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PROLIFERATING CARBON MARKETS: CAN THE EU ETS DRIVE CLIMATE ACTION OUTSIDE OF THE EU?

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LIST OF ABBREVIATIONS:

CBAM – Carbon Border Adjustment Mechanism

EC – European Commission

ETS – emissions trading system

EU – European Union

EUA – European Union Allowance

EU ETS – European Union Emissions Trading System

GHG – greenhouse gases

ICAP – International Carbon Action Partnership

LDCs – least developed countries

LRF – linear reduction factor

WB6 – six Western Balkan Contracting Parties of the Energy Community

WTO – World Trade Organization

RECOMMENDATIONS (FOR EU POLICY MAKERS)

- Continue supporting the development of climate ambitious carbon pricing systems around the world and in the EU neighbourhood, using CBAM as leverage rather than a goal in itself
 - Make CBAM rules transparent for EU trading partners, provide guidance to the most vulnerable countries and LDCs and help them with compliance of the CBAM legislation, including through emissions monitoring
 - Recycle the revenue from CBAM to support mitigation and adaptation capacities in the countries most negatively affected by the climate crisis, especially in the Global South
 - Support the Energy Community in further developing the Decarbonisation Roadmap and achieving its goals for member states, including the set up of domestic carbon pricing schemes
-

SUMMARY

At a time when few would contest that climate change presents the great existential challenge of our era, it is remarkable that globally, carbon pricing remains marginal. Carbon taxes and emissions trading schemes of different sorts (and sending widely varying price signals) cover less than a 1/5 of global carbon emissions as of 2022. Nevertheless, the number has been on the rise and it is no stretch to claim that the EU with its ETS launched in 2005 has played a pivotal role in the proliferation of carbon pricing. Now, it wants to take it a step further. The intended introduction of CBAM, which should be phased-in in the second half of this decade should serve as a reminder that the Union is serious about the need for global climate action. At the same time, it presents an opportunity

to do away with the unfair and ineffective free allocation of allowances to energy intensive industries within the Union. Yet, it needs to be acknowledged that it may also badly affect certain less developed countries in the EU's immediate and more distant neighbourhood. It is all the more important, therefore, that the CBAM is presented and perceived as a catalyst for change, raising the bar for all, rather than as a protectionist measure. To that end, the EU has a fundamental role to play in promoting the establishment of sub-national, national and supra-national emissions trading schemes around the world and particularly in the Western Balkans and the Eastern Partnership countries, including Ukraine. It may want to do just that with future revenues from CBAM.

INTRODUCTION

Climate change is one of the defining issues of our century and its impacts are affecting the planet and people's lives in unprecedented ways ranging from changes in precipitation patterns and extreme weather events to ocean acidification and biodiversity loss. The changing climate also incurs significant costs to the EU which has seen climate-related events cause more than €487 billion in financial losses, according to estimates.¹ Let alone the thousands of lives lost during extreme weather and other climate-related events. The EU has one of the highest environmental standards in the world and environmental protection as well as the promotion of sustainable development are seen as a prerequisite for defining and implementing the Union's policies. The fight against climate change is an explicit objective reflected in the Treaty on the Functioning of the European Union.²

Climate policy of the European Union is first and foremost aimed at slashing greenhouse gas emissions and reaching a net-zero emissions balance in order to avoid the most extreme climate impacts. In this way, the goal of the EU's climate policy is to lead global mitigation efforts so as to contribute to "holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels"³, as set by the Paris Agreement, with the aim of attenuating disastrous climate impacts on our society. Inspiring other countries to increase

their climate ambition is at least as important as reducing the EU's own emissions, given that the EU is responsible only for around 9 % of global GHG emissions.⁴ Article 191 of the Treaty on the Functioning of the European Union clearly states the Union policy on the environment shall contribute to "promoting measures at international level to deal with regional or worldwide environmental problems, and in particular combating climate change."⁵ Which is why the EU policymakers progressively work on updating the climate and emissions targets of the Union as the EU is striving to be at the forefront of global climate policy.

The EU ETS is considered among the most cost-effective instruments of the European Union to reach the ambitious emissions reduction targets as set by the Fit for 55 legislative package and achieve climate neutrality by 2050. Set up in 2005, the EU ETS was the world's first international emissions trading system and remains one of the largest. Citing the first article of the EU ETS directive, the trading system was set up "in order to promote reductions of greenhouse gas emissions in a cost-effective and economically efficient manner."⁶ And indeed, since its establishment, the EU ETS has been an inspiration for market-driven climate policy around the world. New emissions trading systems have since sprouted in New Zealand, the US, Japan, Canada and China, among others. In 2017, the EU and Switzerland signed an agreement to link their

¹ "Climate change: What the EU is doing – European Council, Council of the European Union", <https://www.consilium.europa.eu/en/policies/climate-change/>.

² Cifuentes-Faura, J., "European Union policies and their role in combating climate change over the years", *Air Qual Atmos Health* 15, (2022): 1333–134.

³ The UNFCCC, "[The Paris Agreement](#)", 2015

⁴ "EU's CO2 footprint continues to decrease – European Commission", <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20220524-1>.

⁵ "Treaty on the Functioning of the European Union", Article 191, Official Journal of the European Union, <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:12012E/TXT:en:PDF>.

⁶ "Directive (EU) 2018/410 of the European Parliament and of the Council", Official Journal of the European Union, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018L0410&from=EN>.

emissions trading systems based on mutual recognition of emissions allowances.⁷ The EU supports the efforts of other countries in building their own emissions trading systems through knowledge sharing and capacity building and the European Commission offered such bilateral cooperation and technical assistance to both China and South Korea when their two national emissions trading systems were about to be implemented.

Since its inception, the EU ETS has also undergone numerous changes. While every new revision of the trading system usually reviews the overall ambition, the scope as well as the rules of the functioning of the EU ETS, the revision ongoing in November 2020 brought the Carbon Border Adjustment Mechanism, or CBAM, into the picture, to address the question of carbon leakage⁸ while simultaneously incentivizing industrial transformation. Many researchers and representatives of civil societies argue that while the phenomenon of carbon leakage in industry has been widely studied and analysed, very little evidence of observed carbon leakage has been presented.⁹

And if there was any substantial risk of carbon leakage, the generous system of free allocation for industrial sectors has made sure it is prevented from expanding. However, this system simultaneously resulted in tens of billions of euros in windfall profits.¹⁰ The CBAM legislation is being introduced to progressively replace the current carbon leakage protection measures and multiply the EU's GHG emission reduction efforts towards imports of products

manufactured in countries with less ambitious climate policies, preventing the relocation of EU production or the import of carbon-intensive products.

Free allocation for industry has been a clear disincentive for any significant emissions reductions. By 2030, the EU ETS aimed to decrease the combined emissions of all covered installations by 43%, relative to 2005, a target which was achieved by the end of 2020, a full decade ahead of schedule, although this was to a large extent due to the COVID-19 related restrictions and was followed by a rebound. While plunging emissions from electricity and heating production were the key reasons why emissions from the EU ETS decreased over time, industrial emissions have been more or less stagnant since 2013 and aviation emissions have even increased (with the notable exception of 2020 due to the pandemic). The main cause of this divergence is that while the power sector has had to pay for most of its allowances since Phase 3 (2013–2020) of the EU ETS, the aviation and the industrial sectors still receive massive amounts of units for free¹¹, resulting in no strong economic incentive for them to decarbonise their operations. An inherent part of the Fit for 55 climate package, CBAM should function as a replacement to the free allocation of emission allowances¹² in the EU ETS, addressing carbon leakage while at the same time “encouraging partner countries to establish carbon policies to fight climate change.”¹³

CBAM will not only cover industrial products such as cement, steel and aluminium but

⁷ “EU ETS - International carbon market – European Commission”, https://climate.ec.europa.eu/eu-action/eu-emissions-trading-system-eu-ets/international-carbon-market_en.

⁸ Carbon leakage is defined as a process during which carbon-intensive companies are transferred abroad to avoid high costs to their operations caused by climate mitigation policies.

⁹ Agnese Ruggiero, The Phantom Leakage – The Industry windfall profits from Europe's carbon market 2008–2019. Brussels: Carbon Market Watch, 2021. https://carbonmarketwatch.org/wp-content/uploads/2021/06/Phantom_leakage_WEB.pdf.

¹⁰ Sander de Bruyn, Daan Juijn, Ellen Schep, Additional profits of sectors and firms from the EU ETS. Delft: CE Delft, 2021. https://cedelft.eu/wp-content/uploads/sites/2/2021/06/CE_Delft_200402_Additional_Profits_EU_ETS_FINAL_3.pdf.

¹¹ In 2017, 2018 and 2019 this was 98.8%, 96.8% and 97.5%, respectively.

¹² CBAM ideally also replaces indirect cost compensation, another form of protection against carbon leakage. However, talks on whether these are to be included are still ongoing.

¹³ “Council agrees on the Carbon Border Adjustment Mechanism (CBAM) – European Council, Council of the European Union”, <https://www.consilium.europa.eu/en/press/press-releases/2022/03/15/carbon-border-adjustment-mechanism-cbam-council-agrees-its-negotiating-mandate/>.

also the power sector as carbon-intensive electricity imports to the EU are a reality. These are so far not the result of intentional moves to build polluting facilities outside of the EU but countries like Montenegro and Bosnia and Herzegovina are undoubtedly taking advantage of their lack of effective carbon pricing and underinvestment in pollution control to export cheap coal-based electricity to the EU.

WHAT EU AMBITION AS REGARDS CARBON PRICING IN THE NEIGHBOURHOOD?

a. The Energy Community, an enabler of carbon market integration

The year 2006 gave rise to the Energy Community, an international organisation that was established with an objective to “extend the EU internal energy market rules and principles to countries in South East Europe, the Black Sea region and beyond on the basis of a legally binding framework.”¹⁴ Cooperation and coordination of actions in the field of energy is usually a ‘win-win’, assuring security of supply as well as the stability of energy market networks. In this case, the Energy Community helps harmonise the EU regulatory energy market framework with the energy regulation of EU neighbouring countries. The EU neighbouring countries which are part of the organisation¹⁵ are required to transpose and implement any EU energy legislation in force in the Energy Community. The primary objectives of the Energy Community are: (1)

The aim of this policy briefing is to: (1) highlight the impacts of the EU ETS on carbon pricing policy developments in EU trading partner countries; (2) assess impacts of the EU ETS developments on EU neighbours and partners abroad; (3) present key carbon pricing systems in neighbouring countries and; (4) outline constructive ways forward.

to create a single regulatory space for energy markets and trading; (2) to enhance security of supply in this space and develop cross-border relations.¹⁶ However, decarbonization has been put forward as one of the future objectives of the Energy Community as well. In 2014 already, a report by the High Level Reflection Group of the Energy Community suggested the scope, limited to the definition of network energy, should be broadened.¹⁷ Moreover, the Decarbonization Roadmap for the Contracting Parties of the Energy Community¹⁸ followed suit in 2021 and confirmed that decarbonization is an integral part of the club’s objectives and that an agreement on the progress of an integrated carbon pricing system within the parties of the Energy Community is of high importance.

Also as a result of market integration efforts between the EU and its neighbourhood, energy exports to the EU from some of the EU neighbouring countries have been increasing.¹⁹ In contrast to European energy producers,

¹⁴ “Energy Community Treaty – Europex”, <https://www.europex.org/eulegislation/energy-community-treaty/>.

¹⁵ Contracting parties of the Energy Community: Albania, Bosnia & Herzegovina, Kosovo, North Macedonia, Georgia, Moldova, Montenegro, Serbia and Ukraine.

¹⁶ “The Energy Community Treaty”, Official Journal of the European Union, OJ L 198, <https://eur-lex.europa.eu/EN/legal-content/summary/the-energy-community-treaty.html>.

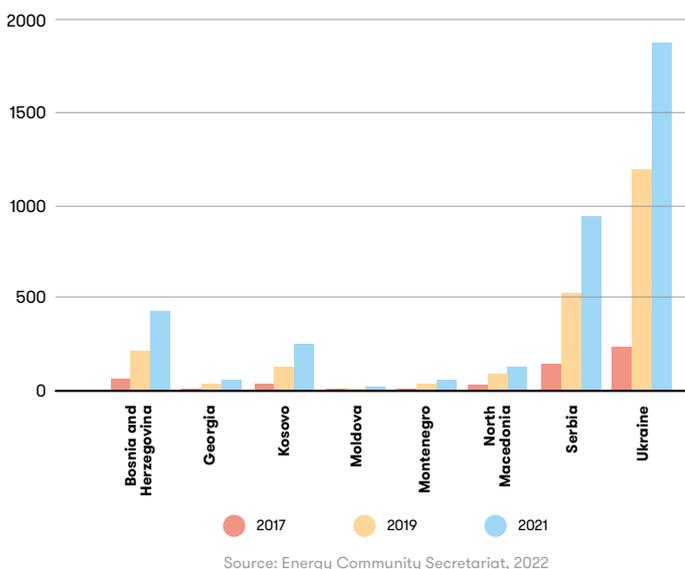
¹⁷ The High Level Reflection Group of the Energy Community. “An Energy Community of the Future”. Vienna: Energy Community Secretariat, 2014. https://www.energy-community.org/dam/jcr:ec8d48c9-c8ed-40c2-a2e7-d522932485d4/MC2014_Report_Future.PDF.

¹⁸ Energy Community. Decarbonisation Roadmap for the Contracting Parties of the Energy Community. Vienna: Energy Community, 2021. https://www.energy-community.org/dam/jcr:f04e86aa-dee2-4617-b2f1-6bef8713e4cb/2021_10_21_Decarbonisation%20Roadmap_ENC%20TWC_f.pdf.

¹⁹ We can observe this trend both to the south as well as to the east of the EU. This is particularly true for Montenegro as the country started exporting electricity to the EU upon the opening of an undersea interconnecting cable to Italy. Power exports from other Western Balkan countries do not show any particular trend. For more information, see Ioana Ciuta, Pippa Gallop. The Western Balkan power sector: between crisis and transition. CEE Bankwatch Network, 2022. https://bankwatch.org/wp-content/uploads/2022/12/2022-12-05_The-Western-Balkan-power-sector.pdf.

producers from the Energy Community or wider EU neighbourhood do not have to bear the direct costs of carbon emissions. The lack of carbon pricing not only incentivizes exports of fossil-based electricity to the EU, but also represents a missed opportunity for the countries of the Energy Community and elsewhere to at least partially offset the costs of the energy transition. Only Montenegro and Ukraine have some form of carbon pricing in place but at a level much lower than the EU ETS set price. With an ETS in place²⁰, in 2021 the costs of emissions allowances for power produced in the Energy Community would have reached EUR 3.8 billion.²¹

Graphic 1: **Avoided costs of emissions at EU ETS price** (million EUR)



b. The EU ETS as a precursor for carbon pricing

The EU ETS was established in 2005 and was the first international emissions trading system at the time. As a forerunner, the European carbon market served as an inspiration for the creation of similar market-based schemes of

carbon pricing, as attested by numerous other cases of emissions trading systems that have appeared since 2005 all around the world. Some of these, such as the Korean ETS, are essentially copies of the European ETS.

The European Union supports the development of domestic carbon markets mainly through the European Commission who is a founding member of the International Carbon Action Partnership, or ICAP. The ICAP is an international forum for countries and regions that have implemented or are planning to implement emissions trading systems. The partnership facilitates cooperation between governments by technical dialogue, knowledge sharing and capacity building.²² Furthermore, the Commission also supports other countries in developing domestic carbon markets through the Partnership for Market Readiness, which directly assists some in preparing and implementing these,²³ as well as other regionally focused programmes, such as EUROCLIMA+ in Latin America which has been working on “monitoring and generation of tools [...] in order to generate a carbon market in the Americas together with the United States and Canada.”²⁴

In addition to international initiatives, the Commission also supports bilateral cooperation. Probably the most extensive such partnership was formed with China which launched its carbon market in 2021. While covering only power generation, with around 4.5 billion tonnes of CO₂ produced annually from the sector, the Chinese ETS has become the largest carbon market in the world. Prior to its establishment, the European Commission carried out two 3-year long projects that provided technical assistance to Chinese authorities and supported seven

²⁰ Calculated with the average EUA price in 2021, that is EUR 42 per ton of CO₂.

²¹ Energy Community Secretariat. Energy Transition Tracker. Vienna: Energy Community, 2022. https://www.energy-community.org/dam/jcr:a09255dc-ac8a-47b1-b664-3463705906de/EnC_Tracker_07_2022.pdf.

²² “About us – The International Carbon Partnership”, <https://icapcarbonaction.com/en/about-us>.

²³ “International Carbon Market – European Commission, Climate Action” https://climate.ec.europa.eu/eu-action/eu-emissions-trading-system-eu-ets/international-carbon-market_en.

²⁴ “EUROCLIMA+ analyses the social carbon price in Latin America – Euroclima+”, <https://www.euroclima.org/en/recent-events/en-news/242-euroclima-analyses-the-social-carbon-price-in-latin-america>.

regional pilot systems and the implementation of the national carbon market.²⁵ The “Platform for Policy Dialogue and Cooperation between EU and China on Emissions Trading” supported Chinese authorities, and the Ministry of Environment in particular, in their efforts to implement and develop a domestic carbon market. In 2018, during the EU-China summit, a common Memorandum of Understanding was signed, “to further enhance cooperation on emissions trading.”²⁶

c. CBAM as an incentive for climate action

As part of its effort to fight climate change, the European Commission proposed a Carbon Border Adjustment Mechanism, to “prevent the risk of carbon leakage and support the EU’s increased ambition on climate mitigation, while ensuring WTO compatibility.”²⁷ The CBAM should serve as a replacement for the system of free allocation which is in place to prevent carbon leakage, by making imported goods from third countries subject to a carbon levy which would be linked to the price of emission allowances in the EU ETS. This way, companies in the EU would not be disadvantaged against their competitors in cases where there is a lower, or no carbon price to be paid in those third countries. In effect, the playing field in terms of carbon pricing policy is levelled for both EU importers and producers.

But the aim of the CBAM is not only to make sure European companies are not subject to

higher carbon pricing than their competitors abroad but also to incentivize partner countries to decarbonize their production processes and as such the EU argues the CBAM is a climate measure with “ancillary positive effects”²⁸. In order to encourage carbon pricing mechanisms abroad, the CBAM should not apply to producers in countries, “where their production has already been subject to the EU ETS, whereby it applies to third countries or territories, or to a carbon pricing system fully linked with the EU ETS.”²⁹ The establishment of the CBAM thus incentivizes climate action in countries that import their goods to the EU. And that is true for both the national or regulatory level with the CBAM motivating countries to establish carbon pricing schemes, and in the private sector where companies have clear incentives to decarbonise their operational processes and avoid paying CBAM-related fees.

This has been the case for Ukraine, which is among few³⁰ EU neighbouring countries with concrete plans to establish a national ETS. A research study by the Institute for Advanced Sustainability Studies found that the upcoming legislation establishing the CBAM “influences the climate policy debate in Ukraine by affecting the interests of powerful business groups opposing climate policy so that climate policy now finds itself in the sphere of their interests.”³¹ While the CBAM is still seen as a form of protectionism, climate policy has nevertheless moved higher up the political

²⁵ “International Carbon Market – European Commission, Climate Action” https://climate.ec.europa.eu/eu-action/eu-emissions-trading-system-eu-ets/international-carbon-market_en.

²⁶ Ibid.

²⁷ “Carbon Border Adjustment Mechanism: Questions and Answers – European Commission”, https://ec.europa.eu/commission/presscorner/detail/en/qanda_21_3661.

²⁸ “Proposal for a Regulation of the European Parliament and of the Council establishing a carbon border adjustment mechanism – European Commission”, https://ec.europa.eu/info/sites/default/files/carbon_border_adjustment_mechanism_0.pdf.

²⁹ “Draft regulation of the European Parliament and of the Council establishing a carbon border adjustment mechanism – General Approach - Council of the European Union”, <https://data.consilium.europa.eu/doc/document/ST-7226-2022-INIT/en/pdf>.

³⁰ Only Montenegro and Ukraine have carbon pricing schemes in place and Montenegro’s is in the process of being revised due to serious deficiencies. Bosnia and Herzegovina and North Macedonia have made public statements about carbon pricing introduction.

³¹ Iryna Holovko, Adela Marian, Maria Apergi. The Role of the EU CBAM in Raising Climate Policy Ambition in Trade Partners - The case of Ukraine. Potsdam: IASS, 2021. https://publications.iass-potsdam.de/rest/items/item_6001279_2/component/file_6001289/content.

agenda. But this has yet to transform into higher climate ambition as many Ukrainian producers hope for an exemption from the CBAM.

The same is true for Western Balkan countries which show high ambition for decarbonisation, albeit until now only on paper. With the guidance of the Energy Community and its Decarbonisation Roadmap, the countries of the Western Balkans should achieve 2030 and mid-century decarbonisation targets. A prominent point on the roadmap is a rollout of carbon pricing schemes which should be passed by national legislation by 2025. Moreover, during the Western Balkans

summit with the EU in November 2020, the country leaders signed the Sofia declaration, acknowledging the European Green Deal as a strategy towards a climate neutral economy, and committed themselves to working towards the 2050 carbon neutral continent, including a continued alignment with the EU ETS.

It is in the interest of the EU that domestic carbon markets in EU neighbouring countries and EU trading partners are established as soon as possible and that they function efficiently and effectively from their outset. For those reasons, the EU should make sure to provide guidance and assist third countries in establishing their domestic carbon schemes.

WHAT ARE THE IMPACTS OF EU ETS DEVELOPMENTS ON EU TRADING PARTNERS?

a. What countries are the most affected by the CBAM legislation?

The CBAM legislation has been promoted as a tool to accelerate the climate ambition of the EU. As a charge on imported goods based on their carbon content, the CBAM would be the world's first system of carbon tariffs.³² This caused the CBAM to be viewed by many EU trading partners as driven by trade concerns rather than ambitious environmental policy.

The scope of the CBAM is expected to cover industrial sectors which are both carbon intensive and highly traded which makes them highly vulnerable to carbon leakage. At first, the CBAM would apply to imports of the following goods and commodities: (1) cement; (2) iron and steel; (3) aluminium; (4) fertilisers and (5) electricity.³³ Electricity is also in the scope of the CBAM due to the

increasing trading activity between the EU and its neighbouring countries whose electricity mix is typically more carbon intensive. This list is expected to be extended in the future.

According to an analysis by Chatham House, between 2015 and 2019, exports to the EU in CBAM sectors were concentrated among a few big trading partners - almost half (49,5%) of all CBAM covered exports came from only five countries. Namely, the Russian federation (16.7%), China (10.1%), the UK, (8.5%), Norway (7.3%) and Turkey (6.8%).³⁴ However, Norway (as well as Iceland) is exempt from CBAM as it is already covered by the EU ETS. Because of the link between the Swiss ETS and the EU ETS, Switzerland is also exempt from CBAM fees, showcasing another condition for exemption.

The developments of the EU ETS have different impacts on different countries and the

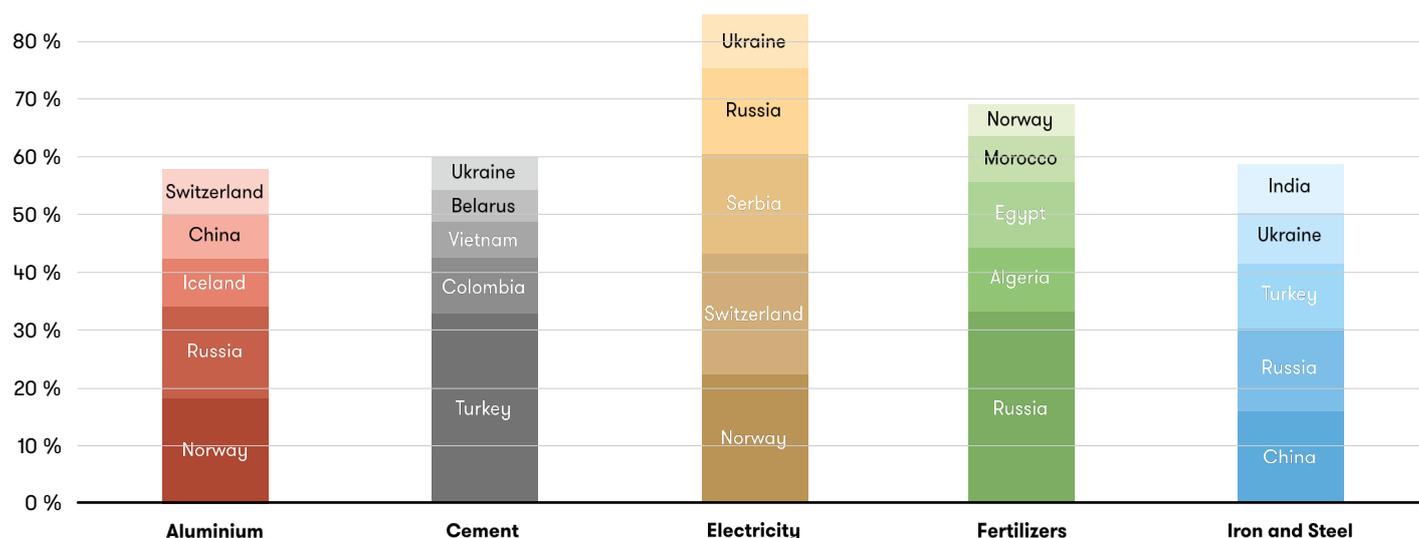
³² Chris Kardish, Mattia Mäder, Mary Hellmich, Mattia Hall, "Which countries are the most exposed to the EU's proposed carbon tariffs?", adelphi/Chatham house, August 20, 2021, <https://resourcetrade.earth/publications/which-countries-are-most-exposed-to-the-eus-proposed-carbon-tariffs>.

³³ "Carbon Border Adjustment Mechanism: Questions and Answers - European Commission", https://ec.europa.eu/commission/presscorner/detail/en/qanda_21_3661.

³⁴ Chris Kardish, Mattia Mäder, Mary Hellmich, Mattia Hall, "Which countries are the most exposed to the EU's proposed carbon tariffs?", adelphi/Chatham house, August 20, 2021, <https://resourcetrade.earth/publications/which-countries-are-most-exposed-to-the-eus-proposed-carbon-tariffs>.

Graphic 2: Top 5 trade partners in the five sectors under the CBAM

The data reflects the state before February 2022, and sanctions imposed on Russia and Belarus, as well as constraints on exports from Ukraine due to the war should be noted.



Source: Szulecki K., Overland I. and Smith I.D., "The European Union's CBAM as a de facto Climate Club: The Governance Challenges", *Frontiers in Climate*, 2022

CBAM legislation impacts countries differently based on their imports to the EU. For instance, it is expected that the CBAM can play a role in decarbonising electricity imported to the EU from the Western Balkans. At the same time, processes for iron, steel and cement production are generally much harder to decarbonise and it remains to be seen whether the CBAM can help decarbonisation efforts in those sectors as well.

b. What climate justice implications of the CBAM?

When assessing the impacts of the CBAM legislation, it is important to distinguish between two types of EU trade partners: large economies and small and medium-income states.³⁵ While almost half of all CBAM covered exports come from five countries only, the most exposed countries are not necessarily the most vulnerable. The CBAM legislation impacts small and emerging states as well, and their exports

to the EU might be much more important for them and their economies than they are to the EU. While some emerging economies argue that they are entitled to less ambitious climate policy since their cumulative emissions are much lower compared to the EU, modelling has shown that "the main effect of a CBAM is shifting of the economic burden of developed-world climate policies to the developing world"³⁶, worsening income inequalities and welfare distribution in the world. At its broadest implementation, the CBAM could result in an annual welfare gain in developed countries of \$141 billion, while developing countries would see an annual welfare loss of \$106 billion, compared to a baseline scenario.³⁷

For example, Mozambique relies heavily on aluminium and iron and steel exports and according to the European Commission, its aluminium exports to the EU represent around 7% of its GDP.³⁸ The EU needs to make sure that less developed countries have enough means and capacity to adapt to and comply with

³⁵ Iryna Holovko, Adela Marian, Maria Aperi. The Role of the EU CBAM in Raising Climate Policy Ambition in Trade Partners - The case of Ukraine. Potsdam: IASS, 2021. https://publications.iass-potsdam.de/rest/items/item_6001279_2/component/file_6001289/content.

³⁶ Ibid.

³⁷ He Xiaobei, Zhai Fan, Ma Jun. The global impact of a carbon border adjustment mechanism - a quantitative assessment. Task Force on Climate, Development and the IMF, 2022, <https://www.bu.edu/gdp/files/2022/03/TF-WP-001-FIN.pdf>.

³⁸ Chris Kardish, Mattia Mäder, Mary Hellmich, Mattia Hall, "Which countries are the most exposed to the EU's proposed carbon tariffs?", adelphi/Chatham house, August 20, 2021, <https://resourcetrade.earth/publications/which-countries-are-most-exposed-to-the-eus-proposed-carbon-tariffs>.

the CBAM legislation. The lack of attention to the impacts of the CBAM on LDCs has even been called “a key blind spot in the CBAM policy debate”.³⁹ Moreover, bigger economies have the economic power and resources to decarbonize their production processes and to diversify their trade revenue streams and exports while smaller economies and LDCs especially, usually do not. The EU needs to address the risk that the CBAM will lead to more inequalities, should a country not be able to match the EU’s ambitious climate policy. For that purpose, CBAM revenues should be recycled back to the most vulnerable countries, to help them with CBAM compliance such as emissions monitoring and help finance decarbonization of their economies.⁴⁰

c. What CBAM impacts on Western Balkan countries?

One of the reasons for the CBAM to include power in the scope of covered imported commodities are the increased electricity imports to the EU as well as higher interconnection capacity between the EU and its neighbours. And plans exist to increase interconnection capacity between EU and non-EU countries with a particular focus on countries of the Western Balkans. In 2019, the Western Balkan countries exported 6.3 TWh to the EU⁴¹, third only behind Russia and Ukraine. According to estimates from Ember, the 6.3

TWh exported to the EU was responsible for 5.2 MtCO₂, or 20 % of CO₂ from all electricity imports to the EU. The lack of carbon pricing in the region gives a competitive short-term advantage to high-polluting lignite generation.⁴²

And the emission intensity of power produced in the Western Balkan countries is typically higher than from power produced in the EU, at least on average, largely due to the much bigger share of coal in electricity mixes of most Western Balkan countries. For example, “the average CO₂ intensity of the power production at the EU level in 2019 was 0.255 tCO₂/MWh. By comparison, the available national emission factors⁴³ [in Western Balkan countries] range between 1 and 1.1 tCO₂/MWh for the available countries.”⁴⁴ While the electricity generated from coal in Western Balkan countries typically represents between 60 to 70% (with the exception of Albania which relies on hydroelectric power), the share of coal-generated power in the EU is usually around 14%.

The crucial question to pose ourselves is – can the CBAM legislation help with the decarbonization of the power sector in Western Balkan countries? An analysis by the REKK⁴⁵ showed that with the introduction of the CBAM, the combined emissions in the Western Balkans and the EU would actually grow by 1 million tonnes CO₂.⁴⁶ According to the modelling exercise, there would also be

³⁹ Iryna Holovko, Adela Marian, Maria Apergi. The Role of the EU CBAM in Raising Climate Policy Ambition in Trade Partners - The case of Ukraine. Potsdam: IASS, 2021. https://publications.iass-potsdam.de/rest/items/item_6001279_2/component/file_6001289/content.

⁴⁰ Anne Gläser, Chiara Putaturo, “World’s poorest should not pay for climate action while EU industry pollutes for free”, Euractiv, March 14, 2022, <https://www.euractiv.com/section/energy-environment/opinion/worlds-poorest-should-not-pay-for-climate-action-while-eu-industry-pollutes-for-free/>.

⁴¹ In 2018, total electricity consumption in the EU amounted to 3049.2 TWh. (Source: ENTSO-E Statistical factsheet 2018)

⁴² Sonja Risteska, Christian Redl, Julius Ecke, Rita Kunert. The EU’s Carbon Border Adjustment Mechanism: Challenges and Opportunities for the Western Balkan Countries. Berlin: Agora Energiewende, 2022. https://static.agora-energiewende.de/fileadmin/Projekte/2021/2021_01_EU_Balkan_Green_Deal/A-EW_251_CBAM_WB-6_WEB.pdf.

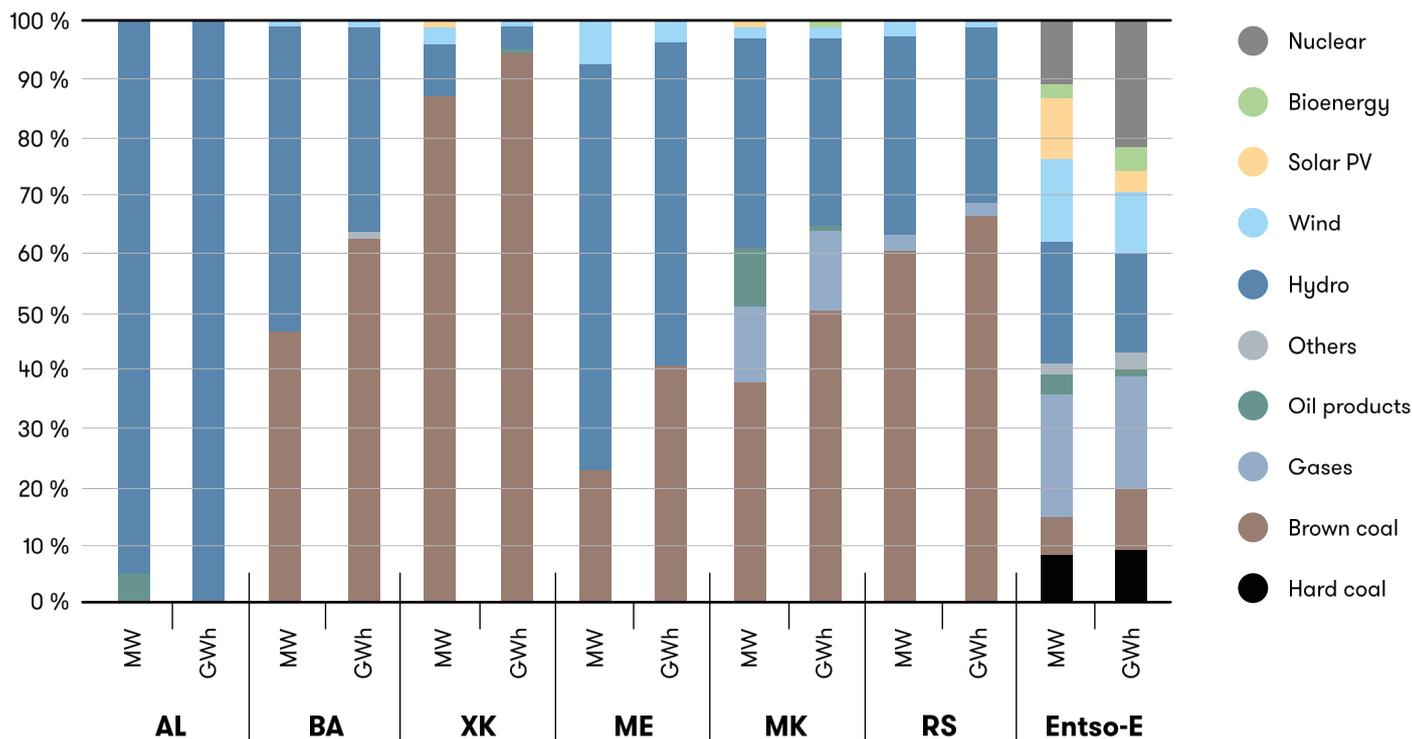
⁴³ Data available only for Bosnia & Herzegovina, Montenegro, Serbia and Kosovo.

⁴⁴ Sonja Risteska, Christian Redl, Julius Ecke, Rita Kunert. The EU’s Carbon Border Adjustment Mechanism: Challenges and Opportunities for the Western Balkan Countries. Berlin: Agora Energiewende, 2022. https://static.agora-energiewende.de/fileadmin/Projekte/2021/2021_01_EU_Balkan_Green_Deal/A-EW_251_CBAM_WB-6_WEB.pdf.

⁴⁵ Zsuzsanna Pató, András Mezősi, László Szabó, “Is border carbon adjustment the right tool for the power sector?”, Climate Policy, Volume 22, (March 2022): 502-513.

⁴⁶ The reasoning behind this increase is two-fold. Firstly, additional fossil fuel capacity comes online in the EU to compensate for the fenced-off imported electricity. Secondly, due to a more restricted export to the EU with the introduction of CBAM, power markets in W6 countries would face more competition domestically, which would subsequently lower power prices and increase consumption.

Graphic 3: Power mix of Western Balkan countries' CO2 emissions from electricity production per GDP [kg CO2/EUR GDP]



Source: enervis (2021): The Future of Lignite in the Western Balkans. Scenarios for a 2040 Lignite Exit. Study on behalf of Agora Energiewende, based on Eurostat database (2020)

power pricing impacts as the introduction of the CBAM would actually lower power prices by about 20 EUR per MWh. Should an ETS be introduced instead (a carbon price of 70 EUR was considered), it would lower coal output by 85 to 90%. Moreover, an ETS with a sufficiently high carbon price would translate into an annual drop of 22 million tonnes of CO₂.

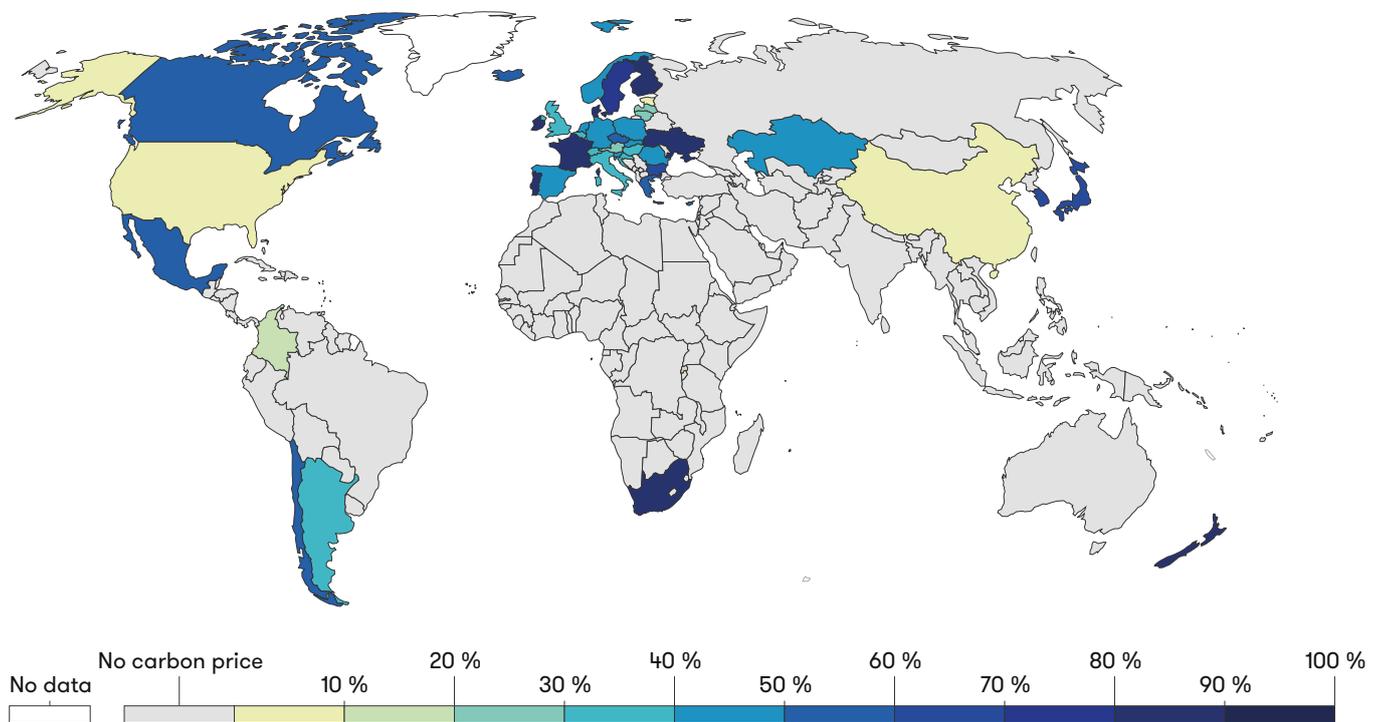
However, this remains a simplified model, as one of the assumptions is that analysed countries of the Western Balkans and their respective power sectors operate on a market basis which has not yet proven to be the case. Nevertheless, the report suggests that the way forward should be to establish carbon markets in EU neighbouring countries while

ensuring sufficient market coupling. CBAM should be a stepping stone to expanding carbon pricing through domestic ETS schemes in the EU neighbourhood. Also, the EU should pave the way forward for the Western Balkans and other countries, showing them the benefits of carbon markets or a carbon tax, fostering decarbonization and energy security simultaneously. In addition, a carbon border tax might also result in carbon intensive power producers only shifting their resources and selling power to domestic consumers instead of exporting it. While overall coal plant production remains unaffected by the CBAM, their profitability may suffer as they would face increased competition on the domestic market.⁴⁷

⁴⁷ Tomáš Jungwirth. Mapping the impacts of the CBAM on the Visegrad region. Asociace pro mezinárodní otázky (AMO), 2020 (unpublished).

CARBON PRICING SYSTEMS (TO BE) INTRODUCED IN EU NEIGHBOURING COUNTRIES

Graphic 4: Share of global CO2 emissions covered by a carbon price by country, 2020



Source: OurWorldInData based on Dolphin, Pollitt and Newbery (2020). Emissions-weighted Carbon Price.

Aside from playing an indispensable role in the EU’s attempts to meet its mitigation goals under the Paris Agreement, the EU ETS has had the ambition to become a global role model for many carbon pricing systems to come. And indeed, the number of such schemes (be it sub-national, national or regional) established worldwide has been on the rise in the recent past. In fact, the share of global GHG emissions capped by carbon trading has constantly exceeded the share of emissions covered by a carbon tax. Altogether, 17% of global emissions have been covered by some sort of a pricing scheme by 2022, more than tripling the global share of EU ETS at the time of its inception in 2005.⁴⁸ It is not much of

a surprise that countries in the EU’s immediate neighbourhood have been among those most dragged into the EU ETS orbit.

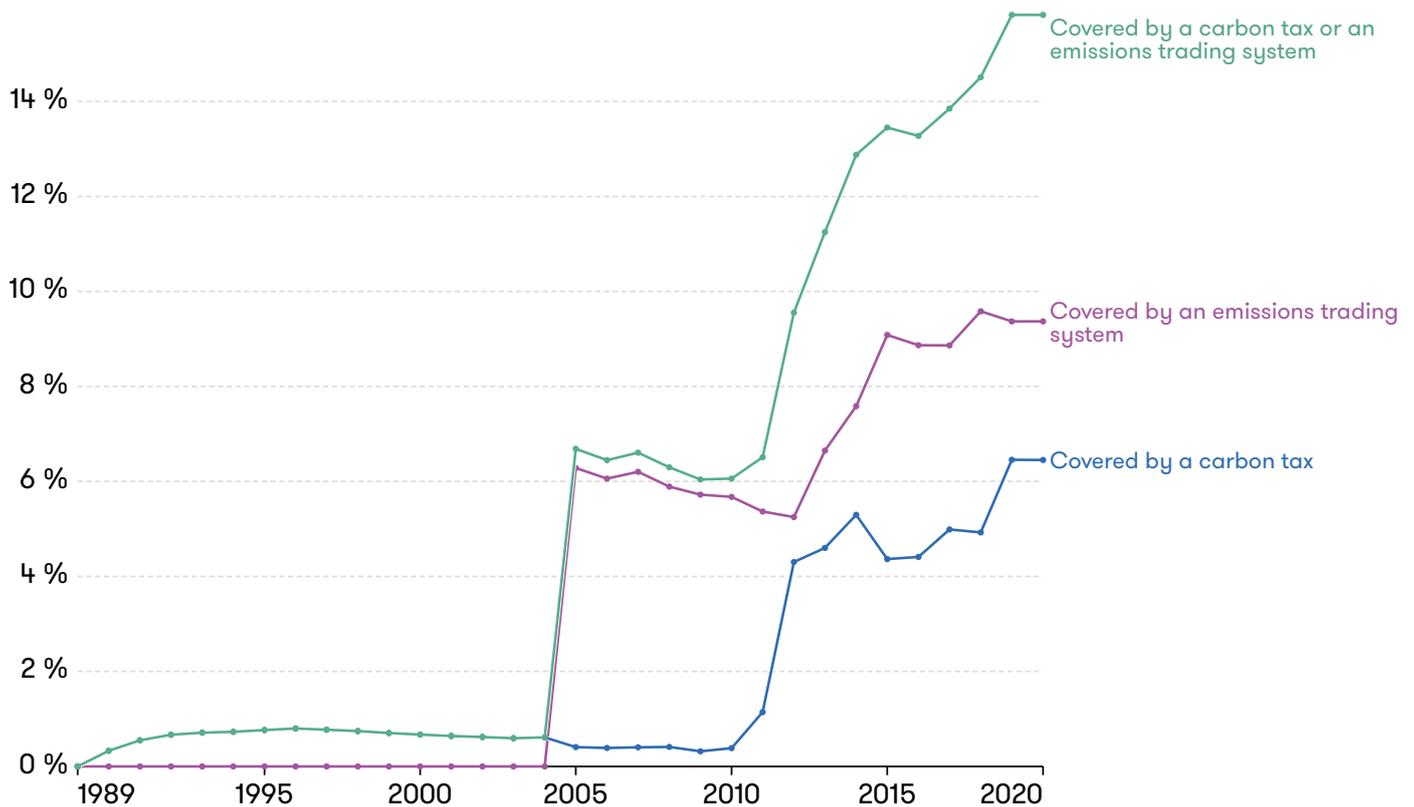
In the Western Balkans, the EU, with the help of the Energy Community, has managed to spark a widespread fear of the impacts of the prospective CBAM introduction among political leaders.⁴⁹ This has in turn helped mainstream the carbon pricing debate in the region. The first non-EU member, Montenegro, introduced its distinct cap-and-trade carbon pricing system in 2020. It includes a phase-out of free allowances for the country’s only coal plant, a transfer of all revenue into an environmental fund, and unlike the EU ETS, also a floor price of 24 EUR/tonne.⁵⁰ Yet, the story is not a success: an excessive

⁴⁸ Stefano De Clara Stefano et al., “Emissions Trading Worldwide: Status Report 2022,” International Carbon Action Partnership, 2022, https://icapcarbonaction.com/system/files/document/220408_icap_report_rz_web.pdf.

⁴⁹ Igor Todorović, “EU’s carbon border tax must become mainstream topic in Western Balkans,” Balkan Green Energy News, 9 February 2022, <https://balkangreenenergynews.com/eus-carbon-border-tax-must-become-mainstream-topic-in-western-balkans/>.

⁵⁰ Pippa Gallop, “The cautionary tale of Montenegro’s emissions trading scheme,” Balkan Green Energy News, 6 June 2022, <https://bankwatch.org/blog/the-cautionary-tale-of-montenegro-s-emission-trading-scheme>.

Graphic 5: Share of global CO2 emissions covered by a carbon price: by mechanism



Source: OurWorldInData based on Dolphin, Pollitt and Newbery (2020). Emissions-weighted Carbon Price.

amount of free emissions allowances have been allocated for the Podgorica aluminium plant, leading even to accusations of it becoming a covert state aid mechanism. To add to the problem, the reduction of the annual cap has been set at just 1.5%, reflecting an overall low ambition, and substantially below the EU ETS LRF for up until 2030.⁵¹ As of December 2022, the mechanism is under revision.

Apart from the Montenegrin scheme, internal carbon prices have also been introduced by the state utilities of Bosnia and Herzegovina, and North Macedonia. The latter of the two has pledged to fully align with the EU ETS before 2030.⁵² Of course, this is after all a necessary prerequisite for

the successful conclusion of the accession process for full EU membership, that all of the WB6 countries are part of.⁵³

Similarly, prior to the Russian aggression, Ukraine had intended to set up its own emissions trading scheme as early as 2025, following an extensive mapping and capacity-building project supported by the German government, and building upon a (minimal) carbon tax that has been in place since 2011.⁵⁴ Currently, there are many uncertainties in play, given the volatility of the overall situation but presumably, carbon pricing will be an integral part of the discussions on “building Ukraine back better” once the hostilities have ceased or at least receded.

⁵¹ Ibid.

⁵² Vladimir Spasić, “Which Western Balkan countries intend to introduce carbon tax?,” Balkan Green Energy News, 18 May 2022, <https://balkangreenenergynews.com/which-western-balkan-countries-intend-to-introduce-carbon-tax/>.

⁵³ For further details, see Action Plan for the Implementation of the Sofia Declaration on the Green Agenda for the Western Balkans 2021-2030, Regional Cooperation Council, 2021, <https://www.rcc.int/docs/596/action-plan-for-the-implementation-of-the-sofia-declaration-on-the-green-agenda-for-the-western-balkans-2021-2030>.

⁵⁴ “Factsheet – Ukraine,” International Carbon Action Partnership, 2022, https://icapcarbonaction.com/system/files/ets_pdfs/icap-etsmap-factsheet-74.pdf, “Successful climate mitigation through emissions trading,” GIZ, 2021, <https://www.giz.de/en/downloads/giz2021-07-en-successful-climate-change-through-emissions-trading.pdf.pdf>, Olga Yukhymchuk, “Carbon pricing developments in Ukraine,” Ministry of Environmental Protection and Natural Resources, 2021, <https://www.thepmr.org/system/files/documents/Olga%20Yukhymchuk%20presentation.pdf>.

Even Russia itself, faced with the prospective dramatic impacts CBAM could have on its economy, had pondered over the introduction of an emissions trading scheme that the EU would recognize as legitimate.⁵⁵

MAPPING WAYS FORWARD

It is clear that the social justice concerns described above related to the introduction of CBAM have only been aggravated by Russia's war of aggression against Ukraine. Some analysts have even argued in favour of dropping the instrument altogether, citing the need to keep the emerging nations on Europe's side at times of a growing political and economic rift between the West, Russia, and China, and to support, rather than hamper, Ukraine's post-war reconstruction.⁵⁶ As of November 2022, the trilogues between the European Council, the Parliament and the Commission on both the CBAM and the EU ETS reform were yet to conclude, and there were therefore a number of outstanding uncertainties as regards the final compromise. Nevertheless, similarly to all the other files under the Fit for 55, it certainly appeared unlikely that there would be a revamp of the very intention to finalise the file in spite of all the geopolitical and economic turbulence - not to forget how high it was on Emmanuel Macron's agenda for the domestic audience.⁵⁷

Given the sensitivity of the matter, it would have been advisable for the EU institutions to reach out beyond the formal negotiations and engage in still broader conversations with stakeholders including civil society representatives from the countries potentially negatively affected by the instrument. It

However, given the dramatic deterioration of mutual relations following its military invasion of Ukraine, and the rapid slashing of EU imports from Russia, the initial intentions are certainly up for a revision.

remains only to be seen whether the social justice considerations are reflected in the final text insofar that all or a substantial part of the CBAM revenues would be handed back over in the form of climate finance to the most affected and vulnerable economies in support of their decarbonization efforts. Presently, it also appears difficult to imagine that the CBAM will be introduced with an effect on the war-torn Ukraine, itself also a major exporter of iron and steel to the EU.⁵⁸

Moreover, should CBAM become a reality, as is expected with a decade-long phase-in from 2026 onwards, not only will compatibility with WTO rules come into play but also the consistency and credibility of the EU's messaging to the developing world. It is presumed that free allowances will still be handed out in large amounts within the Union but at the same time, CBAM certificates would already have to be purchased on selected products imported to the EU. Even more problematic would be an "export rebate" mechanism to make up for the phase out of free allowances applying to exports from the EU if introduced as part of the package, thereby subsidising the EU carbon intensive industries. It is worth noting, however, that early on in the negotiations, the Commission has marked such a subsidy as overstepping

⁵⁵ Evgenia Pismennaya and Yuliya Fedorinova, "Russia Aims to Make Carbon Tax System That EU Will Recognize," Bloomberg, 21 December 2021, <https://www.bloomberg.com/news/articles/2021-12-21/russia-aims-to-make-carbon-tax-system-that-eu-will-recognize?leadSource=uverify%20wall>.

⁵⁶ Andreas Golthau and Karsten Neuhoﬀ, "Why the war in Ukraine warrants a rethink of the EU carbon border tax," Euractiv.com, 29 July 2022, <https://www.euractiv.com/section/energy-environment/opinion/why-the-war-in-ukraine-warrants-a-rethink-of-the-eu-carbon-border-tax/>.

⁵⁷ "Macron: Carbon border adjustment mechanism key to EU climate strategy," Reuters, 9 December 2022, <https://www.reuters.com/business/environment/macron-carbon-border-adjustment-mechanism-key-eu-climate-strategy-2021-12-09/>.

⁵⁸ "EU trade relations with Ukraine," European Commission, https://policy.trade.ec.europa.eu/eu-trade-relationships-country-and-region/countries-and-regions/ukraine_en.

a 'red line' intended to prevent the EU from falling into economic and legal traps.⁵⁹

In considering the design of CBAM, one should really not forget about the bigger game - this being the global proliferation of carbon pricing, rather than just creating a revenue stream for EU budgets or shifting an economic burden onto the Union's trade partners. After all, if a state prices its carbon emissions in a manner comparable to Europe's, it shall be exempt from the application of the border tariff. In this sense, it may also be said that despite all the fuss, the EU ETS really is more fundamental to the story than CBAM.

For countries on the EU's close orbit, be it in the Western Balkans, Ukraine or in the

Caucasus, the endgame should indeed be full EU membership, to which integration within the EU ETS is a necessary prerequisite. The Union's representatives should reinforce this message using CBAM as a catalyst for change, hence supporting (via the Energy Community or otherwise) its partners in piloting the necessary elements of national emissions trading schemes that would set the ground for their integration into the pan-European system. For the countries further away, there is certainly still much experience with the Union scheme to be shared, and technical support to be provided for the establishment and maintenance of their own carbon pricing instruments.

CONCLUSION

The impact of the EU ETS development on carbon pricing policies in other countries, and in EU trading partners especially, has been manifold. The EU ETS has acted as a forerunner and an inspiration for carbon pricing schemes around the world and most subsequent ETSs have been influenced by its development, successes and failures. While the Energy Community has been a catalyst for decarbonisation policy development including carbon schemes in the EU's neighbourhood, the European Commission has been supporting other countries in setting domestic carbon pricing schemes via the ICAP, the Partnership for Market Readiness and Clima East, among others. These efforts must be continued and strengthened as more countries are looking to pilot carbon pricing schemes of their own.

The CBAM legislation has been presented as one of the most impactful EU ETS-related pieces of legislation for EU trading partners. While only five countries are responsible for almost half of all CBAM covered exports, CBAM impacts will

be felt across the board and in LDCs with high dependency on exports to the EU, especially. The EU has to make sure that CBAM revenues are recycled back to the most vulnerable countries to guide them towards CBAM compliance while fostering decarbonisation efforts. In the Western Balkans, the fear of the impacts of the introduction of CBAM have prompted many countries to consider establishing their own carbon pricing schemes. However, as of now, only Montenegro and Ukraine have schemes in place with Bosnia and Herzegovina and North Macedonia considering their introduction. EU institutions should hold formal talks not just with national governments, but with broader stakeholders from countries affected by CBAM such as representatives of civil society, academia and the private sector. Looking ahead, the EU should make sure that the instrument is seen as a climate finance catalyst rather than a protectionist measure or a way to monetize the EU's climate policy, shifting the burden to other countries.

⁵⁹ Anna Gumbau, "Export subsidies are a 'red line' in EU carbon tariff negotiations, EU official says," Euractiv.com, 9 May 2022, <https://www.euractiv.com/section/energy-environment/news/export-subsidies-are-a-red-line-in-eu-carbon-tariff-negotiations-eu-official-says/>.

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