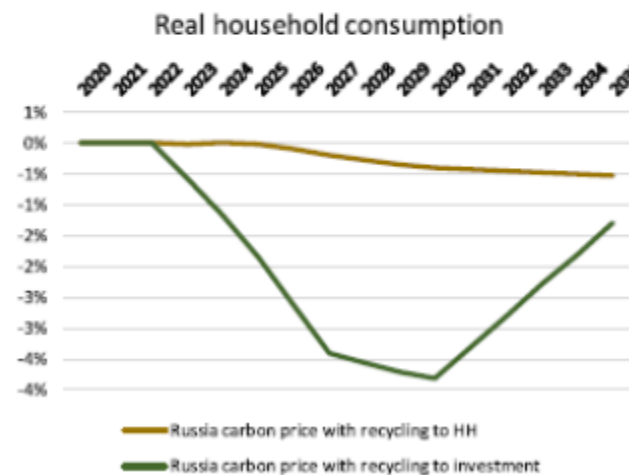
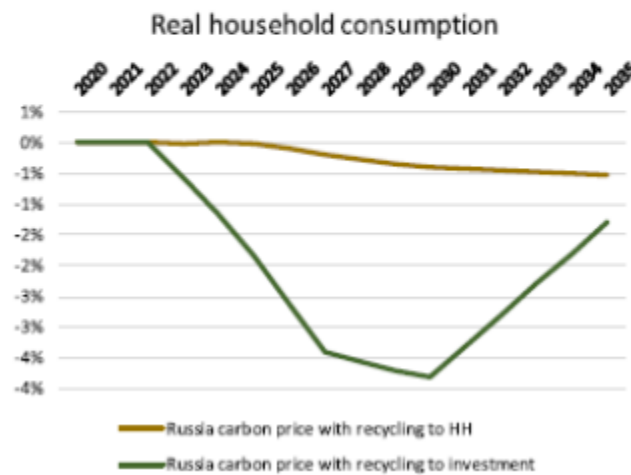
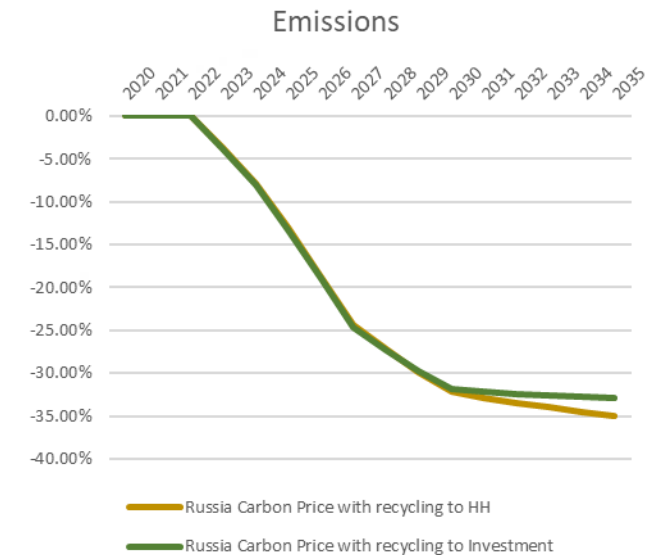
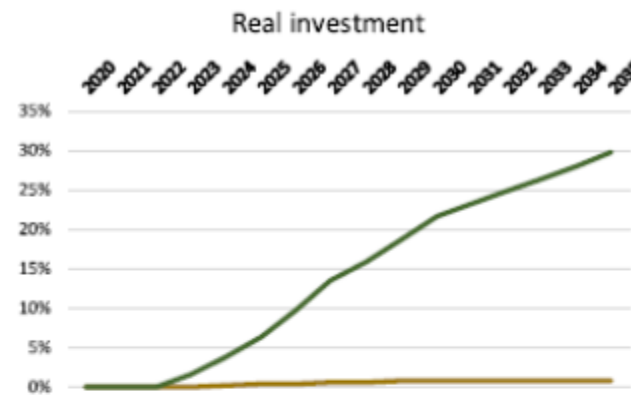
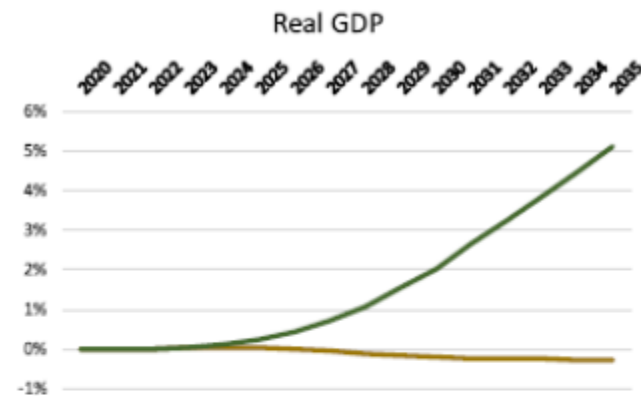
Carbon price /CBAM Scope 1, 2 (EU)  
Russia carbon price with recycling to HH  
Russia carbon price with recycling to investment

Carbon price /CBAM Scope 1, 2 (EU)  
Russia carbon price with recycling to HH  
Russia carbon price with recycling to investment

- Climate action recovers exports in all sectors but Chemicals
- Chemicals recover significantly but still 30% below

# Climate action does not cause significant losses in growth; and can boost GDP if revenues can be transformed to investment with significant emission reductions

All figures: % change from no-CBAM reference scenario



- Trade-off between growth and welfare: Transition needs to be managed carefully!