XXIth International Multidisciplinary Scientific GeoConference
Surveying, Geology and Mining, Ecology and Management – SGEM 2021

LOW-CARBON DEVELOPMENT: CHALLENGES FOR RUSSIA

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Albena, 2021

AGENDA

- Introduction
- Problem statement
- Key findings
- Discussion and Directions for future research

INTRODUCTION

Top Global Risks by Likelihood

	2012	2021
1	Income disparity*	Extreme weather**
2	Fiscal imbalances*	Climate action failure**
3	Greenhouse gas emissions**	Human environmental damage**
4	Cyberattacks*****	Infectious diseases****
5	Water crises****	Biodiversity loss**

*economic; **environmental; ***geopolitical; ****societal; *****technological

In 2020 all top 5 global risks (by likelihood) were environmental

Source: World Economic Forum. Global Risks Report 2021

Long-term low-carbon development strategies

- **European Union –** *The European Green Deal*

  - Objective: **to become climate-neutral by 2050**
  - Carbon Border Adjustment Mechanism (CBAM) is one of the most important initiatives

- **China**

- Building an Ecological civilization (Constitution of the People's Republic of China)

From Xi Jinping`s speech: **“We aim to have CO2 emissions peak before 2030 and achieve carbon neutrality before 2060”**
(*The 75th session of the United Nations General Assembly, 2020*)

- **Russia**

Long-term Development Strategy with Low Greenhouse Gas Emissions to 2050

PROBLEM STATEMENT

CBAM can seriously affect Russia, since the European Union is Russia's **largest trading partner**
(*37.3% of Russia`s total trade in goods in 2020*)

Losses of Russian exporters:

from 6 bln Euro to 50,6 bln Euro to 2030 (KPMG)

from 3 bln. US$. to 4,8 bln US$ pro year(BCG).

Main Goal

To assess **the *carbon intensity*** *of Russia`s exports* and identify ***potential challenges*** for the country

KEY FINDINGS

Table 1. Production-based and consumption-based CO2 emissions,
CO2 emissions embodied in exports and imports, net CO2 emissions exports, Mt

Country	Production-based emissions	Consumption-based emissions	Emissions embodied in exports	Emissions embodied in imports	Net emissions exports
China	9 281	7972	2190	881	1309
United States	5 020	5805	559	1344	-785
India	2 043	1919	431	307	124
Russia	1 488	1167	450	129	321
Japan	1 202	1360	263	421	-158
Canada	556	546	219	209	10
Brazil	461	474	104	117	-13
United Kingdom	431	574	128	271	-143
South Africa	415	314	157	56	101
Turkey	337	376	102	141	-39
World	32 276	32 276			

Source: Authors` calculations, based on the OECD

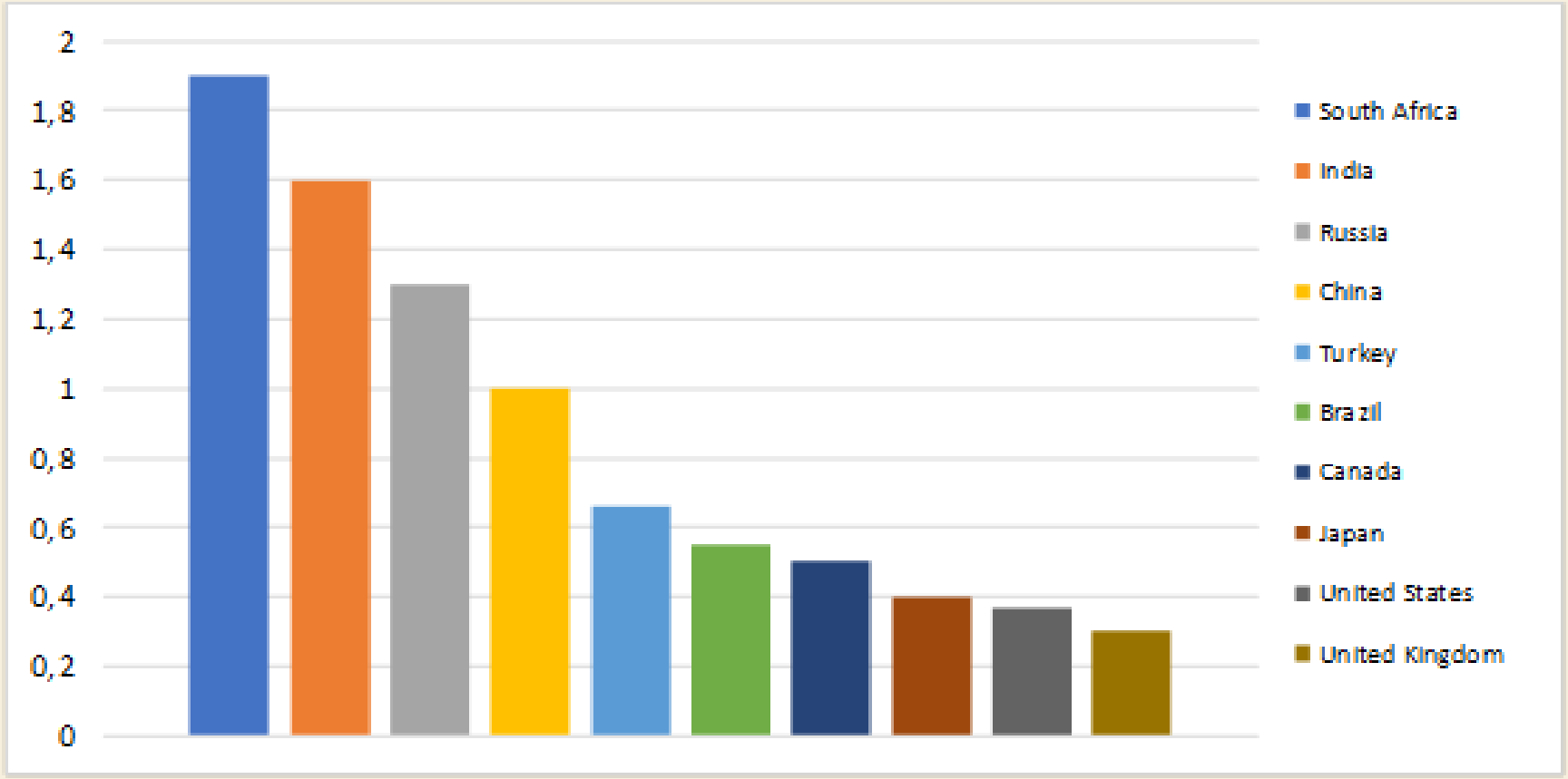

Fig. 1. Carbon intensity of exports, tCO2/thousand US$

Fuels and energy products, metals and metal products
account for *75,1% of the total value of Russia`s exports* to far-abroad countries

Source: Authors` calculations, based on the OECD and World Bank data

CBAM`s potential impact on Russia`s economy:

- *Highly carbon-intensive industries* are the most affected ones, risk losing competitiveness in the European market
- CBAM can give Russia an impetus to *accelerate structural reforms and modernize the national economy*

DIRECTIONS FOR FUTURE RESEARCH

- Calculation of Russian carbon-intensive industries` carbon footprint
- Development of address measures to reduce carbon footprint

CIRC4LIFE: MAINTAINING ECO-FRIENDLY CONSUMPTION

- Launched by European Commission Horizon 2020 in May 2018
- 4 pioneering sectors: LED lightning products, recycle and reuse of tablets, meat production, and vegetable farming
- Global Life Cycle Impact Assessment (LCA) database
- LCA info available for consumers via smartphones software
- Credits & Debits for eco-friendly/unfriendly behavior
- Credits are rewarded with bonuses

Environmental impact consideration is directly included into consumer's decision-making	Purchasing eco-unfriendly goods lessens customer's bonuses

May 2021: Estimation of Carbon footprint is a problem

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Thank you for your attention

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