TRADE & INDUSTRIAL POLICY STRATEGIES

Climate change and trade risk: South Africa's trade with the European Union

SUMMARY

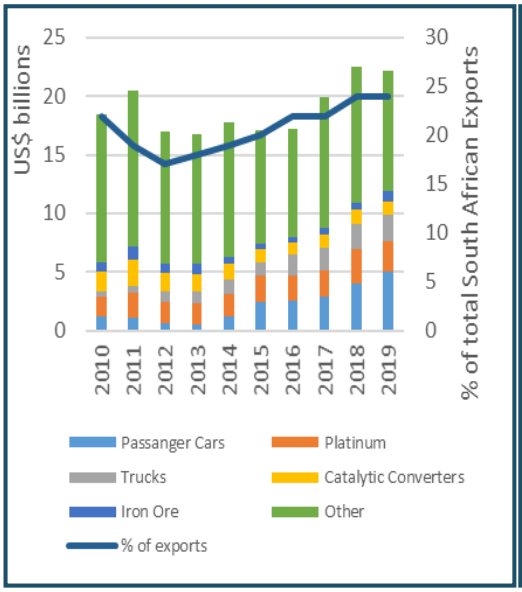
The European Union (EU) is a significant export destination for South African products. Between 2010 and 2019, exports to the EU averaged between 16% and 19% of South African exports. The main exports to the EU over this period were motor vehicles and metals. South African exports to the EU are at risk from the recently announced border carbon tax on imports within the EU from 2023. The EU has adopted a tough stance towards fossil fuels and, after years of consolidating a domestic carbon regime, the EU is beginning to pay increasing attention to leakages from imports. This brief is based on a comprehensive review of the EU's climate change policy framework in relation to industries, available here, as well as a review of South Africa's climate and trade risks, available here.

SOUTH AFRICA'S EXPORTS TO THE EUROPEAN UNION

South Africa's top five exports to the EU made up 31% of the country's total exports to the EU in 2019. By value, exports to the EU totaled US$17 billion (R286 billion), which translated into 19% of South Africa's total export earnings in 2019. Passenger motor vehicles composed 23% of total exports by value, followed by platinum (12%), motor vehicles for the transport of goods (10%), catalytic converters (5%) and iron ore (4%).

South Africa's exports to the EU are overall highly carbon intensive. This is particularly the case for transport equipment, mining and metal products, which are much more carbon intensive than exports from other countries. In addition, transport-related exports are tied to the internal combustion engine, which is increasingly threatened by e-mobility.

Figure 1: South Africa's exports to the European Union (left)
Figure 2: Metals exports per country per carbon intensity, share of exports and export value (right)



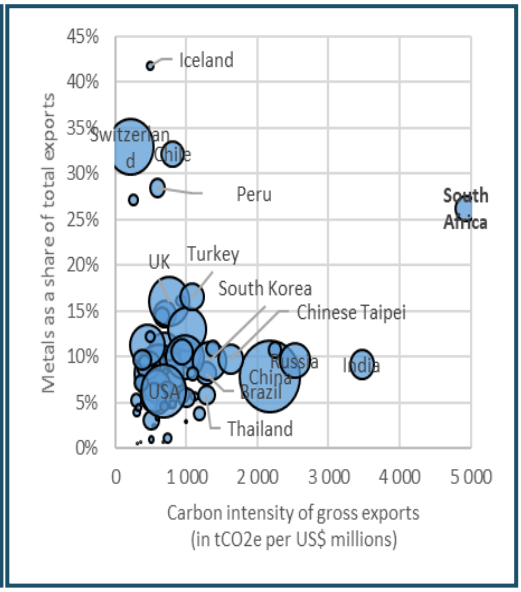


Figure 1 source: Author, based on data from Trade Map, dataset on bilateral trade between South Africa and the EU, downloaded from https://www.trademap.org in June 2020.
Figure 2 source: Montmasson-Clair, 2020, based on data from the OECD, dataset on carbon dioxide emissions embodied in international trade, downloaded from https://stats.oecd.org in March 2020.
Figure 2 note: bubbles indicate the relative value of countries' mining and quarrying export in US$.

Trade & Industrial Policy Strategies (TIPS) is a research organisation that facilitates policy development and dialogue across three focus areas: trade and industrial policy, inequality and economic inclusion, and sustainable growth

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Country Brief by Kudzai Mataba

Climate action is at the heart of the European Green Deal – a package of measures ranging from cutting greenhouse gas emissions, to investing in research and innovation, to preserving Europe's natural environment.

INDUSTRY-RELATED CLIMATE CHANGE LEGISLATION IN THE EUROPEAN UNION

The EU has adopted an iron-fist approach towards the regulation of climate change within its jurisdiction. The EU has a binding 2030 target to cut its greenhouse gas (GHG) emissions by at least 40% from 1990 levels. The European Commission aims to raise this to a 50%-55% cut and plans to propose changes to the EU's climate and energy legislation to support this more ambitious target.

GHG emissions generated by industrial activity are a significant share of emissions in the EU. The EU Emissions Trading System (EU ETS) is the cornerstone of policies leading to a reduction of industrial emissions, supplemented by regulation to prevent fluorinated gases. A major criticism of the ETS has, however, been the treatment of the iron and steel industry in the earlier phases of the scheme. The iron and steel industry was initially given more allowances than its historical emissions warranted. This has resulted in billions of euros in lost revenues – because allowances could have been sold — and large windfall profits for producers (Joltreau and Sommerfeld, 2019).

The Industrial Emissions Directive (IED) is the main EU instrument regulating pollutant emissions from industrial installations. The IED aims to reduce emissions across the EU, in particular through better application of Best Available Techniques (BAT). Around 50 000 installations undertaking the industrial activities listed in Annex I of the IED are required to operate in accordance with a permit. This permit should contain conditions set in accordance with the principles and provisions of the IED.

At the national level, Finland was the world's first country to introduce a carbon tax. Since then, European countries have followed and implemented carbon taxes. The carbon taxes levied within the EU range from less than €1 (R22) per tCO_2e in the Ukraine and Poland to more than €100 (R2 200) in Sweden. The World Bank shows that less than 5% of the emissions covered by a carbon pricing initiative are priced at a level consistent with achieving the goals of the Paris Agreement. Sweden, with the highest carbon tax worldwide, is, however, one of the few countries with a carbon tax above these limits.

Climate action is also at the heart of the European Green Deal – an ambitious package of measures ranging from cutting GHG emissions, to investing in cutting-edge research and innovation, to preserving Europe's natural environment (European Commission, n.d.-a). The European Green Deal proposes a legally binding target of net-zero GHG emissions by 2050. The decarbonisation of the energy sector is at the core of the bloc's 2050 climate target. This should come through investments in low-carbon technologies, such as green hydrogen, renewable energy, batteries and carbon capture and storage, and investments in grids and interconnectors (European Commission, n.d.-b).

In July 2020, EU leaders reached agreement on an aid budget of €1.8 trillion (US$2 trillion) aimed at helping hard-hit bloc members to recover from the economic fallout of the COVID-19 pandemic. The plan is presented as a chance to accelerate the European Green Deal. Around a third of the €750 billion recovery package and the €1.1 trillion seven-year budget will be invested in projects contributing to climate action (Norman, 2020). To finance the debt from the recovery plan, proposals have been made for the expansion of the ETS, a digital tax or a levy on non-recycled plastic packaging waste.

The EU has been the leading global proponent of border carbon taxes. Over the past five years, border carbon taxes have been increasingly mentioned in EU trade policy. In July 2020, the European Commission announced that, from 2023, the bloc will be applying additional taxes to goods from jurisdictions with weaker carbon regulation than the EU.

The finer details of the tax are yet to be released (Ben et al, 2020). The simplest form would impose a tax on imported goods produced in ways that emit more GHG emissions than are allowed by EU manufacturers. It might apply to a variety of carbon-intensive industries such as cement, glass, steel, fertiliser and fossil fuels.

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At the national level, Finland was the world's first country to introduce a carbon tax. Since then, 15 European countries have followed and implemented carbon taxes.

Table 1: European Union's key climate change policy instruments in relation to industries

POLICY NAME	CORE GOAL(S) OF THE POLICY	COSTS OF POLICY ADAPTATION	PENALTIES FOR LACK OF CONFORMANCE TO POLICY
European Union Emissions Trading System	Carbon mitigation: Under the cap-and-trade principle, a maximum (cap) is set on the total amount of GHGs that can be emitted by all participating installations.	Participants are required to monitor and report their emissions and surrender sufficient emission allowances to cover their reported emissions in each year. Allowances for emissions are then auctioned off, or allocated for free, and can subsequently be traded.	From Phase 3 of the EU ETS (2013-2020), participants that fail to comply with their obligation to surrender allowances under the EU ETS are fined €100 per tCO_2e.
Directive 2010/75/EU on Industrial Emissions	Carbon mitigation by regulating pollutant emissions from industrial installations.	Industrial facilities may not operate without a permit certifying compliance with the use of best available technologies.	There is no uniform penalty. Member states must lay down rules on penalties applicable to infringements of the national provisions. Those penalties must be effective, proportional and dissuasive. In the event of a breach of the permit conditions, compliance must be restored within the shortest possible time.
Sweden Carbon Tax	Carbon mitigation: The carbon tax is collected by taxing the fuels in accordance with the prevailing EU tax rules for the taxation of energy products.	The carbon tax is administered in the same way as the energy tax and follows the existing tax reporting and collection system in Sweden. Fossil fuel suppliers report their emissions to the tax authorities on an annual basis and pay the associated tax rate per volume of emissions. Compliance is further ensured through the enforcement of tax evasion regulation.	A penalty of up to 40% of the tax that was due is payable in addition to the late payment.

Source: Author, based on European Climate Law EUR-Lex - L28012 - EN - EUR-Lex. Accessed 2 September, 2020: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=LEGISSUM%3Al28012 Sweden's Carbon Tax. 25 February 2020. Accessed 2 September 2020: https://www.government.se/government-policy/taxes-and-tariffs/swedens-carbon-tax/.

South African exports to the European Union are all facing high risk, particularly from 2023 with the introduction of a border carbon tax.

ENERGY DEVELOPMENTS IN THE EUROPEAN UNION

The EU's energy supply is strongly dependent on imported fuels. In 2018, the EU produced around 42% of its own energy, while 58% was imported. In 2018, the energy mix in the EU was mainly made up of five sources: petroleum products (including crude oil) (8,8%), natural gas (13,6%), coal (16,4%), renewable energy (29,9%), nuclear energy (27,8%), and other (3,5%) (Statistical Office of the European Communities, 2019). The share of imported fuels in the primary energy supply of the EU increased from 44% in 1990 to 56% in 2017 (Eurostat, 2020).

In November 2019, EU finance ministers backed a declaration urging an end to fossil fuels funding. The statement adopted by EU finance ministers, however, retained some ambiguity. It "encourages" multilateral development banks "to phase out financing of fossil fuel projects, in particular those using solid fossil fuels" – a term referring to coal.

Furthermore, any phase-out should, according to the statement, also take into account the "energy security of partner countries" receiving funding from multilateral donors, such as the World Bank and the European Investment Bank (Guarascio, 2019).

RISKS FOR SOUTH AFRICA'S EXPORTS TO THE EUROPEAN UNION

South Africa's main exports to the EU comprise motor vehicles, catalytic converters and metals. In addition to implementing more stringent fuel efficiency standards, the EU market is rapidly shifting to electric vehicles, putting South African exports of motor vehicles and automotive components at risk. South Africa's main exports to the EU, most notably metals, also have a high-carbon intensity due to South Africa's coal-based electricity supply. As a result, South African exports to the EU are all facing high risk, particularly from 2023 with the introduction of a border carbon tax.

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This Country Brief forms part of a research project for the Department of Trade, Industry and Competition examining the vulnerability of South African trade to evolving climate change legislation. The research comprises a main report on *The global climate change regime and its impacts on South Africa's trade and competitiveness: A data note on South Africa's exports;* case studies on various sectors; detailed briefs that explore South Africa's trade risks with different countries; and key data in Excel format. The reports, country briefs and excel sheets are available on the TIPS website (see link).

Climate change and trade risks