Aligning the resource economics with Sustainable Development Goals

Anton S. Pavlov, ITMO University, Saint Petersburg Scientific adviser: Anastasia S. Pavlova, ITMO University, Saint Petersburg

Согласование экономики природных ресурсов с целями в области устойчивого развития

А.С. Павлов, Федеральное государственное автономное образовательное учреждение высшего образования Санкт-Петербургский национальный исследовательский университет информационных технологий, механики и оптики. Санкт-Петербург

Научный руководитель: А. С. Павлова, Федеральное государственное автономное образовательное учреждение высшего образования Санкт-Петербургский национальный исследовательский университет информационных технологий, механики и оптики. Санкт-Петербург

The paper focuses on aligning the resource economics with Sustainable Development Goals(SDGs) by means of promoting the responsible sourcing of raw materials and responsible business conduct. Responsible sourcing of raw materials is important for the sustainable supply of products, especially in some key sectors (such as the electronics sector) that use precious metals. The availability and management of raw materials knowledge is essential to the EU and 3d countries, in particular to its industrial, trade, security-of-supply, and sustainability policies.

The content of the research project includes learning existing tools, approaches, platforms and networks, including raw materials market, scoreboard, resource efficiency and supply of "secondary raw materials", understanding status Quo of raw materials in the EU and 3d countries and development of aligned solutions for promoting the responsible sourcing of raw materials.

Overall, the research contributes strongly to the moving to a greener, more resource efficient and climate-resilient economy in sync with the natural environment and social priorities, demonstrating a strong commitment to supporting the UN's Sustainable Development Goals.

Sustainable Development Goals, set by the United Nations General Assembly, cover social, economic and environmental issues. Sustainable development and responsible sourcing of raw materials is essential for the sustainable supply of products. This is reflected in EU policy through the proposal of a supply chain due diligence system for importers of tin, tantalum, and tungsten and gold originating in conflict-affected and high-risk areas, also called "conflict minerals" (COM 2014/111).

The EU's industry and economy are reliant on international markets to provide access to many important raw materials since they are produced and supplied by third countries. Although the domestic production of certain critical raw materials exists in the EU, in most cases the EU is dependent on imports from non-EU countries.

Russia is one of the major suppliers of critical raw materials (e.g. rare earth elements, palladium, scandium, tungsten, vanadium etc.). China (e.g. magnesium, antimony, natural graphite, etc.), Brazil (niobium), USA (beryllium and helium) and South Africa (iridium, platinum, rhodium and ruthenium) are also important producers of critical raw materials. The risks associated with the concentration of production are in many cases compounded by low

substitution and low recycling rates. In line with the strategy for EU international cooperation the research of resource economics in the EU and 3d countries contribute the promotion the concept of responsible source of raw materials in world business practice and achievement of Sustainable Development Goals. This explain the choice the subject of research.