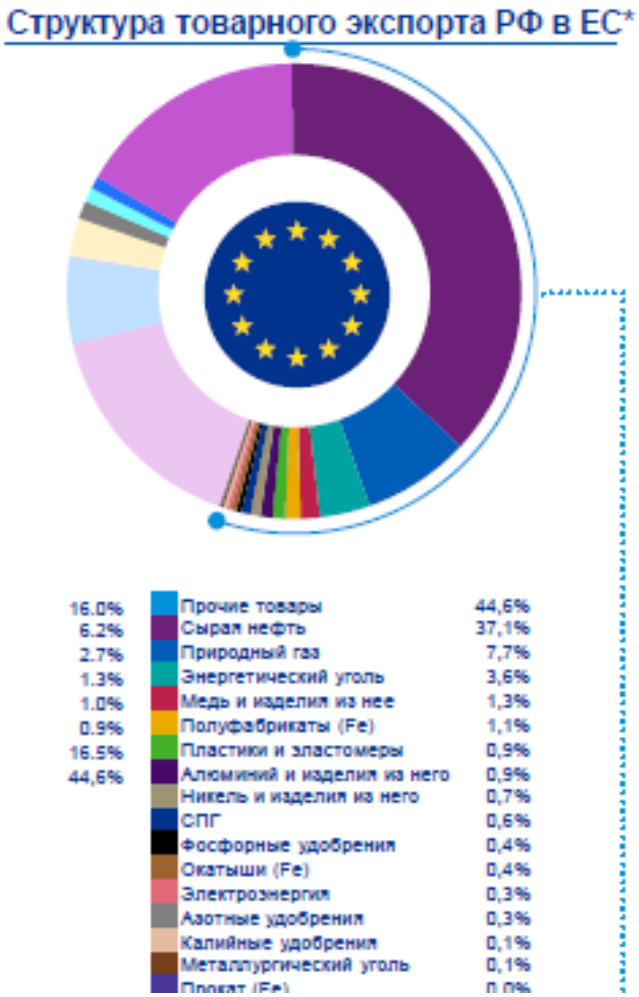
EU and Russia climate change research and innovation priorities

The potential role of forest & climate offsets in EU transboundary carbon regulation for Russia

Dr. Evgeny A. Shvarts, Independent director, UC RUSAL and NorNickel
Dr. Andrey V. Ptichnikov, Institute of Geography

Export of Russia to EU



* According recent KPMG Russian report

- 46% of Russia export (by value) is directed to EU
- 55% of Russian export to EU is under risk of transboundary carbon regulation (TCR) and carbon tax*
- Anticipated additional **annual** taxation of Russian goods in the period 2020-2030 directed to EU is estimated as:

1,9 Bln USD under optimistic scenario (taxation starts at 2028, only Scope 1);

5,5 Bln USD under basic scenario (taxation starts at 2025, Scope 1 & 2);

- Russia is among the most affected countries by EU TCR due to its structure of export to EU

EU Climate policies against Russia ones

1. **Russia is 15 years behind EU in its GHG regulation legislation and its implementation.**

- EU launched its Emission regulation and emission trading system (ETS) in 2005 and was able to implement it is a step-wise manner.
- Russia is only preparing its regulations (eg. draft law on State regulation of GHG emissions, strategy of adaptation to climate change etc) and is far behind EU in climate neutrality race

2. Russia do not have yet clear sectoral targets of GHG emission reduction, clear mitigation and adaptation strategies to climate change

- According the strategy of low carbon development of Russian Federation, adopted in 2020 by Russian Ministry of economic development the effect of national adaptation and mitigation strategies will lead to ***reduction of GHG emissions only after 2030 (in the best case scenarios!)*** – see next slide

Russian Ministry of economic development scenario of law carbon development of Russia

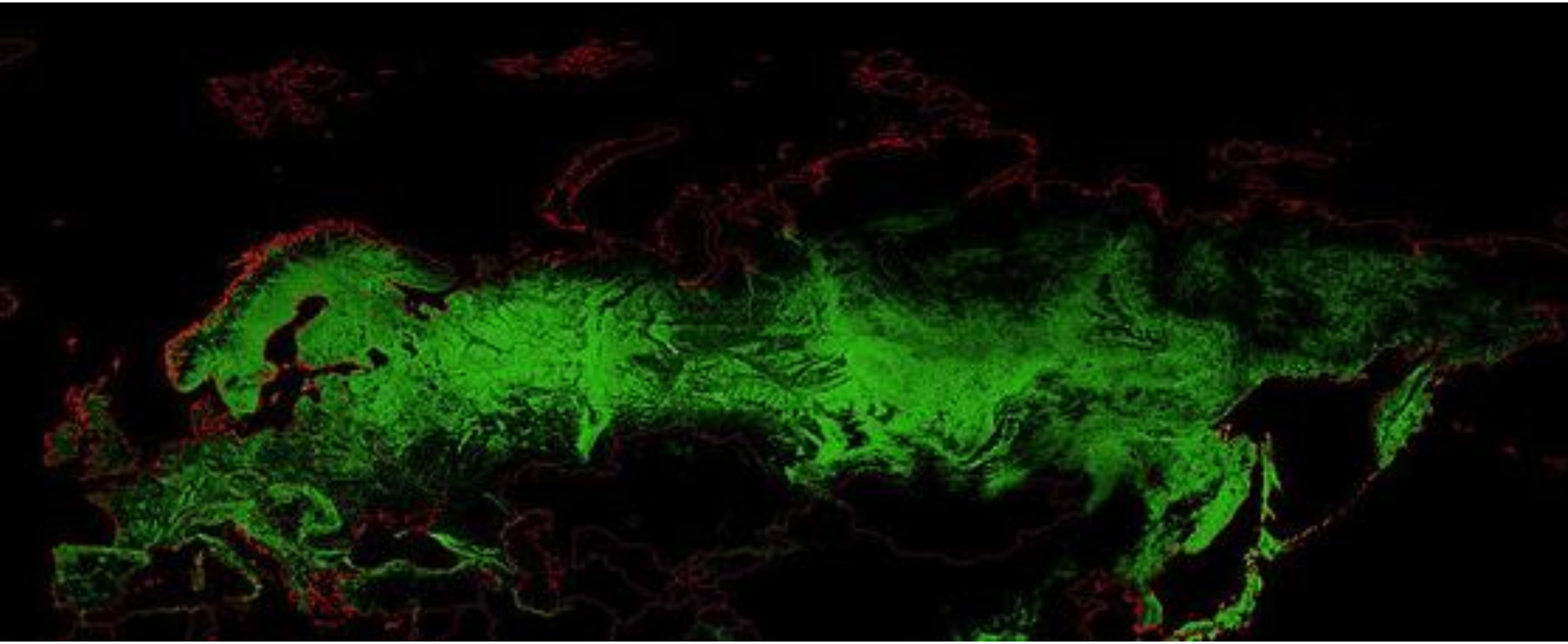
The basic and intensive scenarios requires a set of active changes in existing polices and regulations, including energy efficiency programs and forest policies

	Сценарий	Краткое описание
1	Базовый	Достигнутые к 2030 г. темпы роста энергоэффективности увеличиваются за счет принятия новых мер по масштабному внедрению энерго- и ресурсосберегающих технологий во всех отраслях экономики, кардинальному снижению потерь энергии. Существенно сокращаются сплошные рубки, расширяется охрана лесов на зону космического мониторинга II уровня
2	Интенсивный **Big challenge**	В дополнение к базовому сценарию принимаются меры по снижению углеродоемкости производимых товаров, энергии, работ и услуг: вводится национальное регулирование парниковых газов, увеличивается генерация на основе ВИЭ, проводится масштабная электрификация и цифровизация транспорта и технологических процессов в отраслях, внедряется технология захвата, хранения и переработки углекислого газа. Отказ от сплошных рубок, расширение охраны лесов на зону космического мониторинга I и II уровня
3	Инерционный	Темп роста энергоэффективности и обновления технологической базы сохраняется на уровне, достигнутом при реализации национальных проектов, а также за счет внедрения наилучших доступных технологий (НДТ) и модернизации энергетики. Воспроизводство 100% выбываемых лесов
4	Без мер государственной поддержки	Предусматривается сохранение энергоемкости экономики и ее технологической базы на текущем уровне. Отказ от внедрения наилучших доступных технологий, модернизации энергетики, экстенсивный характер лесопользования формируют риски для устойчивого развития экономики после 2040 г.

Gap between EU TCR and Russian national regulations

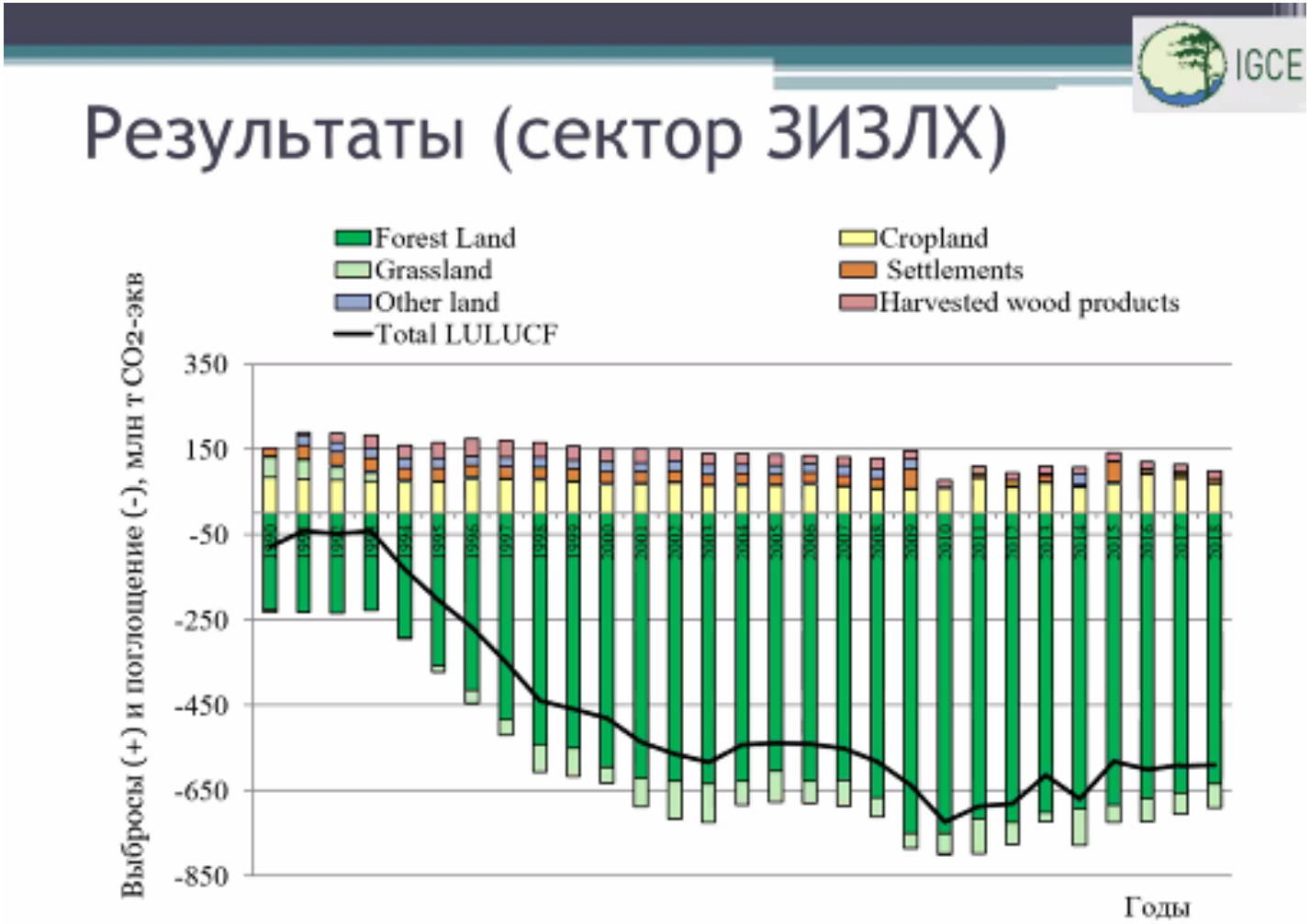
- According basic scenario of Russian export to EU carbon taxation (or enlargement of EU ETS to Russia) starts at 2025, while Russian national adaptation and mitigation strategies will provide necessary GHG emission reductions only after 2030.
- EU successes in GHG emission reduction are due to long-term interaction (cooperation) between EU – national governments and business (>11.000 companies) through GHG quotation programs, EU emission trading system, carbon taxes and other measures.
- Business in Russia most likely will not be able alone to implement ambitious GHG reduction programs to be fully in line with EU TCR requirements *in time*. Most of exporters are already implementing various GHG emission reduction programs.
- As the result in the starting period (eg, 2025-2030) EU carbon taxation might be seen more a EU market protection measure, than a strong environmental driver to emission reduction as it should be.
- To solve this contradiction it is important to consider the difference between EU and Russia in carbon sequestration.
- EU main sequestration mechanism is energy efficiency, shift to alternative energy et al. **In case of Russia main sequestration area is improving Land and Forest management!**

Russia managed forests as the major sink of GHG emissions



- The greatest potential in mitigation of climate change is within LULUCF and particularly in forest sector
- According different calculations (eg. IGCE (Romanovskaya) or KPMG Russia) the potential of additional GHG sequestration by forests is around 360-420 Mln t CO2 eq per year. It is 40-50% of sequestration potential by other type of climate projects. See next slides

Forest sector plays primary role in sequestration GHG in Russia



Source: N. Romanovskaya presentation

The potential of mitigation in LULUCF in Russia

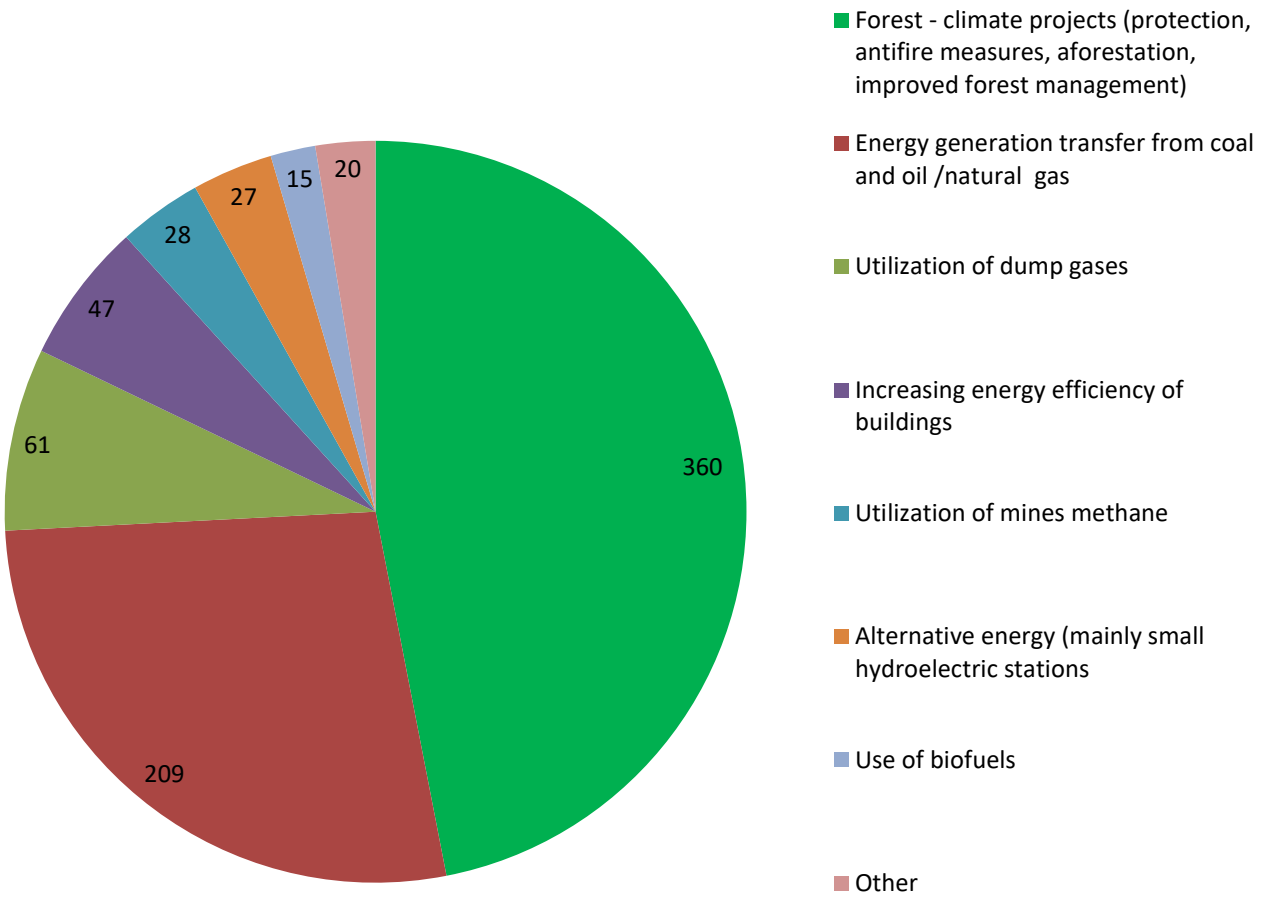
Потенциал митигации в земельном секторе

Меры по митигации	млн. тонн CO_2-экв\год
Предупреждение лесных пожаров	220-420
Щадящий режим лесозаготовок	15-59
Уменьшение образования древесных отходов при рубке	61-76
Эффективное лесовосстановление (замена хвойных пород на смешанные разновидовые культуры)	50-70
Предотвращение пожаров на луговых землях	0,5-1,5
Оптимальное внесение органических удобрений, сокращение эрозионных и дефляционных потерь на пахотных землях	101-159
Меры по потенциальному накоплению углерода в почвах луговых земель	13-19
Меры по уменьшению вымывания азота вносимых минеральных и органических удобрений	4-8
Обводнение ранее осушенных территорий водно-болотных угодий	0,1-0,3
Сокращение экспорта круглой древесины и переход на экспорт переработанной древесной продукции	17-26
Наращивания рециклинга бумаги и переработки освободившегося количества древесины в долгоживущие продукты	51-79
Посадка эквивалентного по качеству древостоя на площади, равной обезлесению	0,2-0,4
Рекультивация земель	13-19

ист.: Romanovskaya et al., 2019

Potential of climate projects generation of carbon units in Russia

1 CU = 1 Mln t C02 eq / year



* According KPMG Russia 2020 research

Different forest & climate projects may provide up to 40-45% of all GHG sequestration in Russia

Barriers to recognize forest climate offsets in EU TCR

- Current exclusion of forest and tropical REDD+ projects from quotation by EU Emission trading scheme (ETS) due to identified risks (forest fires, illegal logging et al) and non-sustainability of results

In the same time:

- No principal objections under Paris agreement to include ***forest projects as climate projects under Art 6***.
- Inclusion of boreal forest projects in quotation by EU is a matter of negotiations between Russia and EU.
- In addition to GHG sequestration forest climate projects have very important role for enhanced protection of biodiversity of global value, for reduction of forest fires, conservation of indigenous people lifestyles, promoting better forest management.

Recognition of forest offsets in international process

- ***Russia has signed Paris agreement under condition of recognizing sequestration of forests***
- Kioto Clean development mechanism (CDM) recognize forest offsets, such as REDD+
- Voluntary carbon markets recognize the carbon units from forest / REDD+ projects,
- Voluntary certification schemes, such as Responsible steel, recognizes the forest offsets
- There is experience in place to develop forest & climate projects, beneficial for biodiversity and indigenous and rural people in Russia
- Four types of forest & climate projects may be explored: forest protection in association with low impact forestry and certification, forest fires prevention and suppression, sustainable forest management and afforestation / restoration mainly in drylands.

All that create a solid basis for at least exploring the feasibility of forest offsets in EU Green deal with Russia

Proposal to EU (1): Recognize Forest offsets

- EU and Russia to explore in details the possibility *for exporters* to reduce their carbon footprint through forest offsets, obtained under credible internationally recognized mechanisms, at least for a period of 2025-2030 (35), when other Russian national GHG sequestration mechanisms will not yet be deployed
- Use of forest offsets may significantly facilitate integration of Russia into EU Green deal plan, and in the same time improve the resilience of Russia forests to Climate change.
- Engagement of key exporters in a number of forest climate projects may enhance protection of biodiversity, ecosystem services, reduce the forest fires and other negative impacts on forests
- The feasibility of this approach may be explored in a pilot project(s) between EU and Russia.

Proposal to EU (2): Engage market based incentives, such as green finances and internationally recognized certification schemes in EU Green Deal process

To engage market based drivers, aimed to encourage low carbon processes and production, such as:

- Internationally recognized certification schemes, such as ASI (Aluminium stewardship initiative), RS (Responsible steel) et al as a proof for low carbon and “green” product;
- Green finances, based on ESG (environment & social governance criteria);
- Pilot projects, aimed to harmonization of EU and Russia approaches in carbon taxation and driving toward low carbon and green future.