The EU proposal for a Carbon Border Adjustment Mechanism: an advanced tool to combat ‘carbon leakage’, a new EU own resource of ‘moral suasion’ for third Countries?

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Abstract: With the proposal for a Regulation of the European Parliament and of the Council establishing a Carbon Border Adjustment Mechanism (CBAM) adopted on July 14, 2021 by the European Commission, it begins to reach the heart of the global debate on the opportunity to adopt mechanisms to combat the phenomenon of ‘carbon leakage’, that is the attempt to evade existing carbon pricing systems through the delocalization of the most polluting activities. In this way, the European Union demonstrates its serious intention to strengthen actions against climate change and to identify customs taxation as an instrument to guide the choices of its trading partners and, therefore, of the major world economies. The precautions adopted in the application of the CBAM and the long transitional period before its entry into force, however, prevent the full appreciation of its potential repercussions (also) in terms of the new own resource of the European budget.

Keywords: Carbon Border Adjustment Mechanism, CBAM, Carbon leakage, Environmental duty, Customs law

1. The EU proposal for a Carbon Border Adjustment Mechanism

With the proposal for a Regulation of the European Parliament and of the Council establishing a Carbon Border Adjustment Mechanism (CBAM) adopted on July 14, 2021 by the European Commission, the ambition of the European Union to assume a leading role in the field of environmental protection and the fight against climate change grows. The European...
strategy is also growing in quality since, in addition to experimenting with (new) good practices in regulation, it claims to take a leading role in a new phase of global action to combat emissions of carbon dioxide, according to the polluter pays principle.

The explanatory memorandum for the EU legislative acts confirm the European desire to favor a global approach on these problems, but also the awareness of the distance that separates the policies of the Old Continent from those of the most aggressive economies of the Planet. It is sufficient to read some passages of the Regulation COM (2021) 564 final, to appreciate the healthy ambitions of the European legislator1: the description of the reasons and objectives of the proposal contained in its accompanying report expresses a certain will to counter the phenomenon of the so-called ‘carbon leakage’. Carbon leakage consists in the relocation outside the European territory of carbon emissions that would otherwise be affected by the emission control mechanism called Emission Trading System (ETS) which the EU has been using since 20052. In this way, the CBAM would like to avoid that the greenhouse gas not produced within the European customs borders is however released into the atmosphere elsewhere.

This eventuality is very likely, since carbon pricing schemes3 cover only one fifth of global emissions: the OECD estimates that around 60% of carbon emissions from fuel combustion are priceless.

Where older carbon pricing mechanisms are established, however, the price levels are very low (i.e. $ 3/ton of CO₂)4. On the contrary, according to the International Monetary Fund, before to 2030, this price is expected to rise to at least $ 75 /ton of CO₂.

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1 James Bacchus, “Legal Issues with the European Carbon Border Adjustment Mechanism,” Cato Briefing Paper, August 9, 2021, Briefing paper no. 125 (August 2021): 1.
2 Paolo Dè Capitani Di Vimercate, “The Emissions Trading Scheme: accounting and tax aspects,” Diritto e Pratica Tributaria (2010): 15.
3 Paul Elkins and Terry Baker, “Carbon Taxes and Carbon Emissions Trading,” Journal of Economic Surveys, vol. 15, no. 3(2002): 325; Gilbert E. Metcalf, David Weisbach, “Design of a Carbon Tax,” Reg-Markets Center Working Paper, no. 09–05, accessed January 8, 2009, https://ssrn.com/abstract=1327260.
4 World Bank, State and Trends of Carbon Pricing 2021, Washington, DC, accessed May 25, 2021: https://openknowledge.worldbank.org/handle/10986/35620.
Certainly, a possible global response to carbon leakage could consist in the introduction of a ‘carbon price floor worldwide’, according to some proposals already formulated by the IMF and OECD. It is quite evident, however, that the different sensitivities of the Governments and some wicked economic strategies pushed this goal away. The failure of COP 26 in Glasgow confirmed this feeling and suggested seeking alternative solutions in the short term.

The debate on the CBAM scheme proceeds along parallel lines to those on which the suggestive thesis of the Nobel Prize Prof. Nordhaus, according to which a global carbon pricing scheme applied uniformly in all Countries should be launched quickly\(^5\). The European approach, however, is more pragmatic, because it takes note of the existing difficulties (now made insuperable by the war in Ukraine and the instability of the prices of raw materials) and tries to give an ‘extraterritorial’ effectiveness to European environmental protection measures.

The legislative proposal is only apparently limited to the European juridical dimension; instead, its effectiveness in space immediately crosses the EU borders, without any need to reach an agreement with non-collaborative Countries. This choice can significantly reduce the time frame and provide a contribution, already in actuality, to the achievement of the ambitious objectives contained in the Paris Agreement and the further and even more ambitious commitments undertaken autonomously with the European Green Deal and with the related package of measures ‘FitX55’\(^6\).

One of the clearest confirmations of the EU ambition to drive change in the global environmental policies\(^7\) and, above all, to influence the choices of the Countries that establish trade relations with the Member States can be found in art. 2 of the proposal of Regulation. This rule identifies the taxable

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\(^5\) OECD, *Environmental Fiscal Reform, Progress, Prospects and Pitfalls, Report for the G7 Environment Ministers*, 2017, accessed June 11, 2017, https://www.oecd.org/tax/tax-policy/environmental-fiscal-reform-G7-environment-ministerial-meeting-june-2017.pdf.

\(^6\) Alberto Majocchi, “Carbon pricing in Germany and the new European own resources,” *L’Unità Europea* (2020): 22, accessed May 28, 2020, https://www.mfe.it/unitaeuropea/index.php/collezioni-online/371-anno-2020/l-unita-europea-n-2020–3-maggio-giugno/4600-il-carbon-pricing-in-germania-e-le-nuove-risorse-proprie-europee.

\(^7\) Tatiana Falcão, “Toward Carbon Tax Internationalism: The EU Border Carbon Adjustment Proposal,” *Tax Notes International* (June 1, 2020): 1047.
entities of the CBAM and provides for a complex system of exceptions based on the attitude held by their foreign jurisdiction. In this way, the convergence with the European choices on carbon pricing are rewarded with the exclusion from the CBAM of the emissions produced by the companies of the collaborative third Country.

For example, imports from Countries that have signed agreements with the European Union that provide for the obligation to apply European law in the electricity sector, including legislation on the development of renewable energy sources, as well as other regulations on energy, environment and competition are excluded from the CBAM. Not even imports from Countries that have shared with the Commission a “road map” for the adoption of measures with equivalent effects to those in Europe are not subject to the levy; or, again, imports from third Countries that have committed to achieving climate neutrality by 2050 are excluded from the CBAM.

There is more: the exceptions to the application of the CBAM are subject to the verification of concrete compliance with the commitments undertaken by the third Country. This leads to an unusual ‘dynamic’ dimension of cooperation between different jurisdictions. The European Union would reject the CBAM exemption when the third Country, in implementing the commitments undertaken, did not respect its own roadmap and did not demonstrate substantial progress towards aligning national legislation with Union law on action for the climate (see art. 2, par. 7–9, of the proposed Regulation).

In this way, a sort of improper sanction and an unprecedented control function for the European institutions against foreign authorities is configured.

Regardless of the effectiveness of the new mechanism, these elements give great interest and particular originality to a proposal which, at the same time, aims to establish a new own resource of the European budget with an estimated revenue of two billion euros per year\(^8\) and to

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\(^8\) On these issues, Giovanna Petrillo, “Next Generation EU and new system of own resources: a decisive step towards the establishment of a new European tax model?” *Rivista di diritto tributario on line*, (2021): 2, accessed December 7, 2021, https://www.rivistadirittotributario.it/wp-content/uploads/2021/12/Petrillo.pdf.
suppress the controversial mechanism of free assignment of the ETS pro-
vided for by art. 10-bis of Directive 2003/87/EC.

And these are the reasons that probably have fueled a climate of skepti-
cism and hostility in the institutions that govern the main world economies
that have considered CBAM a tool to protect the European internal market.
Precisely for this same reason, the interest of the international community
for the institute has grown significantly in a few months, placing the Euro-
pean choice at the center of an animated debate that involves, at the same
time, the mechanisms for implementing art. 6 of the Paris Agreement. It
provides for a system, with voluntary adhesion and under national law,
to reduce emissions, with the possibility of “buying” and using real carbon
“credit certificates” generated elsewhere as a result of the greater reductions
achieved by other countries (Internationally Transferred Mitigation Out-
comes, or ITMO).

Therefore, although the final documents of the United Nations Confer-
ence held from 31 October to 13 November 2021 in Glasgow (Cop 26) did
not foresee the adoption of a global mechanism for fixing the price of fossil
fuels, important openings are beginning to be seen for legal experimenta-
tions in line with European choices. The debate also involves the hypothesis
of a global application of a CBAM or similar tools, according to an ap-
proach that would mark a very significant progress in quality of the global
strategy on the fight against climate change.

2. The classification of the CBAM in the system of customs law

Moving on to the analysis of the new European device, first of all we can
appreciate the numerous points of contact between the customs legislation,
fully harmonized by the unitary Customs Code established with EU Regula-
tion no. 952/2013, and the CBAM application mechanism. In fact, the choice
of regulating the price adjustment system with an EU Regulation identifies
a first point of contact with customs matters and, at the same time, expresses
the determination of the Commission in making the CBAM immediately
operational, ensuring a direct application of the rules at the national level.

There are other points of contact between the CBAM and the European
customs levy system that lead us to classify the new tool within those of
a fiscal nature and, more precisely, among customs duties for environmen-
tal purposes. In fact, if this mechanism were applied, when some goods
originating in third Countries listed in Annex I to the Regulation were to cross the borders of the EU territory, EU Member States would require the authorized importer a sum of money (duty) or the transfer of shares of greenhouse gas emissions under the quota trading system already in use (the ETS). The value of these quotas or the amount of the duty should be calculated on the basis of the greenhouse gases released in the production process of the goods themselves, on the basis of a calculation that presents many profiles of complexity, although this measurement could be very complex and should therefore be simplified.

The list of goods whose import would be taxed by the CBAM is currently limited to the categories with respect to which the risk of circumvention of ‘carbon pricing’ is most felt, i.e. cement, electricity, fertilizers, steel in ingots and semi-finished products (with the exception of stainless steel and steel pipes), aluminum in raw and semi-finished form (including pipes) and other steel products. In the most recent agreement reached in June 2022 between the political forces of the European Parliament, the gradual expansion of CBAM to polymers, organic chemicals and hydrogen was also hypothesized.

The delimitation of the CBAM to these sectors responds, above all, to the need to ensure compliance of the CBAM with WTO commitments, which can constitute a serious limit to the exercise of European tax autonomy. Moreover, to allow an early verification of compliance of the new carbon adjustment mechanism with the agreements for the freedom of international trade, the European Union intends to adopt a transitional regime which risks further weaken the effectiveness of the CBAM: originally, in fact, its entry into operation would not take place before 2035; moreover, until 2025, the system would be implemented for mere experimentation and monitoring purposes. But only one year after its presentation, the mechanism continues to be feared by the European business system, especially in this phase of strong instability in the prices of energy products. The hypothesis of a further deferral to 2027 (instead of 2026), with the elimination of free CO₂ quotas by 2032 (instead of 2035), has come down.

These reasons lead us to prefer the ‘moral suasion’ that the new rules can exercise on other legal systems, rather than the other effects expected from the proposed regulation. Their effectiveness appears, at least today,
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weakened: first of all, due to the postponement over time of the entry into force of the CBAM which hinders the measurement of its impacts on the European budget and on the ETS system; moreover, since the levy mechanism on imports of polluting goods is destined to affect their final price, in a context of ‘energy crisis’ that European markets are facing and which in a few months has brought the average price of CO₂ to the ETS auctions, from 28 to 65 dollars per ton, with even higher peaks.

In other words, on the one hand, the simple proposal of the CBAM was able to develop an animated and constructive debate on the advisability of adopting anti-circumvention devices of the European and international agreements for the containment of global warming, and also on the possibility of experimenting a tax on a global scale, discouraging the use of fossil fuels; on the other hand, the application of the institutes envisaged by the proposed EU Regulation, does not seem to be able to achieve important results due to an excess of cautions, exceptions and postponements over time.

3. Brief notes on the procedure for applying the CBAM

These limits are the expression of a political choice, rather than a technical difficulty. In fact, the rules for implementing the carbon adjustment mechanism at borders, as well as being sufficiently defined by the Regulation, appear to be capable of immediate use, making use of the reference frameworks and the network of roles that have long been tested in the harmonized European customs law.

Art. 4 of the proposal, for example, establishes that goods can be imported into the customs territory of the Union “only by a declarant authorized by the competent authority” (so-called “authorized declarant”). Also the procedure and conditions of authorization of the declarant which are governed by art. 17 are mirrored to the customs law in force: this subject, in fact, may address the request for authorization to the competent authority pursuant to Article 5, paragraph 1, provided that he has not committed serious or repeated violations of customs and tax legislation and of the rules on market abuse and provided that he has not had a history of serious crimes related to his economic activity in the five years preceding the application. In addition, the declarant must document possession of sufficient financial and operational capacity to fulfill the obligations undertaken pursuant to
the Regulations. And also the system of financial guarantees provided for by paragraphs 6, 7 and 8 of the same art. 17 proposes solutions that have long been established in the collection of customs and excise duties.

The system of declaratory obligations (which, in the case of the CBAM, are established by art. 6 of the Regulations) is also already tested. The standard provides that by 31 May of each year the authorized registrant submits to the competent authority a summary declaration of the operations relating to the previous year (“CBAM declaration”), which contains, among other things, the following information: a) the total quantity of each type of goods imported during the calendar year preceding the declaration, expressed in megawatt hours for electricity and in tonnes for other goods; b) the total embedded emissions, expressed in tonnes of CO\textsubscript{2}e emissions per megawatt hour of electricity or, for other goods, per tonne of CO\textsubscript{2}e emissions and per tonne of each type of goods, calculated in accordance with Article 7; c) the total number of CBAM certificates corresponding to the total incorporated emissions, to be surrendered, after the reduction due on the account of the carbon price paid in a country of origin in accordance with Article 9 and the adjustment necessary of the extent to which EU ETS allowances are allocated free of charge in accordance with Article 31.

This is certainly not the place to examine the most peculiar cases that determine further declaratory obligations (i.e. the one in which the imported goods are “returned goods” pursuant to Article 203 of the Single Customs Code or the others identified by paragraphs 3, 4 and 5 of article 6). What has been said so far is sufficient to demonstrate the use in the CBAM discipline of institutes and rules directly drawn from customs law, with which the new Regulation must necessarily be linked, since both govern imports.

On the contrary, the mechanisms set up by the CBAM for the calculation and valuation of the embedded emissions do not correspond to the customs law, respectively drawn by Articles 7 and 8 of the proposed Regulation. These are very complex calculation methods, which are developed in Annex III to the Regulation, where we find separate rules for goods other than electricity and which adopts appropriate remedies (default values according to the methods of Annex III, point 4.1.) for the hypothesis in which it is not possible to adequately determine the real emissions.
The European Commission is responsible for adopting implementing acts regarding the detailed rules on these calculation methods, including “the determination of the system limits of production processes, the emission factors, the plant-specific values of the actual emissions and their application to individual goods, as well as the definition of methods to ensure the reliability of the data on the basis of which the default values are determined, including the level of detail and verification of the data”. Furthermore, “if necessary”, the implementing acts must provide that “the default values can be adapted to particular areas, regions of countries where specific characteristics prevail in terms of objective factors such as geography, natural resources, market conditions, energy mix, or industrial production”.

The European Commission is responsible for adopting implementing acts regarding the detailed rules on these calculation methods, including the identification of the system limits of production processes, the presumable emission levels referring to the types of plant and goods. The European Commission is also responsible for defining methods to ensure the reliability of the data on the basis of which the default values are determined, including the level of detail and data verification. Furthermore, “if necessary”, the implementing acts must provide that “the default values can be adapted to particular areas, regions or countries to take into account specific objective factors such as geography, natural resources, market conditions, sources prevailing energy or industrial processes”.

The verification of the embedded emissions reported in the CBAM declaration must be carried out by special “accredited verifiers”, pursuant to Article 18, with the rules set out in Annex V. In this regard too, the Commission will have the power to adopt specific implementing acts.

The CBAM “governance” system is described in Chapter III of the Regulation (articles 11–19) and is based on a network of Authorities designated by each Member State. These Authorities will be bound by a specific obligation to exchange information essential to the exercise of their functions and tasks and will be directly connected to the European Commission itself which will perform the role of “central administrator” responsible for keeping an “independent transaction catalog” to record the ‘purchase, holding, return, repurchase and cancellation of CBAM certificates’ and to ensure the coordination of the related national registers.
Chapter IV of the Regulations (Articles 20–24) regulates the sale, price, return, purchase and cancellation of CBAM certificates, while Chapter V is dedicated to the management of goods at the borders.

For the rest, the Regulation links and coordinates the new legal institutions and procedures with pre-existing customs procedures and with the ETS system.

Finally, in Chapter X, it identifies the transitional regime mentioned above and which, it should be confirmed, can constitute the real weakness of the innovative mechanism for reducing greenhouse gas emissions aimed, in the intentions of the European institutions, at producing effects outside the customs territory.

It will not be easy, in my opinion, to prevail over economic interests and the impudence through which some governments at the helm of the main world economies are used to paralyze the debate on concrete actions against climate change at United Nations conferences. Certainly, however, proposals similar to CBAM, precisely because they potentially affect the exports of strategic products and the stubborn use of fossil fuels, can help accelerate that difficult convergence between legal systems and the scientific community. The research is in fact sure of the relationships that link global warming to greenhouse gas emissions⁹.

4. Conclusion

Waiting and hoping for a more serious discussion about a globally harmonized carbon pricing mechanism (e.g. linking emissions trading schemes, minimum carbon price agreements, multilateral reform of fossil fuel subsidies, etc.), the European CBAM presents profiles of significant interest. It keeps alive the debate on the need to overcome national and EU borders in the application of carbon pricing tools. At the same time, it constituted a possible ‘green’ evolution of the EU customs Code which, up to now, has scarcely considered the environmental component.

On the other hand, the proposal to adopt the European regulation on CBAM disappoints expectations in terms of the necessary and urgent

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⁹ Alberto Comelli, “Reflections on environmental taxation, at the time of the pandemic triggered by covid-19, in the perspective of a broad tax reform,” *Diritto e Pratica Tributaria*, no. 1 (January 2021): 44.
strengthening of European own resources and the EU budget\textsuperscript{10}. In fact, recent emergencies have given impetus to a revision of the system of European own resources to which the CBAM seems to contribute insufficiently.

The need to find the resources to finance the relief interventions of the Member States’ economies during and after the Covid-19 emergency led to the adoption of the Next Generation EU plan. It was financed almost exclusively with bonds, which took advantage of the EU’s high financial rating. At the same time, the weakness of the EU’s tax autonomy has emerged. Even in an emergency phase, in fact, EU had difficulty in reaching an internal agreement to acquire its own resources according to the provisions of art. 311 TFEU\textsuperscript{11}.

For these reasons, in the policy mix created to combine the aims of economic recovery with the most ambitious environmental policies of FIT\textsuperscript{x55}, it was proposed to increase the EU budget with the revision of the ETS, with the revision of energy taxation and with the CBAM.

The mechanism examined so far has a strong media impact but a weak return in terms of revenues, nor is the timing of their income clearly predictable. As regards the most up-to-date estimates on the maximum revenue from this environmental duty, no more than two billion euros per year are expected. A significant part of these sums should finance the CBAM’s operating procedures. Only the residual part could be freely used as a ‘free resource’ of the European budget, since no restrictions on its use have yet been envisaged (e.g. obligation to use it for environmental interventions or for funding research on renewable sources, on the reduction of emissions, on the CO\textsubscript{2} capture, etc.).

The main limit is the very long transitional period (experimentation), the political disagreement and the continuing uncertainty about the date of entry into force (according with the last prevision, no earlier than 2027). According to the last agreement reached on June 2022 by the three major political groups in the European Parliament, the reform of the EU’s

\textsuperscript{10} Frans Vanistendael et alias, “European Solidarity Requires EU Taxes,” \textit{Tax Notes Int.}, 2020, accessed April 30, 2020, https://taxprof.typepad.com/taxprof_blog/2020/04/european-solidarity-requires-eu-taxes.html.

\textsuperscript{11} EU Treaty on the Functioning of the European Union (TFEU), Art. 311: “The Union shall provide itself with the means necessary to attain its objectives and carry through its policies. Without prejudice to other revenue, the budget shall be financed wholly from own resources...”.

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Emissions Trading System will provide that gradual elimination of free quotas for European industries between 2027 and 31 December 2032. Consequently, the CBAM would start to fully apply only from 2033 to replace the free allowances. It could be a problem, both in relation to its ability to collect revenue for the EU budget, and also for its concrete ability to affect the choices of Companies.

If the EU Institutions will not be able to shorten these terms, the CBAM will have to continue to perform only the noblest of its functions: the contrast to the hateful phenomenon of the carbon leakage.

The debate on international carbon pricing trends would continue on a parallel track.

References

Bacchus, James. “Legal Issues with the European Carbon Border Adjustment Mechanism.” Cato Briefing Paper, Briefing paper no. 125 (August 2021): 1.

Comelli, Alberto. “Reflections on environmental taxation, at the time of the pandemic triggered by covid-19, in the perspective of a broad tax reform.” Diritto e Pratica Tributaria, no. 1 (January 2021): 44.

Dè Capitani Di Vimercate, Paolo. “The Emissions Trading Scheme: accounting and tax aspects.” Diritto e Pratica Tributaria (2010): 15.

Elkins, Paul, Terry Baker. “Carbon Taxes and Carbon Emissions Trading.” Journal of Economic Surveys, vol. 15, no. 3(2002): 325.

Falcão, Tatiana. “Toward Carbon Tax Internationalism: The EU Border Carbon Adjustment Proposal.” Tax Notes International (June, 2020): 1047.

Kardish, Christopher, Duan Maosheng, Lina, Li, Tao Yujie, Mary Hellmich. “The EU carbon border adjustment mechanism (CBAM) and China. Unpacking options on policy design, potential responses, and possible impacts.” (June 2021). Berlin.

Majocchi, Alberto. “Carbon pricing in Germany and the new European own resources.” L’Unità Europea (2020): 22. Accessed May 28, 2020. https://www.mfe.it/unitaeuropea/index.php/collezioni-online/371-anno-2020/l-unita-europea-n-2020-3-maggio-giugno/4600-il-carbon-pricing-in-germania-e-le-nuove-risorse-proprie-europee.

Metcalf, Gilbert E., Weisbach, David. “Design of a Carbon Tax.” Reg-Markets Center Working Paper, no. 09–05. Accessed January 8, 2009. https://ssrn.com/abstract=1327260.
Petrillo, Giovanna. “Next Generation EU and new system of own resources: a decisive step towards the establishment of a new European tax model?” *Rivista di diritto tributario on line* (2021): 2. Accessed December 7, 2021. https://www.rivistadirittotributario.it/wp-content/uploads/2021/12/Petrillo.pdf.

Vanistendael, Frans, Gianluigi Bizioli, Irene Burgers, Prats Garcia, Alfredo Francisco, Daniel Gutmann, Peter Essers, Werner Haslehne, Georg Kofler, Hanno Kube, Adolfo Jiménez, Martín Nykyel, Włodzimierz Nykyel, Pasquale Pistone, Ekkehart Reimer, Edoardo Traversa. “European Solidarity Requires EU Taxes.” *Tax Notes International* (2020). Accessed April 30, 2020. https://taxprof.typepad.com/taxprof_blog/2020/04/european-solidarity-requires-eu-taxes.html.
