

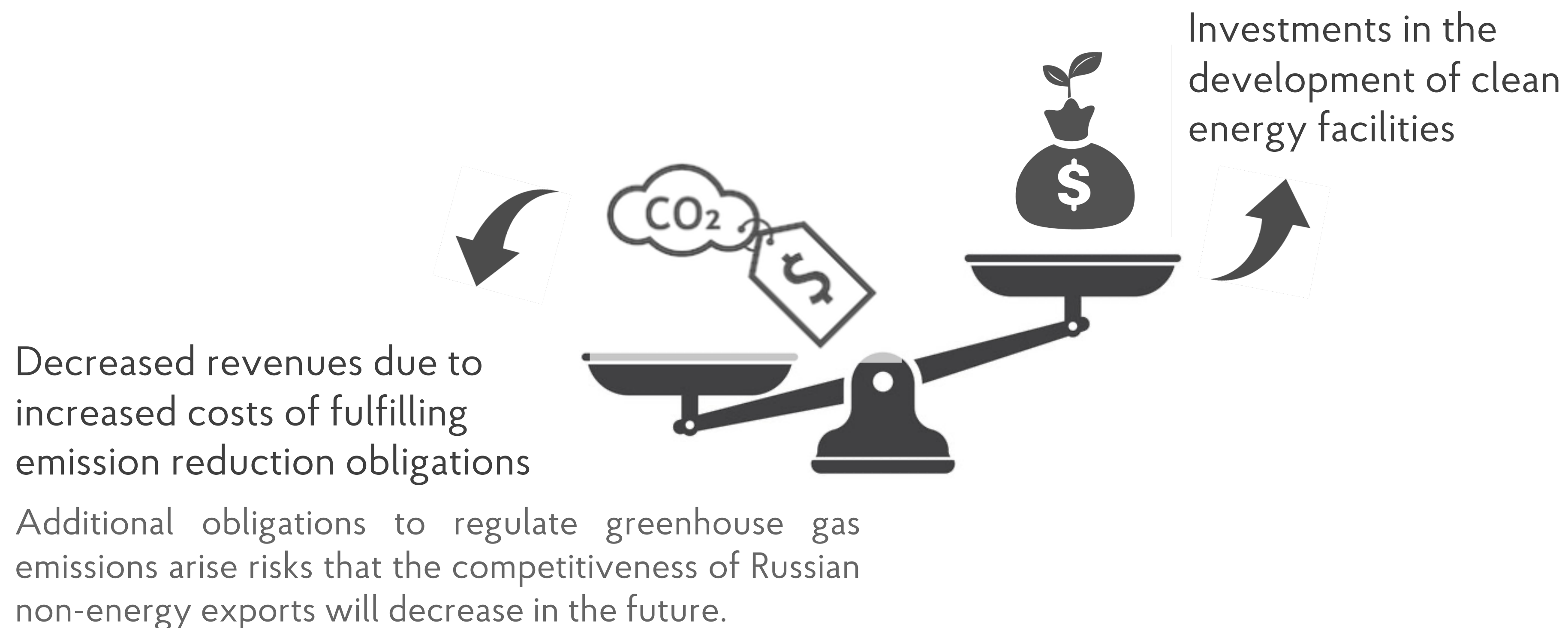
Institute for Economics and Utility Regulation

Russia: internal barriers to the Green Transformation

Ilya Dolmatov, PhD in economics
Director of IEUR

Moscow 2020

PARIS AGREEMENT AND EMERGING CHALLENGES FOR RUSSIAN INDUSTRY



THE MAIN QUESTION IS HOW TO
ADAPT TO A NEW REALITY?

THE VISION CHANGE OF THE FUTURE ELECTRICITY BALANCE IN RUSSIA

Unified System' Electricity Balance up to 2035				
	2020 , Billion kWt.h	Share 2020, %	2035 год, Billion kWt.h	Share 2035, %
Electricity Generation, Total	1090	100	1355	100
including:				
Nuclear	215,1	19,73	245,5	18,12
Hydro	192,5	17,66	201,2	14,85
TPP	676,5	62,08	900,7	66,47
Renewables	5,8	0,53	7,6	0,56

Source: General Scheme of the Power Generation Development until 2035 (2017)

List of main indicators of the implementation of the Draft Strategy			
	Fact 2017	Forecast 2030	Forecast 2050
Green house gas emission, Mln. t.	1577,8	2077	1993
Renewable electricity generation, bln kWt.h	1,1	25	55

Source: Draft of the Low-Carbon Emission Development of RF, 2020

2020 vision compare to 2017:

- More rapid changes in RF electricity balance for the future
- More rapid growth of clean electricity generation (nuclear, hydro, renewables)

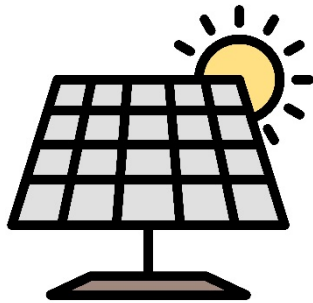
COMPARISON OF RENEWABLE ENERGY AND TRADITIONAL SOURCES OF ELECTRICITY COSTS

WHOSALE MARKET 2019

	THOUS. RUB / MW
PSA (Power Supply Agreement) TPS (Thermal Power Station)	925,6
PSA NPP (Nuclear Power Plant) / HPP (Hydro Power Plant)	2174,5
PSA RES (Renewable Energy Source)	2696,9

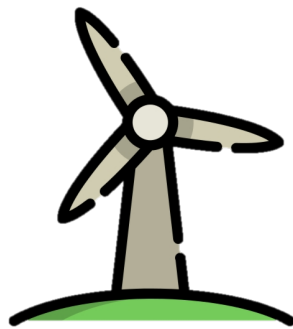
Source: Market Council Annual Outlook, 2019

RETAIL MARKET 2019



Solar

9 RUB / kWh



Wind

6 – 9 RUB / kWh

Source: Market Council Annual Outlook, 2019

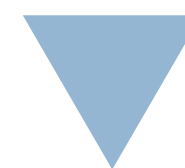
Renewable energy sources today are uncompetitive by price comparison to traditional sources of electricity

RUSSIA AND THE EU: DIFFERENT APPROACHES TO THE TARIFF POLICY FORMATION

- ▶ In Russia, part of the payment for consumed electricity is shifted from the population to industry. Tariff growth is limited by the legislative level (should not exceed the inflation rate)
- ▶ In the EU, the industry does not bear an additional burden of subsidizing the population, as a result there is the possibility of shifting part of the payment for renewable energy sources to the industry

CONCLUSION: IN FRONT OF NEW CHALLENGES

- ▶ To ensure the competitiveness of Russian products, it is important to comply with the European Green Policy
- ▶ Today it is necessary to ensure the sustainable development of the Russian energy sector under the existing conditions of financial constraints



RUSSIA HAS TO MAKE STRATEGIC DECISIONS ON THE BASES OF
COMPLEX SCIENTIFIC ECONOMIC RESEARCH AND RISKS ESTIMATIONS

Institute for Economics and Utility Regulation of HSE University



www.ur.hse.ru



Moscow, 13 Myasnitskaya Ulitsa, building 4