

♦ STATEMENT 2021-12-15

EU Commission's proposal to introduce a carbon border adjustment mechanism (CBAM)

INITIAL SITUATION/BACKGROUND

The launch of the European Green Deal, the EU's new and legally binding emissions reduction target for the year 2030 and the goal of climate neutrality by 2050, will bring about inevitable, fundamental changes in the European industry. Hydrogen applications can and must take on a key role in these changes. In the EU, greenhouse gas pricing schemes will play a major, though not exclusive role in enabling and driving this transformation process forward.

In view of the fact that this Europe-wide transformation process will take place in an international marketplace with different CO_2 pricing schemes, at least in the foreseeable future (due either to differing emissions targets or differences in the role of CO_2 pricing in overarching transformation-related policies), it will be necessary to face the challenge of providing effective protection against carbon leakage, or relocating production and/or plant investments to regions that, in the global context, may not be poised to foster emissions reductions, and may indeed even increase emissions instead.

In the European regulations, prior approaches have focused on avoiding the effects of carbon leakage by allocating emission allowances (${\rm CO_2}$ certificates) of the EU Emissions Trading Scheme (EU ETS) free of charge and providing monetary compensation for indirect costs associated with the EU ETS arising from electricity markets (indirect ${\rm CO_2}$ costs). These mechanisms are effective primarily in preventing carbon leakage effects caused by production relocation and have less of an impact on mitigating the problem of carbon leakage through investment relocation.

However, the impact of free allocation in preventing carbon leakage will decrease along with the number of available CO_2 certificates (cap), which is steadily declining. Bearing that in mind, it is both a sound and vital strategy to expand mechanisms for preventing carbon leakage, especially if these mechanisms boost the total efficacy of the CO_2 pricing scheme.

Particularly for hydrogen applications, efforts should continue to be made, at least temporarily, to supplement the industrial transformation to climate neutrality with additional mechanisms (investment cost subsidies, operating cost subsidies, for example, with climate protection contracts, and so on) that are primarily designed to support investments in technological transformation and hydrogen applications and can thus simultaneously aid in preventing carbon leakage through investment relocation.

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In view of the increased motivation to reduce emissions and, at the same time, the intensification of challenges facing carbon leakage prevention, a legislative proposal for the introduction of a carbon border adjustment mechanism (CBAM) has also been submitted for the implementation of the European Green Deal.

CBAM implementation takes place within a complex framework of material and legal conditions. On the one hand, there must be comprehensive protection against carbon leakage (also taking into account the practice of shifting large shares of the value chain abroad); on the other hand, restrictions on the design of such a mechanism imposed by trade policy and international law are narrowly defined and remain partially undefined. Finally, regulatory implementation of this type of instrument is highly complex and challenging.

PERSPECTIVES AND RECOMMENDATIONS

In general, the introduction of a CBAM can help prevent carbon leakage associated with the comprehensive industrial transformation process pursuant to the goal of climate neutrality. However, many uncertainties remain concerning the prerequisites, implications and effectiveness of such a mechanism. This applies to the material, legal and political dimensions of this new instrument. In particular, the practice of restricting the CBAM to the import of CO_2 -intensive basic materials and electricity, interactions between the CBAM and free allocation of CO_2 certificates for industries at risk of carbon leakage and expectations regarding shifts in value chains are all associated with significant uncertainties and, at least to some extent, remain highly controversial. There are also significant questions regarding the implementation costs of a CBAM as well as evasion or circumvention strategies by certain exporting countries.

At the same time, it must be noted that the announcement and implementation of a CBAM can promote the creation of additional – and possibly more robust – cooperation mechanisms (sectoral agreements, climate clubs, etc.). Thus the CBAM introduced by the EU might prove to aid in the transition; alternatively, its real impact may stem primarily from the announcement itself.

Considering these numerous uncertainties, it is clear that the introduction of a CBAM should be designed as a learning process, not discounting the substantive, legal and procedural checks still required. Thus, CBAMs must first be tested and reviewed to determine whether carbon leakage can be effectively prevented or whether CBAMs must be supplemented or replaced by alternative measures (for example, climate clubs or sectoral agreements).

Above all, CBAM implementation must not trigger or cement irreversible restrictions on other carbon leakage prevention mechanisms.

Finally, it should be noted that in light of

- the upcoming industrial transformation, with a significant contribution from hydrogen technologies,
- the time required for this and the lengthy period of coexistence of conventional and transformative technologies,
- the increasing gravity of the challenges facing investment leakage in this context,
- the significant decline in opportunities to prevent carbon leakage over the next 10 to 15 years by making free CO₂ certificates available,

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- the as yet undeveloped solutions for the export issue,
- the as yet undeveloped solutions for preventing circumvention and
- developments in the international arena, which are difficult to assess,

it will be necessary to develop a new combination of policies, consisting most likely of several elements in which CBAMs play a key and increasingly important role. However, these policies will be incapable of replacing more comprehensive approaches.

In view of the wide range of sectoral challenges regarding carbon leakage prevention (for example, for exports), such combined policies must be focused heavily on sector-specific issues.

Finally, it should be noted that CBAM will be used to raise funds for the targeted transformation of basic industries in the EU, for example, in the field of hydrogen-based technologies.



THE GERMAN NATIONAL HYDROGEN COUNCIL

On 10 June 2020, the German Federal Government adopted the National Hydrogen Strategy and appointed the German National Hydrogen Council. The Council consists of 26 high-ranking experts in the fields of economy, science and civil society. These experts are not part of public administration. The members of the National Hydrogen Council are experts in the fields of production, research and innovation, industrial decarbonisation, transportation and buildings/heating, infrastructure, international partnerships as well as climate and sustainability. The National Hydrogen Council is chaired by former Parliamentary State Secretary Katherina Reiche.

The task of the National Hydrogen Council is to advise and support the State Secretary's Committee for Hydrogen with proposals and recommendations for action in the implementation and further development of Germany's National Hydrogen Strategy.

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