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Berlin, 19 June 2026

BDEW Bundesverband
der Energie- und
Wasserwirtschaft e.V.
(German Association of Energy and
Water Industries)
BDEW Representation at the EU

Avenue de Cortenbergh 52
1000 Brussels
Belgium

www.bdew.de

Position Paper

Making the EU ETS 1 fit for the Future

Effective Carbon Pricing, Fair Competition and Reliable Investment Signals

Contents

1 Executive Summary

The EU ETS 1 remains the EU's central market-based climate policy instrument and has delivered substantial emissions reductions in the energy sector and industry. In the upcoming review, the system should be further developed without weakening its core function of providing a reliable, effective and investment-relevant CO_2 price signal. Planning certainty, market stability, fair competition and carbon leakage protection are essential. Any dilution of the cap or the linear reduction factor would undermine system credibility and disadvantage companies that have already invested in decarbonisation.

At the same time, ETS 1 is facing new challenges, including declining allowance volumes, rising transformation costs, risks to industrial competitiveness and potential liquidity constraints. These challenges should not be solved by weakening the ETS itself. Instead, industrial and social policy objectives should be addressed through targeted accompanying measures such as electricity price compensation, Carbon Contracts for Difference, investment programmes and transition support.

Key recommendations:

- The linear reduction factor should not be weakened. Relief for hard-to-transform sectors should be provided through targeted support instruments rather than by diluting the cap.
- The Market Stability Reserve should be developed into a rule-based liquidity buffer. Automatic cancellation of allowances above 400 million should be suspended, distribution rules should be smoothed and the withdrawal rate reviewed. Price triggers and price control should be rejected.
- CBAM must be made effective, administrable and resistant to circumvention. The phase-out of free allocations should only proceed where CBAM provides equivalent carbon leakage protection. Export-oriented value chains, electricity imports and electrification pathways need stronger consideration.
- International credits under Article 6 of the Paris Agreement should only be integrated in a controlled, limited and quality-assured manner.
- Negative emissions and CO_2 removals should be integrated into ETS 1 as soon as a robust certification and MRV framework is in place. This would support liquidity and incentivise investment in carbon management technologies.
- In the long term, the EU should develop ETS 1 as a reference model for international carbon markets. Linking with similarly ambitious systems and high-quality Article 6 certificates can increase liquidity and reduce carbon leakage risks, provided they do not weaken the European CO_2 price signal or environmental integrity.

2 Emission trading today

Emissions trading schemes are based on the simple idea that producers or emitters of CO_2 must purchase a permit in order to be allowed to emit a defined quantity of CO_2 into the environment. The aim of these schemes is to curb and reduce emissions of environmentally harmful gases. A cap sets the maximum amount of emissions that may be released. This principle is known as 'cap and trade'. The value of individual emission allowances is generally determined by the interplay of supply and demand, with the cap decreasing over time. The core idea is that the declining availability of emission allowances and the resulting rise in price make CO_2-intensive processes more expensive, thereby incentivising emitters to switch to climate-friendly processes.

A look at how this works in practice shows that the concept is fundamentally effective. Since 2005, around 9,000 installations across Europe in the energy sector and energy-intensive industries have been participating in the European Emissions Trading Scheme (ETS 1). In addition, intra-European air transport has been included since 2012, and maritime transport since 2024. Since then, the covered German installations have reduced their emissions by around 47 per cent; across Europe, emissions from stationary installations in ETS 1 have even fallen by around 51 per cent. The key drivers of this development were the increasing share of renewable energy, the decline in electricity generation from hard coal and lignite, fuel switching, efficiency improvements and other climate and energy policy measures.

Since its inception, the ETS 1 has generated auction proceeds totalling 248 billion euros, which have been channelled at national level into climate protection measures and the transformation of the energy system. These impressive figures demonstrate that the European emissions trading scheme is an effective market-based instrument of European climate policy and generates effective price signals for the transition.

The energy sector sees itself as part of the solution to mitigating the consequences of climate change and has contributed to the further development of the European emissions trading scheme over the past two decades. For the energy sector, emissions trading offers reliability and predictability, as well as effective price signals for future investment decisions. The BDEW and its more than 2,000 members therefore support this central pillar of European climate protection policy.

At the same time, the postponement of the European fuel emissions trading scheme (ETS 2), signs of an economic recession and global conflicts such as the war in Iran indicate that emissions trading itself is under pressure. The economic situation, combined with emissions trading, is leading to fundamental challenges in certain sectors, and market dynamics are set to change fundamentally in the coming years.

Since its introduction in 2005, ETS 1 has been continuously refined over four trading phases. With this paper, the BDEW aims to prepare for the upcoming ETS 1 review and contribute to its further development. First, the current positions on ETS 1 are outlined; subsequently, key points and guidelines for the forthcoming review are formulated on the basis of this analysis, against which the energy sector will assess any proposals following the review. Finally, an outlook on the future of ETS 1 is provided.

The energy sector's aim is to maintain and further develop emissions trading, whilst expanding its scope of application. Companies that are already investing in decarbonisation must not suffer as a result of a possible complete watering down of emissions trading. At the same time, sectors that are difficult to transform must be protected from being overburdened. In addition to the energy sector and industry, emissions trading also affects citizens themselves. In times of geopolitical upheaval, it also plays a role in industrial policy and foreign policy. The BDEW sees itself as an energy industry association that wishes to at least contribute to the discussion of these major issues, even if it can only offer guidance on their resolution.

3 EU ETS 1 – Between reform and continuity

The debate on reforming ETS 1 has gained significant momentum once again following the postponement of ETS 2, the tightening of the EU's climate targets, and the current energy crisis – resulting from the conflict between the US and Israel on one side and Iran on the other. However, even before these events, there were pressing issues requiring a review of ETS 1, such as the competitiveness of energy-intensive industrial sectors. Against the backdrop of these very diverse events, a number of distinct areas of tension are emerging in industrial, social and fundamental economic policy terms. The ETS 1 is intended to address foreign trade policy issues, protect end consumers from high prices and organise the transition through the market by means of effective price signals.

All these issues are important, but from the energy sector's perspective, they cannot be resolved by the ETS 1 alone. The ETS 1 should, first and foremost, internalise externalised costs and thereby create incentives to invest in lower-emission alternatives. Naturally, the market design must protect market participants and end consumers from price distortions – but this requires additional policy measures to address, for example, industrial and social policy issues from outside the system. For the ETS 1 to effectively incentivise investment in climate-neutral technologies, a sufficiently strong and reliable CO_2 price signal is needed. Robust and predictable market rules are essential to this end, to ensure the system's steering effect and to make investment decisions predictable. In the upcoming review process, it is therefore important to coordinate all measures to generate a reliable, efficient and sustainable price signal whilst limiting potential volatility.

From the BDEW's perspective, the following four guiding principles are crucial for the revision of ETS 1, to modernise the scheme whilst ensuring ambitious and sustainable climate protection:

1.) Planning certainty

For the energy sector, the ETS 1 and the resulting planning certainty represent a major achievement. Thanks to a reliable legal framework and market rules, companies can plan their investments for the long term and be confident that interventions will only be made in the event of external and unforeseen circumstances. This certainty is essential for long-term investment decisions. From the industry's perspective, the annual linear reduction factor (LRF) of 4.4 per cent – up to 2030 – is appropriate for achieving an incentive effect towards decarbonisation. The LRF should not be weakened. Weakening it would significantly jeopardise the integrity of the system and put pioneers at a disadvantage.

2.) Effective price signal

Investment decisions are made on the basis of economic considerations. In order to create incentives, the ETS 1 requires an effective price signal that is not unduly diluted. Prices that are too low may delay or even prevent necessary investments. Prices that are too high or too volatile naturally lead to distortions, which must be minimised. With a falling cap, certificate prices may rise in the long term, which will place a particular burden on businesses if climate-neutral alternatives are not sufficiently available – hence it is all the more important, when revising the ETS 1, to avoid, as far as possible, taking any measures that unnecessarily dilute the existing price signal or undermine planning certainty.

3.) Using MSR for liquidity management

The MSR was originally introduced to reduce excess liquidity resulting from a structural oversupply of CDM emission allowances. At the same time, however, it also withdraws allowances from the market during periods of low demand – for example, as a result of weak economic performance – and may thereby contribute to higher allowance prices. The MSR thus remains an important liquidity management tool, particularly for addressing structural imbalances. However, its role will change significantly in future: in view of the falling cap, it will increasingly have to regulate scarcity. This makes it all the more important that the MSR operates on a strictly rule-based basis. A suspension of the cancellation of certificates within the MSR must not result in the MSR itself becoming an oversized buffer. The BDEW rejects price-based approaches.

4.) The Political Flanking of Emissions Trading Matters

The ETS 1 is, first and foremost, a climate protection instrument designed to promote decarbonisation. From the energy sector's perspective, the ETS alone should not be used to achieve both industrial and socio-political objectives simultaneously. Therefore, alongside the ETS, supporting policy measures are necessary to provide targeted relief to industry and certain groups of private households. Possible measures here include climate protection agreements, investment programmes or transition programmes towards, for example, climate-neutral heating technologies and vehicles.

The various aspects of the ETS-1 reform are examined in more detail below. All the measures listed here should be coordinated and primarily aimed at stabilising liquidity. From a purely market-design perspective, such measures can only protect against price distortions. However, they are not suitable for steering CO_2 prices to a specific level.

3.1 Cap and linear reduction factor

From the BDEW's perspective, the cap – or the LRF – is of particular importance. A credible, declining cap is the key prerequisite for an effective price signal. Any excessive weakening of the LRF would jeopardise the system's climate policy integrity and, in particular, disadvantage companies that have already invested in decarbonisation at an early stage. The forthcoming review should therefore not seek to fundamentally call this path into question. From the energy sector's perspective, the binding nature of the LRF is at the heart of emissions trading and should therefore remain unchanged. Should adjustments nevertheless be discussed at a political level, these would have to be strictly limited and must not jeopardise the integrity of the cap or the certainty of planning and investment.

At the same time, the task is to examine, in light of the 2040 target, how an industrially viable transition to the post-2039 phase can be shaped – without jeopardising the aforementioned core of the system. In preparation for the ETS review, the BDEW would like to point out at this stage that providing relief to certain sectors does not necessarily have to be achieved by weakening the LRF. The most effective levers lie in the previously announced extension of free allocations, as well as in the integration of negative emissions and Article 6 allowances – the framework conditions for this will be discussed later in the paper.

› Recommendation: *The energy sector is already investing in the transition. The success of these investments is closely linked to stability and planning certainty. The BDEW therefore opposes any excessive watering down of the LRF and recommends that, as part of the ETS-1 review, sectors where the transition is particularly challenging should be addressed not primarily through the LRF, but through other relief measures.*

3.2 Market Stability Reserve

In its early stages, ETS 1 suffered from a massive fall in prices due to a structural oversupply of allowances. From the BDEW's perspective, the Market Stability Reserve (MSR) was an appropriate response to this oversupply. Whilst the MSR does, in principle, constitute market intervention, which the BDEW views critically, Nevertheless, it has played a key role in effectively reducing the oversupply during the early years of ETS 1 and in strengthening the market's functionality. The MSR has thus contributed significantly to the stabilisation and credibility of the CO_2 price signal in the ETS 1. At the same time, however, it also withdraws allowances from the market during periods of low demand – for example, as a result of weak economic performance – and may thereby contribute to higher allowance prices. Any reform of the MSR should take such adverse effects on market participants into account. The MSR will continue to withdraw allowances in the coming years. It is therefore appropriate to build up a buffer for future situations of scarcity by suspending the cancellation of allowances from the MSR.

The linchpin of the reform debate on the ETS 1 is therefore the further development of the MSR. Even before the upcoming review, it was proposed that the automatic cancellation of allowances above the 400-million threshold be suspended. To date, allowances in the MSR above this threshold have expired annually. From the BDEW's perspective, such an adjustment could be an important step towards modernising the ETS 1. Whilst the MSR has so far been primarily geared towards reducing structural surpluses in the allowance market, its role will need to be redefined in an increasingly tight market environment. In future, the MSR should be designed more as a rule-based liquidity buffer capable of cushioning fundamental supply and demand shocks and limiting excessive market volatility, without undermining the environmental integrity of the ETS 1.

Adapting the existing thresholds to future market conditions could also contribute to the further development of the MSR. With the cap falling, the issue of the reallocation of allowances from the MSR is expected to become increasingly important. Care should be taken to ensure that falling below a single threshold does not lead to an abrupt and very large-scale reallocation. A corresponding smoothing mechanism has already been introduced for the range between 833 million and 1,096 million allowances. From the BDEW's perspective, consideration should be given to whether a comparable sliding-scale distribution rule would also be appropriate for the range below 400 million allowances. It is crucial that the distribution rules remain strictly volume-based, transparent and rule-bound. The BDEW opposes the introduction of price triggers. The MSR should remain a liquidity management tool and not be used for explicit political price control. Only in this way can the CO_2 price signal fulfil its function and efficiently incentivise investment in climate-neutral technologies.

Another adjustment mechanism could be the withdrawal rate. Currently, when the Total Number of Allowances in Circulation (TNAC) exceeds 1,096 million allowances, 24 per cent of the total volume of allowances in circulation is withdrawn from the auction volumes over a twelve-month period and transferred to the MSR. Withdrawals may still occur in the coming years despite falling caps. As part of the review, it should therefore be examined whether the withdrawal rate needs to be adjusted to ensure sufficient market liquidity in the short and medium term. In doing so, the short-term relief effect and the long-term function of the MSR as a stability buffer must be carefully weighed against one another. Any adjustment to the withdrawal rate must not lead to a relaxation of the cap, but must remain focused on safeguarding the market's functionality in the face of increasing scarcity events.

A further issue concerns the calculation of the TNAC. To avoid misalignment caused by the MSR, the calculation of the TNAC should take into account the use of EUAs by the aviation sector up to 2024, as well as by certain Member States under the ESR flexibility mechanism (up to 100 million by 2030).

Overall, the reform of the MSR should be aimed at strengthening its effectiveness and resilience without undermining the environmental integrity and market-based incentive effect of the ETS 1.

› Recommendation: *The MSR should be further developed into a rule-based liquidity buffer for an increasingly tight market environment. To this end, the automatic cancellation of allowances exceeding 400 million should be suspended, the distribution rules smoothed out and the withdrawal rate reviewed. Price triggers and political price control should be rejected; the reform must safeguard market liquidity without undermining the cap, price signal or environmental integrity of the EU ETS 1.*

3.3 Maintaining the competitiveness of industry

Another key area of focus in the review is carbon leakage – that is, the relocation of production and investment to countries with less stringent climate protection requirements. From the BDEW's perspective, this risk may increase further as the transformation and electrification of industrial processes progress. This applies in particular to energy-intensive sectors, whose electricity and energy requirements are rising as a result of decarbonisation. The EU's carbon leakage list should therefore be reviewed regularly and adapted to changing transformation pathways and actual competitive risks.

The BDEW considers the existing instruments for carbon leakage protection – in particular the free allocation of allowances and the compensation for indirect CO_2 costs – to be fundamentally effective and important. However, they should be designed in a rule-based, targeted and transformation-oriented manner. Free allocations must not permanently weaken the

incentive for transformation. They may, however, remain necessary on a transitional basis as long as the Carbon Border Adjustment Mechanism (CBAM) does not offer equivalent and reliable protection. Their phasing out should therefore only take place to the extent that CBAM is actually administrable, resistant to circumvention and effective. From the BDEW's perspective, the focus should therefore be on the further development of CBAM.

Electricity price compensation (SPK) continues to be of particular importance. From the BDEW's perspective, it is one of the most effective instruments for protecting against carbon leakage, as it addresses indirect CO_2 costs and thus supports electricity-based transition pathways. With the increasing electrification of industrial processes, its continuation and long-term financing are becoming ever more important. From an economic perspective, the SPK can be an efficient instrument, as it safeguards competitiveness whilst creating incentives for electrification. At present, companies have to fight year after year at national level for the continuation of the SPK. This uncertainty does not create incentives for investment in electrification. The possibility of introducing an SPK should therefore be enshrined in the ETS Directive in a way that provides planning certainty across the EU, and the corresponding national ETS revenues should, for the most part, be earmarked for this purpose. Each Member State should continue to decide for itself on the actual introduction of the scheme.

In addition to the instruments enshrined in ETS legislation, accompanying measures should be utilised more extensively to stimulate concrete investment in climate-neutral processes. This applies in particular to the further development of the Innovation Fund, the Temporary Decarbonisation Fund and the Industrial Decarbonisation Bank. These include, in particular, Carbon Contracts for Difference (CCfDs), which cover the additional costs of the transition and enable investment in electrification, hydrogen or other climate-neutral processes. One advantage of these contracts for difference is that their terms can be tailored to specific conditions. This makes it possible to anchor certain stages of the value chain at locations in Germany or Europe, thereby combining industrial competitiveness with climate protection. Furthermore, the Industrial Accelerator Act (IAA) offers the possibility of establishing lead markets for various sectors. The state would not need to provide any further funding, as the framework conditions already provide the right incentives. This would ensure the uptake of green products and enable the transformation costs to be refinanced within the value chain.

3.4 CBAM and free allocations

For the energy sector, CBAM is by no means a peripheral issue that primarily affects energy-intensive industries. The design of this instrument will determine whether the price signal from ETS 1 remains politically viable. If rising CO_2 costs put European industrial companies at a disadvantage compared with producers in third countries, the pressure to water down ETS 1

itself will increase. Only an effective CBAM can reduce this pressure and help to maintain an effective price signal. Effective climate action is only sustainable in the long term if it limits distortions of competition and the relocation of production to countries with lower climate protection standards.

At present, the CBAM is not yet a fully tested instrument, as it will not come into full effect until 2026. At the same time, the phased reduction of free allocations is beginning in the sectors affected by these free allocations. From the BDEW's perspective, it is therefore essential to carefully assess whether the CBAM actually provides equivalent protection against carbon leakage and for which sectors it can offer such protection. The phasing out of existing protective measures must not proceed more rapidly than the demonstrable establishment of an effective, manageable and tamper-proof border adjustment mechanism. The BDEW therefore welcomes the fact that a time-limited continuation or adjustment of the phase-out path for free allocations is being discussed in the reform debate. It is important, however, that some of the pressure to transform the sector is maintained, as the free allocations will only support the affected sectors up to a point where, overall, few allowances will be available. It is therefore important to establish effective carbon leakage safeguards as soon as possible.

Particular attention must be paid to the international competitiveness of export-oriented companies. CBAM, in its current form, primarily addresses competition within the EU internal market. However, this focus on the EU internal market does not do justice to the competitive reality faced by export-oriented companies. Their competitive disadvantages arise in particular in markets outside the EU. Supplementary, WTO-compatible instruments are therefore needed to complement CBAM and thus safeguard industrial value creation in Europe. The BDEW is unable to present a comprehensive concept on this matter, as our member companies are practically unaffected by it. Effective protection against carbon leakage is therefore crucial for the energy sector, because industrial electrification, the roll-out of hydrogen, climate-neutral heating and investments in grids, storage and generation depend on a competitive industrial demand base.

CBAM is of particular significance to the energy sector in relation to cross-border electricity trade. As electricity itself falls within the scope of CBAM, the aim is to prevent CO_2-intensive electricity generation in third countries from gaining a structural competitive advantage over electricity generation subject to the ETS within the EU. This can help to safeguard the integrity of the EU ETS 1 and the European internal electricity market. At the same time, the specific design of the CBAM rules for electricity imports must remain practicable from an energy market perspective. Electricity flows are short-term, physical in nature and often serve the system; therefore, reporting, calculation and settlement obligations must not create perverse incentives that undermine security of supply, cross-border trade or system stability. For

electricity exports and electricity-based value creation outside the EU internal market, it also remains to be examined whether supplementary, WTO-compatible instruments are required to limit competitive disadvantages arising from differing CO_2 costs.

Closely linked to this issue is the question of benchmarks for allocations. In principle, the benchmarks determine how many free allowances a plant receives. They are based on the greenhouse gas intensity of the most efficient plants within a product segment. From the BDEW's perspective, benchmarks must be further developed in such a way that they incentivise ambitious decarbonisation, whilst taking into account technically feasible transition pathways and the availability of climate-neutral alternatives. Particularly in view of the increasing electrification of industrial processes, it is crucial that benchmarks do not create perverse incentives at the expense of electricity-based solutions. Climate-neutral or, in the long term, climate-neutral electrification, hydrogen applications and low-carbon heating and process solutions must not be disadvantaged by a failure to accurately reflect direct and indirect emissions or the associated costs. The design of the benchmarks must therefore be considered in close conjunction with electricity price compensation, the CBAM and the transformation of energy infrastructures. One sensible proposal currently under discussion is to give greater weight to indirect CO_2 costs associated with electricity procurement when determining benchmark factors. To date, only direct costs have been taken into account when calculating these factors. In order to reduce disincentives to electrification, one option is to factor in indirect costs. However, care must be taken to ensure that this is implemented in a legally sound manner. At present, it is not legally clear whether this form of consideration is legally feasible. To date, funding frameworks have made a clear distinction between direct and indirect costs, and Article 10a(6) of the ETS Directive excludes double compensation via national support instruments. From the BDEW's perspective, legal clarification is required here. In any case, the inclusion of indirect CO_2 costs can be taken into account when determining the benchmarks for the ongoing electrification process.

Furthermore, with regard to free allocations, the New Entrants Reserve should be examined more closely. Originally allocated 330 million EUAs, the NER has since grown to over 500 million EUAs (as a result of adjustments to free allocations following closures and partial closures). From 2031 onwards, these quantities should be used for additional free allocation to industry.

The aim must be a consistent carbon leakage framework that preserves the CO_2 price signal of the ETS 1, enables industrial electrification and, at the same time, strengthens the investment conditions for the energy sector in a climate-neutral electricity, heating and hydrogen supply.

› Recommendation: *The CBAM should be further developed in a targeted manner as part of the ETS-1 review so that it provides effective, manageable and anti-circumvention*

protection against carbon leakage. The phasing out of free allocations should only take place to the extent that the CBAM actually guarantees equivalent protection; a time-limited adjustment to the phase-out path should therefore be considered. At the same time, greater account must be taken of export-oriented value chains, electricity imports and electricity-based transition pathways. Benchmarks should be designed in such a way that they do not disadvantage electrification, hydrogen applications and low-carbon process solutions. In addition, electricity price compensation and legal clarifications regarding the consideration of indirect CO_2 costs are required in order to reconcile competitiveness, investment certainty and the CO_2 price signal from the ETS 1.

3.5 International credits

International credits under Article 6 of the Paris Agreement could play an important role in the further development of ETS 1 in the long term – their direct inclusion should take place in phases. Direct inclusion in ETS 1 right at the start of the integration process is not the most effective approach. With the falling cap and increasing scarcity in the European allowance market, the question arises as to how hard-to-avoid emissions can be addressed in the long term whilst at the same time strengthening market liquidity and international interoperability. High-quality international emission reduction credits can contribute to this, provided they meet strict requirements regarding effectiveness, additionality, transparency and the avoidance of double counting. If the use of international allowances is permitted in the ETS 1, it must be ensured that carbon dioxide removals (CDRs) from international sources are subject to the same requirements as CDRs from EU sources. Otherwise, international allowances would set the (long-term) marginal price and EU CDRs would have little chance of success.

From the BDEW's perspective, the inclusion of international credits in ETS 1 should therefore only be considered with great caution and on a limited basis. Experience with project credits under the Kyoto Protocol has shown that inadequate quality standards, unclear additionality and a lack of oversight can significantly undermine the credibility of emissions trading schemes. An uncontrolled opening of the ETS 1 to international credits would therefore be inappropriate and could weaken the CO_2 price signal as well as the environmental integrity of the system.

At the same time, the EU should actively support the development of high-quality Article 6 mechanisms. In particular, the Paris Agreement Crediting Mechanism under Article 6.4 can, in the long term, help to establish international CO_2 markets and organise climate finance in a more market-based manner. This may open up new opportunities for the energy sector, for example through trading in high-quality allowances, investments in international climate protection projects and new business areas in the field of carbon management and CO_2 markets.

For ETS 1, a controlled, centralised approach should initially be examined. One possible option would be the limited use of international credits via a centralised European or nationally coordinated purchasing and verification model. This would allow the quality, integrity and eligibility of the allowances to be assessed centrally before they are further integrated into European compliance markets. It is crucial that international credits are not viewed as a short-term relief mechanism designed to water down the ETS 1, but rather as a building block of a long-term, integrity-driven and internationally compatible CO_2 market architecture.

› Recommendation: *The potential use of international credits under Article 6 should be discussed as part of the ETS-1 review. Purchases should be made centrally, and compliance with strict quality requirements is essential. This requires clear international rules on additionality, permanence, transparency, independent verification and the avoidance of double counting. For ETS 1, a controlled purchase and verification model should initially be considered to enable international market integration without undermining the CO_2 price signal, the cap or the environmental integrity of the system. It is important to ensure fair competition between measures implemented both within and outside the EU, particularly for CCU measures.*

3.6 Waste incineration

The possible inclusion of waste incineration in the ETS 1 is another key issue for the forthcoming review. Under the EU ETS Directive, the European Commission is required to assess the feasibility of including waste incineration in the ETS 1, with a view to its possible inclusion from 2028. The assessment is also to examine whether Member States require an opt-out option until 31 December 2030. This assessment is also to cover the possibility of including further waste management processes in the EU ETS, in particular landfills that cause methane and nitrous oxide emissions. From the BDEW's perspective, such an extension of the scope could, in principle, be sensible provided it is harmonised across the EU, practical to implement and consistent with waste management policy.

In the BDEW's view, the possible inclusion of municipal waste incineration plants in ETS 1 should only take place on the basis of a comprehensive cost-benefit analysis. In this context, the impacts on climate protection, competition, administrative burdens and waste disposal costs must be assessed collectively. Inclusion is, in principle, sensible provided that it is implemented uniformly across Europe, covers all relevant types of facilities – including co-incineration plants – and thus avoids distortions of competition and the diversion of waste streams.

There is currently no uniform CO_2 pricing across the EU for waste-to-energy plants. Creating a level playing field for waste-to-energy plants and competing waste disposal options within the EU should be a high priority. This could be achieved by introducing an EU-wide obligation for

waste-to-energy plants to hold allowances under the ETS 1 from 2028 onwards: the sooner a uniform EU-wide CO_2 pricing system for waste-to-energy plants is introduced, the sooner fair competition between waste disposal options within the EU can be established, and the greater the benefits for climate protection.

With the EU-wide inclusion of waste incineration plants in ETS 1, the incentives and requirements for landfilling waste must be further developed across the EU to prevent a distortion of competition and the resulting climate-damaging shift in waste disposal from TAB plants towards landfilling. The aim must be to minimise as far as possible the proportion of waste sent to landfill, which results in highly climate-damaging methane emissions.

At the same time, it must be borne in mind that municipal waste incineration plants have only a limited ability to influence the composition, calorific value and fossil carbon content of the waste delivered to them. They primarily process unavoidable and non-recyclable residual waste, which still needs to be disposed of safely. The direct steering effect of a CO_2 price is therefore limited in this sector. Effective emissions reductions depend much more on upstream circular economy measures, in particular waste prevention, improved separate collection, recyclable product design and the reduction of fossil components in the waste stream.

The prospective inclusion of municipal waste incineration plants in ETS 1 makes sense, provided that it is coordinated across the EU, that carbon leakage risks are adequately addressed, and that perverse incentives for landfill disposal are avoided. With the expected transition of the nEHS to ETS 2, likely in 2028, a seamless transition of waste incineration from the nEHS to ETS 1 would be advisable. If waste incineration were not included in ETS 1, there would otherwise be a risk of a national ‘special path’ being adopted, which could put waste incineration in Germany at an economic disadvantage in the long term. Should inclusion in ETS 1 take place, a practical and sector-specific framework is therefore required. This includes an appropriate adjustment of the ETS cap, suitable rules for free allocation for heat and steam supplies, and simplified yet robust MRV rules, for example through standard values for waste categories. Furthermore, CO_2 removals – particularly those resulting from the installations’ own carbon management activities or from recognised permanent removals – must be eligible for credit against the emissions liability. As the relevant technologies are unlikely to be financed solely through the CO_2 price during the market ramp-up phase, supplementary support mechanisms such as Carbon Contracts for Difference may be necessary. The potential inclusion of municipal waste incineration in the ETS must therefore not be viewed in isolation as merely an additional form of CO_2 pricing. Rather, it must be considered in conjunction with the waste hierarchy, the circular economy, waste disposal security, heat recovery and carbon management. The aim should be to establish a framework that provides additional incentives for climate

protection without creating perverse incentives at the expense of safe disposal, high-quality recovery or the stability of local authority charges.

› Recommendation: *The inclusion of municipal waste incineration in the EU ETS 1 should, where possible, be harmonised across the EU from 2028 onwards, be practicable and consistent with waste policy, and avoid creating perverse incentives for landfill. In doing so, account must be taken of the limited influence that plants have on waste input, disposal security, the impact of charges, and the role of carbon management. This requires adapted MRV rules, an appropriate cap adjustment, suitable allocation rules and the eligibility of CO_2 removals for crediting.*

3.7 Inclusion of negative emissions

The BDEW recognises the challenge posed by the fact that sectors which are difficult to transform are under particular strain as a result of the current LRF and the cap. At the same time, these framework conditions are essential to ensure the credibility and predictability of the ETS 1. From the energy industry's perspective, there are a number of measures that can alleviate this pressure. In principle, increasing liquidity can help in this regard.

From BDEW's perspective, the fastest possible integration of negative emissions into ETS 1 should be pursued as part of the CO_2 offshore storage strategy and in light of industrial emissions that cannot be avoided. Against this background, companies covered by ETS 1 should be allowed to use CO_2 removal certificates to meet their obligations, in order to create incentives for investments in CO_2 removal technologies whose implementation requires a corresponding lead time. This measure would establish a regulated market for negative emissions, and further supporting instruments such as contracts for difference could ensure an accelerated technology ramp-up. In order for the transformation to succeed also in sectors where emissions are difficult to avoid, a clear and uniform regulatory certification framework is also needed for industrial sinks such as DACCS and BioCCS. This framework must ensure clear calculation bases as well as transparent and reliable monitoring, reporting and verification of permanently removed quantities of carbon.

In this context, the recognition and enablement of CCU, for example in the context of municipal waste incineration — such as the production of synthetic naphtha — as "temporary negative emissions" must also be taken into account. One objective of further developing ETS 1 may be, also from the perspectives of technological openness and the promotion of innovation, to incentivise the use of CO_2 as a raw material beyond the cases already provided for in Article 12(3)(b) of the ETS Directive. This may include, for example, the temporary binding of CO_2 in a product or its material use as a carbon feedstock in the chemical industry. Such a

circular economy can make an important contribution to climate neutrality in the final stretch of the decarbonisation pathway.

4 The Future of Emissions Trading – From the EU ETS to a Global CO_2 Market

ETS 1 is the world's most advanced emissions trading system and has formed the central market-based framework of European climate policy for two decades. However, with the declining cap, increasing requirements for industrial transformation and growing risks to international competitiveness, the question increasingly arises as to how an ambitious European CO_2 price signal can be secured in the long term. From BDEW's perspective, the further development of ETS 1 should therefore not be viewed solely from a European perspective. In the longer term, ETS 1 should be understood as a starting point and reference model for the development of an international CO_2 market.

Greater internationalisation of emissions trading can help reconcile several objectives. It can increase market liquidity, limit price volatility, reduce carbon leakage risks and, at the same time, strengthen international climate action. The more economic areas establish comparable CO_2 pricing systems, the less pressure there will be to offset competitive disadvantages for European companies solely through CBAM, free allocation or compensation instruments. This is particularly relevant for the energy sector, as industrial electrification, the hydrogen ramp-up, climate-neutral heat and investments in grids, storage and generation depend on a competitive industrial demand base in Europe.

4.1 Linking as a First Step Towards International Market Integration

A key building block for stronger internationalisation is the linking of ETS 1 with other emissions trading systems. By connecting compatible systems, larger markets can emerge, enabling higher liquidity, more stable price signals and more efficient emissions reductions. At the same time, linking can help reduce competitive distortions between economic areas with comparable levels of climate ambition.

From BDEW's perspective, the EU should actively advance linking perspectives with emissions trading systems that are similarly ambitious and robustly regulated. The United Kingdom is an obvious reference point, as its emissions trading system is structurally closely related to the EU ETS. Existing experience with linking the EU ETS and the Swiss emissions trading system can also be used for this purpose. However, any linking must be conditional on preserving the environmental integrity, market stability and regulatory quality of ETS 1.

Linking must not result in the import of lower ambition levels. Comparable caps, robust MRV systems, effective market oversight, clear rules to prevent double counting and mechanisms

to avoid significant market disruptions are required. Any linking should therefore be designed to be gradual, conditional and reversible.

› Recommendation: The EU should strategically assess and actively pursue linking options with emissions trading systems of comparable ambition. This requires high standards for cap integrity, MRV, market oversight and the prevention of double counting. Linking should strengthen market liquidity and international compatibility without weakening the CO_2 price signal or the environmental integrity of EU ETS 1.

4.2 Article 6 Certificates as a Bridge to a Global CO_2 Market

In addition to linking existing emissions trading systems, Article 6 of the Paris Agreement can play a central role in the long-term development of international CO_2 markets. Article 6 provides the legal basis for voluntary cooperation between countries and for market-based climate protection mechanisms. It is intended to help raise climate ambition, promote sustainable development and safeguard the integrity of national climate targets. As such, Article 6 provides a framework for organising climate action more efficiently at international level while opening up new market-based financing channels for climate protection projects.

For the development of global CO_2 markets, the Paris Agreement Crediting Mechanism under Article 6.4 is particularly relevant. It is supervised by the United Nations and could, over time, establish a central global mechanism for trading emission credits. The decisions adopted at COP29 in Baku laid important foundations for operationalising this mechanism. This brings the practical implementation of international CO_2 markets closer. For the energy sector, this could open up new opportunities, for example through the trading of high-quality certificates, the accounting-based achievement of climate targets, investments in climate protection projects and the development of new business areas.

From BDEW's perspective, an international carbon market can also contribute to stabilising European compliance markets in the long term. If CO_2 markets become more closely integrated internationally, this can increase market liquidity, reduce competitive distortions and, over time, reduce the need for complex compensation instruments such as CBAM or free allocation. A more global CO_2 market can therefore contribute to an international level playing field while enabling market-based international climate finance. This is particularly relevant for the German energy sector, as many member companies operate globally, pursue ambitious climate targets and can develop new business areas in climate-friendly technologies, carbon management and CO_2 markets.

Article 6 should therefore not be understood as a short-term relief instrument to dilute ETS 1. Rather, its added value lies in building robust international CO_2 markets over the long term, strengthening climate finance through market-based mechanisms and making European CO_2 markets more internationally compatible. Such a development can complement ETS 1, but must not undermine its price signal, cap integrity or transformational impact.

› Recommendation: *The EU should closely monitor the development of the Paris Agreement Crediting Mechanism and other Article 6 mechanisms, and assess at an early stage under what conditions high-quality international certificates could be integrated into the European climate policy framework. This requires high standards for additionality, permanence, transparency, independent verification and the prevention of double counting. For EU ETS 1, the EU should initially assess a controlled, quality-assured model that enables international market integration without diluting the CO_2 price signal or the environmental integrity of the system.*

4.3 Global CO_2 Markets as a Response to Carbon Leakage

A long-term objective of European climate policy should be the development of a more global CO_2 market. CBAM is an important step towards addressing competitive distortions at the EU's external border. In the long term, however, it cannot replace an international CO_2 market. The more comparable CO_2 pricing systems emerge in third countries, the less need there will be to correct competitive differences solely through border adjustment mechanisms.

This perspective is particularly important for the energy sector. Industrial transformation will depend to a large extent on climate-neutral electricity, hydrogen, heat, storage and grid infrastructure. If industrial value creation relocates away from Europe due to one-sided CO_2 cost burdens, this weakens not only the industrial base, but also the investment outlook for transformation projects in the energy sector. International CO_2 markets can therefore help to better align climate action, competitiveness and investment security.

At the same time, internationalisation must not be confused with arbitrariness. A global CO_2 market can only build trust if it is based on common minimum standards. EU ETS 1 should serve as a reference point in this regard. Its standards for monitoring, reporting and verification, market oversight, cap integrity and transparency should not be lowered, but used as the basis for international market integration.

› Recommendation: *The EU should actively promote the development of international CO_2 markets and position EU ETS 1 as a reference model for high market and environmental integrity. The aim should be to limit carbon leakage in the long term not only through CBAM*

and compensation, but through the gradual convergence of international CO_2 pricing systems.

4.4 Guardrails for the Internationalisation of ETS 1

The internationalisation of ETS 1 can only succeed if clear guardrails are observed. First, the environmental integrity of ETS 1 must be preserved. International links or certificates must not lead to the European cap being effectively weakened or the transformation pressure being permanently reduced. In addition, international units must meet high quality requirements. This requires robust rules to prevent double counting and to ensure actual emissions reductions.

Internationalisation must also proceed gradually. Linking, Article 6 certificates and the recognition of international mitigation outcomes should not be introduced simultaneously and without control. Instead, pilot phases, quantitative limits, review clauses and clear exit options are needed in case environmental integrity or market stability are put at risk. Internationalisation should also be considered together with European industrial and energy policy. It is not a substitute for the expansion of climate-neutral infrastructure, electricity price compensation, carbon leakage protection or transformation support, but complements these instruments.

› Recommendation: *The internationalisation of ETS 1 should proceed gradually, with quality assurance and based on clear rules. Linking and Article 6 mechanisms can contribute to the long-term development of a global CO_2 market, but must be tied to high standards for environmental integrity, transparency, additionality, the prevention of double counting and market stability.*

EU ETS 1 has demonstrated that market-based climate action can be effective. Its next stage of development should be to make this logic internationally compatible. A more global CO_2 market can help organise climate action more efficiently, reduce carbon leakage risks and create fair competitive conditions for climate-neutral investments. From BDEW's perspective, ETS 1 should therefore not only be defended, but further developed as a starting point for the gradual creation of robust international CO_2 markets. What matters is that internationalisation does not dilute the European price signal, but strengthens market integrity, investment certainty and global climate ambition.