

The US-EU Sustainable Steel Agreement: Preliminary Impact Assessment

The study is devoted to the US-EU Sustainable Steel Agreement announced on October 30, 2021 (hereinafter referred to as the Agreement), which is to be concluded by 2024. Parties are expected to fix stringent requirements for the carbon footprint of steel, both produced domestically and supplied from abroad. By the end of November 2021, the analysis of the prospects of the potential Agreement was limited to expert opinions. A more detailed study of the consequences of the Agreement will continue the publication series on related problems of carbon border adjustment mechanisms, reducing greenhouse gas emissions and overcapacity in the iron and steel industry, as well as the US-China trade war. Obviously, a detailed quantitative impact assessment of the Agreement can be carried out after the completion of negotiations and the disclosure of the negotiated nomenclature scope, tools and approaches to the regulation of international trade in steel. Nevertheless, the proposed assessment is highlighting the areas and factors of potential gains and losses for the signatories of the Agreement, as well as the characteristics of foreign trade partners that need to be considered when reorienting the US and EU imports of iron and steel after the Agreement enters into force.

Thus, the purpose of this study is to provide a preliminary impact assessment of the US-EU Sustainable Steel Agreement. The research design was as follows. TOP-5 countries supplying iron and steel to the USA and the EU (according to the methodology of the US Department of Commerce) were selected. The TOP-5 supplying countries accounted for 74% of the volume of steel imports in the USA and for 67% in the EU. The final list of 8 countries (South Korea is in both TOP-5) and the EU is supplemented by the US as a party to the Agreement. Further analysis was carried out in three areas: the current technical level of the steel industry in the selected countries (carbon footprint, crude steel production by process, structure of energy consumption in the industry); potential technical level of the steel industry of the selected countries (investments in new facilities by process in the next three years, green steel projects); corporate (commitments to reduce greenhouse gas emissions by leading companies) and government (commitments of countries under the Paris Agreement and the domestic price of carbon) climate policy. The study is based on specialized reports and databases of Climate Action Tracker, Global Energy Monitor, Green Steel Tracker, IEA, OECD, US Department of Commerce, World Bank, World Steel, as well as scientific publications. In addition, the author has supplemented the data of the Green Steel Tracker database by adding climate commitments of a wider scope of companies from the studied countries and previously uncovered green steel projects in Russia.

The study concluded that the EU is in a more vulnerable position for the following reasons. Firstly, three out of five major steel supplying countries to the USA (almost 50% of the imports volume) have a carbon footprint below the world average (for the EU – two out of five suppliers), which is attributed to a higher share of electric arc furnaces (EAF) in the steel production of these countries and a lower share of coal in the sectoral energy mix. Secondly, the government climate policy in the countries supplying steel to the US is more in line with the benchmarks of the Paris Agreement, and the current average domestic carbon prices are higher than those in countries supplying to the EU. Additionally, companies from the major US supplying countries are more likely to commit to carbon neutrality / greenhouse gas emissions reductions. Third, companies from major supplying countries to the US are more actively developing green steel projects (almost 70% of projects announced globally with a wider portfolio of tested new technologies). By and large, the EU is in a more favorable position only when it comes to the planned investments in the steel industry of the supplying countries. EAF-based capacities to be launched in the next three years in the major supplying countries to the EU surpass those in the major supplying countries to the US. Undoubtedly, the higher average readiness of major suppliers to the US to tighten environmental requirements is associated with the presence of countries and companies from the EU among them.

Despite the risks arising for the parties (and especially for the EU), a number of balancing factors should be noted. Generally, both the US and the EU are quite well prepared for toughening environmental requirements for iron and steel, and the announced Agreement is intended to secure their competitive advantages (so far not too highly valued) in the global market. For both sides, this is also a prerequisite for increasing mutual trade in steel to replace the falling volumes of more carbon-intensive products from other countries. Moreover, the global iron and steel industry is characterized by overcapacity, which also facilitates the geographic diversification of steel imports. Finally, for the EU, additional risks can be mitigated both by increasing intra-block trade through both new and currently unused capacities, and by the experience of introducing and operationalizing the carbon border adjustment mechanism.