Russia and Global Climate Negotiations

Natalia Churkina

Vera Kononova

Institute for Complex Strategic Studies

Graduate School of Business Administration, Moscow State University

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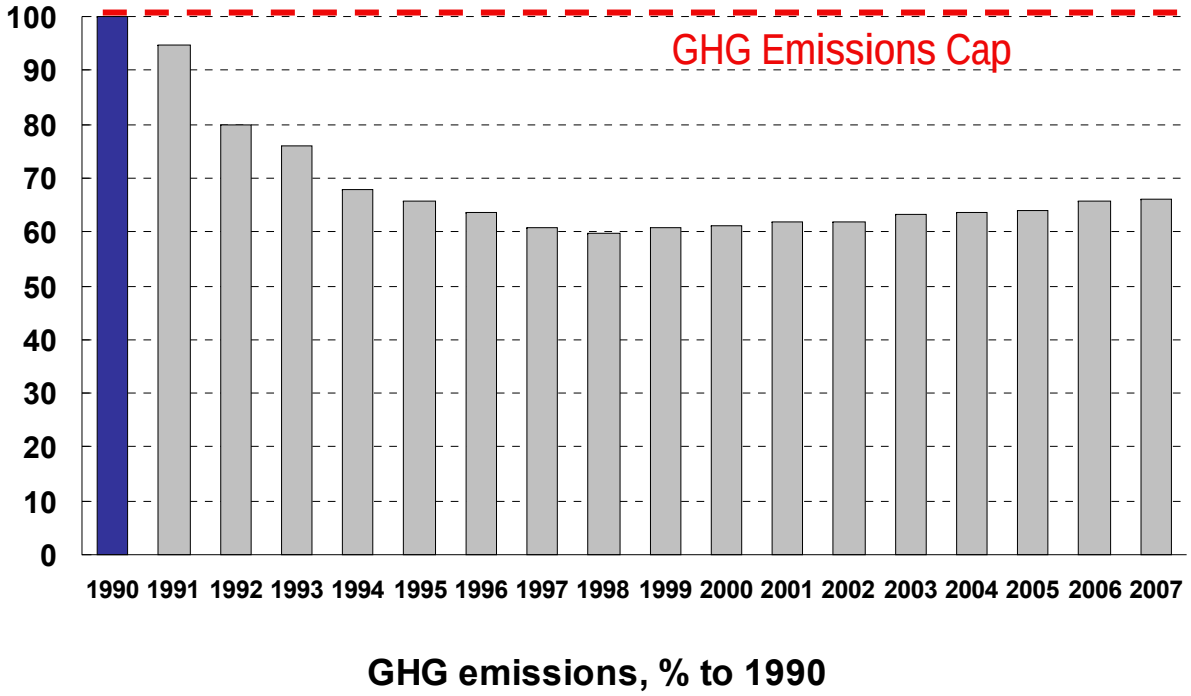
Presentation Overview

- GHG emissions reduction in Russia: soft constraint and high potential
- Current Russian carbon trade policy
- Corporate initiatives on emissions reduction and energy efficiency
- Russia's position in Copenhagen

GHG emissions reduction in Russia: soft constraint and high potential

GHG emissions in Russia: «soft constraint»

Macroeconomic crisis in 1990s caused a significant drop in GHG emissions and substantial stock of allowances for Kyoto period



- Russian acceptance of Kyoto Protocol allowed it to come to effect
- Russia has 7% share of world GHG emissions (2,2 bln tons CO2 eq. annually)
- Russia is expected to comply with 1990 emissions level at least until 2020

Source: UNFCCC, Rosstat

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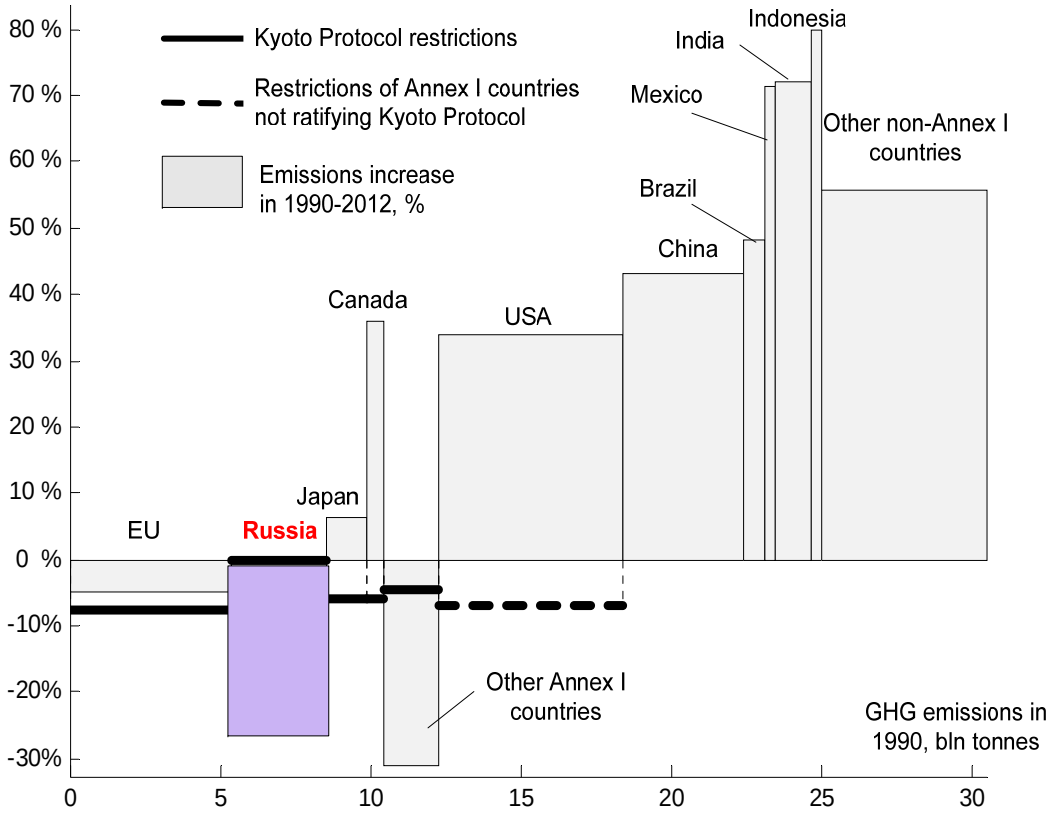
GHG restrictions across countries

Russia is the largest allowances stock owner and is considered worldwide as potential supplier for Europe, Canada and Japan

- 2193 Mt CO2 eq – annual emissions
- 1126 Mt CO2 eq – annual excess allowances



Source: ICSS estimates based on UNFCCC, IEA, EIA, EEA data

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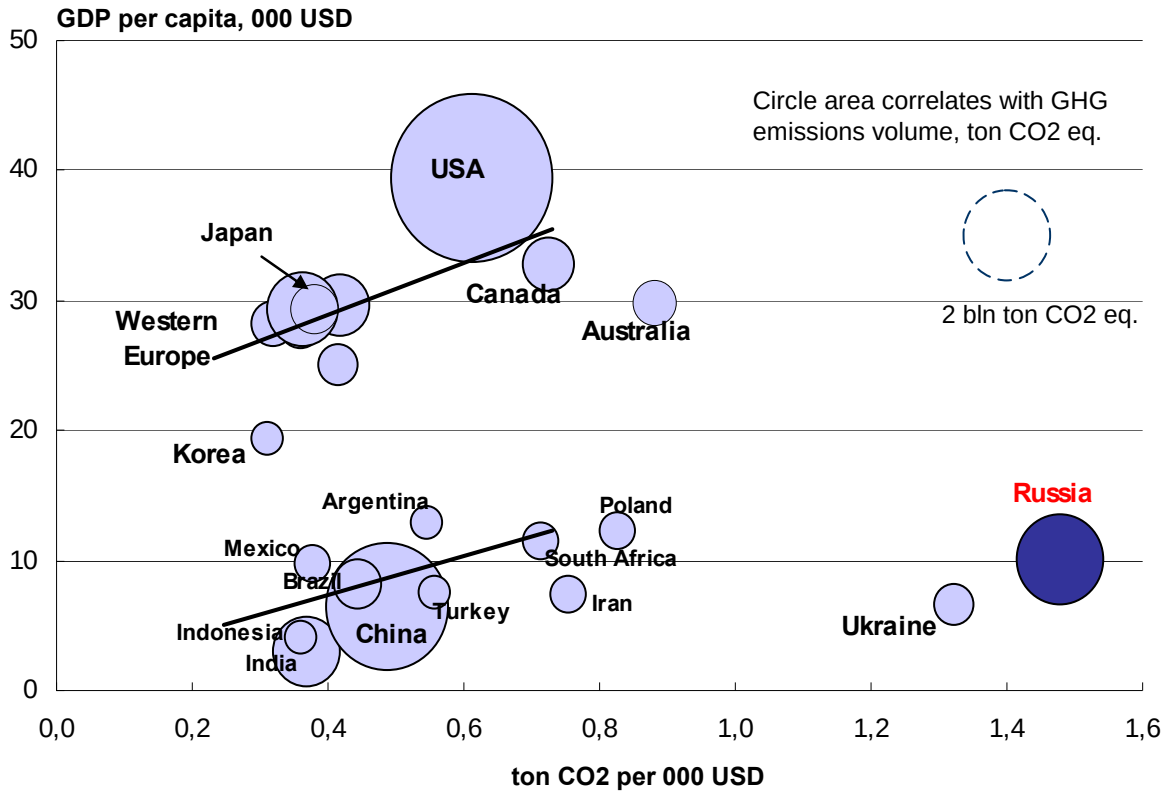
Carbon intensity of Russian economy

Russia is one of the most carbon intensive economies in the world, having the highest GHG emissions per 1 USD GDP



Source: UNFCCC, IMF

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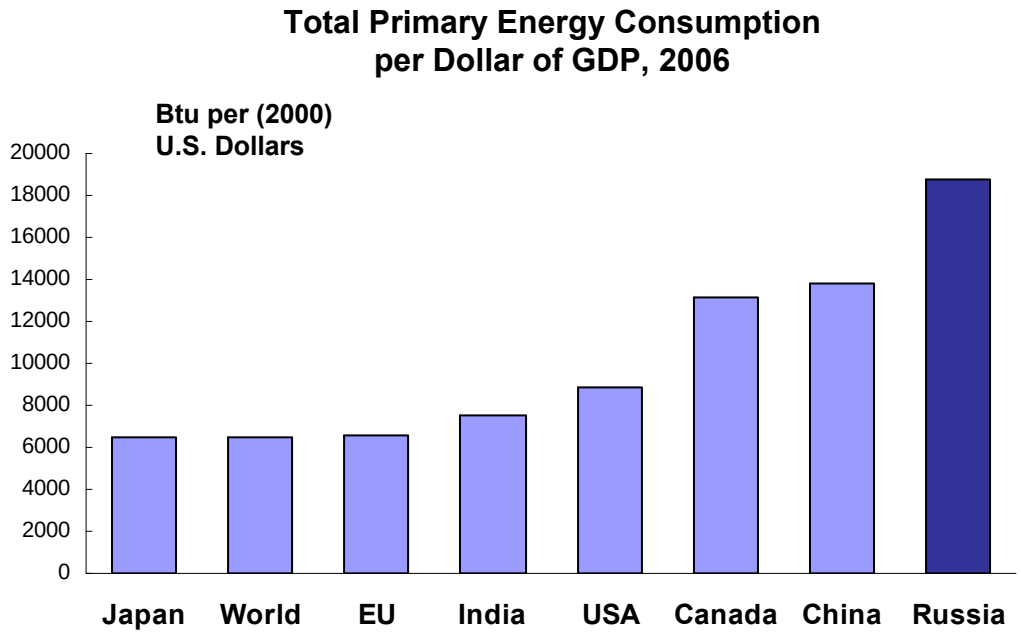
Why Russian economy is carbon intensive

Main reasons of high energy intensity are as follows:

- **Natural reasons**: colder climate implies higher energy consumption for heating
- **Economic structure**: large GDP share of energy intensive industries; low energy efficiency of economy
- **Energy sector**: energy production is dominated by organic fuels

Energy intensity of Russia is much higher than abroad



Source: IEA

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Challenge of high carbon intensity

High carbon intensity imposes potential limitations on economic development of Russia through probable post-Kyoto constraints, carbon taxes and technical standards

EU	I will not accept a system… that imports products from countries that don't respect the rules… We need to impose a carbon tax at [Europe's] borders. I will lead this battle. *Nikolas Sarkozy, September 2009 (Financial Times)*
EU	We need to be able to use the trade instruments and commercial bodies to protect European products from competition with products that do not take into account the true ecological cost. *Jean-Pierre Jouyet, France's Minister for European Affairs "France and Britain ready to lay out eco-friendly tax cuts", Herald Tribune, 1 November 2007*
WTO	We reaffirm our commitment to work towards the reduction or, where appropriate, the elimination of tariff and non-tariff barriers to environmental goods and services through the WTO Doha negotiations, which will also help us to address our shared energy security and climate goals. *Growth and Responsibility in the World Economy, G8 Summit Declaration, 7 June 2007*

Energy efficiency of Russian economy

Energy efficiency improvement is one of the priorities in government policy:

The President's decree "On Measures to make the Russian Economy more Energy and Environment Efficient" (June 4, 2008)

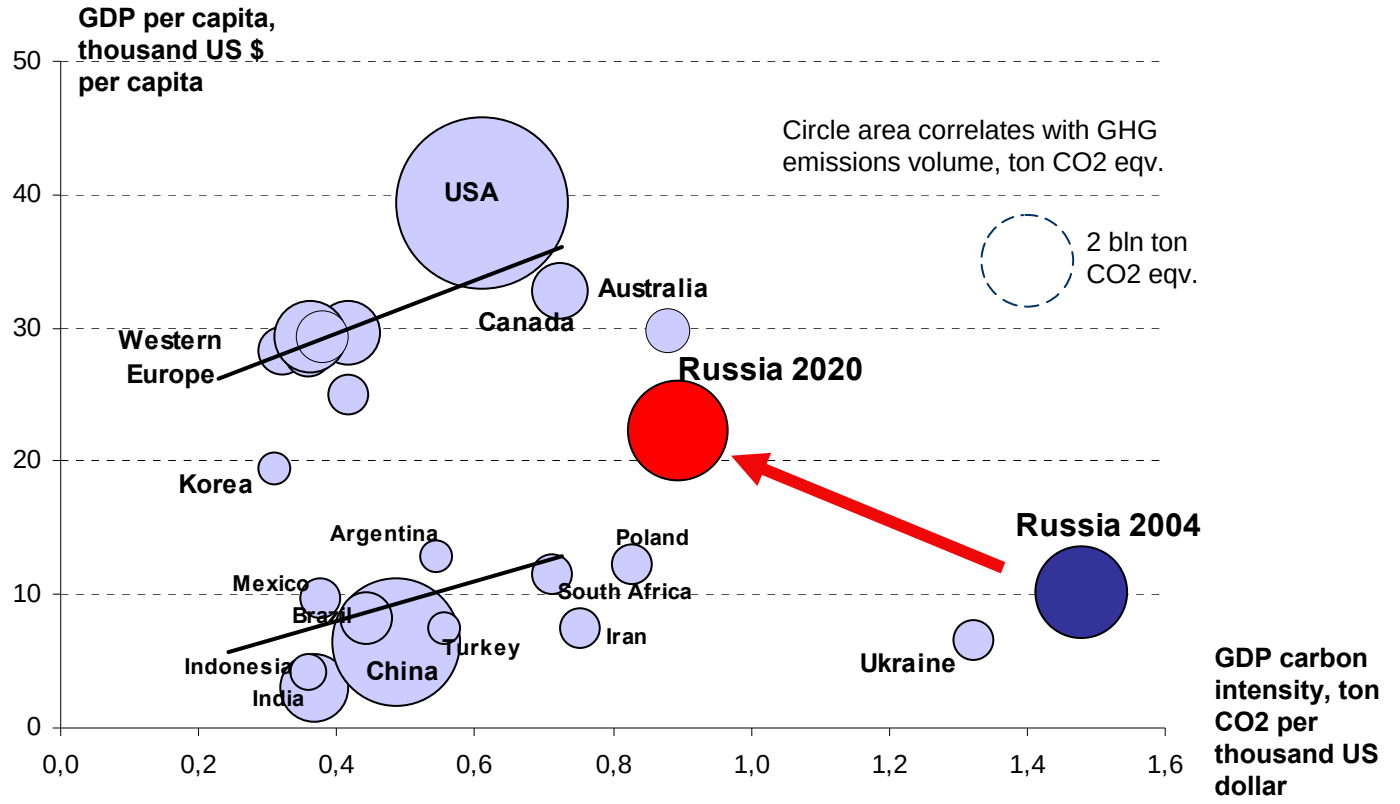
- the target of reducing by 40% the amount of energy used per unit of GPD by 2020 as compared to the 2007

The Federal Law "On Energy Saving and Energy Efficiency" (November 23, 2009) includes:

- restrictions on the sale of incandescent light bulbs
- requirements of energy efficiency labeling of goods
- requirements of energy evaluations for the most energy-intensive organisations
- new energy efficiency standards for buildings
- reductions in budget spending on purchasing energy resources

The new target and carbon intensity in Russia

The new target - energy efficiency to be improved by 40% till 2020 - may allow Russia to reduce the gap with other countries



Source: UNFCCC, IMF, Rosstat, ICSS estimates

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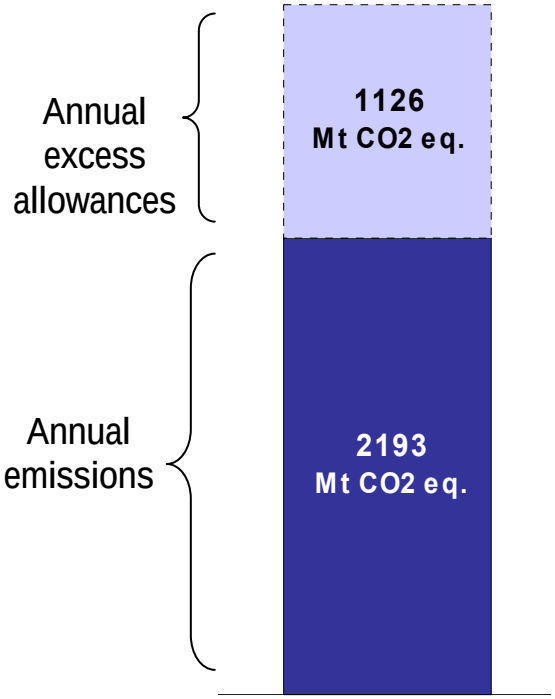
Current Russian carbon trade policy

Emerging policy

Carbon Trade policy is emerging, based on the recently adopted Climate Doctrine of Russian Federation, yet there is much to improve



- The Climate Doctrine is adopted in 2009
- Green Investment Scheme is supported, yet there are no plans to sell allowances
- Joint Implementation Scheme is approved, the details are being elaborated

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National Climate Doctrine

Climate Doctrine of Russian Federation is a political declaration on the climate change problem: “a plan to make a plan”

Feb 2009	Roshydromet published Assessment Report on Climate Change and its Consequences in Russian Federation
April 2009	The Government Presidium discussed the draft version of Climate Doctrine
Nov 2009	Climate Doctrine signed by President Medvedev

- Acknowledgement of the human nature of climate change
- Estimations of probable losses if the problem is ignored (2-5% GDP)
- General directions for action, no responsibilities assigned
- Lack of public discussion

Green Investment Scheme in Russia

Green Investment Scheme is consistently supported as an alternative to a "simple sale" of emissions reductions, though the investment projects in emissions reduction are not yet approved

Dec 2009	At present time Russia is not planning to sell emission allowances. *Alexander Bedritsky, Advisor to the President of RF on issues of climate change (Prime-TASS,11.12.09)*
Feb 2005	The Russian Federation is not planning to sell allowances not ensured by real emissions reduction. *Vsevolod Gavrilov, Ministry of Economic Development of Russia (Rossiyskaya Gazeta, 16.02.05)*

- A “simple sale” of excess emission allowances is considered as probable limitation for future growth
- “Saving allowances” is a part of the Government course in 2005-2009

History of JI in Russia

Russian large business is active in preparing JI projects. However, still no projects are approved

May 2007	Decree #332 stated the order for joint implementation of projects on the territory of Russia. Russian business got the access to world carbon market
Dec 2008	About 100 JI projects (180 mln tons of CO2 equivalent for 2008-2012) prepared. Over 30 projects (85 mln tons of CO2 equivalent) successfully passed the assessment
May 2009	The amount of ready JI projects grew up to 125 (240 mln tons of CO2 equivalent). The implementation is not yet started/
June 2009	The Government adopted new “JI rules”. OAO “Sberbank of Russia” (Sberbank) is to act as the “operator of carbon units”, assessing the JI projects on the base of tenders
Feb 2010	Sberbank management notified that the first tender for JI projects would be announced this week

New JI rules

Regulations "On Implementation of Art. 6 of the Kyoto Protocol to the UNFCCC" include:

- Applications are to be selected on the basis of tender. The tender limit is 30 mln tons CO2-equivalent. Tenders are held by Sberbank.
- Application package must include the project documentation, independent determination report, confirmation of the applicants technical and financial potential to carry out the project and the statement of expected economical and social effect of the project).
- In 5 business days the Expert Council of Sberbank would make a decision on project approval.

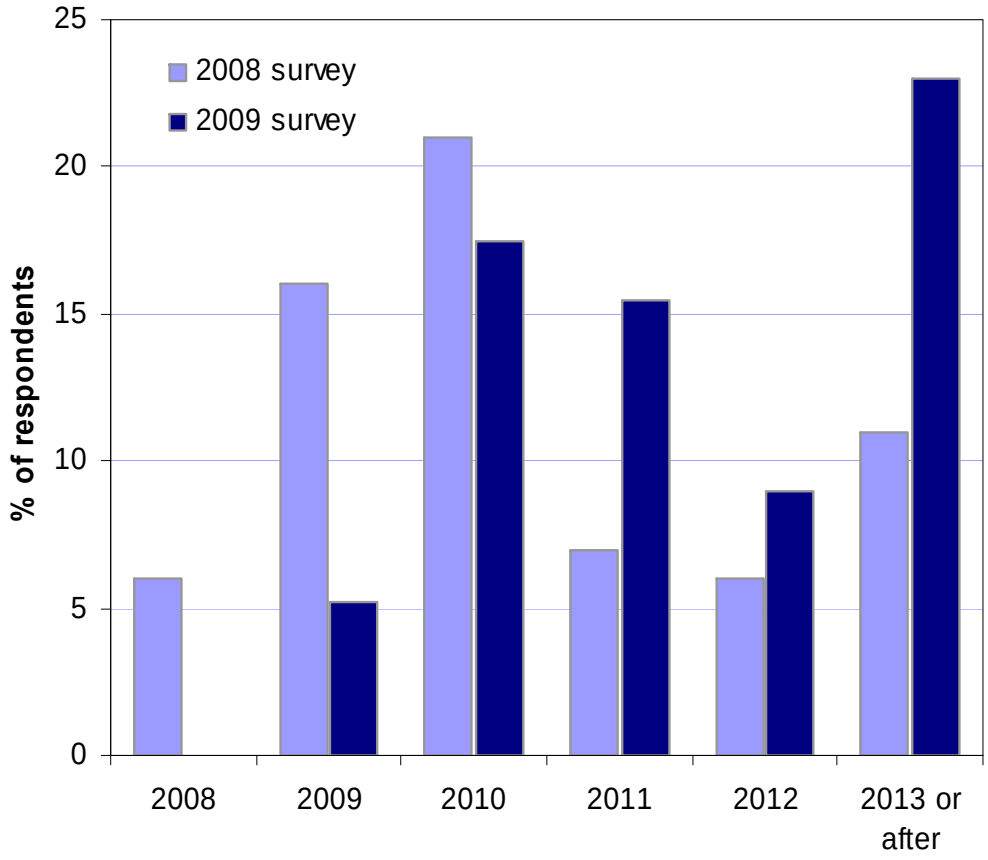
The new rules are to promote the best Russian JIPs, although some important points are not covered

- The procedures for comparing the JIPs from various industries are not defined
- No quantitative indicators assigned
- Timeframe for tenders is not set
- Sberbank is assessing JIPs but not financing them

Expectations on JI in Russia

SURVEY: At what time do you expect Russian JIP-based ERUs to come to the market?

A significant share of Point Carbon respondents (23%) expect that Russian JIPs would be fulfilled in 2013 or after – during post-Kyoto period



Source: Point Carbon

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Corporate initiatives on emissions reduction and energy efficiency

Case Study Outline

The study is focused on three Russian companies, controlled by single holding company

Sources of Information

1. Interviews with companies' representatives

Ivan Rebrik, Head of UC RUSAL's Health, Safety & Environment Department

Maxim Epifantsev, Head of UC RUSAL's Environmental Management Department

Nikolay Sakharov, Project Manager (Ecology) of En+ Management LLC.

Alexander Lukichev, Head of Environment Department of GAZ Group

2. Internal documents

3. Publicly available sources

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The United Company RUSAL: Company Profile

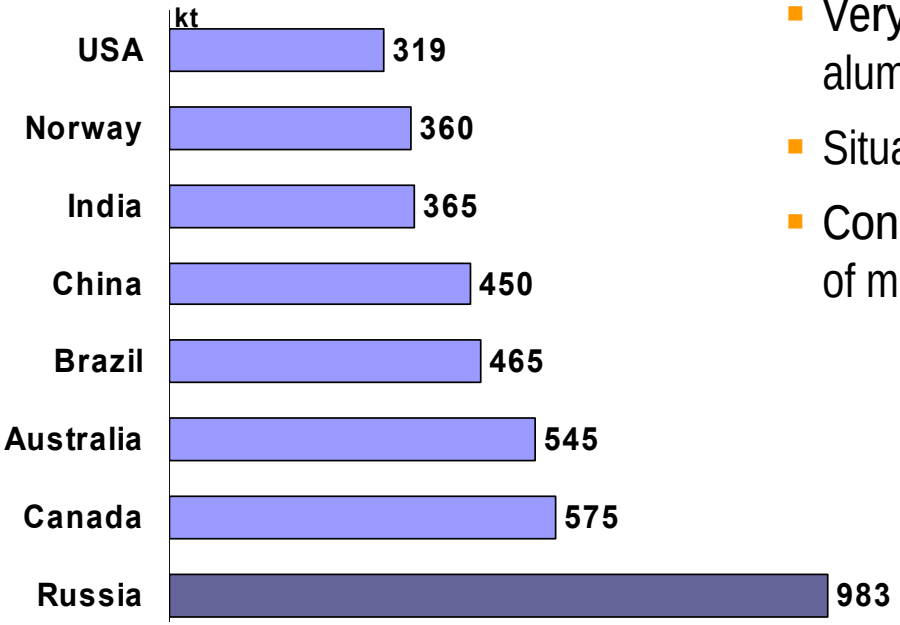
- **The global leader** – 12% of the global output of primary aluminum, 15% of the global alumina production
- **Global scope of operations** – in 19 countries on 5 continents
  - Russia – 12 regions (mostly aluminum smelters)
- **The complete production chain** - bauxite and nepheline ore mines, alumina refineries, aluminum smelters, casthouse business for production of alloys, foil mills and production of packaging materials, power-generating assets

Source: UC RUSAL

UC RUSAL: Background of Environmental Policy

Till the end of 1990s Russian enterprises followed the traditional paradigm – environmental costs were borne in order to comply with standards and to avoid public dissatisfaction

Capacity of the largest smelter by country



Source: Alcor, Global Operations Data, 2009

Most Russian aluminum smelters are…

- Very large (Bratsk and Krasnoyarsk plants are the largest aluminum smelters in the world)
- Situated very close to the cities
- Constructed in 1960ies when environment issues were of marginal importance

«The activities of aluminum plants in Russia were always watched over very carefully by society and by supervision authority as well».

Ivan Rebrik

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UC RUSAL: Environmental Policy Development

UC RUSAL's technological modernization not only prevented the company's negative impact on nature, but also helped to reduce costs due to resource saving

- The whole production facilities were modernized

  Example: Sayanogorsk and Krasnoyarsk smelters in 2003-2004

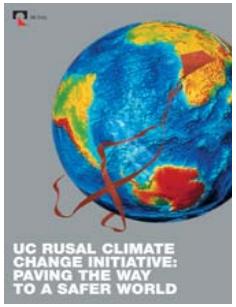
- New plants were constructed in compliance with high environmental standards

  Example: Khakas smelter launched in 2006

- Modernization of existing technologies and development of the new ones allows company to reduce energy and other resource consumption

  Example: Modernization of Soderberg technology allowed to increase productivity of the potline, to reduce hazardous emissions by 15-20% and to increase energy efficiency by 20%

UC RUSAL: Reducing Risks of Climate Change



In 2007 UC RUSAL announced its Climate goal:

To reduce the direct GHG emissions by 50% by 2015 and to eliminate carbon emissions in the long term perspective

Translating Climate goal into policies:

- Developing company's GHG emissions management
- Utilizing environmentally-friendly power sources (hydro and nuclear)

UC RUSAL: Other Environmental Activities

- **Employee environmental education**

  Informing employees about the consequences of environmental rules' violation, providing educational programs for different employee and partner categories (senior management, workers, contractors etc.), involving employees into environmental activities

"It is the people who really implement the environmental policy".

Ivan Rebrik

- **Community involvement**

Example: "Environmental information centers" of UC RUSAL give the access to the information on company's environmental policy and serve the community by providing environmental education to citizens.

- **Rehabilitation of environment**

Example: Development of a unique monitoring system for populations of rare and endangered flora and fauna in Altai-Sayan region within the impact zone of the Sayanogorsk Aluminium Smelter.

UC RUSAL: Environmental Policy Results

The company evolved into an environmentally-responsible business with efficient green investments achieved through cost reduction, with positive image, and competitive advantage in GHG emissions management

> *"Russian business has moved to a new stage of development, giving special attention to the planet's safe future".*
>
> **Marco Borsotti**,
> UN Resident Coordinator and UNDP Resident Representative in the RF

Further questions:

? Will the company's profit and environmental goals be compatible under the current conditions of aluminum price decrease?

? Can the company's best practice be transferred to other companies – and how?

? Do other companies in Russia have the sufficient resources to make the same transition from traditional to sustainable environmental approach?

Barriers on Way to Environment Responsibility

- **Limited time – government and environmentalists' requirements often require rapid action without regard of the companies' possibilities and resources**

  "The key problem is that we are too often in a hurry".

  Ivan Rebrik

- **Lack of environmentalists with a business perspective – and lack of managers / employees with the environmental consciousness**

  "We need to shift environmentalists' mindset to business approach".

  Nikolay Sakharov

- **Limited investment sources**

  "It would have given business considerable support if government allowed companies to use environmental payments".

  Alexander Lukichev

Policy Implications

In the situation when carbon trade policy is lagged, the additional incentives for environmental activities of companies are essential

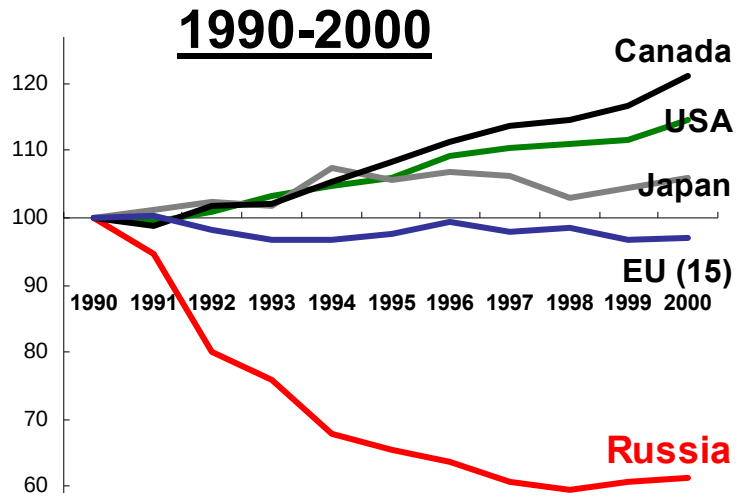
Additional investment sources	▪ Tax relieves for corporate environmental activities ▪ Permission to invest environmental payments in company's environment activity ▪ R&D subsidies ▪ Subsidized loans for clean technologies and equipment
New educational programs	▪ Environmental education for businessmen ▪ Business education for environmentalists
Favorable conditions	▪ Setting clear "rules of game" – clear timeframe of new environmental standards ▪ Facilitating information sharing through best practices promotion

Russia’s position in Copenhagen

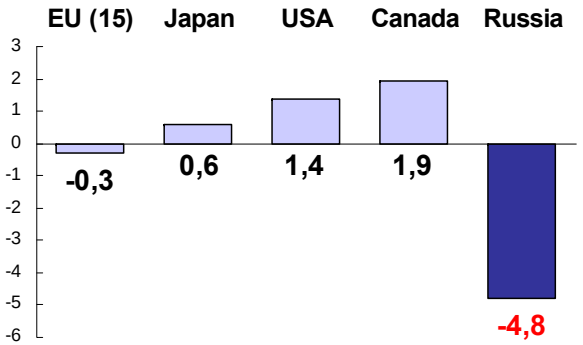
Background for Russia's position

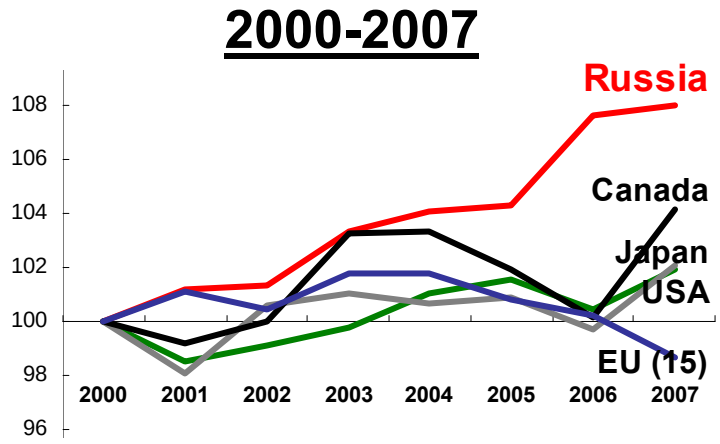
Russia's position: cap to be based on 1990 level as the country leaded in emissions decrease in 1990-2000 but leaded in emissions increase in 2000-2007

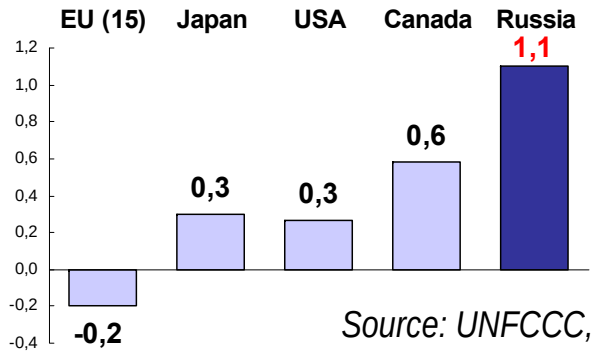
GHG emissions:
a) % to 1990 for 1990-2000
b) % to 2000 for 2000-2007



Average annual growth rates, %







Source: UNFCCC, ICSS estimates

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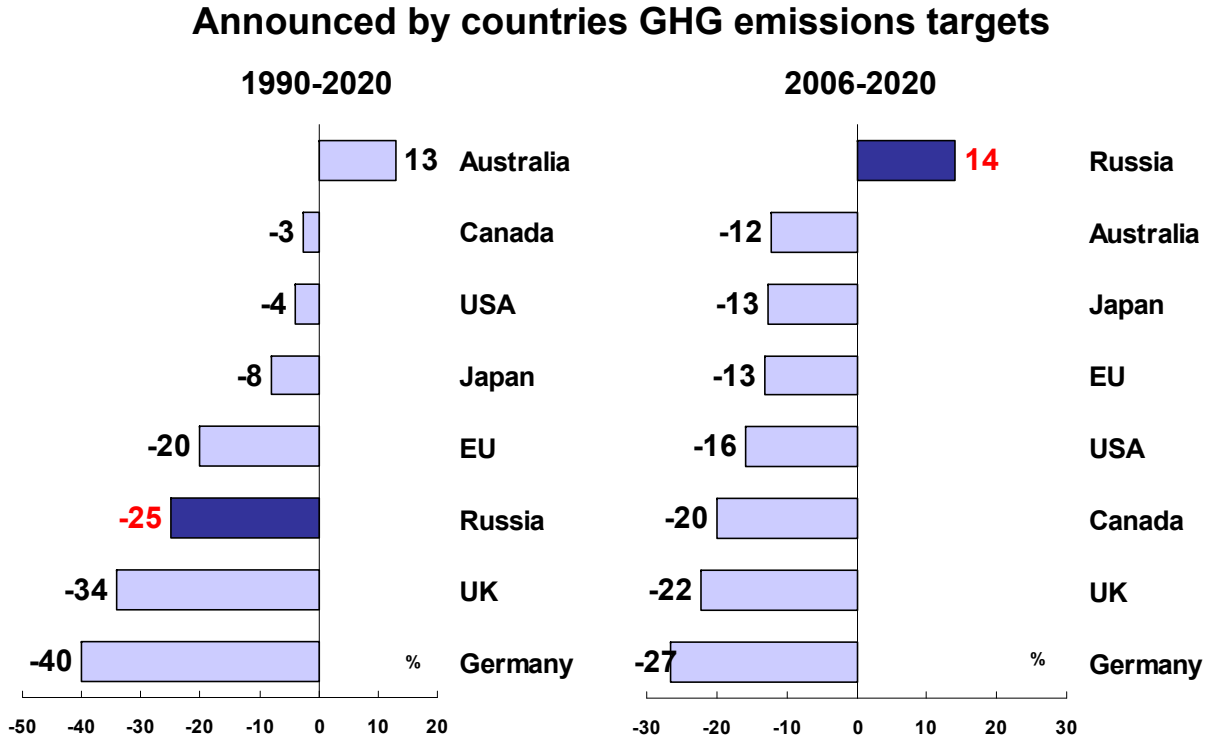
Official Russian position

The Russian Federation is ready to set emission targets and commit itself to an unprecedented cumulative reduction in greenhouse gas emissions of more than 30 billion tons between 1990 and 2020 which is equivalent to a 25 percent drop in emissions over this period

Dmitry Medvedev, Speech at Climate Change Conference Plenary Session, Copenhagen, December 18, 2009

If based on 1990 Russian target means decrease in emissions by 25% till 2020

However, based on 2006 Russian target means increase in emissions by 14% till 2020



Source: National governments, media, ICSS estimates

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Emissions reduction regardless of int-l agreement

There is an interest in the international agreement on GHG emissions reduction. However, the potential benefits of emissions reduction are being recognized. These activities are likely to be realized even in the case of absence of such agreement

December 14, 2009 Recording on Dmitry Medvedev's blog	"The major economies of the world … must simultaneously make the necessary commitments and strictly observe them. I would particularly like to emphasize that these must be simultaneous commitments and commitments that we all abide by together. Trying to do this on our own will be fruitless and pointless."
December 18, 2009 Speech of Dmitry Medvedev at Climate Change Conference Plenary Session, Copenhagen	"I want to stress that we will pursue these efforts [25% drop in emissions in 1990-2020] regardless of whether or not we manage here to agree on the basic principles and regardless of whether or not we reach a legally binding agreement. We will do this for the simple reason that it is in our own best interests.

Conclusions

- Russia is one of significant players in post-Kyoto negotiations
- Recent policy initiatives in carbon trade and energy efficiency are in line with international efforts, although the improvements are required
- Russian commodity global trading companies have incentives to promote climate strategies ahead of emerging national policy. However, the additional incentives required to spread climate initiatives either in large companies or SMEs
- Russia's position in Copenhagen was cautious, however national activities are likely to continue regardless of international agreement

Thank you for your attention!

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