

Russia and Europe: cooperation or confrontation in green area?

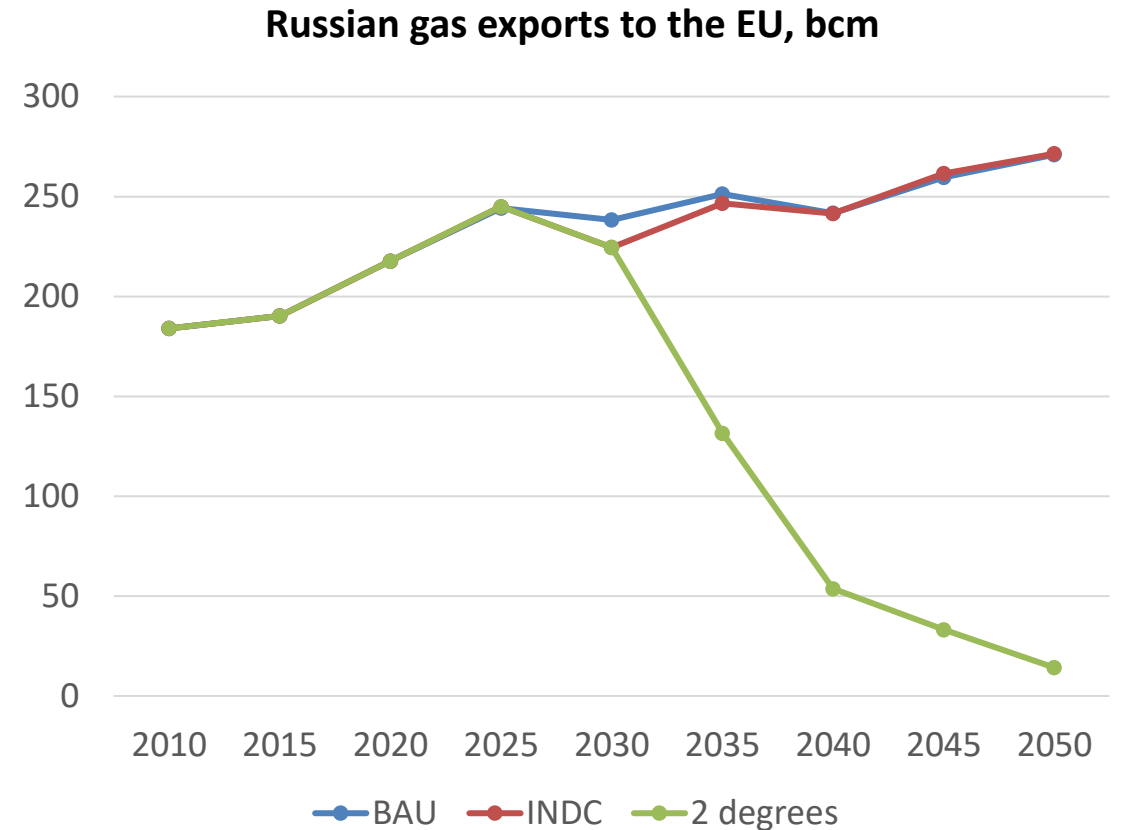
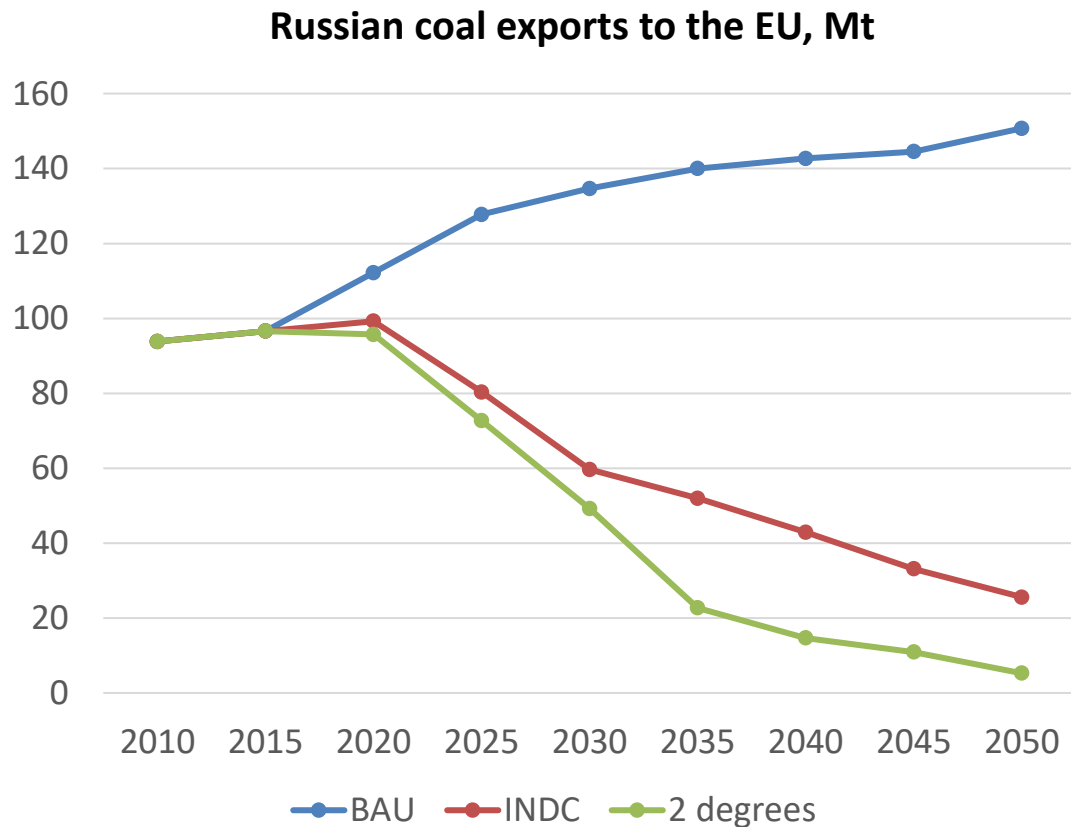


NATIONAL RESEARCH
UNIVERSITY

Igor Makarov

Head of the School of World Economy
Head of the Laboratory for Climate Change Economics
Higher School of Economics, Moscow

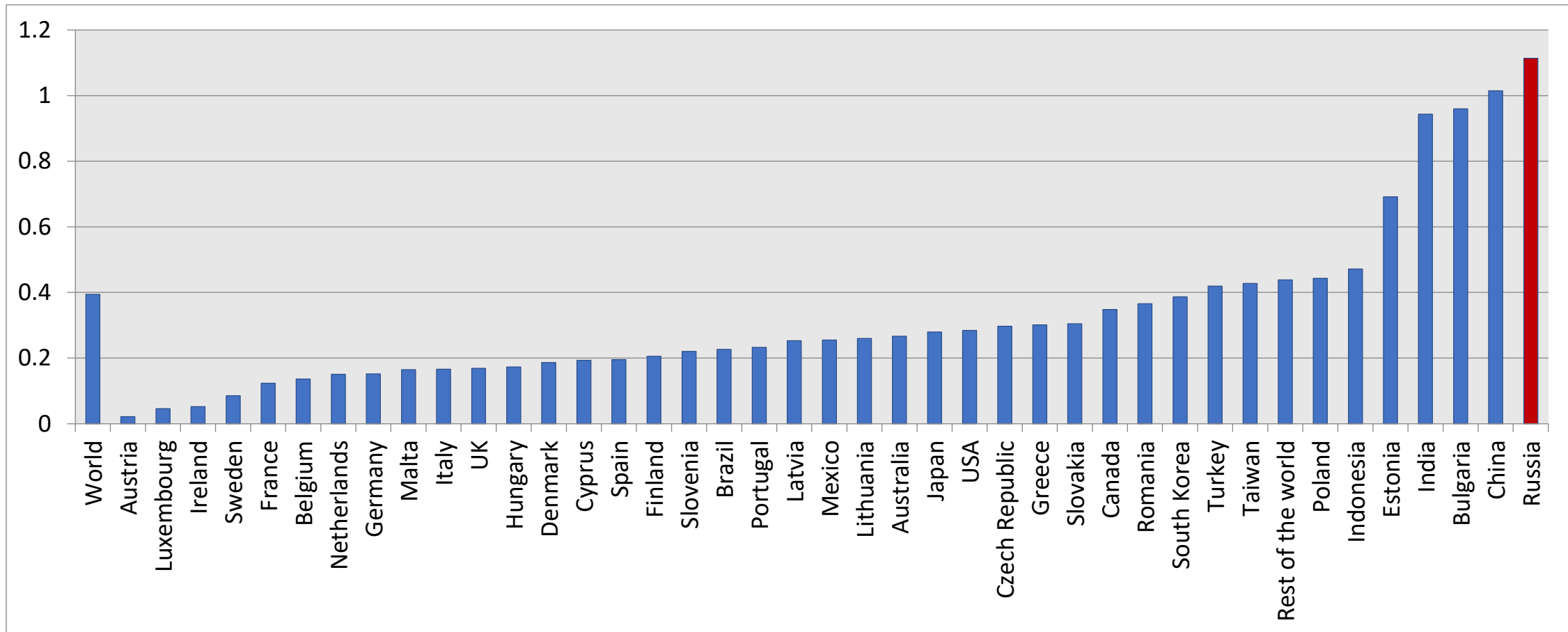
Risks for Russia related to European Green Deal: exports of fossil fuels



Source: Makarov et al., 2020

Risks for Russia related to European Green Deal: carbon border adjustment mechanism

Carbon intensity of Russia's exports, kg CO₂ per USD



Source: Makarov and Sokolova, 2017

CBAM: Estimates of damage to Russian exporters

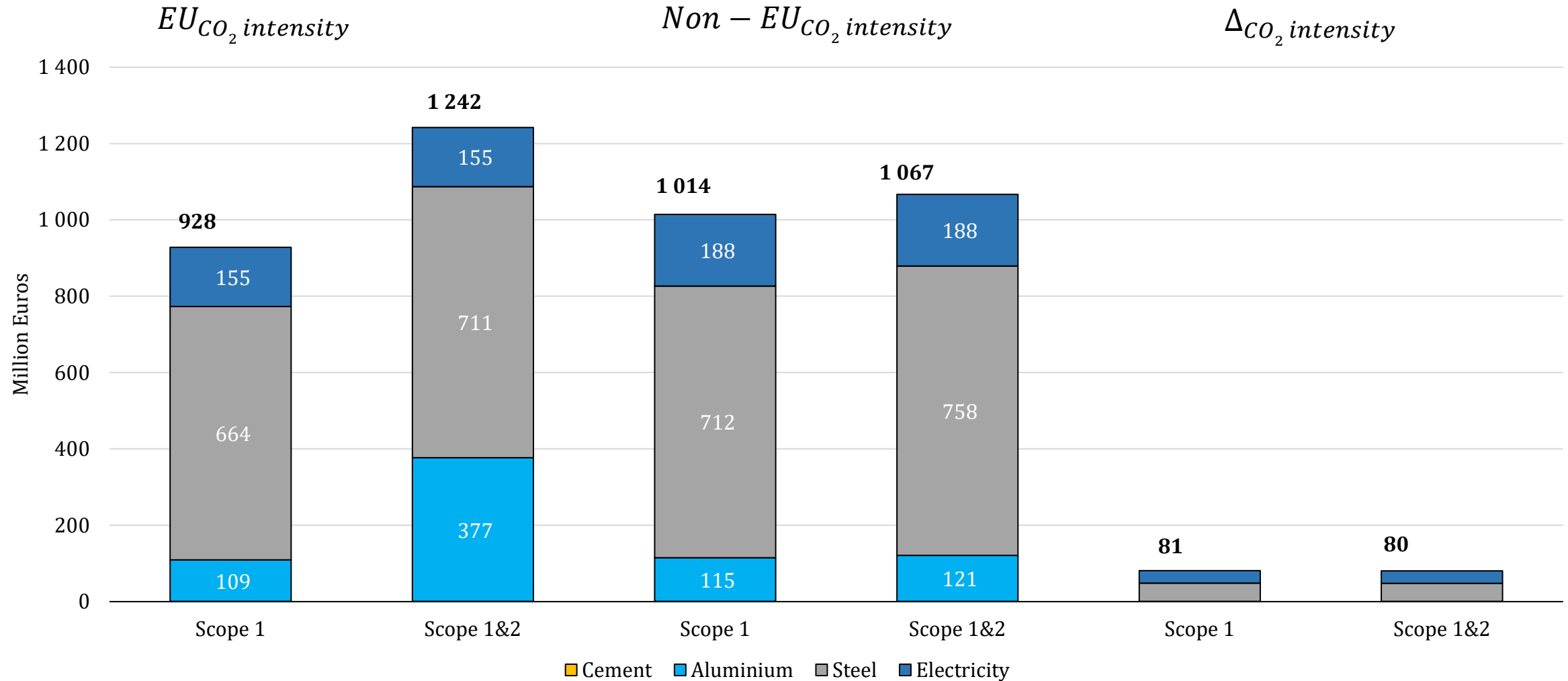
- Is planned by the EU starting from 2022-2023 in order to prevent carbon leakage and to promote green development in other countries
- Details are not clear yet (geographical and sectoral scope, part of carbon footprint etc.)

- KPMG:
 - 3 scenarios:
 - pessimistic: 50.6 bn euro in 2022-2030
 - baseline: 33.3 bn euro in 2025-2030
 - optimistic: 6 bn euro in 2028-2030
- BCG:
 - 3-4.8 bn dollars/year, incl.:
 - oil and gas: 1.4-2.5 bn dollars/year
 - metals: 0.4-0.6 bn dollars/year
- Institute of Economic Forecasting of RAS:
 - 3.6 bn euro/year

These estimates are likely to overestimate the damage:

- oil and gas industries are unlikely to be included to CBAM
- re-orientation of exports to other countries would decrease the costs
- some of competing countries are also likely to be affected

Losses from CBAM for Russian exports to the EU



Source: ERCST, 2021

OECD vs BRICS: importers and exporters of emissions embodied in trade

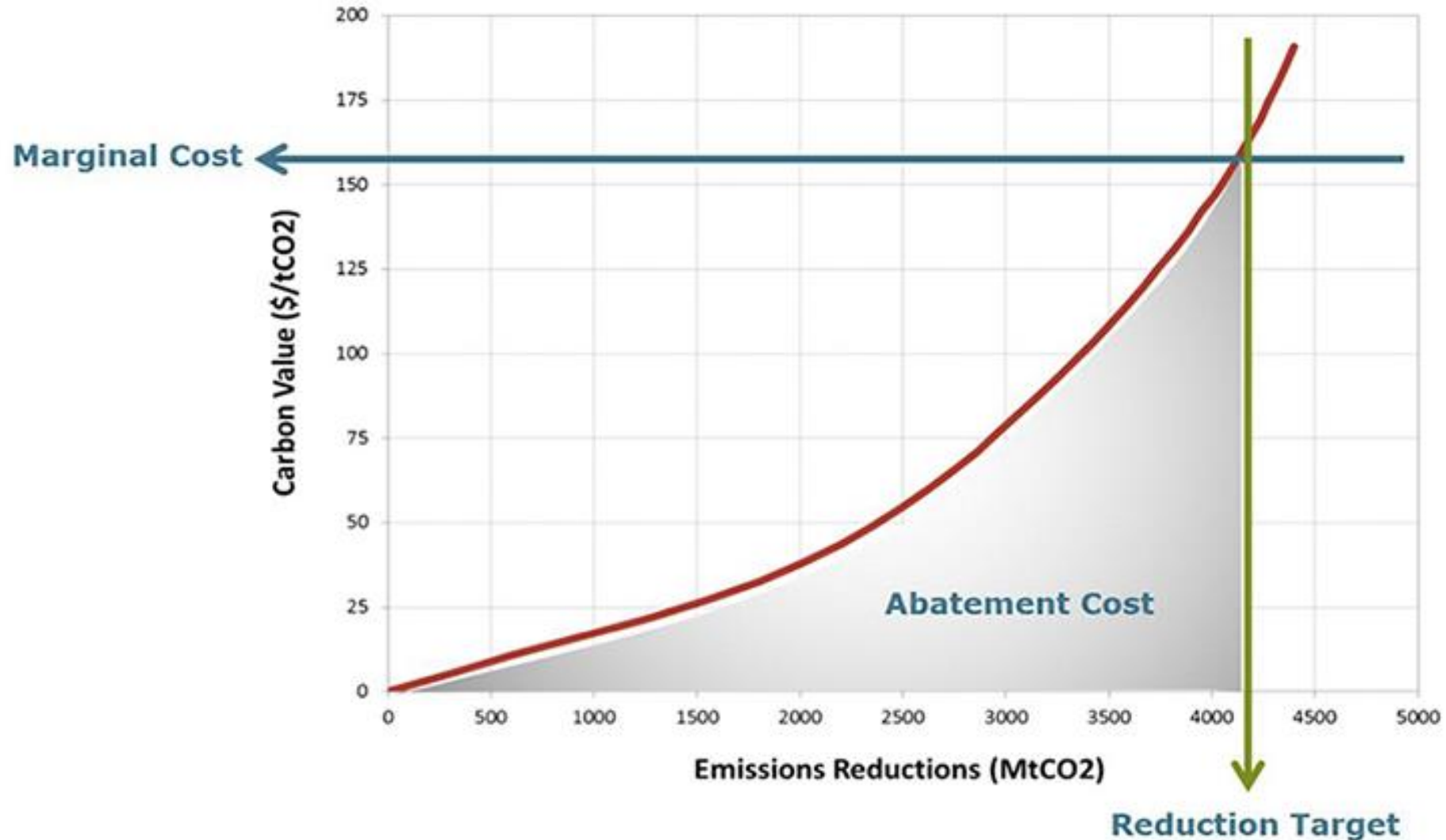
Consumption- and production-based emissions in OECD and BRICS countries in 2018

Country	Production-based emissions		Consumption-based emissions		Net exports of emissions	
	Mt	% of world	Mt	% of world	Mt	% of national emissions
OECD, total	12 602	34.6%	13 865	38.1%	-1 264	-10.0%
Canada	587	1.6%	588	1.6%	-2	-0.3%
France	332	0.9%	442	1.2%	-110	-33.3%
Germany	755	2.1%	862	2.4%	-106	-14.1%
Italy	348	1.0%	466	1.3%	-118	-33.8%
Japan	1 136	3.1%	1 312	3.6%	-177	-15.6%
Spain	270	0.7%	288	0.8%	-18	-6.6%
Sweden	42	0.1%	71	0.2%	-29	-69.5%
United Kingdom	380	1.0%	540	1.5%	-160	-42.1%
United States	5 425	14.9%	5 767	15.8%	-343	-6.3%

Country	Production-based emissions		Consumption-based emissions		Net exports of emissions	
	Mt	% of world	Mt	% of world	Mt	% of national emissions
BRICS, total	15 178	41.7%	13 554	37.2%	1 624	10.7%
Brazil	467	1.3%	489	1.3%	-22	-4.8%
China	9 957	27.3%	8 960	24.6%	997	10.0%
India	2 591	7.1%	2 355	6.5%	237	9.1%
Russia	1 691	4.6%	1 415	3.9%	277	16.4%
South Africa	472	1.3%	335	0.9%	137	29.0%

Source: OECD

Opportunities related to EGD: it is cheaper to reduce emissions in Russia than in the EU



Key issues

- Forests projects:
 - The potential of reforestation in Russia is estimated at 151 million ha with mitigation potentials of up to 351 Mt CO₂/year (Leskinen et al., 2020)
 - No system of certification and no recognition by the EU
- Hydro and nuclear:
 - 36% of electricity production
 - No recognition as green by the EU
- CCS:
 - Too costly and probably risky
- Hydrogen:
 - Russia is willing to develop blue and yellow hydrogen (probably together with CCS)
 - The EU wants green hydrogen

From “deal of the century” to EU-Russia Green Deal?



1970



2020s?

Thanks for your attention!