



RECOMMENDATIONS OF THE ENERGY AND CLIMATE
POLICY STEERING COMMITTEE

Impulses for Transatlantic Climate Action

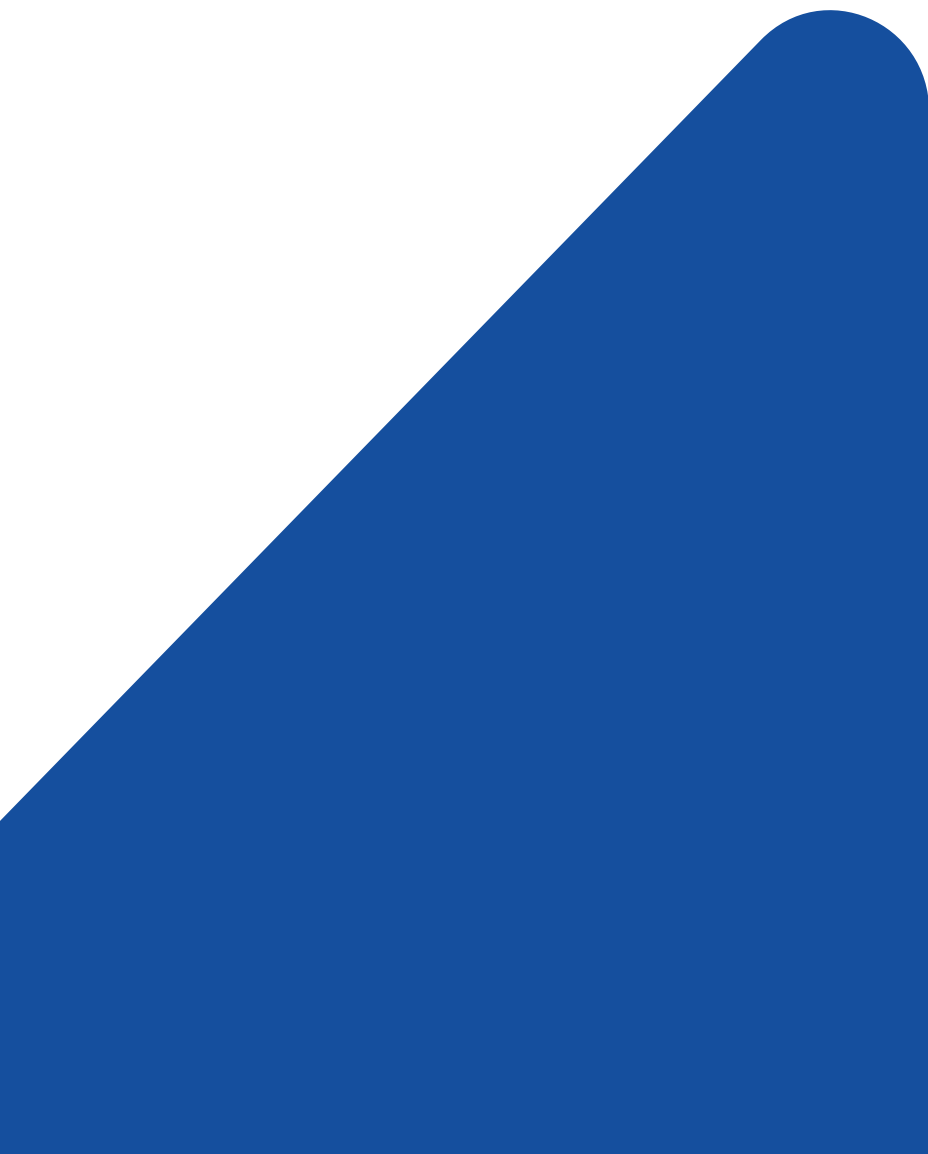


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Introduction – View of TBI

The United States' re-entry into the Paris Climate Agreement, the European Green Deal and COP 26 in Glasgow have given new momentum to global climate protection. At the same time, however, national climate protection regulations vary widely and are far from a level playing field that could help prevent carbon leakage as well as investment leakage in new zero-emission technologies.

Various platforms for cooperation between North America and Germany as well as the European Union (EU) already exist. One example is the U.S.-Germany Climate and Energy Partnership, launched by the two governments in July 2021. There is also an energy partnership between Germany and Canada. The EU-U.S. Trade and Technology Council (TTC) also includes a working group on climate and green tech.

According to its coalition agreement, the new German government intends to initiate a climate club of countries that are leading the way in climate protection and are taking similarly ambitious steps. In the view of the Transatlantic Business Initiative (TBI), such a project only makes sense if the major emitters participate. The EU, the United States and Canada may take the first step together, but the club must be open to other interested parties from the very start.

This paper compares current climate policy measures and debates in Germany and the EU as well as in the United States and in Canada. It also examines the areas in which greater cooperation on climate policy is possible. In doing so, the paper aims to create a basis for personal discussions and contacts on the topic of climate protection between business and policymakers on both sides of the Atlantic.

01

European and North American Climate Policy – Comparison

Climate Club

The idea of a climate club of ambitious states has so far been put forward most explicitly in Germany, but the point arguably has potential for further trilateral engagement:

GERMANY

In its November 2021 coalition agreement, the new German government announced it will join forces with European partners to launch an initiative for a climate club of countries that want to take the lead with similarly ambitious climate protection projects.

UNITED STATES

U.S. Climate Envoy John Kerry has called for a U.S.-EU climate club to harmonize climate regulations, though this has not yet been further pursued.

CANADA

In Canada, the idea of a separate climate club has not yet been subject to public discussion. However, Canada supports international cooperation on climate protection and is a participant in various multilateral fora.

CO₂ Pricing

In Germany/the EU and Canada, there is a CO₂ price at the federal level; in Canada, its constitutionality was upheld by a supreme court ruling in May 2021. In the United States, there have already been various unsuccessful legislative attempts to introduce a federal CO₂ price. The Biden administration

seems to want to limit CO₂ emissions primarily through incentives and regulation.

GERMANY/EUROPEAN UNION

With the introduction of the European Union Emissions Trading Scheme (EU ETS) in 2005 for electricity producers and certain industries, the EU is a global forerunner. The system has been continuously developed over four trading periods and now applies to 30 countries, extending beyond the borders of the EU (e.g., Switzerland). It is now to be made more stringent with the European Green Deal (2019). For example, free allocations for aviation and for industrial companies will be phased out over the next ten to fifteen years. The CO₂ price currently stands at around 80 euros and is set to rise to 90-130 euros by 2030 through a cap on allowances. In addition, a new, separate emissions trading system for buildings and transport is to be introduced and merged with the ETS in the medium to long term. Carbon leakage regulations are in place to maintain industry's competitiveness, but their scope and duration are a constant topic of discussion between policymakers and industry.

In Germany, national CO₂ pricing has been in place since the beginning of 2021 via the Fuel Emissions Trading Act ("Brennstoffemissionshandelsgesetz"), which applies to all areas outside the EU ETS (i.e. buildings, transport, and all industry which is not being covered by the EU ETS). In the phase-in period from 2021 to 2025, emission allowances will be sold at a fixed price, increasing from 25 euros per ton of CO₂ (2021) annually to 55 euros per ton (2025). Carbon leakage rules are also in place here, but German industry believes that they are not sufficient to achieve the self-imposed goal of effective carbon leakage protection.

UNITED STATES

In the United States, California and some states on the east coast have cap-and-trade systems, which are regulated at the level of the respective state. At the federal level, however, past efforts have not been successful. Republicans are overwhelmingly opposed to carbon pricing, and moderate Democratic legislators from states with energy-intensive industries are also largely skeptical or opposed to carbon pricing. In general, measures that raise energy prices are considered politically unattractive. However, Democrat Ted Deutch (Florida) has introduced the Energy Innovation Act, which seeks to establish a CO₂ tax at the wholesale level which is also supported by 28 Democrats in the current Congress. While the Biden Administration has called for a carbon price in its climate plan, it seems reluctant to move forward on this in light of high energy prices, inflation, and its own promise not to raise taxes on Americans with annual incomes of less than \$400,000. Instead, the government is trying to achieve CO₂ reductions through incentives and regulation (vehicle emissions, investment in clean technologies).

CANADA

In Canada, CO₂ pricing schemes vary from province to province, but according to a landmark Supreme Court ruling in May 2021, the respective scheme must meet the requirements of federal law. For provinces that do not have a CO₂ pricing system, or have an inadequate one, the federal price will apply. It will gradually increase from 23 CAD/t CO₂ in 2023 to 170 CAD/t in 2030. However, significant parts of large industry are exempt from this pricing, and citizens can reclaim up to 90 percent of the burden through their tax returns.

CBAM

EUROPEAN UNION

As part of the European Green Deal, the European Union is considering the introduction of a carbon border adjustment mechanism (CBAM) to enable it to meet its ambitious climate targets without energy-intensive industries shifting their emissions abroad. The CBAM provides for the virtual linking of EU trading partners to the EU ETS, which makes it a target for criticism abroad. The planning of the CBAM has already proven to be a lever that encourages countries

to seek talks with the EU on climate policy cooperation. Tactically, it may be advantageous from the EU's perspective to allow sufficient time for further negotiations and to decide later whether and how to apply the instrument. As soon as classical carbon leakage instruments such as free allocation and electricity price compensation are gradually phased out with no globally comparable CO₂ prices in place by then, the introduction of a CBAM may become increasingly urgent for the EU. If the CBAM instrument is abandoned, comprehensive carbon leakage protection must continue to be granted for competition outside the boundaries of any climate club. Fundamentally, there is a risk that the Commission will no longer be able to come out of the CBAM approach in a face-saving manner, i.e. that this instrument will be implemented regardless of other developments and despite all its weaknesses in certain areas. This may pose a significant risk to transatlantic cooperation.

UNITED STATES

In the United States, such measures are also politically difficult. In July 2021, for example, Democrats proposed legislation to impose a border carbon adjustment on energy-intensive imports (steel, aluminum, cement, iron, fuels). Efforts to include a carbon border adjustment in the Build Back Better Act were unsuccessful. The Biden Administration has not moved significantly on the issue, based on concerns about rising prices and discouraging other countries from pursuing climate goals.

CANADA

The Canadian government is monitoring the issue internationally, particularly in the EU and the United States. Law firms are already offering advice on this for the business community.

Green Lead Markets

Green Lead Markets are markets for specific products which are being established and encouraged by political measures with the objective to support green or climate neutral methods of production. This topic is addressed in all three countries, albeit with different emphases in some cases. Actual "markets" do not yet exist anywhere, but the idea seems to have potential for further development.

GERMANY/EUROPEAN UNION

In Germany/the EU, the topic has so far mainly been a buzzword without any real substance. However, it does play a role – at least in theory – in green public procurement. An EU regulation already allows this today: in public tenders, the administration may buy a more sustainable product, even if it is more expensive. Overall, however, this is too time-consuming and thus hardly ever occurs in practice. Applications would have to be accelerated and existing hurdles removed. First, however, it is also necessary to find a definition for green products that avoids “green washing”, is recognized as widely as possible and is used, for example, in public procurement. This could then also be discussed and “advertised” with the partners in the TBI.

UNITED STATES/EUROPEAN UNION

As part of the recent U.S.-EU agreement on steel and aluminum tariffs, the United States and the EU agreed to develop a common methodology to determine the CO₂-content for traded steel and aluminum.

CANADA

In Canada, green steel is increasingly coming into focus as well, as is the decarbonization of cement. Some provinces have already approved or granted substantial subsidies and support in the form of loans for the domestic steel industry. Decarbonization of the industry is a major issue, with CAD 8 billion being invested in the Net Zero Accelerator in addition to other subsidy programs.

Global Hydrogen Economy

In all three markets, hydrogen is seen as an important topic for the future, although the political prioritization still differs in detail and the “theory of colors” is not the same. The different weight of (fossil) raw material producers in the countries also plays a major role here. The future role of hydrogen in the economy can have significant industrial policy consequences, as green hydrogen production outside the EU potentially draws investment in energy-intensive industries away from the EU.

GERMANY/EUROPEAN UNION

In Germany and in the EU, there are hydrogen strategies that attribute a high priority to green hydrogen in particular. According to the coalition agreement, (domestic) electrolysis capacity for green hydrogen in Germany is to be doubled to 10 gigawatts by 2030, compared with the current target of five gigawatts. Furthermore, the new German government intends to promote a “European Union for Green Hydrogen”.

UNITED STATES

In the United States, the hydrogen strategy is less developed than in Germany, but there are nevertheless important political decisions on hydrogen, for example:

- eight billion U.S. dollars in funding from 2022 to 2026 (Infrastructure bill) for clean hydrogen hubs, to be implemented by the Department of Energy (DOE)
- The DOE Hydrogen Shot Initiative, with a goal of reducing the cost of “clean hydrogen” by 80 percent to one U.S. dollar per kilogram by 2031.

The U.S.-Germany Climate and Energy Partnership is inter alia advancing collaboration on sustainable hydrogen technologies. It was established by President Biden and Chancellor Merkel in July 2021.¹ Canada already has high capacities for gray hydrogen (via steam reforming from natural gas). Among experts, Canada is considered a country with high potential for green hydrogen production. Canada’s strategy is based on green and blue hydrogen. In addition, there is also great interest in turquoise hydrogen (methane pyrolysis) in areas where CCS is not technically feasible.

CANADA

Canada is home to or has subsidiaries of several leading fuel cell and electrolyzer manufacturers. Canada is also part of several multilateral policy fora in the hydrogen field. The provinces are very independent in energy matters and in some cases are developing hydrogen strategies themselves.

¹ FACT SHEET: U.S.-Germany Climate and Energy Partnership | The White House

02

Proposals for Cooperation

The German G7/B7 presidency in 2022 is an opportunity to work closely with the United States and Canada on climate issues (climate club/CO₂ pricing/CBAM/hydrogen, etc.).

As explained above, from today's perspective, there is potential for discussion within the framework of the TBI, particularly on the following topics:

1. Climate club

In addition to the German government, this is also called for by John Kerry, and the Canadian government is also open to multilateral approaches. However, the issue still lacks "political momentum" on a broad scale. Where uniform CO₂ pricing is concerned, such a club is unlikely to work without effective CBAM.

2. CO₂ pricing

The details of the existing federal systems could be harmonized between Germany/EU and Canada (carbon leakage protection, minimum prices, refunds, etc.) in order to achieve a level playing field.

With regard to the United States, it would be interesting to learn more about the existing congressional

initiatives and whether a different framing of the issue could make it more acceptable to the majority in the United States.

3. Global hydrogen economy

Here, one could certainly learn from each other's approaches. Canada and the United States are large potential markets for German electrolysis technology. Cooperation between the three markets could also help set global standards (hydrogen colors, etc.).

4. Support measures for the transformation in the three markets

Collecting examples of best practices, determining subsidy quotas, etc., also with regard to the "de-fossilization" of the basic materials industry (steel, etc.).

5. Promote green product/lead market standards created in the EU and explain methodologies so they can be applied in Canada and the United States.

Annexes

Annex 1

FURTHER TOPICS WHICH MAY BE ADDED IN THE COURSE OF FUTURE DEBATES OF TBI (LIST NOT CONCLUSIVE)

- Decarbonization of global logistics and prevention of competitive distortion by regional regulation
- Renewable energies
- CCUS – Carbon Capture, Utilization, and Storage
- Sustainable finance
- Energy efficiency

Annex 2

EXPLANATION OF HYDROGEN THEORY OF COLORS

Gray hydrogen is obtained from fossil fuels. As a rule, natural gas is converted into hydrogen and CO₂ under heat during production (steam reforming). The CO₂ is then released unused into the atmosphere, thus reinforcing the global greenhouse effect: The production of one ton of hydrogen generates around 10 tons of CO₂.

Blue hydrogen is gray hydrogen, but its CO₂ is captured and stored during production (Carbon Capture and Storage, CCS). The CO₂ generated during hydrogen production is thus not released into the atmosphere, and hydrogen production can thus be considered CO₂-neutral.

Turquoise hydrogen is hydrogen produced via the thermal decomposition of methane (methane pyrolysis). Instead of CO₂, solid carbon is produced in the process. Prerequisites for the CO₂ neutrality of the process are that the heat supply for the high-temperature reactor comes from renewable energy sources, and that the carbon is permanently bound.

Purple hydrogen is produced with the help of nuclear energy, as promoted e.g. by France or also the United States.

White hydrogen is hydrogen that occurs naturally in certain regions, e.g. in Africa, and can be extracted using fracking technologies. However, the potential is generally considered to be extremely low.

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