

Fit-for-55: Fit for industry?

Position of the Federation of German Industries on the legislative package of the European Commission of 14th July 2021

PREFACE

8. November 2021

Europe faces the unprecedented challenge of proving to the world that a **climate-neutral industrial continent is feasible**. This requires an overall societal transformation of unprecedented scale, speed and investment, affecting all sectors and areas of the economy, research and innovation and cooperation at all levels.

On 28th June 2021, the EU has adopted its first ever Climate Law including an increased binding EU target of a net domestic greenhouse gas reduction of at least 55 % by 2030 compared to 1990 and the EU's long-term objective of climate neutrality by 2050. To implement its increased ambition, the European Commission presented the Fit-for-55 package on 14th July 2021, thereby moving on in its climate debate from "how much to do" to "how best to achieve it".

To stay ahead in the global race for the best climate and energy technology solutions, companies need a **clear and reliable fit-for-55 implementation plan** providing a **clear commitment to Europe as an attractive business, investment and innovation location**. Besides ensuring the cost-effectiveness of its measures, such an implementation plan must set the necessary framework and concrete toolbox for supporting industry in elevating its global competitiveness and climate and energy technology leadership on the road to climate neutrality.

The BDI acknowledges the fit-for-55 package as a **bold and ambitious first concrete step forward**, notably with respect to advancing carbon pricing or promoting renewable energies, sustainable alternative fuels, sustainable mobility or energy efficiency. However, **critical framework conditions for the implementation of the fit-for-55 package and the future innovation and investment capability of EU industries remain missing**. These include for example access to sufficient amounts of renewable energies at competitive prices, fit-for-purpose infrastructures, a scaled hydrogen economy or reliable carbon leakage protection measures. Instead of effectively putting an end to vehicles with internal combustion engines, the transport sector needs to be decarbonised in a way that is open to all technologies and charging and refuelling infrastructures must be bindingly expanded. An **overarching governance mechanism should be introduced to continuously inform and consistently govern the implementation of the EU's new climate targets as a whole across different EU policies and instruments**, including the present fit-for-55 policy measures, infrastructure development or climate financing measures. Europe's future viability stands and falls with a **reliable carbon price not only at EU but global level**. It is right to rely on separate systems when introducing emission trading in the buildings and road transport sectors. It is also important that the Energy Taxation Directive provides incentives for CO₂-neutral energy sources and relief for hydrogen and alternative fuels. Distortions of competition for European air and sea transport through isolated solutions however should be avoided. A European go-it-alone approach to climate protection will neither help the global climate nor EU industry or the acceptance of the wider societal transformation. In the future, the EU must strive even harder for a global level playing field in climate protection and converging carbon prices, at G7, G20 and UN-FCCC level. **Energy and climate diplomacy** for a sustainable Europe in a sustainable world must be given even more weight with an EU standing united in external and trade policy in the face of system competition.

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EXECUTIVE SUMMARY: DESIGNING A ROBUST FIT-FOR-55 GOVERNANCE

With the mammoth fit-for-55 legislative package of the European Commission of 14th July 2021, Europe's climate debate moves on from "how much to do" to "how best to achieve it" - and rightly so.

In the light of Europe's ambition of becoming the first climate neutral continent in the world and the ongoing global race for the best energy and climate innovation solutions, industry needs a strong and reliable "Fit-for-55" implementation plan. Such an implementation plan should in our view be a true catalyst for Europe's global energy and climate innovation leadership. Only with an industry that is strong in investment and innovation will it be possible to turn climate ambition into action while reinforcing Europe's high economic and social cohesion, citizens welfare and prosperity. This is all the more relevant in times of soaring energy prices.

Innovation, investment and cooperation represent critical factors for succeeding in Europe's Herculean task of proving to the world that a climate-neutral industrial continent is possible:

- **Innovation for prosperity and global technology leadership**
 - According to the IEA, 80 % of all technologies for 2030 are already known. Technological solutions for implementing the 2030 climate goal in industry will be manifold: from efficiency improvements, to more electrification, more hydrogen and power-to-x solutions, the sustainable use of biomass or circular economy, to name just a few key net-zero solutions for industry. However, many solutions are not yet market- ready, economically viable or available at industrial scale. We will still rely on bridging solutions in the 2020 decade.
 - For 2050, the IEA confirms that 45 % of the necessary technologies still have to be developed. Consequently, it is imperative to rapidly scale up existing CO₂-neutral technologies and to massively push forward research and development of these technologies.
 - The BDI recommends finding technology-open transformation paths and build on the successful structure of closely interconnected value chains and ecosystems to drive progress and employment for future generations.
- **Investment for making the Green Deal a blueprint of new growth**
 - The scale of investment required is considerable: around 350 billion EUR of additional annual investment compared to 2011-2020 is needed to realise the increased 2030 climate targets, according to the European Commission. On top, an additional amount of 130 billion EUR per year is needed to realise other environmental targets. BDI's new Climate Path Study 2.0 estimates a total cumulative additional investment need of 860 billion Euro for Germany alone to achieve Germany's 2030 GHG reduction target of -65 %.
 - To succeed, Europe should pursue a determined international export and cooperation agenda and provide companies with a reliable framework to stimulate and make the necessary investments in climate-friendly processes and technologies economically attractive.
- **Cooperation for building acceptance and social cohesion and as cornerstone for combatting the global phenomenon of climate change**

- Without comparable climate protection commitments from our international partners, a well below 2°C scenario can only fail. Global climate change does not stop at Europe's borders. Convincing, leading by example, global answers and joint action are the way forward.

For the fit-for-55 package to deliver on the ground, proper framework conditions will have to be in place. These particularly include the following:

- **Secure and continuous access to renewable energies and sustainable alternative fuels in abundance at competitive prices:** if access is not guaranteed, increased CO₂ prices result in cost burden on companies while not showing any climate protection effects. Renewable energy production has to be increased drastically. Planning and permitting procedures need to be accelerated considerably and require streamlining as a matter of priority. An EU import strategy will have to be developed, since Europe and Germany will remain dependent on energy imports also after the transition.
- **Modern and sufficiently flexible energy, transport and digital infrastructures,** including charging and refuelling infrastructure in the transport sector: investment in infrastructure will have to be increased and speeded up massively.
- **A harmonised EU regulatory framework for the classification and certification of renewable and low-carbon gases and fuels based on carbon footprint:** certificate trading for climate-friendly fuels, similar to green electricity certificates would ensure that fuels could also be booked within the European internal energy market and a later stage everywhere in the world through a book & claim system to avoid complex fuel transports and to set broad market impulses.
- **Revised Climate, Energy and Environmental State Aid Guidelines (CEEAG 2022) that are fit to support industry in its transformation:** these should provide for proper eligibility criteria for state aid in form of reduced levies on electricity for energy-intensive users. Furthermore, carbon contracts for difference (CCfDs) as new temporary instruments to support the ramp-up of the hydrogen economy or technology-neutral support for CO₂-neutral hydrogen should also be eligible, as well as low carbon industrial production processes based on proper criteria during the transitional phase.
- **Realistic sustainable finance policies** that are aligned with the different technology pathways of different sectors to effectively support the industrial transformation – the substantial contribution of gas to climate change mitigation and a successful industrial transformation should be recognised.
- **A solid carbon pricing framework at EU and global level:** the earlier carbon prices converge at international level the more effective carbon emission reduction will become. The concrete carbon pricing tool used (be it a CO₂ tax, CO₂-levy or emission trading) may differ, however, their scopes should be fully aligned.
- **A fully fledged Green Deal diplomacy:** Europe accounts for some 8 % of global greenhouse gas emissions. It is self-explanatory that successful climate protection requires global action. It is in our view particularly relevant that the global community works harder on removing fossil fuel subsidies, invests more in renewable energies, besides working on converging carbon prices. Internationally linked value creation networks and supply chains as well as the export of cutting-edge technologies generate welfare and prosperity in Europe.

- **Continuously monitoring progress in all areas that are intertwined with the presented fit-for-55 package:** this is a fundamental prerequisite for making the fit-for-55 package work on the ground and will be equally imperative for a consistent implementation of the EU climate goals while maintaining Europe's world-class industrial base.

Summary of the BDI's Fit-for-55 recommendations:

- An **overarching fit-for-55 governance mechanism** should be established to ensure a consistent implementation of EU climate goals across all relevant EU policies and instruments, including this package. This mechanism should provide continuously updated information on the state of implementation and help identifying potential gaps to be closed in upcoming reviews of different EU policies and measures. Respective amendments should be made to the **EU Regulation 2018/1999 on the Governance of the Energy Union and Climate Action**.
- **Consistency of the fit-for-55 package with further implementation measures needs to be ensured on the basis of the above mentioned governance mechanism**, in particular with the Gas- and Hydrogen Decarbonisation package, the revised Climate, Energy and Environment State Aid Guidelines (CEEAG) and the further ongoing implementation work under the EU Taxonomy Regulation or existing Renewable Energy Directive (REDII).
- In general, the BDI evaluates the Fit-for-55 package as a bold and ambitious step forward for turning climate targets into action. This is particularly true for the following **elements of the package, which we recommend supporting in the further legislative process**:
 - **EU-ETS:** The proposal for introducing separate upstream trading systems for buildings and road transport (with separate allowances, permits, LRFs and MSR provisions) and establishing a Climate Social Fund as accompanying measure to increase acceptance; using auction revenues for reinvestment in climate protection and energy savings projects; making carbon capture and utilisation (CCU) accountable towards the ETS as an important first step for making CCUS technologies economically attractive; the temporary support for low-carbon industrial production processes, hydrogen and CCU projects through CCfDs financed through the Innovation Fund based on proper criteria. The implementation and clear demarcation of CORSIA in relation to the EU ETS in the area of aviation.
 - **RED III:** The promotion of PPAs; the accountability of electricity production from RFNBOs towards the increased RED target, the switch to a greenhouse gas intensity target and limitation of conventional biofuels in the transport sector and mainstreaming renewable energy in buildings.
 - **EED:** The increased headline target of 9 % by 2030, indicative nature of national contributions to the headline target; however, the definition of energy efficiency needs to be modified and sufficient flexibility must be granted to Member States for implementing the energy savings obligations scheme of article 8.
 - **AFIR:** Changing the Directive into a Regulation as an important signal to Member States highlighting EU-wide binding charging and refuelling infrastructures as a basic prerequisite for achieving national and European climate protection targets in the transport sector; the comprehensive and basically technology-open approach of expanding alternative fuels and drives infrastructure for all modes of transport; shifting to charging capacity instead of

number of charging points for EV-infrastructure roll out; expanding infrastructure for aviation and maritime transport as a generally positive step.

- **RefuelEU Aviation (Sustainable Aviation Fuels):** The establishment of a European Market for Sustainable Aviation Fuels (SAF) and the predefined ramp up of the SAF minimum share until 2050.
 - **FuelEU Maritime:** Earmarking of penalties to fund GHG intensity reducing projects and securing infrastructure development in ports especially regarding onshore electricity supply with ETD draft and respectively AFIR draft as important flanking measures to ensure meeting the obligations.
 - **ETD:** The ranking of taxation by energy content coupled with environmental performance; tax exemptions for the aviation and waterborne navigation sector and for sustainable alternative fuels, (bio-)gas and electricity.
- However, critical framework conditions remain missing and important questions with respect to Europe as an attractive business, innovation and investment location remain unanswered. **Elements to be resolved during the upcoming legislative process include the following:**
- **EU ETS:** Effective carbon leakage protection is of utmost and increasing importance if our industries are to transform their processes successfully in such a short timeframe. The reduction of free allocations while simultaneously increasing the Linear Reduction Factor, overall investment pressure and funding requirements for climate protection measures exacerbate the challenge of remaining globally competitive while decarbonising production. Necessary infrastructures for low-carbon hydrogen, for renewable power etc. need to be in place before operators will change their processes. If alternatives to fossil fuel applications are not available, increasing carbon prices will penalise production and lead to investment leakage. Existing carbon leakage protection mechanisms should therefore be reinforced as long as there is no global level playing field. As regards new sectors, two separate trading systems for road transport and buildings should be designed as these sectors face very different abatement costs. ETS revenues from auctioning should be earmarked for reinvestment in low carbon innovation in the affected sectors. Distortions of competition in the EU ETS at the expense of European airlines and hubs has to be counteracted as well as the elimination of free allocation for aviation with its distortive effect and carbon leakage protection for feeder flights must be guaranteed.
 - **CBAM:** A ten-year transition period before potentially introducing CBAMs is better in terms of planning and investment security than an abrupt introduction of a completely new, untested instrument. However, a CBAM is no alternative to existing ETS carbon leakage instruments but complementary until the CBAM is fully operational and has been proven to be effective in avoiding carbon leakage i.e. has been proven to ensure a level playing field. Also, the introduction of a test phase with information requirements and a focus on direct emissions are important. A WTO-compliant answer to the question of how exports from the EU can be shielded against undue competitive distortions has to be found. Also, the risk of trade retaliation measures remains. The unilateral introduction of CBAMs must not lead to new trade wars. In addition, Annex III (calculation method) raises serious questions regarding the availability and quality of relevant data, and many important implementation aspects remain unclear because they have been deferred to future delegated acts. Therefore, the BDI remains critical to the proposal of introducing CBAMs and calls for a fully-fledged

proposal first and then for a multi-annual test phase before any free allocations are reduced. Existing carbon leakage protection should be reinforced as long as there is no global level playing field.

- **RED III:** The focus must be on ensuring continuous access to sufficient renewable energies, including those from sustainable biomass, at competitive prices, as well as the development of the hydrogen economy, including e-fuels. The revision should seize the opportunity to streamline permitting and provide financial support for reaching the suggested quota. In its present form, the proposal falls short in terms of what is needed for ramping the hydrogen economy. The revised Renewable Energy Directive should make renewable and low-carbon hydrogen and its derivatives tradable across Europe and internationally through a harmonised classification and certification scheme based on (redefined) Guarantees of Origin (GOs) including carbon footprint and sustainability criteria. A book-and-claim system should be introduced for fuels. Certificates should be made accountable for end-consumers towards CO₂-thresholds or sector renewable energy targets. Alternatively, the option of introducing a certification scheme for CO₂ should be considered as well. New demand side quota can be important incentives, however, are inevitably intertwined with the availability of sufficient amounts of renewable energies and sustainable alternative fuels. The newly proposed industry target requires correction: the suggested 50 % quota of green hydrogen in industry is unrealistic, and it should be possible to meet the +1,1 % RES-usage target in industry over multiple of years since industrial decarbonisation will happen in large but fewer steps than annually. The proposed GHG quota for the transport sector should be reviewed and increased and the interim targets for RFNBOs for transport, at least for 2027, could be considered to ensure monitoring of the ramp-up, and to enable a readjustment if necessary. RED III should enable the crediting of renewable energy (generated close to the building and not close to the building) towards the targets in the building sector.
- **EED:** A cap on energy consumption is limiting the potential for industrial decarbonisation. The definition of “energy efficiency” should be reviewed.
- **AFIR:** Increased ambition for charging capacity per electric vehicle and for charging infrastructure in the TEN-T network is required for EU-wide ramp up. The specifications of 1kW per BEV/0.66 KW for PHEVs are insufficient and should be increased to 3 kW per 1 BEV and 2 kW per PHEV. The ambition for charging and for hydrogen refuelling infrastructure for passenger cars as well as for road freight transport and coaches in the TEN-T network needs to be increased. In order to effectively support the required rapid market ramp up of electromobility and to achieve the ambitious EU CO₂-fleet limits, a binding, rapid and comprehensive expansion of the EU-wide charging infrastructure is indispensable. As the EU Commission is presenting tight schedules for air and maritime transport, subsidies will be needed in order to avoid additional burdens on the industries. Hydrogen infrastructure at airports and other central transport hubs across the TEN-T core network should be established and tax exemptions for electricity supply at airports, sea and inland waterway ports to be ensured.
- **CO₂-FLEET REGULATION CARS AND VANS:** Achieving the very ambitious 2030 targets requires a consistent and technology-open regulatory framework and an ambitious ramp-up of EU-wide charging infrastructure. A further tightening of the proposed 2030 fleet limit would significantly increase the already high transformation pressure in the automotive and mechanical engineering industry and would therefore be unacceptable. It is not appropriate to just set today detailed targets for 2035 as many parameters of the required framework

conditions and in particular the future progress in ramp-up of charging infrastructure are still unknown. Instead, a strong review clause by 2028 at the latest should be set. The primacy of technological openness needs to be maintained to ensure inclusion of voluntary crediting of CO₂-neutral fuels and climate-neutral input materials instead of a de-facto ban of vehicles with an internal combustion engine by 2035. The benchmark scheme for ZLEV (including PHEV) must be extended beyond 2029. Funding programmes and revenues from penalties must be used to finance transformation support measures.

- **RefuelEU Aviation (Sustainable Aviation Fuels/SAF):** Regulatory certainty for PtL-plant expansion should be ensured. The refuelling obligation remains questionable. Carbon leakage protection and fair competition must be ensured. Thus, distortive effects especially for international flights starting in the EU need to be avoided. Therefore, the proposal should be improved to avoid carbon leakage and to maintain the competitiveness of European aviation. We propose the minimum share of SAF only to be applied to intra-EU flights excluding feeder traffic. If the EU sets a minimum share also for international (ex-EU) flights as currently proposed, distortion of competition must be avoided. This can be achieved by establishing a competitively neutral funding mechanism to cover the additional costs of SAF minimum share fuelled at EU airports. Fines should be earmarked for reinvestment in SAF projects. There will be a temporary need for CAPEX and OPEX funding to accelerate SAF production and market uptake.
- **FuelEU Maritime:** A level playing field in international shipping has to be maintained. A "book & claim" framework for sustainable marine fuels could be established to facilitate the market ramp up to avoid complex fuel transports by having emission reduction be accounted for in carbon footprint of carriers, suppliers, and forwarders.
- **ETD:** A harmonised low taxation of electricity and alternative energy products must be guaranteed. Mandatory exemptions for alternative energy products, including e-fuels or sustainable biomass, used in all sectors are crucial. To protect energy intensive industries, including the mineralogical industry, mandatory exemptions and a transition period to reach the new minimum tax levels need to be set in place. The possibility to fix a tax rate for business use should be restored. The suggested kerosene tax should not be adopted. Alternatively, a climate levy equivalent to the German aviation tax could be introduced to finance additional costs of SAF-quotas as proposed in the RefuelEU Regulation. Energetic self-use of residues and waste from in-plant processes as biomass from residues used within self-sufficient production cycles should be exempted.

We specify our comments and recommendations in the subsequent chapters in more detail:

1. The Fit-for-55 package in general: Interconnected proposals and big levers

The general approach of interconnected fit-for-55 proposals

The BDI welcomes the general approach of the fit-for-55 package of **interconnected proposals to strike a balance between carbon pricing, targets, rules and support measures**:

Pricing	Targets	Rules
<ul style="list-style-type: none"> ▪ Stronger Emissions Trading System including in aviation ▪ Extending Emissions Trading to maritime, road transport and buildings ▪ Updated Energy taxation Directive ▪ New Carbon Border Adjustment Mechanism 	<ul style="list-style-type: none"> ▪ Updated Effort Sharing Regulation ▪ Updated Land Use Land Use Change and Forestry Regulation ▪ Updated Renewable Energy Directive ▪ Updated Energy Efficiency Directive 	<ul style="list-style-type: none"> ▪ Stricter CO₂ performance for cars & vans ▪ New infrastructure for alternative fuels ▪ ReFuelEU: More sustainable aviation fuels ▪ FuelEU: Cleaner maritime fuels
Support measures		
<ul style="list-style-type: none"> ▪ Using revenues and regulations to promote innovation, build solidarity and mitigate impacts for the vulnerable, notably through the new Social Climate Fund and enhanced Modernisation and Innovation Funds. 		

Source: European Commission, Communication Fit-for-55



We also welcome that the individual legislative proposals are backed by **impact assessment analysis**, which takes the interconnections between the individual measures of the package into account. The analysis shows that **an over-reliance on strengthened regulatory policies would lead to unnecessarily high economic burdens**, while carbon pricing alone would not overcome persistent market failures and non-market barriers. The BDI agrees that a successful policy mix needs to strike a delicate balance between pricing, targets, rules and support measures.

While the Fit-for-55 package contains many of the relevant instruments for striking this balance, however, further important elements for implementing the EU's climate goals are either missing or subject to parallel legislative processes, as previously mentioned. To avoid stranded assets, the **present fit-for-55 package also needs to be consistent with further implementation measures to come**, in particular **the Gas- and Hydrogen Decarbonisation package**, the **revised Climate, Energy and Environment State Aid Guidelines (CEEAG)** and further ongoing implementation work under the **EU taxonomy** or **existing Renewable Energy Directive (REDII)**. Hence, the above key proposal of the BDI to introduce **an overarching governance mechanism** to ensure a consistent implementation.

In addition to its proposal for an overarching fit-for-55 governance mechanism, the BDI calls on EU policymakers:

- To address the **substantial contribution of gas to climate change mitigation under the EU Taxonomy**, to foresee a pathway to get from transitional to mitigating activities in the longer run and to recognise transitional activities in the manufacture, energy and transport sector, notably the repurposing of gas infrastructure.
- To **make the existing gas market model fit for the integration of climate-neutral gases**, including for the possibility of joint financing of hydrogen and gas networks via existing fees to kick off the transition.
- To set **realistic and sufficiently flexible criteria for the definition of “green hydrogen production” and address “additionality” at system level via National Energy and Climate Plans** (see precise comments regarding the pending delegated Act under article 27.3 of the existing REDII under section 8 of this paper).
- To **incentivise CO₂-neutral hydrogen** in a technology-open way for the transitional phase **in the final CEEAG 2022, support the temporary use of carbon contracts for difference (CCfDs)** based on proper criteria for building the hydrogen economy and set **appropriate eligibility criteria for future state aid in form of reductions from electricity levies for energy-intensive users**.

The big fit-for-55 levers

The BDI calls on Europe to boost its leadership in energy and climate innovation to ensure security of supply, energy resilience, climate neutrality and the global competitiveness of EU industries. Only by unlocking Europe’s industrial strength will a fair and cost-efficient transition be possible, and Europe be able to serve as a global role model that others will wish to join in.

As described in the BDI Green Deal Position Paper of March 2021, German industries see ten key levers for a successful fit-for-55 toolbox:

- Pursuing **technology open pathways** to net-zero, thereby building on even stronger industrial ecosystems.
- Massively **investing in energy, transport and digital infrastructures** - accelerating the **deployment of existing CO₂-neutral technologies** and the **development of further technologies**.
- Scaling-up of the EU and global **hydrogen economy**.
- Developing a **global carbon pricing roadmap with converging CO₂-prices** for 2030 at least at G20 level.
- When rescoping the **EU-ETS, preventing upheavals** for incumbents and installing **separate systems for new sectors**.
- **Shielding European industry from unfair competition** on the road to net-zero.

- Ensuring the availability of **abundant renewable energy carriers at competitive prices** in an integrated and upgraded low-carbon energy system.
- Accelerating a **market-driven Circular Economy, low-carbon mobility and building renovation**.
- Unlocking the **potentials of digitalisation and the data economy**.
- Ensuring **consistency** throughout the Fit-for-55 package and the entire negotiation process.

While we see many of these levers taken into account in the package, important differences exist that should be addressed:

- Most prominently, leaving the path of technology neutrality by proposing a de facto ban on vehicles with combustion engines from 2035 onwards diminishes Europe's innovation capabilities and the potential of cost-efficient sectoral technology pathways. Instead, **technology openness** should be maintained.
- In addition, **market-based instruments and incentives** should be reinforced while keeping regulatory intervention, administrative burden and costs to the minimum.
- **Reliable carbon leakage protection via the tried and tested instruments of the EU Emissions Trading Scheme (ETS)** is ever more important in times of increasing climate ambitions without other world regions implementing comparable action. As long as ambition gaps exist and continue to grow, existing carbon leakage tools should rather be strengthened than reduced. **Carbon Border Adjustment Mechanisms (CBAMs) are no reliable alternative to carbon leakage protection under the EU-ETS**, since prone to abuse and bearing the risk of new trade conflicts.
- **Leading in the development of the hydrogen economy requires more speed, more harmonisation and more cross-border and international cooperation:** the July package falls behind the necessary with respect to the ramp up of the hydrogen economy. In particular, the opportunity of establishing an effective certification scheme for renewable electricity and climate-neutral gases and fuels should be tapped and the relevant market design and harmonised regulatory framework should be developed simultaneously. For a successful industrial transformation both, electrification and hydrogen, will play a crucial role.
- Overall, the fit-for-55 framework should place more emphasis on **making the necessary massive investments in climate-friendly processes and technologies economically attractive**.

2. Carbon pricing: the EU ETS Reform

The EU ETS is a cornerstone of the EU's policy to combat climate change: It is the world's first major carbon market and remains its largest by limiting emissions from around 10,000 installations in the power sector and manufacturing industry, as well as airlines operating within Europe. Today, it covers around 41 % of the EU's total GHG emissions and has proven to be an effective tool in driving emissions reductions cost-effectively. Installations covered by the ETS today reduced emissions by about 43 % since 2005.

In general, **the BDI promotes the EU emissions trading as a leading instrument and pushes for creating a common carbon market with the most important trading partners based on equal conditions for all players.** The EU-ETS reform should put carbon leakage protection on a firm footing reflecting Europe's increased climate ambition and the reality of still widening global ambition gaps. The reform should ensure consistency with the new carbon border adjustment mechanism (CBAM) if carried forward and opt for separate ETS systems when introducing emission trading in new sectors.

The BDI welcomes the introduction of a separate Emission Trading System for road transport and buildings (Chapter IVa) in order to set further incentives through price signals in a market-based system. However, **trading schemes for road transport and buildings** should not only be separate from the existing EU-ETS covering the industry and electricity sectors but should also be separate from each other to set the right price signals in each sector. Until 2030 at least the scope of the EU ETS should not be extended to buildings and road transport as otherwise the system will collapse due to hugely differing abatement costs in the various sectors by coercing very different addressees - companies and citizens - into one system. Setting up separate EU-wide trading systems for buildings and road transport can also help avoiding lengthy discussions over national targets under the ESR.

As long as the marginal abatement costs in the different sectors are extremely different, separate trading schemes should be set up for these sectors. A common EU ETS for road transport and buildings would, however, be counterproductive and would discourage investments due to an inaccurate price signal. Even if a price cap existed to avoid undesirable price spikes in markets, a diverged price signal would emerge in the long run.

In addition to price signals, a complementary policy mix is needed for both sectors. In the buildings sector, for example, funding programmes, such as the German Federal Funding for Efficient Buildings (BEG) set further incentives for investment. Private households and companies need a reliable and long planning horizon to achieve climate neutrality. For road transport, there is also a need for accompanying incentives and support, especially for the development of charging infrastructure, as well as consistent regulation regarding the revision of the fleet limit values and the AFID/RED/ETD.

The BDI also welcomes the **introduction of CORSIA and the clear demarcation between the EU-ETS and CORSIA.** However, the responsibility for the advancement and efficiency of CORSIA for extra-EU/ international aviation should remain with the ICAO.

It is paramount to avoid any market distortions that European airlines with hubs in the EU, including their feeder flights, would face.

As regards the **existing EU-ETS for industry and electricity**, it will be essential to arrive at a delicately balanced reform, especially with respect to the necessary **carbon leakage protection via existing instruments, and notably free allowances and indirect cost compensation**, as long as ambition gaps in international climate action continues to exist. This becomes even more relevant in the

light of the proposed significant increase of the emission reduction target for these sectors from 42 % to 61 % in comparison to 2005, a tightened Linear Reduction Factor of 4,2 % and a rebasing mechanism.

Elements of the proposal that the BDI supports and recommends maintaining in the further proceedings:

- The **proposal of keeping emission trading schemes for new sectors** (buildings and road transport) **separate from the existing EU-ETS for industry and electricity**: however, also the new sectors buildings and transport should be separate from each other and be subject to two standalone separate upstream emission trading systems, one for buildings and one for road transport.
- The **recognition of carbon capture and utilisation (CCU) as a mitigation option and making it accountable towards the existing EU-ETS**: This is an important step for making CCUS technologies economically attractive. Further details regarding creating a functioning mechanism will have to be elaborated for carbon removal certificates. The elimination of the limitation of CO₂ transport via pipelines under the EU ETS Monitoring Directive is highly relevant for the transportation of CO₂ in a future CO₂ economy. Without the use of CO₂ capturing, (utilisation) and storage technologies climate neutrality will not be achievable.
- The **general reinforcement of the EU-ETS Innovation Fund** and more particularly:
 - the support given for low-carbon industrial production processes, hydrogen and CCU projects through for example temporary CCfDs based on proper criteria.
 - the driving of auction revenues (from stationary sources, aviation and maritime) into the Innovation Fund (IF) and provisions, such as Article 30d that re-direct revenues from CO₂ pricing to the respective sectors to promote CO₂ reductions: The first IF call for large-scale projects registered applications whose total financial requirements were 22 times higher than the available budget. With the considerable increase in 2030 climate ambitions significantly more financial resources need to be mobilised to enable large-scale deployment of low-carbon technologies in ETS sectors and especially in industry. Increasing the IF within the ETS, could cover part of the financial needs. However, further additional support will be needed for a successful transformation.
- The **continuation of indirect cost compensation mechanism** (Art. 10a(6)), which is essential for supporting especially electricity-intensive industries in their transition.
- **Regarding emission trading in the transport sector**:
 - The proposal for an ETS for road transport at EU level: Since 2021, national road transport has been part of the German Fuel Emissions Trading (BEH). It makes sense to gradually develop existing national approaches to CO₂ pricing towards a reliable, European, technology-open, market-based path and avoid a patchwork of different national rules. Therefore, the European proposal to include road transport in European emissions trading and to price fossil CO₂ and exempt renewable fuel from non-fossil sources is welcome.
 - The implementation and clear demarcation of CORSIA in relation to the EU ETS in the area of aviation: it is a step in the right direction to address emissions also in international aviation

without placing a double burden on European airlines considering that the scope of the EU ETS for aviation remains focusing on intra-European flights.

Elements of the proposal that the BDI rejects or for which gaps remain to be filled during the further legislative process:

- **Reliable and increased carbon leakage protection** has to be set in place for all sectors and all sizes of companies:
 - **Sufficient free allocation in ETS installations** needs to be ensured, even with a decreasing cap, to prevent carbon leakage risk from getting out of hand. ETS installations need sufficient free allocation; this also applies accordingly to aircraft operators for feeder flights to European hubs. As long as the ambition gap in climate protection between EU and non-EU countries continues to grow and other countries do not implement equivalent climate protection measures, the existing ratio of auctioning to free allocation (57:43) should be shifted in favour of free allocation. Increasing the share of free allocation is urgently needed to avoid the cross-sectoral correction factor (CSCF) as the cap continues to decrease. The current auctioning share of 57 % is based on the power sector's historical emissions share of the cap, which was determined using a database that is well over ten years old. The ongoing decarbonisation of the power sector leaves room for increasing the share of free allocation and thus avoiding the CSCF. This option would reduce the risk of losing competitiveness, especially in this investment phase, for companies that have already started their transformation towards climate neutrality in 2050.
 - **Effective carbon leakage protection is also essential for small installations:** In principle, CO₂ pricing also makes sense in the non-ETS sectors. What needs to be considered is what should happen to installations that carry out ETS activities (Annex I of the ETS Directive) but do not exceed the thresholds specified in Annex I. In Germany, these sectors are subject to an upstream system in the form of fuel emissions trading (BEHG), which, unlike the EU ETS, has an indirect effect. While it is also recognised by policymakers that this creates a carbon leakage risk for these plants, so far there is no national regulation to minimise this risk. It will have to be examined whether the **threshold values in Annex I** can be lowered in such a way that only the smallest plants do not fall within the scope of the EU ETS. The advantage of this would be that plants that manufacture identical products, but in plants of different sizes, would be assessed uniformly in terms of direct emissions. They could then also be protected from carbon leakage in a simplified procedure across the EU under the ETS Directive. Should the thresholds be lowered, it is essential to ensure that the administrative requirements (reporting, monitoring plans, etc.) for small plants are kept to the minimum. For the time being, no SME could "reasonably" participate in the EU ETS.
 - **Carbon leakage protection remains also necessary in maritime transport:** The inclusion of maritime transport in the EU ETS is likely to increase the cost of maritime supply chains. The full integration of intra-EU maritime transport as opposed to the pro-rata application in transport between the EU and third countries leads to distortions of competition and disadvantages the European maritime economy. Carbon leakage effects would also appear because of competition between the latter kind of transport and transports without contact to EU ports, especially regarding high-volume, long-distance maritime traffic.
- The proposal for **making ETS free emission allowance allocation to industry conditional to the implementation of the recommendations of the energy audit report** would change the

very nature of free allocation as a tool to combat carbon leakage and support companies' investment capacity in GHG-neutral technology. It should not be pursued. Instead, a mandatory proof of justification should be required if companies did not implement the recommendations of the energy audit report. The penalizing mandatory 25-percent cut in case of non-compliance and the suggested obligation to publish audits (which raises concerns in terms of compliance with anti-trust law) as follows the reference to Article 8 of the revised Energy Efficiency Directive should not be pursued at this stage.

- The EU-ETS should display an **openness to promote the self-use of on-site produced fuels from renewable biomass and adjust demands** for sustainability certification as inferred by the reference to Article 29.1 RED III accordingly.
- **Offsets should not be rejected categorically:** The use of the market mechanisms of Article 6 of the Paris Agreement ("cooperative mechanisms", such as international trading of certified reduction credits) for demonstrating compliance with the EU ETS should not be excluded from the outset, as the Commission suggests. COP26 is expected to adopt the so-called "Paris rule-book" that lays down binding rules for the application of cooperative mechanisms. In the medium term, progress must be made regarding global CO₂ pricing. The BDI advocates for establishing a "global carbon pricing roadmap" to converge CO₂ price paths at least at the level of G20 by 2030.
- **The related Market Stability Reserve (MSR) proposal should not be used to artificially drive up the CO₂ price:**
 - It would be counterproductive if the MSR removed every bit of surplus. Surplus derived from the realisation of mitigation measures is the goal intended by the lawmaker (GHG reductions by the operator reduces the amount of allowances needed for compliance), this is "good surplus" because this acts as incentive for mitigation. Ideally, the task of the MSR should be to remove "bad surplus" resulting e.g. from external economic shocks. The MSR has so far not been intended to artificially inflate the price of CO₂. The proposal could undermine the cost-effectiveness of the system and unnecessarily increases CO₂ costs and electricity prices for society. The focus should be on relaxing the rules for releasing allowances from the MSR. This could counteract the rise in the price of CO₂ as a result of increased climate change ambitions, and especially at a time of COVID crisis when the financial capabilities of the industry are extremely limited. In general, the review of MSR rules should take the need to ensure reliable framework conditions and long-term planning capability into account, especially in the transition to a climate-neutral economy.
 - The Commission, by maintaining an intake rate of 24 % (except for a minor positive change that eliminates the so called "threshold effect", MSR Decision Art. 1.5), de-facto increases upward price pressure beyond the supply and demand functions determined by the cap. More concerningly, by eliminating all allowances above the limit of 400 million, the market is deprived of duly issued allowances, which should have been used to ease the pressure on the market and ensure sufficient free allocation and help avoid a Cross Sectoral Correction Factor (CSCF). The BDI therefore opposes the 400 million allowances threshold and the cancellation of allowances in case of a CSCF. In particular, a triple supply squeeze, whereby the much more stringent LRF, a possible rebasing and the cancellation of allowances in the MSR all come into effect at the same time, must be avoided. Otherwise this

would put huge pressure on the ETS spot price, and thereby on the competitiveness of internationally exposed sectors.

- **The demand for green products should be stimulated:** One important instrument to create markets for green products is green procurement. Every year, public bodies in the EU spend about 14 % of GDP on public procurement, which amounts to about €2 trillion a year.
- **ETS auctioning revenues** should be earmarked for reinvestment in low carbon innovation in the affected sectors.
- **CO2 pricing in transport can only be effective if consumers have realistic options for investing or switching to low-carbon transport modes and technologies.** Therefore, CO2 pricing must be underpinned by an intelligent mix of incentives and support for new propulsion systems and fuels, as well as by the expansion of rail and waterways infrastructure and refuelling and charging infrastructure. Revenues from the existing and new ETS and national emissions trading schemes for transport must also be used for this purpose (i.e. support for new propulsion systems and fuels, expansion of rail and waterways infrastructure, refueling and charging infrastructure).
- With regard to **emissions trading system for road transport:** By setting a fleet limit value of 0g in 2035 as part of the CO2 fleet regulation for passenger cars, the impact effect for the new car fleet aimed at with the introduction of emissions trading for road transport is upset.
- **Distortions of competition in the EU ETS at the expense of European airlines and hubs must be counteracted:** Distortions of competition in the EU ETS at the expense of European airlines and hubs must be counteracted. Regardless of their origin, EU or non-EU, airlines should receive equal treatment. The revision does not provide a comprehensive solution for maintaining a level playing field. A remedy could be a free allocation of ETS allowances for the part of the emissions that is subject to market distortion (i.e. feeder flights). In order to prevent carbon leakage, the emissions attributable to Non-EU feeder passengers must be excluded. This can be done by the airlines concerned retroactively reporting the passenger kilometres incurred for the transport of passengers to their inner-European hubs (for onward intercontinental flights) within the framework of monitoring and reporting, calculating the concrete equivalent fuel consumption related to these passengers on the basis of real data (aircraft types used, fuel quantities etc. are known), and a corresponding passenger-specific deduction from the ETS.
- **The elimination of free allocation for aviation**, as proposed in Article 1 of the revision of the EU emission trading system for aviation amending Directive 2003/87/EC Article 3d, leads to unnecessary distortions of competition. Carbon leakage protection for feeder flights must be guaranteed. To this end, free allocations should be calculated more precisely according to the carbon leakage share.
- **Revenues from the EU ETS for aviation could be used for reinvestment** in climate protection and efficiency projects in aviation.
- **Establishing a “book & claim” approach regarding the SAF quotas to be credited in EU ETS in aviation:** A “book & claim” approach, which provides for SAF to be credited if it was purchased by an airline but could not be refuelled by the airline, could also be a helpful step towards further promoting the ramp-up of SAF as proposed in the RefuelEU Regulation.

- **Implementing a baseline for CORSIA of 2019-2020 for emissions post 2023, as laid out in Art. 1, para. 9 amending Article 25a, adding paragraph 3 to Directive 2003/87/EC:** The EU Commission is forestalling the decision-making process at ICAO level, which has not yet set a baseline following the pilot phase of CORSIA. Including the year 2020 for the baseline post 2023 is causing additional distortions, since 2020 was a year of immense crisis in aviation and the sector was hit hard by the dramatic decline in demand due to the Coronavirus pandemic.
- Regarding **the geographical scope of CORSIA past 2026**, the consideration (20) lays out the plan for flights not covered by CORSIA to be subject to the ETS after 2026. The BDI rejects this idea as it undermines international agreements and will be distortive to competition.

3. Proposal for a Regulation on a new Climate Action Social Facility

The BDI welcomes the creation of a Social Climate fund, which supports among others energy efficiency measures in buildings, the decarbonisation of heating and cooling in buildings and mobility and transport for low-income households. It is important to create awareness that measures for climate protection trigger enormous investments but have also consequences for socially weaker groups. Thus, the social facility might be an important means to create acceptance.

BDI recommendations:

- The Commission should ensure that these **funds are spent most effectively and reach their potential recipients in an unbureaucratic manner.**
- Furthermore, it would be desirable, to **spend generated ETS revenues according to its origin** (i.e. transport and buildings) and for the most part in the respective Member State.
- **SMEs should not be disproportionately burdened:** Policymakers should ensure that the scheme is designed and funded at national level and that the costs are shared fairly. The fund should not only target consumers and micro-enterprises as beneficiaries, but also support SMEs. The latter face many of the same risks in terms of energy expenditure as consumers do, are a vital part of their communities, and often are better suited to implement investments effectively.
- Careful assessment will be necessary to avoid the duplication with existing EU-level fund mechanisms. In the interest of the most long-lasting impact, the measures financed should represent a **good balance between direct income support and investments**, with the later much more likely to protect vulnerable populations in the long-term.

4. Proposal for a new Regulation on Carbon Border Adjustment (CBAM)

The carbon border adjustment mechanism is proposed to be designed as a so-called “notional ETS” for certain imported goods in terms of sectors and emissions covered (CO₂ and partly, nitrogen oxide or perfluorocarbon). During a pilot phase, CBAM would cover imports of goods listed in Annex I stemming from the iron, steel, aluminium, cement, fertiliser and electricity sectors. There is a review clause (Art. 30) concerning the possible inclusion of further sectors, indirect emissions, and the development

of methods of calculating embedded emissions based on environmental footprint methods via comitology procedure (delegated acts).

During a transitional period from 2023 -2025, importers would have to report emissions that are embedded in their products. From 2026 onwards, importers would have to both, declare quantities of each type of goods produced in the reporting period and submit CBAM certificates for their imports.

A sufficiently long test phase with free allocation as the foundation for carbon leakage prevention has the advantage of reducing burden on international downstream value chains. In addition, it would be possible to advance negotiations on a global climate club with Europe's key trading partners in the period up to 2030 and thus deepening cooperation on industrial and climate policy instead of fuelling international trade frictions.

The proposal remains premature. Certain sectors, particularly those targeted in the pilot period, seek to retain free allocation on the basis of, for example, technically realistic benchmarks, and to compensate for price increases caused by emissions trading.

It should be considered that the switch to low-carbon production technologies is not an overnight process, but rather long-term in nature. Carbon leakage prevention is a vital priority, as is securing the international competitiveness of European producers, especially those that are transitioning to low-carbon production. Ensuring a level playing field as well as competitive neutrality remains, as in trade policy, a priority for the BDI and its industries. European companies can only reach ambitious climate goals if they themselves are economically successful. German industry remains highly export-oriented, and maintaining competitiveness of EU exports, particularly in the affected sectors, is key.

The design must be workable and legally certain for both, enterprises and authorities. Administrative burden must be kept to a minimum.

BDI supports a sectoral, step-by-step approach with an upstream test phase and a focus on direct (scope 1) emissions. This prevents undermining the existing, tried and tested carbon leakage protection instruments. In view of diverse risks, a sufficiently long test phase is needed. Stable framework conditions and legal certainty are essential for currently pending and urgent investment decisions.

The increase of the climate ambition exposes Europe to significant vulnerabilities, both from an economic and social perspective, due to the risks of carbon leakage, despite the fact that the limited EU contribution – around 8 % – to the global GHG emissions will strongly limit the positive effects of the very significant EU efforts.

Higher cost for EU industry, together with no comparable carbon constraint for extra-EU competitors, requires strengthened carbon leakage protection. Therefore, full benchmark-based free allocation and indirect cost compensation need to remain fully effective also for CBAM sectors at least until 2030 to allow companies focusing on low carbon investment and to assess the effectiveness of the new instrument as well as safeguard the competitiveness of EU exports. A CBAM is no alternative to existing ETS carbon leakage instruments but complementary until the CBAM is fully operational and has been proven to be effective in avoiding carbon leakage i.e. has been proven to ensure a level playing field.

For German industries, WTO compatibility and overall alignment with the multilateral trade framework are indispensable. It remains to be clarified in a transparent manner how this would be ensured.

WTO compatibility of a CBAM for imports primarily requires compatibility with rules under the General Agreement on Tariffs and Trade (GATT). However, if extended to exports, then a mechanism would

also have to prove not representing a prohibited or actionable subsidy under the Agreement on Subsidies and Countervailing Measures (SCM).

One key element of WTO law is the non-discrimination principle (GATT Article 3), under which a CBAM should not differentiate between like products or between Members of the WTO. This applies both, to fiscal and regulatory measures. In this context, it is key that the Commission can prove that EU products and imports are subject to the same price. Under this article, the burden of proof is higher for importing nations.

In principle, the phase-out of free allocation in the EU ETS would presume WTO compatibility. However, this does not deal with the possibility of retaliation by third countries who feel discriminated. A spiral of new trade conflicts could build up as a result.

It may occur that exemptions for least-developed countries, which are not yet foreseen in the current proposal, could become necessary to allow for non-discrimination under WTO provisions.

In general, the BDI advocates for a common CO2 price at least at G20 level.

Elements of the proposal that the BDI supports and that should be maintained in the further proceedings:

- The BDI acknowledges that with the increasing LRF, free allocation will come to an end at some point of time after 2030. It is therefore recommendable to think in time about other possible instruments to prevent carbon leakage. Any new instrument will have to be tested thoroughly before its application. The Commission's current proposal will have to be clarified and substantiated in many respects before the testing can start.
- The **introduction of a transition period for the phasing out of ETS free allocation of allowances**, the introduction of a **test phase** on a selected number of products and a focus on their direct emissions, as well as the limited scope of covered products in general and the mitigation of the associated conversion risk are all relevant elements for learning more about this new, so far unproven instrument.
- The **exclusion of organic chemicals** from the CBAM pilot period should be supported.

Elements of the proposal that the BDI rejects or gaps that should be filled:

- **German industry remains generally sceptical to the unilateral introduction of CBAMs** given the harsh backlash to be expected from key trading partners, including in the form of WTO disputes, tariff retaliation and accusations of protectionism. Circumvention is also an area of severe concern, given experiences in the trade defence instrument arena. More than one-fifth of total cases in the WTO Dispute Settlement Mechanism deal with violations of the relevant multilateral framework, the Agreement on Subsidies and Countervailing Measures. The draft provisions regarding circumvention (Article 27) remain too narrow, covering only cases based on a minor modification of products. The provisions should also cover cases of exports of products with a lower carbon footprint.
- **Climate diplomacy that underpins CBAM preparations:** Free allocation is to be maintained until 2030. Sectors should be encouraged to participate in a test phase on a voluntary basis. Negative effects on downstream customers (carbon leakage passthrough) need to be closely

investigated in the test phase to find appropriate remedies. Prior to starting this test phase extended diplomatic efforts are necessary to explain the EU's move in detail to our trading partners.

- The **calculation method presented in Annex 3** for determining emissions raises severe concerns regarding **data quality and data availability**. Default values should be set based on the most carbon-intensive production process.
- **Too many important aspects of the proposal remain subject to future delegated acts.**
- A **WTO-compatible mechanism to tackle exports** should be introduced.
- A **review clause** should be introduced to allow accommodating the result of international discussions and Climate Clubs.
- An **obligation to preserve the functioning of the internal market** should be introduced considering that national solo-runs of national competent authorities remain possible and likely.
- **Revenues from CBAM** should be reinvested in climate innovation in affected sectors rather than be channelled into the general (EU or national) budget(s).

5. Proposal for a revised Energy Taxation Directive (ETD)

The BDI supports the revision of the ETD to ensure clear taxation rules for energy products and electricity to contribute to the smooth functioning of the internal market and to avoid distortion of competition.

In view of tackling the climate and environmental-related challenges within the Green Deal, the BDI welcomes that the ETD supports the development of alternative energy products and electricity and continues to recognize the need to support the European energy intensive business.

The introduction of a fixed taxation scheme by environmental performance is seen as a good tool to recognise the climate contribution of energy products under the condition that negative effects and market distortion can be avoided. The concept of the fixed taxation scheme must assure a harmonised low taxation of electricity and alternative energy products.

Competitive energy prices must be guaranteed for energy-intensive businesses. The aviation and waterborne navigation sector must be exempted from taxation due to international constraints and a different model for financing of their infrastructure.

According to the proposal, however, energy taxation would serve to control consumption and generate additional fiscal revenues, rather than have any steering effect in terms of climate neutrality. As a result, a further increase of energy prices in addition to already existing burdens stemming from other regulations can be expected, which will hinder the transformation to greenhouse-gas neutral production schemes. This in turn risks new debates around energy taxation exemptions and energy price compensation, in particular considering current energy price spikes.

Elements of the proposal that the BDI supports and that should be maintained in the further proceedings:

- **Ranking of taxation by energy content coupled with environmental performance:** We welcome the new concept of taxation with a fixed taxation ranking for each product (Art. 5 para. 1) independently from CN-Codes (Art. 2 para. 6) and support that electricity is always among the least taxed energy sources equal to advanced biofuels and RFNBO. It is important that the concept assure a harmonised low taxation of electricity and alternative energy products. This is a crucial element for climate protection in transport, because it strengthens the ramp-up of electromobility and CO₂-neutral fuels in a way that is open to technology and at the same time fundamentally advances the ramp-up of the hydrogen market. It is positive that reduced tax rates are kept for heating purposes. We welcome that a continuous increase of the tax level is foreseen for the transition period (Art. 9). In addition to the taxation approach, however, massive support for ensuring the timely availability of competitive alternatives in sufficient quantities has to be provided to prevent higher costs on industry due to a gap of available alternatives.
- **Tax exemption for the aviation and waterborne navigation sector:** The 10-years mandatory tax exemptions with zero rates for alternative fuels and gas and electricity (Art. 14, 15) is necessary to promote the reduction of carbon emissions. The possible tax exemption for onshore electricity supply of ships in ports (Art. 15 para. 5) is positive, too. Also, the tax exemption for aviation should be maintained, since a kerosene tax does not have a targeted effect on reducing CO₂ emissions.
- **Tax exemption of alternatives fuels and gas and electricity:** Analog to the provision for the aviation and waterborne navigation sector the ETD provides as a Member State option the possibility to reduce tax on alternative fuels and gas and electricity to the minimum level. This is an important element for climate protection in transport, because it strengthens the ramp-up of electromobility and CO₂-neutral fuels in a way that is open to technology and at the same time fundamentally advances the ramp-up of the H₂ market.

Elements of the proposal that the BDI recommends improving during the further legislative process:

- **Transition period to reach minimum tax level:** There must be a transition period to reach the minimum tax levels to moderate the cost increase for energy intensive industries and to be able to face the challenges of the transformation period. Especially, the increase of taxation of natural gas from 0,54 Euro / GJ to 2,16 Euro / GJ will jeopardize the competitiveness of energy intensive industry. The cost effect is even amplified by the deletion of possible reduced rates for business use. Also, any transitional lack of competitive alternatives needs to be addressed. In this regard, the transitional period as such appears too short. For example, for recycled carbon fuels it is supposed to already end in 2033. However, e.g. e-fuels are expected to be available in sufficient quantities only from 2030 onwards.
- **General mandatory tax exemption for alternative fuels, RFNBOs and electricity:** In order to boost the production of alternative fuels and electricity the ETD should foresee a mandatory exemption to all sectors. Therefore, the obligation to apply a minimum rate of zero for alternative energy products an electricity in Art. 14 (aviation) and Art. 15 (waterborne navigation) should be opened to all sectors. The limitation to 10 years should be put into question in regard of technological achievements in terms of climate neutrality.

In order to support e-mobility the ETD should not allow Member States to opt for a specific level of taxation to electric use to charge electric vehicles (Art. 5 para. 1).

- **Mandatory tax exemptions instead of Member State options:** The ETD must amplify mandatory tax exemptions. Optional tax exemptions are subject to state aid law, which creates a lot of uncertainty and burden for companies and may lead to double taxation. Companies need security and globally competitive energy prices. Therefore, we recommend changing Member State options to mandatory tax exemptions to the production of electricity in Art. 13 para. 2, the production of renewable electricity in Art. 16b, with the connection with combined heat and power generation in Art. 16c as alternative fuels and gas in Art. 16d and the consumption of energy products and electricity related to the production of energy products in Art. 22.
- **Effective exemptions for energy intensive businesses and industries:**
 - The taxation of the mineralogical industry should not be changed. With the deletion of mineralogical processes in Art. 3, those processes fall under the ETD which will be a big cost burden on this sector in view of third country competitors. The mineralogical industry must be continuously supported to assure its competitiveness.
 - In order to support energy intensive businesses Art. 18 needs to be adopted. The determination of energy intensity must not be distorted by the national energy tax levels of Member States. We recommend using the minimum tax levels to the ratios in Art. 18a to reach a level playing field among industries and Member States.
 - The possibility for agreements in Art. 18b) should be extended by achievements of technological transformation towards climate neutrality.
 - The possibility to fix a tax rate for business use must be restored. This is important to support energy intensive business especially when gas is the key energy source of transition.
 - The yearly adoption of the rates to the index of consumer prices is rejected as this means a massive administrative burden to the companies (Art. 5 para. 2). The revision every five years (Art. 31) should sufficiently offer timeline to adopt the rates.
- **Support of the transformation of greenhouse-gas neutral production processes:** in order to substitute the use of fossil energy products in production processes the ETD should support the energetic self-use of residues and waste from in-plant processes as biomass from production residues within an energy self-sufficiency production cycle. This biomass should be excluded from the scope of the ETD in adding the point self-consumption to Art. 3 para. 1b).
- **Application of reduced taxation rates for public transport and rail must be restored.** Member States should be able to decide to apply reduced taxation rates for public transport and rail, as long as they are not lower than the minimum rates for fuels used in agriculture, forestry etc.
- **A climate levy to avoid distortions of competition for European aviation and waterborne navigation sector could be introduced:** We reject the proposal of unilateral taxation of aviation and shipping fuels (e.g., a kerosene tax) within the European Union. Distortions of competition to the detriment of European companies in international aviation and shipping should be avoided. This is not the right instrument to incentivise CO₂-emission reduction in aviation. Without achieving climate-friendly effects, a kerosene tax would only lead to routes and airlines being

placed at a disadvantage in international competition. Alternatively, a climate levy equivalent to the German aviation tax could be introduced to finance the SAF-quotas in aviation as proposed in the RefuelEU Regulation.

- **The possibility to apply reduced taxation rates for public transport and rail:** Member States may decide to apply reduced taxation rates for public transport and rail, as long as they are not lower than the minimum rates for fuels used in agriculture, forestry etc.

6. Proposal for a revised Effort Sharing Regulation

The Effort Sharing Regulation (ESR), as adopted in 2018, sets national targets for emission reductions from road transport, heating of buildings, agriculture, small industrial installations and waste management. These sectors – which were not included until now in the EU ETS - currently generate about 60 % of EU greenhouse gas emissions. To meet the EU's overall emission reductions target by 2030, the Commission is now proposing to reduce emissions under the ESR by at least 40 %, compared to 2005 levels. This is an increase of 11 percentage points compared to the existing target of a 29 % emission reduction.

Furthermore, the Commission proposal keeps the existing architecture and scope of the Regulation, meaning that the ESR will continue to cover the road transport and buildings sectors, alongside their inclusion in a new emissions trading system.

Finally, the ESR proposal is closely interconnected with other fit-for-55 proposals, notably the Energy Efficiency Directive, Renewable Energy Directive, CO₂ standards for cars and vans or Alternative Fuels Infrastructure Regulation to help Member States' to reach their targets under the ESR. At national level, these policies need to be complemented by government action to address market failures, such as infrastructure investment, support to the purchase of zero emission cars or support to building renovation in a cost-efficient manner.

Elements of the proposal that should be maintained:

- The principles of cost efficiency and fairness should guide the effort sharing.
- The flexibilities enabling Member States to reach their targets in a cost-efficient manner, such as the possibility to 'bank and borrow' emission allocations, should be maintained.
- The proposal for the creation of an additional reserve for Member States based on 'non-used' greenhouse gas removals generated in the EU should be supported.

Elements of the proposal that should be improved:

- Providing clarity and coherence regarding the interaction of the ESR and EU-ETS for the new sectors, buildings and road transport.

7. Proposal for a revised LULUCF-Regulation

Rural areas are increasingly facing a locational disadvantage for SMEs and family businesses. Inadequate or lacking infrastructure as well as a lack of investments increase pressures on companies. It would however be in the interest of a fair transition to maintain the industrial SME sector as a key success factor and social stabiliser in these areas. Strengthening companies in rural areas means securing prosperity across the board.

SMEs and family businesses have often been key success factors in rural areas for generations. Rural regions account for around 46 percent of Germany's gross value added and are home to around 57 percent of the population.

Policymakers should take off the big-city glasses and make rural areas more attractive for investment, employment, housing and living. What is needed is a triad of state-of-the-art digital, education and transport infrastructures throughout the country, faster planning and approval procedures and less bureaucracy. Too many regulations and long approval processes, for example in the designation of residential and commercial areas or the recruitment of qualified skilled workers, inhibit prosperity and social cohesion.

Elements of the proposal that should be improved:

- **Locational disadvantages** for companies, notably SMEs and family businesses stemming from reduced land use options due to their classification as greenhouse gas mitigation sinks under the revised LULUCF Regulation should be avoided.
- In line with the REDIII sustainability criteria and cascading principle, it should be possible to **use biomass from sustainable production as a carbon carrier in industry**, such as for metallurgical purposes. The self-use of on-site produced fuels from renewable biomass should be possible.

8. Proposal for a revised Renewable Energy Directive (RED III)

The Renewable Energy Directive is the legal framework for the development of renewable energy across all sectors of the EU economy. It establishes common principles and rules to remove barriers, stimulate investments and drive cost reductions in renewable energy technologies, and empowers citizens, consumers and businesses to participate in the clean energy transformation.

Making renewable energy and sustainable alternative fuels available in abundance and at competitive prices is key for the decarbonisation of all sectors and of particular relevance for the European transport, industry and buildings sectors. Especially hydrogen is a key building block for reducing process emissions in the industry sector and must be made available at competitive prices. Regarding the revision of the renewable energy directive, it is therefore crucial to unlock further potentials to curb the availability of sufficient amounts of renewable energies and sustainable alternative fuels at affordable prices and provide the necessary financial support mechanisms and funding programmes.

The revision should address the removal of existing barriers of stronger renewable energies development and it should seize the opportunity of significantly simplifying and streamlining permitting procedures (e.g. faster approval; obligation for cross-border projects; joint offshore planning). Increased efforts to remove obstacles and reduce administrative burden and bureaucracy are positive. However,

more precise specifications and clearer obligations for Member States would be needed. Blueprints for good governance or guidelines on best practice are positive but not sufficient to stir the revolution in permitting and planning procedures that are needed to implement climate targets on time.

Furthermore, the revision is not providing guidance beyond 2030. Investors in for example renewable fuels of non-biological origin (RFNBO)-related projects who are starting their projects now, urgently need planning security on the regulatory framework and the support mechanisms, which will be valid for them in the post-2030 period. Also, a perspective should be given on the further expansion of renewables between 2030 and 2050. Therefore, the revision should also address the lack of energy system integration provisions in the current Directive to deliver on RES-based electrification system integration, RES fuels and hydrogen and circularity.

In this context, the introduction of a harmonised system of classification and certification of renewable and low-carbon hydrogen and its derivatives based on guarantees of origin (GOs) will be particularly relevant.

To become operative, the definition of “Guarantees of Origin” will require amendment to enable the certificates to have a compliance function and enlarged to include other relevant stakeholders (energy producers, investors, governments, etc.). Such a uniform European GO system should:

- comprise all renewable and low-carbon gases to foster the ramp-up of green hydrogen.
- include carbon footprint and sustainability criteria to make separate sustainability certification obsolete and allow their use in other EU policies.
- be operated as a “book-and-claim” principle to avoid market fragmentation and to increase liquidity in Europe.
- be accountable for end-consumers towards CO₂ emission thresholds or sector renewable energy targets.

Furthermore, it will be essential to create incentives for low-carbon energy and fuels. The effects in meeting greenhouse gas reduction quotas through Sustainable Aviation Fuels (SAF) and Power-to-Liquid (PtL) must be taken into account. An important prerequisite also here is that companies will have access to SAF and PtL in sufficient quantities at competitive prices. Providing investment support in scaling their availability will therefore be essential for reaching the new quota.

With regard to the transport sector, a fast, complete implementation including all detailed aspects within the framework of the delegated acts of Article 27.3 of the existing REDII as well as transposition into national law by 2022 is necessary to leave sufficient time for the realisation of required projects. Overly strict criteria with regard to additionality and temporal correlation, however, would hinder the urgently needed ramp up of the hydrogen economy. They should be avoided. Instead, a pragmatic and realistic implementation will be critical for rapidly scaling the hydrogen economy and kicking off the creation of new lead markets. In particular, a pragmatic and realistic implementation of the given criteria of additionality and temporal correlation will be decisive for Europe’s global leadership.

REDIII proposes to extend this delegated act, including the principles of additionality and temporal correlation for electricity taken from the grid to produce green hydrogen, beyond the transport sector to all sectors using RFNBOs. It is evident that with sector integration there will be need for additional renewable energy. Yet, according to the proposed delegated act, only project operators of RFNBO-plants have to assume responsibility at individual level. However, additionality is best addressed at a

systemic level. Therefore, Member States should be obliged to account renewable energy demand through sector integration, including both direct and indirect electrification through their National Energy and Climate Plans. In these plans, Member States should also demonstrate that renewables expansion has to meet the increasing demand for renewables. As regards the criteria laid out in Art. 27.3, we recommend a revision. GOs and higher national renewable targets are in our view sufficient to prove the renewable character and the additionality of the electricity used to produce green hydrogen.

The additionality principle, primarily developed as sustainability criteria for the production and accounting of low-carbon and renewable fuels in the transport sector (art. 27), and now proposed as well for industry sectors via the new art. 3(4)a, prescribes that any additional demand for renewable electricity is met with additional renewable electricity as well as for industry, in relation inter alia to the production of RFNBOs.

Nonetheless commendable in its purposes, regarding the availability of renewable energy and the compliance with any related target, the application of the additionality principle would only hamper the necessary increase of the renewable energy supply as national long approval procedures for the development of RES generating assets do not match with the pace to achieve RES target sets at EU level, thus ultimately discouraging investments.

In addition, it is imperative to support the market ramp-up of green hydrogen and PtX via a European model for global PtX tenders (modelled on the German "H2Global" tender project).

Finally, RED III should consider the need of energy-intensive branches of industry like primary food processors to keep pathways to decarbonisation open that will depend on the use of sustainably produced biomass residues from own processes, especially if situated in rural areas without sufficient grid capacity for electrification.

Elements of the REDIII proposal that the BDI supports:

- **Electricity production from RFNBOs** is recognized and accountable towards the RED target. However, the revision of the Directive should also explicitly address the promotion of RFNBOs.
- **The promotion of Power Purchase Agreements (PPAs, Art. 3, 4 and 15):** The BDI welcomes measures to promote PPAs as a market driven instrument for the deployment of renewable energy sources. The promotion of the crediting of non-building-generated renewable energy at the building should be adopted as a supporting measure to the proposed promotion of PPAs for renewable electricity in the national implementations.
- **The provisions on cross-border cooperation (Art.9)** are positive and could be further strengthened by including further low carbon option.
- **The proposed GHG quota for the transport sector:** The amendment provides a reinforced target with a GHG quota of 13 % for the transport sector. The switch to a GHG intensity target in transport (new Art. 25, 1 (a)) has already proven valuable in Germany. It needs to be clarified whether this target can contribute to achieving significantly higher national climate protection targets for individual Member States. An increase in the GHG quota should be reviewed. The proposal of an 2.6 % RFNBO sub-target (new Art. 25, 1 (b)) is positive, as it underlines the increasing importance of hydrogen and PtX but is foreseeably too unambitious to advance the

ramp-up of RFNBOs. Also, the limitation of conventional biofuels (new Art. 26, 1 (1)) and, in principle, the introduction of B10 (recital 45 and new Art. 4, 1 (2)) are positive.

- **Strengthening the engagement of Member States:** The draft also obliges Member States to consider additional demand for renewable energy to produce RFNBOs.
- **Mainstreaming renewable energy in buildings:** The BDI welcomes the new Article 15a “Mainstreaming renewable energy in buildings” and the intention to set indicative targets for increasing the use of renewable energy in buildings, as the availability of affordable renewable energy is a cornerstone to achieve the climate goals in the building sector. Substantial increases in renewable self-consumption, as lined out in number 15a No. 2, should be incentivised in an appropriate manner, e.g. by exempting tenant electricity from business tax in residential and non-residential buildings.
- **A public sector that leads by example:** Furthermore, the BDI supports the exemplary role of the public sector buildings on national, regional and local level. However, in view of existing funding restrictions at regional and local level, an expansion of obligations should be underpinned by financial support.
- **Certification and training of installers:** The BDI appreciates further, changes made in paragraphs (3) and (4) in Article 18, as the certification, training and availability of installers and designers is of utmost importance. Moreover, the BDI recommends to creating standardization in the qualification requirements for designers and installers in order to ensure a comparable level of qualification in the EU, e.g. through a common EU-wide curriculum or a certification system. The German vocational training scheme provides a best practice example in this respect. Finally, the BDI honours the insertion of a generic reference to heating systems made in Article 18 (3), which allows for technology openness and innovation.

Elements of the proposal that the BDI recommends improving:

- **Continuous availability of alternative energy/renewables at competitive prices has to be assured:** A significant element regarding cost effects of the ETS is the price and continuous availability of alternative energy sources including renewables. Increased demand for low-emission and emission free energy by industry is likely to lead to higher prices and possibly scarcity. It is therefore important to improve availability wherever possible including by broadening the scope of admissible raw materials also taking into account the different situation in Member States for instance with respect to the production of biofuels.
- **Delivering on demand-side quotas/sector targets depends on the availability of sufficient amounts of renewable energy at competitive prices:** quotas/targets are a valuable tool to create incentives in end-use sectors; however, the proposal suggests quite a vast number of new targets and sub-targets thereby risking creating a straitjacket while not providing supply safeguards. To be able to achieve the new quotas and sector (sub-)targets, the availability of sufficient quantities of renewable energy at competitive prices is key. It is essential to provide the necessary financial support mechanisms and funding programmes to remove existing barriers for the market ramp-up and RES sourcing.
- **New industry target (art. 22.II): The burden and responsibility for steering the uptake of renewable and low-carbon energy sources as hydrogen in the EU cannot be placed on industrial end-users.** The Commission proposal aims at achieving a 50 % target in terms of

renewable hydrogen consumption by 2030 in key EU industrial sectors, in line with the targets enshrined in the EU Hydrogen Strategy, through a Member State's obligation set on energy users, de facto placing industries as the sole drivers for the creation of a (yet-not-existing) hydrogen economy, fully exposed to the bargaining power of producers and without regulatory protection. The consumption levels for energy and thus for hydrogen depend on the existence of external factors, such as cost-competitiveness, accessibility and quality of supply, dedicated European transport infrastructure, sectorial production forecasts and technological conditions (e.g., estimated load factor and energy efficiency of electrolysers, supportive electricity framework). All these factors are indeed determined outside the end user's sphere of control and are subject to structural limitations, such as a Member State's energy mix, the availability of renewable energy sources (wind, power, hydro) and water, for the case of electrolysis-based hydrogen. Hence, any revision of the Renewable Energy Directive, for its part, shall aim at creating such conditions as availability and cost-affordability for hydrogen, and an appropriate sustainability framework exploiting the full potential for hydrogen production in the EU. In the absence of such elements, demand-side targets risk resulting in an unrealistic burden for end-users and directly targeted Member States.

- **Calculation methods:** Changes to calculation methods of the various targets leave questions as to the assessment of the level and interaction of quotas. Gas and electricity from renewable energy sources can only be counted once towards the target while RFNBOs are counted towards the consumption sector (Art. 7, 27).
- **The proposed GHG quota for the transport sector:** The contribution of electricity from renewable energies for electric vehicles via charging stations as a fulfilment option is not foreseeable and must not lead to a disadvantage in the marketing of advanced biofuels as well as RFNBOs, as it cannot at the same time provide any impetus for their market ramp-up. The BDI supports the limitation of conventional biofuels (new Art. 26, 1 (1)). The proposal of a 2.6 % RFNBO sub-target (new Art. 25, 1 (b)) is positive, as it underlines the increasing importance of hydrogen and PtX but is foreseeably too unambitious to advance the ramp-up of RFNBOs. Against this background, an increase in the GHG quota, for example to 30 %, should be reviewed. Interim targets for RFNBOs, at least for 2027, could be considered to ensure monitoring of the ramp-up and to enable a readjustment if necessary. In principle, the introduction of B10 is positive (Recital 45 and new Art. 4, 1 (2)), but will not suffice. With R33, a fuel with significantly greater CO₂ reduction potential should be permitted as an additional fuel option.
- **Avoid restrictions in the credit mechanism as a fulfilment option in transport sector.** Article 1(15) introduces a credit mechanism to promote electromobility, under which economic operators that supply renewable electricity to electric vehicles via public charging stations should receive credits. Such credits are tradeable and can be used to fulfil obligations of fuel suppliers. However, BDI believes that such credits should not be restricted to electricity from public charging stations, because today the major share of electricity for the transport sector is supplied by private charging stations either by private households or by charging stations of various economic actors, i.e. also operators of buses for public transport. Thus, electricity from renewable sources supplied via private or commercial (but not public) charging stations should also be eligible for credits.
- **RFNBO sub-quotas** alone are insufficient to stimulate investments due to the first-mover disadvantage. They must be supplemented by accompanying measures, such as a tendering model for PtX.

- **A harmonised classification and certification system of renewable and low-carbon gases and fuels based on the carbon footprint remains missing.** We acknowledge that the amendments proposed by Article 19 open up for national classifications and certifications of renewable hydrogen via guarantees of origin. This is a welcome step, however insufficient for establishing a functioning hydrogen market. A reinforced, fully harmonised EU system should be established to foster the cross-border trade of climate-neutral gases in the EU and globally. A certification scheme will also help tracing the origin of the gas traded. It should be further developed in the legislative process. The CO₂ intensity/ CO₂ footprint should be made tradable independently from the physical commodity (book & claim system) -> mass balance system named in Art. 29
- **Extending the scope of the Union database (Art. 31a):** Art. 1 (22) inserts Art. 31a (new), which extends the scope of Union database to RFNBOs beyond the transport sector and enables the tracing of RFNBOs and their life cycle GHG emission. While a centralised recording can make sense, an extension of the Union database to RFNBOs should not be pursued as long as GOs are cancelled once recorded in the database, since this prevents them from becoming a driver for green and sustainable value and liquid markets development. The Union database should still allow for a book & claim system.
- **Ensuring that the Delegated Act of Art.27 RED II on definition of green hydrogen introduces balanced criteria in terms of counting hydrogen as fully renewable:** Hydrogen should also be counted as fully renewable if it is produced from renewable electricity and supplied by the hydrogen producer himself, instead of purchased from a third party via a PPA. The use of renewable electricity should not be confined to new installations. In general, no special rules restricting the production of renewable hydrogen for use should be introduced. The additionality principle, primarily developed as sustainability criteria for the production and accounting of low-carbon and renewable fuels in the transport sector (art. 27), is now proposed as well for industry sectors as the new art. 3{4a} prescribes that any additional demand for renewable electricity is met with additional renewable electricity as well as for industry, in relation inter alia to the production of RFNBOs. Nonetheless commendable in its purposes, regarding the availability of renewable energy and the compliance with any related target, the application of the additionality principle would only hamper the necessary increase of the renewable energy supply as national long approval procedures for the development of RES generating assets do not match with the pace to achieve RES target sets at EU level, thus ultimately discouraging investments. As regards the criteria laid out in Art. 27.3 we recommend a revision. The implementation of the additionality principle should be moved to a systemic level. Member States should be obliged to account renewable energy demand through sector integration, including both direct and indirect electrification through their National Energy and Climate Plans.
- To allow for more flexibility under article 29, paragraph 1 REDIII regarding **sustainability demands for renewable biomass fuels generated on-site and destined for industrial self-use** so that decarbonisation pathways for energy-intensive industries in rural areas without sufficient public grid capacity can still be implemented.
- **A timely and reliable methodology for renewable RFNBOs is needed:**
 - Instead of proposing a delegated act, a new Art. 29a is introduced. RFNBOs can only be counted towards the renewable energy targets if GHG emissions savings are at least 70 %. Member States shall require economic operators to prove that sustainability and GHG

savings criteria for the hydrogen being used from Art. 29 and 29a are fulfilled by using a mass balance system. This means constraints for the hydrogen market ramp up phase.

- The requirement for operators to review sustainability and GHG saving criteria for the use of renewable fuels and fuels with recycled carbon using a mass balance system is assessed critically. Extensive requirements for the validation of relevant information, including the continuation of a mass balance system (physical tracking of different contents), are an additional burden on the market ramp-up of hydrogen and energy from biomass. The review of compliance with the criteria for sustainability and GHG emission savings for the hydrogen being used should follow the book-and-claim principle.
- **Postponing the deadline for the Delegated Act RED II on co-processing to 2024** creates another 3 years of ambiguity and jeopardises the transformation of refineries into renewable energy hubs.
- **Very short lead time** for timely implementation of required investment projects until 2030. We challenge the proposed mechanism allowing fuel suppliers in their territory to exchange credits for supplying renewable energy to the transport sector: This leads de facto to a double promotion of the charging station infrastructure (which is the role of the AFIR) and disadvantages the marketing of climate-neutral fuels (Art. 25.2).
- The **indicative nature of the EU-wide target for the share of renewable energies in buildings** is welcome in order to maintain the flexibility of national implementation. However, different references in Articles 15, 23 and the EPBD do not allow a clear allocation of the consumption to be taken into account. It should therefore be clarified whether, for example, user electricity is taken into account in the balancing or whether only electrical energy is included in the form that it is used for PtH systems, direct electricity heating or heat pumps. The ambition level of the demand is clearly dependent on this allocation.
- **Renewable heating in buildings:** It is in our view important to take into account that the building sector has great potential in the area of renewable heat. However, this can only be realised with considerable effort and investment as well as long-term planning. Accordingly, the targets in this area should be designed for the long term and be appropriate.
- **EU-wide exemption from trade tax for tenant electricity:** The use of renewable energies directly in buildings, such as photovoltaics, relieves the burden on grids, reduces the need for investment in them and finds acceptance, especially through the establishment of attractive tenant electricity models. The complete EU-wide exemption from trade tax for tenant electricity projects should therefore be considered.
- The **use of waste and residues as fuels** is a substantial contribution to waste management and are the most environmentally friendly disposal option in the case of non-recyclable waste. Therefore, the current obligations to prove GHG emission savings in relation to fossil fuels should be omitted. Fuels derived from waste and residues should instead be generally considered sustainable.

9. Proposal for a revised Energy Efficiency Directive (EED)

The BDI believes that an integrated energy system with a resilient EU-wide infrastructure, functioning markets and abundant renewable energy at competitive prices is a pre-condition for reaching climate-neutrality while maintaining industrial value creation in the EU. Sustainable energy is the backbone of the Green Deal and energy efficiency policies form essential part of this.

German industries contribute to increasing energy efficiency gains at home and abroad through innovative and intelligent technologies and materials.

In its proposal, the Commission proposes to raise the level of ambition of the EU energy efficiency target and makes it binding. The revised directive also requires EU countries to collectively ensure an additional reduction of energy consumption of 9 % by 2030 compared to the 2020 reference scenario projections (corresponding to the 39 % and 36 % energy efficiency targets for primary and final energy consumption outlined in the Climate Target Plan). This means that the overall EU energy consumption should be no more than 1023 million tonnes of oil equivalent Mtoe of primary energy and 787 Mtoe of final energy by 2030. However, with increased electrification and sector integration, electricity production and demand will rise significantly. Industrial decarbonisation potentials should not be limited by a cap on energy consumption.

EU countries can help achieve the EU target by setting indicative national contributions, using a combination of objective criteria, which reflect national circumstances (energy intensity, GDP per capita, energy savings potential and fixed energy consumption reduction). This is important as a one size fits all approach is not feasible, due to the very different technical and structural prerequisites and the energy supply systems in the Member States. The proposal also introduces an enhanced “gap-filling mechanisms” that will be triggered if countries fall behind in delivering their national contributions.

Another key element of the proposal is a specific requirement for the public sector to achieve an annual energy consumption reduction of 1.7 % as part of the objective to enhance the exemplary role of public sector across wide range of activities like buildings, transport, water and street lighting. EU countries are also required to renovate each year at least 3 % of the total floor area of buildings owned by all levels of public administration. Public bodies will also need to systematically take into account energy efficiency requirements in their public procurement of products, services, buildings and works.

Elements of the proposal that the BDI supports:

- **An alignment of the EU headline target with the EU’s overall ambition (Art. 4, 29)** – however, the compatibility of the absolute energy savings target with sector coupling / energy system integration should be clarified, considering that primary energy demand (especially electricity) can be expected to rise with a switch to climate-neutral fuels. A cap on energy consumption is limiting the potential for industrial decarbonisation. The definition of “energy efficiency” should be reviewed.
- The given **flexibility for Member States** with respect to implementing the almost doubled annual energy savings obligation (Article 8) to meet the new increased headline target of 9 % in 2030.

- **The indicative nature of national contributions to the headline target:** The BDI welcomes that national contributions remain indicative and therefore not binding since they secure the necessary flexibility for Member States in fulfilling the climate goals.
- **A public sector that leads by example (Art. 6 and 7):** The BDI approves the provisions made by the European Commission regarding the exemplary role of the public sector in Article 5 and 6 and the renovation obligations of public body.

Elements of the proposal that the BDI recommends improving:

- **The level of ambition of the reinforced energy savings obligation scheme as such (Art. 8, Annex V):** The suggested new savings each year of 1.5 % of final energy consumption from 2024 to 2030 is a very significant increase in ambition for which will require granting sufficient flexibility Member State for its implementation. However, Annex V strongly limits possible accountable measures, thereby rendering the practical achievability of the new target unrealistic. Also, industry's energy consumption, which is covered by EU or national ETS should be basically exempted from the scope of the obligation scheme to avoid double regulation. In general, Art. 8 should also include supply-side efficiency.
- **Removing legislative inconsistencies:** interactions with the EPBD and other directives should be carefully examined with a view to avoiding additional obstacles and bureaucratic hurdles. Also, energy efficiency should not be the sole criterion in public tenders, because it cannot meet all requirements at once. Already at the national level, the available data for the building stock, especially for the non-residential building stock, are often incomplete and difficult to access. The data aggregation of the EU should therefore be checked in terms of its applicability at the national level and the necessary adjustments should be made where assessed relevant. Furthermore, the assumption made for craftsman and engineers might be too low with respect to job creation. The respective numbers should be verified. National training initiatives should be introduced.
- **Clarifying the concrete implications of the introduction of a legal base of the “energy efficiency first” principle,** including for the pending review of the EPBD and new State Aid Guidelines for Climate, Energy and Environment (CEEAG).
- While supporting the **Efficiency First Principle**, the **strengthening of the building envelope, of efficient building system technologies** and the **integration of renewable energies into public as well as non-public buildings** should be taken into account in an equal manner. The public sector should set an example, particularly regarding the use of renewable energies in buildings. With regards to public procurement, the BDI supports that sustainability, social, environmental and circular economy aspects should be included in a tender, to better encourage the use of high-quality, sustainable industrial products. Requirements for these tenders should be affordable and remuneration for complex analyses on the basis of contract surcharges be given.
- **The publication of the result of the energy audit (Art. 11 para. 2)** should remain voluntary in nature to keep administrative burden to a minimum. Financial incentives set up as part of Member States' obligation to implement Art.11 to support the deployment of EMS and the implementation of energy audit recommendations.

- The obligation to **assess the utilisation of waste heat on-site and off-site** (Art. 24 para. 4 letter (b)) should not be mandatory in case an industrial installation is not running the entire year but seasonally only.

10. Proposal for a revised Alternative Fuels Infrastructure Deployment Regulation (AFIR) and Strategic Roll-Out Plan

The regulation lays down binding requirements for the comprehensive development and expansion of an EU-wide network for charging and refuelling infrastructure for all relevant drives and fuels and for all modes of transport: road, airports, sea and inland ports.

By presenting a regulation to replace the directive, the Commission is sending an important signal to its member states, because **the comprehensive expansion of charging and refuelling infrastructures is a basic prerequisite for achieving the national and European climate protection targets in transport**. With concrete targets for the different modes of transport, charging points and refuelling stations are to be expanded along the TEN-T network, differentiated according to core and comprehensive network.

A positive aspect is, that the regulation is fundamentally open to all technologies: electric mobility, charging infrastructures for passenger cars, light and heavy commercial vehicles, alternative fuels, refuelling infrastructures for hydrogen and natural gas and onshore electricity supply on airports and ports. However, recitals 5, 6, 7 and 8 state that in the passenger car sector, the EU Commission is primarily focusing on BEVs and PHEVs, the further use of natural gas must be linked to a clear decarbonisation path, LNG will play a continued role in maritime transport, while only limited use is expected for inland waterways and roads.

Regarding roads, the Commission's view is too short-sighted, at least in terms of the contribution LNG can make to decarbonisation, especially in road freight transport in this decade, as long as market-ready ZEVs are not available in long-haul transport.

The same applies to biofuels, even if they do not require a separate tank infrastructure. The EU Commission should also recognise these bridging solutions by setting binding targets for the deployment of LNG refuelling infrastructure without creating lock-in effects.

It is also right that the EU Commission puts a strong focus on road transport and changes the system to the installed charging capacity instead of the number of charging points. However, it should be noted that the specifications of 1kW per BEV/ 0.66 kW for PHEVs are insufficient for the necessary EU-wide EV ramp-up.

In addition, it is important to keep in mind that the AFIR has a central role to play with regard to the EU CO₂ Fleet Regulation: in order to effectively support the required ramp up of electromobility and to achieve the ambitious fleet limits, a binding, rapid and comprehensive expansion of the EU wide charging infrastructure is indispensable.

For air and maritime transport, the EU Commission is presenting tight schedules. In order to avoid additional burdens on the industries, subsidies will be needed - where the regulation at least allows for the possibility of subsidies in Art. 13, para. 5.

Elements of the proposal that the BDI supports and that should be maintained in the further proceedings:

- **Changing the Directive into a Regulation:** By presenting a regulation to replace the existing Directive, the Commission is sending an important signal to the Member States that EU-wide and binding charging and refuelling infrastructures are a basic prerequisite for achieving national and European climate protection targets in the transport sector.
- **A comprehensive approach of expanding alternative fuels infrastructure for all modes of transport:** The suggested comprehensive and basically technology-open approach for all relevant drives and fuels and for all modes of transport is positive. Binding expansion targets for charging infrastructure and hydrogen refuelling stations for passenger cars, light and heavy commercial vehicles are an important step in setting the course.
- **Shifting to charging capacity instead of number of charging points for EV-infrastructure roll out:** The changed system, which no longer bases the charging infrastructure on the number of charging points, but on installed charging capacity, is an important step for the future roll out of charging infrastructure.
- **Expanding infrastructure for aviation and maritime transport:** Targets regarding the installation of a minimum shore-side electricity supply for certain seagoing ships in maritime ports and for inland waterway vessels, an appropriate number of LNG refuelling points in maritime TEN-T ports (Articles 9,10,11) as well as the expansion of electricity supply to all stationary aircraft in TEN-T core and comprehensive network airports (Art. 12) are ambitious but positive objectives.
- **The possibility of granting state aid measures:** The possibility of granting aid for the expansion of infrastructure under Article 13 para. 5 sends a positive signal in terms of making suitable funding concepts for the expansion of the different charging infrastructure available at the national level.

Elements of the proposal that the BDI recommends improving:

- **Road transport - charging infrastructure**
 - The proposal for the ratio of charging power to electric vehicle (1 kW power per BEV, 0.66 kW power per PHEV) is insufficient: an increase to 3 kW for BEVs and 2 kW for PHEVs is required. More realistic basic assumptions must be made higher energy demand of vehicles, higher share of public charging of 50-60 %.
 - Tighter targets for charging infrastructure in the TEN-T network are required: shorten the distance between charging pools to 40 km (instead of 60 km), double the power provision on site, at least one charging point with 350 kW should also be mandatory for passenger cars.
 - The introduction of a further parameter to achieve a comprehensive coverage also outside the TEN-T network (especially in urban areas): Minimum equipment at country level (e. g. depending on population density), establishing citizens' demand for accessibility of a charging point near their place of residence (reference value: distance in kilometres or accessibility in time).

- Ambitious targets for a comprehensive expansion of the charging infrastructure for heavy goods vehicles and coaches are important to ensure European road freight and passenger transport. For these charging stations, a network expansion with higher charging capacities (in the core network by 2025: 5000 kW, by 2030: 6500 kW; in the comprehensive network by 2027: 1400 kW, by 2030: 3000 kW, from 2035: 5000 kW), shorter intervals between the charging points (50 km in the core network, 100 km in the comprehensive network) and significantly higher capacities of the individual MCS charging points (at least 700 kW) must take place. At the same time, a nationwide expansion of charging stations for overnight charging is necessary (100 kW per charging point at all truck parking areas along the motorways).
- For the most efficient use of charging points and the creation of non-discriminatory access to them for all users, the introduction of a roaming obligation for charging infrastructure (analogous to roaming obligations for mobile telephony: telephoning in all networks with all contracts) should be made binding. The necessary monitoring processes to enable follow-up measures should be installed as early as possible.
- In order to overcome barriers to the deployment of charging infrastructure in the Member States, Member States need sufficient flexibility and European co-financing for appropriate support programmes. These programmes must ensure that a comprehensive EU-wide network of charging infrastructure is built as quickly as possible, including a balance between fast and normal charging as well as charging solutions for private charging infrastructure.
- **Road transport - hydrogen refuelling stations:**
 - Targets for 700 bar hydrogen refuelling stations should be increased (in particular with regard to lower minimum distances of 100 km instead of 150 km or in terms of doubling the minimum delivery of 2t/day) and be complemented by proper consideration of a supply of liquid hydrogen.
 - Targets regarding the TEN-T (core and comprehensive) network should become binding as of 2027 to ensure the availability of enough hydrogen infrastructure right on time for the 2030 CO2 fleet targets.
- **Road transport – LNG as bridging solution:** LNG will continue to play a role in decarbonising especially road freight transport in this decade until market-ready ZEVs are available in long-haul transport. The same applies to biofuels, even if they do not require a separate tank infrastructure. The EU Commission should also recognise these bridging solutions by setting binding targets for the deployment of LNG refuelling infrastructure without creating lock-in effects.
- **Taking national circumstances into account with regard to requirements for air and maritime transport:** Setting the time frame for the expansion of infrastructure across TEN-T network: the schedules for air and maritime transport are very tight and additional burden on the sectors will have to be avoided.
 - LNG is not yet permitted in some ports. Even though the expansion of the infrastructure to optimise the availability of LNG is welcome, there is still a need for adaptation at national level.

- The expansion of the publicly accessible charging infrastructure must also take into account the availability and sufficient network capacity at publicly accessible points that may differ in Member States and on different premises depending on the status of expansion of power lines and availability of renewable energy. Accordingly, sufficient funding opportunities must be created. Member States must be able to promote the need for charging infrastructure also on private property and premises. Funding is prerequisite for the necessary (direct) investments and expansion of network capacity induced by the AFIR.
- **Guaranteeing tax exemptions for electricity supply at airports, sea and inland waterway ports:** The expansion of electricity supply to stationary aircrafts at airports and the shoreside electricity supply in maritime and inland waterway ports requires a mandatory tax exemption, which is to be ensured via the Energy Tax Directive (see above).
- **Clarifying definitions for infrastructure requirements at airports:** An addition to the definitions in Art. 2 is needed to clarify "outfield posts" as mentioned in Art. 12 para. 1b. We propose that parking positions at airport terminals ("gate" positions) and only positions suitable for the permanent (daily) parking of aircraft to be part of the regulation. Yet, parking positions that are not intended for permanent parking of aircrafts (e.g. hangar positions, de-icing positions, holding positions), parking positions on military areas of civil airports, and parking positions for general aviation aircraft (< 5.7 to MTOW) should not be part of the Regulation.
- **Establishment of hydrogen infrastructure at airports across the TEN-T core network to be included:** The expansion of hydrogen infrastructure at airports is missing in the proposal for a regulation. This must be considered due to the great decarbonisation potential of air transport. The development of an infrastructure adapted to the conversion of aviation to hydrogen is imperative. The "hydrogen hub at airports" is a key element on the way to the use of hydrogen in aviation. This will pave the way for the availability of hydrogen for aircraft in the 2030+ timeframe.
- **Include a multi-modal dimension in deploying alternative fuels:** In accordance with the EU Sustainable and Smart Mobility Strategy, Member States shall also ensure that refuelling and recharging infrastructure facilitates modal shift and multi-modal transport, besides taking into account the needs of the different transport modes for which limited alternatives to fossil fuels are available. Particular attention is hence needed for transport nodes and hubs.

11. Proposal for a revised CO₂-Regulation on Cars and Vans

Fleet limit standards for passenger cars and light commercial vehicles are in general an important instrument for climate protection in transport, but they can only be effective in a holistic regulatory approach. For 2030, the EU Commission proposes a very ambitious tightening of the existing CO₂ limits from the current 37.5 % to 55 % for passenger cars and from 31 % to 50 % for light commercial vehicles by 2030.

To meet these 2030 targets, it is necessary to create a consistent and technology-open regulatory framework across all dossiers of the "Fit for 55 Pact", especially with regard to the revision of ETD, RED III, EU ETS, ESR, AFIR, so that the ramp-up of electromobility and CO₂-neutral fuels is made possible. The AFIR has a central role to play in this context: In order to effectively support the required rapid market ramp-up of electromobility and to achieve the ambitious fleet limits, a binding, rapid and comprehensive expansion of the EU-wide charging infrastructure is indispensable.

Stricter fleet limits also require a careful impact assessment with regard to all relevant technologies as well as social and economic impacts. A further tightening of the proposed 2030 fleet limit would significantly increase the already high transformation pressure in the automotive and mechanical engineering industry – especially for many small and medium-sized suppliers – and would therefore be unacceptable.

At this stage, as many parameters of the required framework conditions and in particular the ramp-up of charging infrastructure are still unknown, it is not appropriate to set detailed targets for 2035. A strong review clause by 2028 at the latest, identifying the need to fix post-2030 targets based in particular on the monitoring of a reliable and comprehensive expansion of the charging infrastructure in all member states is an option that still provides investment certainty for the industry, while allowing further technological development in the meantime.

A de facto ban on vehicles with internal combustion engines from 2035 onwards through a strict fleet limit of 0 grams CO₂/t for passenger cars and a lack of technology openness in regulation would also apply to PHEVs, which are an important bridging technology in the transformation phase. **A technology-open implementation of the fleet regulation, which includes a voluntary crediting of CO₂-neutral fuels, is therefore indispensable.** There is no competition for the use of RFNBOs among the transport modes due to the different needs and types of fuels and the occurrence of by-products in the production processes. Similarly, the voluntary crediting of climate-neutral input materials must also be taken into account.

Elements of the proposal that the BDI supports:

- The **interim target for 2025** remains unchanged as this will allow the already existing plans for this decade to be implemented.

Elements of the proposal that the BDI rejects or for which gaps remain to be filled during the further legislative process:

- The German industry rejects a **de facto ban on vehicles with internal combustion engines**, as this would also apply to PHEVs, which represent an important bridge technology option.
- **To meet the very ambitious 2030 targets, it is necessary to create a consistent and technology-open regulatory framework across all dossiers of the "Fit for 55 Pact"**, especially with regard to the revision of ETD, RED III, EU ETS, ESR, AFIR, so that the ramp-up of electromobility and CO₂-neutral fuels is made possible. The AFIR has a central role to play in this context: In order to effectively support the required rapid market ramp-up of electromobility and to achieve the ambitious fleet limits, a binding, rapid and comprehensive expansion of the EU-wide charging infrastructure is indispensable.
- **It is not appropriate to set detailed targets for 2035 as many parameters of the required framework conditions and in particular the ramp-up of charging infrastructure are still unknown.** A strong review clause by 2028 at the latest, identifying the need to fix post-2030 targets based in particular on the monitoring of a reliable and comprehensive expansion of the charging infrastructure in all member states is an option that still provides investment certainty for the industry, while allowing further technological development in the meantime.
- **Extend benchmark scheme for ZLEV** (including PHEV) beyond 2029. The exclusion of PHEVs would make it even more difficult to achieve the fleet target. The incentives for ZLEVs should be

continued at this point in order not to jeopardise the rapid ramp-up of alternative propulsion systems.

- **Extended pooling between passenger cars and light commercial vehicles is important.** The regulations on pooling have proven their worth and increase the efficiency of target achievement. A possibility of pooling between passenger cars and light commercial vehicles is important and desirable in order to better balance unpredictable fluctuations in demand.
- **The recognition of eco-innovations should be improved.** In this way, the savings potential of advanced technologies that do not work in the test cycle can be realised on the road. The procedure should be made less bureaucratic to improve manageability and create incentives for a higher penetration of eco-innovations.
- **Support for transformation (funding programmes) and revenues from penalties** should be used to finance transformation support measures with a special focus on innovation or the sectors concerned.
- **Lack of consequences with regard to the evaluation reports** (scope for adjustments in the event of delayed expansion of the EU-wide charging infrastructure).
- **Build in additional flexibilities** (carry-over/anticipation to subsequent years).
- The **primacy of technological openness must be maintained** to ensure the inclusion of voluntary crediting of CO₂-neutral fuels and climate-neutral input materials. A methodology on a workable crediting scheme is on the table which is voluntary and does not blur the current share of responsibility.
- **Introduction of a well-to-wheel or lifecycle assessment-based regulation** was not pursued further despite a review mandate in existing legislation.

12. Proposal for a revised Regulation on Sustainable Aviation Fuels (ReFuelEU Aviation)

The initiative sends a positive signal for the sustained introduction and roll-out of sustainable aviation fuels into the market in the pursuit of reducing CO₂-emissions in aviation. In order to reach the ambitious CO₂-emission reduction targets for the whole transport sector, the use of alternative sustainable fuels is one of the most important levers to achieve this goal.

The BDI appreciates the initiative taken by the European Commission to tackle the issue of reducing CO₂-emissions in aviation, which is a sector with very limited decarbonisation options to date. It is positive that the European Commission aims at setting up a common framework to avoid national diverging regulations for the aviation sector, which is inherently international and faces global competition.

In implementing the initiative, it remains important to promote the market ramp-up of PtL kerosene products based on green hydrogen in a technology-open approach, in particular, with the aim of building production plants that successfully bring the most energy- and cost-efficient solutions to the market while complying with climate targets. Competition-distorting additional costs should be prevented or be compensated by appropriate measures in order to avoid traffic shifts to non-European airlines and

airports, thus creating carbon leakage. Also, a shift to non-European airports, jet fuel providers and airlines and the associated carbon leakage should be ruled out.

Elements of the proposal that the BDI supports:

- **The establishment of a European market for Sustainable Aviation Fuels:** BDI welcomes the initiative to create a European framework that avoids divergent national regulations and has the potential to create a market for sustainable aviation fuels (SAF). A SAF minimum share can be an effective instrument if sufficient quantities are available at competitive prices. The zero-tax rate for renewable aviation fuels provided for in the ETD draft is an important flanking measure.
- **Predefined ramp-up of SAF minimum share until 2050:** The predefined ramp-up of SAF minimum share set out in the initiative is realistic, but a more ambitious target of a SAF minimum share of at least 10 % in 2030 would put the aviation sector on an ambitious decarbonisation path to meet EU climate targets, always under the condition of adequately addressing increased costs and avoiding market distortions through appropriate measures. It will send the necessary strong signal to the market to allow production and construction to ramp up quickly reducing uncertainty and lowering the risk of investment. It will reduce dependence subsidies and the need for taxation.

Elements of the proposal that the BDI recommends improving:

- **Ensure regulatory certainty for PtL plant expansion:** In view of the ambitious goals for the ramp-up of SAF, the industry must make timely investment decisions, especially for the first PtL-kerosene plants. For this, essential regulatory issues have yet to be clarified. This includes, for example, clarity about the criteria for sourcing renewable electricity for electrolysis as well as clarification of the accounting and crediting rules for the joint processing of PtL crude and fossil crude oil for the production of kerosene and other products in refineries.
- **Increasing the onset minimum share for “synthetic aviation fuel”:** It is also advisable to set a higher minimum share for "synthetic aviation fuel" (Annex I of RefuelEU Regulation) at a minimum of 2.5 % in 2030 while also increasing the minimum share for the following years in order to take full advantage of emerging power-to-liquid technologies and longer-term synergies with the ramp-up of green hydrogen. Yet, additional costs incurred must be compensated by appropriate measures in order to avoid market distortions. To give a positive signal to the market and investors the first sub-quota could be set at 2027 with 0.8 %. Recycled carbon fuels (RCFs) should also be supported in this Regulation initially for the ramp-up of synthetic aviation fuels.
 - **Linear ramp-up of minimum share for synthetic aviation fuel needed:** The haphazard jumps currently proposed in the ramp-up of the sub-mandate for synthetic aviation fuels (i.e., PtL-kerosene) shifts the responsibility of PtL-contribution to the last five years in the run-up to 2050. A linear and stringent ramp-up would provide more stability for the industry in terms of investment security and would also ensure a faster, efficient ramp-up of the quota for PtL.
- **Feasibility of refuelling obligation:** It remains questionable whether a refuelling obligation of at least 90 percent of the annually required aviation fuel, as proposed in Article 5, is legally and internationally feasible to prevent the issue of tankering effectively.

- **Avoiding distortion of competition:**

- The EU must take countermeasures to avoid carbon leakage and distortive effects to the market. There are various regulatory options to ensure carbon leakage protection and fair competition. The EU should follow its own example and introduce a compensation mechanism.
- A blending obligation increases the price of jet fuel in Europe. The competitive disadvantage exists, therefore, in particular for international flights starting in the EU and arriving at their destination without a stopover. These flights have to fuel for the entire route the more expensive fuel unlike those third country airlines flying via their hubs at the periphery to the EU. This distorts competition because it makes flights by European airlines unattractive. Therefore, the minimum share should not be based on total fuel sales, but only on fuel sales incurred on intra-EU traffic. The minimum share of SAF should only apply to intra-EU flights excluding feeder traffic to guarantee a level playing field in international aviation.
- Promoting the market ramp-up of SAF, the quotas provided for in the draft regulation can be a supportive measure. However, in order to prevent carbon leakage should the SAF minimum share only be applied to intra-EU flights, then the costs attributable to Non-EU feeder passengers must be excluded: This can be done by the airlines concerned retroactively reporting the passenger kilometres incurred for the transport of passengers to their inner-European hubs (for onward intercontinental flights) within the framework of monitoring and reporting; calculating the concrete equivalent fuel consumption related to these passengers on the basis of real data (aircraft types used, fuel quantities etc. are known); and a corresponding passenger-specific deduction from the ETS.
- For ex-EU air traffic, a separate regulation for binding quotas should be adopted – ideally at international level (ICAO) by agreeing and setting a binding quota for the use of SAFs for all international long-haul traffic.
- If the EU keeps a minimum share also for international (ex-EU) flights as currently proposed, flights going over European hubs must be treated in the same way as those running over non-EU hubs, to avoid distortion of competition and carbon leakage. For this, we propose a competitively neutral funding mechanism to cover the additional costs of SAF minimum share fuelled at EU airports that is funded either by the introduction of a EU mandatory passenger- or weight- and final destination-based climate levy acknowledging respective emission efficiency of the airlines and including cargo, or by revenue from passenger- and destination-based national aviation taxes (e.g.: German aviation tax) in order to compensate for the additional costs of sustainable aviation fuels.
- For industries in terms of freight and transport logistics costs, compensation of additional costs incurred by the application of minimum shares is also important. The additional costs for passenger air transport and the air freight logistics chain must be compensated, i.e., cost compensation for companies with increases in fuel costs in several areas (e.g., air freight: air and truck transport affected). Distortion of competition within the EU must be avoided in the implementation, e.g., through different subsidisation practices SAF/PtL. One step could be a joint Europe-wide PtL production plan by politics and industry.

- **Establishing a “book & claim” approach:** There is no need for a compulsory refuelling regulation that requires SAF to be available and refuelled at every airport in the TEN-T network. A

“book & claim” approach, which provides for SAF to be credited if it was purchased by an airline but could not be refuelled by that airline, could also be a helpful step towards further promoting the ramp-up of SAF.

- **Earmarking of fines to reinvest in SAF projects:** Furthermore, revenues acquired from fines, as provided for in Article 11, should be invested in SAF projects for example by H2Global to strengthen the market ramp-up as well as to reinvest in the sector. Price levelling of SAF could also be achieved by using these revenues for funding OPEX (e.g.: CCfDs). Further, the fines should be set at a level that provides an incentive to invest.
- **Obligations of owners of fuel infrastructure at Union airports:** The responsibility for the fuel infrastructure “necessary for the delivery, storage and uplifting of such fuels” should, contrary to the provisions in Article 6, be in the hands of the owner of the fuel infrastructure at Union airports and not Union airports. In principle, the roles of the stakeholders need to be differentiated. Today, on many airports, the fuel infrastructure is owned and operated by fuel suppliers, joint ventures between fuel supplies, and sometimes airlines as shareholders. The current Ground Handling Directive stipulates the possibility to have fuel supply operated by third parties instead of the airport for centralized infrastructure. With the proposed changes in the RefuelEU Aviation Regulation, responsibilities are redistributed without need, which could potentially lead to less cost efficiency, loss of know-how, and difficulties in the transition process.

13. Proposal for a revised Regulation FuelEU Maritime

With this initiative, the EU is setting a clear path for the need for sustainable alternative fuels (low-emission and climate-neutral sustainable alternative fuels and energy supply) in shipping. BDI welcomes the EU's move to address CO₂ emissions in shipping, which so far has had only limited options for decarbonisation.

It sets out a clear reduction path, even without a prescriptive regulation. This target-based approach must take into account the possibilities for reducing GHG intensity, e.g. through the availability of alternative fuels and shore-side electricity in ports, in order to avoid distortions of competition and disadvantages for the European maritime industry and supply chains.

The promotion of sustainable alternative fuels is an important step. Here, as with the RefuelEU Aviation initiative, it needs to be ensured that uniform framework conditions are created in order to avoid diverging national efforts and to do justice to the international character of shipping.

BDI supports the "well-to-wake" approach outlined in FuelEU Maritime, whereby GHG emissions are considered over the entire life cycle. Alternative fuels are an important building block for the transition to low-carbon mobility. This requires continued substantial funding for research and market development as well as a precise regulatory framework. The initiative provides helpful funding by earmarking sanction payments for projects supporting renewable and low-carbon fuels in the maritime sector. It remains paramount to avoid distortions of competition.

Elements of the proposal that the BDI supports:

- **Earmarking of penalties to fund GHG intensity reducing projects:** The earmarking of revenues from non-compliance penalties, as provided for in Article 21, to support projects for the

market ramp-up of sustainable alternative fuels and the construction of bunkering facilities and onshore power connections in ports, is very positive.

- **Securing infrastructure development in ports:** The expansion of the infrastructure, especially with regard to onshore electricity supply in ports, must be guaranteed and eligible for funding. This is because the electricity/energy supply must also be able to cover the demand in the ports. For this the ETD and respectively AFIR draft are important flanking measures to ensure that the obligations of the initiative can be met.

Elements of the proposal that the BDI recommends improving:

- **Maintaining a level playing field in international shipping:** It remains questionable whether the extension of the scope of application with regard to the energy use of vessels between EU member states and third countries can be implemented at 50 percent on an international level and whether that way a level playing field can be guaranteed.
- **Establishing "book & claim" framework for sustainable marine fuels:** An important step to increase the use of sustainable fuel (SMF or SAF) is to create a new framework where suppliers, carriers, and forwarders can invest in sustainable fuels, if the emission reduction can be accounted for in their carbon footprint. This can be realized, for example, through certificate trading for climate-friendly fuels similar to green electricity certificates. In this way, fuels could also be booked everywhere in the world through a book & claim system in order to avoid complex fuel transports and to set broad market impulses.

14. Conclusions

A strong and innovative industry is a prerequisite for Europe to win the global race in climate innovation and digitalisation with its own technologies and concepts on an equal footing with the United States and China.

The European Commission, Parliament and Council should clearly commit to Europe as an attractive and forward looking industrial and investment location: Industry needs to be equipped with the necessary "Fit-for-55" framework to be able to successfully navigate through this transition of unprecedented scale.

In some areas, the Fit-for-55 package sets important impulses for the transition.

In others and certainly considering the many interlinkages with pending policy initiatives and measures beyond the package, more will be needed to reliably support European industry in the transition and thereby demonstrate that a climate neutral industrialised continent is feasible:

Areas where Fit-for-55 is fit-for-industry:	Areas where Fit-for-55 falls short for industry:
<p>EU-ETS:</p> <ul style="list-style-type: none"> ▪ Upstream trading systems for road transport and buildings that are separate from existing system for industry ▪ Including CCUS as mitigation option ▪ Establishing a Climate Social Fund as accompanying measure to increase acceptance ▪ Implementation and clear demarcation of CORSIA in relation to the EU ETS in the area of aviation 	<p>EU-ETS:</p> <ul style="list-style-type: none"> ▪ Carbon leakage protection ▪ Two separate systems for new sectors: one for road transport, one for buildings ▪ Reinvesting ETS revenues in climate and energy savings projects in affected sectors ▪ Avoiding distortions of competition in the EU ETS at the expense of European airlines and hubs, eliminating free allocation for aviation, carbon leakage protection for feeder flights needed
<p>CBAM:</p> <ul style="list-style-type: none"> ▪ Introducing a test phase on specific sectors focusing on direct emissions ▪ A transition period for the use of existing proven carbon leakage instruments 	<p>CBAM:</p> <ul style="list-style-type: none"> ▪ A WTO-compatible mechanism for tackling export ▪ Too many uncertainties due to extensive use of comitology procedures (i.e.: details of the calculation methodology) ▪ Earmarking use of revenues for reinvestment in climate innovation in affected sectors ▪ Convincingly preventing circumvention, resource shuffling and trade retaliation measures
<p>ETD:</p> <ul style="list-style-type: none"> ▪ Ranking taxation by energy content coupled with environmental performance ▪ Tax exemptions for aviation, waterborne navigation sector, sustainable alternative fuels, (bio)gas and electricity 	<p>ETD:</p> <ul style="list-style-type: none"> ▪ Harmonised low taxation of electricity and alternative energy products ▪ Mandatory exemptions for alternative energy products for all sectors for a transition period oriented on technological transformation ▪ Mandatory instead of optional exemptions for energy intensive industries ▪ Transition period to reach new minimum rates ▪ Restorage of tax rate for business use ▪ There should be no kerosene taxation ▪ Energy products by in-plant processes must be exempted
<p>REDIII:</p> <ul style="list-style-type: none"> ▪ Promotion PPAs ▪ The accountability of electricity production from RFNBOs towards the increased RED target ▪ Mainstreaming renewable energy in buildings ▪ Switch to a GHG intensity target and limitation of conventional biofuels in transport sector 	<p>REDIII:</p> <ul style="list-style-type: none"> ▪ Streamlining permitting and planning procedures ▪ Addressing additionality criterion at systemic level – sufficiently flexible green electricity criteria ▪ Financial support for reaching new quota ▪ A realistic industry quota (50 % RES-hydrogen demand not achievable with estimated production capacities) ▪ Introducing an EU-wide classification and certification of climate neutral gases and its derivatives ▪ Review and increase of the GHG quota in the transport sector and of the RFNBO sub-target
<p>EED:</p> <ul style="list-style-type: none"> ▪ Aligning the EU headline target with the EU 2030 overall climate ambition ▪ Promoting system efficiency 	<p>EED:</p> <ul style="list-style-type: none"> ▪ A cap on energy consumption limits energy system integration potentials – the definition of energy efficiency needs revisiting ▪ Sufficient flexibility regarding the implementation of the new target – annex V is too restrictive
<p>AFIR:</p>	<p>AFIR:</p>

<ul style="list-style-type: none"> ▪ Changing the Directive into a Regulation is sending an important signal to the Member States ▪ Comprehensive and technology-open approach of expanding alternative fuels and drives infrastructure for all modes of transport ▪ Shifting to charging capacity instead of number of charging points for EV-infrastructure roll-out ▪ Expanding infrastructure for aviation and maritime transport 	<ul style="list-style-type: none"> ▪ Increased ambition for BEV (3 kW) / PHEV (2 kW) and for charging infrastructure in the TEN-T network is required for EU-wide ramp-up ▪ Introducing further parameter to achieve a comprehensive coverage (especially in urban areas) and increasing ambition for hydrogen refuelling infrastructure for passenger cars ▪ Increasing ambition for charging and hydrogen refuelling infrastructure for road freight transport ▪ Establishing hydrogen infrastructure at airports and other central transport hubs across the TEN-T core network ▪ Subsidies needed to meet tight schedules for air and maritime infrastructure expansion ▪ Ensuring tax exemptions for electricity supply at airports, sea and inland waterway ports
<p>CO2 standards cars/vans:</p> <ul style="list-style-type: none"> ▪ Interim target for 2025 remains unchanged 	<p>CO2 standards cars/vans:</p> <ul style="list-style-type: none"> ▪ Rejecting a de facto ban on vehicles with internal combustion engines ▪ Achieving the very ambitious 2030 targets requires a consistent and technology-open regulatory framework and in particular an ambitious ramp-up of charging infrastructure ▪ Rejecting detailed targets for the year 2035, instead of setting a strong review clause by 2028 at the latest ▪ Maintaining primacy of technological openness to ensure inclusion of voluntary crediting of CO2-neutral fuels and climate-neutral input materials ▪ Extending the benchmark scheme for ZLEV (including PHEV) beyond 2029 ▪ Using funding programmes and revenues from penalties to finance transformation support measures
<p>FuelEU Maritime:</p> <ul style="list-style-type: none"> ▪ Earmarking of penalties to fund GHG intensity reducing projects ▪ Securing infrastructure development in ports with ETD and AFIR draft as important flanking measures to ensure meeting the obligations 	<p>FuelEU Maritime:</p> <ul style="list-style-type: none"> ▪ Maintaining a level playing field in international shipping ▪ Establishment of a “book & claim” framework for sustainable marine fuels to facilitate the market ramp up
<p>RefuelEU Aviation:</p> <ul style="list-style-type: none"> ▪ Establishment of a European Market for Sustainable Aviation Fuels (SAF) and the predefined ramp up of the SAF minimum share until 2050 	<p>RefuelEU Aviation:</p> <ul style="list-style-type: none"> ▪ Reliable carbon leakage protection ▪ Avoid distortive effects especially for international flights starting in the EU ▪ The minimum share of SAF should only apply to intra-EU flights excluding feeder traffic ▪ If the EU sets a minimum share also for international (ex-EU) flights as currently proposed, distortion of competition must be avoided. This can be achieved by establishing a competitively neutral funding mechanism to cover the additional costs of SAF minimum share fuelled at EU airports ▪ Earmark fines for reinvestment in SAF projects and account for temporary need for CAPEX and OPEX funding to accelerate SAF production and market uptake ▪ Regulatory certainty for PtL plant expansion to be ensured ▪ Refuelling obligation remains questionable

A robust Fit-for-55 governance that connects the dots:

- Introducing a horizontal governance mechanism to ensure overall coherence within FF55 proposals and beyond (Gas-/Hydrogen package, CEEAG, Taxonomy)
- A fully fledged international climate diplomacy with global energy partnerships
- Fully intertwined national implementation programmes:

A Program for Climate and Germany's Future Development

Additional instruments to existing regulation

	INDUSTRY	TRANSPORT	BUILDINGS	ENERGY
OVERARCHING INSTRUMENTS	Make fossil fuels less attractive EU ETS, higher carbon pricing in non-ETS sectors (where enforceable), energy taxes based on energy content and sustainability level			
	Incentivize switch to electricity Reduction of electricity prices for renewable heat applications in the industry and building sector			
	National infrastructure program Expansion of power grids, district heating, and rail; development of national infrastructures for e-mobility, hydrogen, and CO ₂			
	National biomass strategy Redistribution into large-scale industrial and district heating plants (in the future BECCUS), phase out of subsidies for use in buildings and decentralized power generation			
SECTORSPECIFIC INSTRUMENTS	Carbon contracts (CCfDs) Promotion of green products and heat	Charging/H₂ infrastructure subsidy Investment grants for ramp-up	Municipal infrastructure planning for planning security at all levels	Renewables offensive Area quotas, faster procedures, etc.
	Investment incentives for renewable industrial heat	Purchase incentives for electric cars to align acquisition costs	Mandatory renovation schedules Building-specific zero-emission path	Accelerated grid expansion Faster procedures at all levels
	Efficiency standards and subsidies Increase and accelerate depreciation	Carbon-based truck toll in addition to toll exemption for e/H ₂	Modular building subsidies for renovation and energy carrier change	Flexibilized electricity consumption Digitalization, market incentives, etc.
	Green lead markets e.g., through quotas	PTX quotas and auctions Investm./planning security in ramp-up	Renewables req. in new buildings 100% GHG-neutral heat at installation	Central capacity market to ensure security of supply
RESEARCH	Research and innovation agenda Fundamental climate research, targeted investments in game-changers (batteries, quantum computing, etc.), accelerated scaling (high-temperature power-to-heat, CCUS, etc.)			
COMPENSATION AND FINANCING	Carbon leakage protection allocations, CBAM, exemptions, hardship funds, EPC	Social compensation Basic provisions, hardship funds, (partial) elimination of the Renewable Energy Act levy, etc.		
	Funding sources Combination of savings, levies, taxes, and debt to finance fiscal burdens of up to €50B per year in 2030			
POLITICAL PROCESS	Climate governance Stronger bundling and more central coordination of political responsibility, monitoring of leading indicators, acceleration of procedures, capacities for states/municipalities, etc.			
	Broad societal consensus Consensus on infrastructure expansion, fair burden-sharing, etc., spanning multiple legislative periods			

Source: BDI/BCG Study "Climate Paths 2.0", October 2021, @CorporateDesign

The European Commission, Parliament and Council should commit to timely negotiations on the package and provide the necessary timely legal and planning certainty to industry and investors.

Speed is of the essence in the race for global climate and energy innovation leadership, industrial competitiveness, social cohesion and a climate-neutral planet.

Impressum

Bundesverband der Deutschen Industrie e.V. (BDI)
Breite Straße 29, 10178 Berlin
www.bdi.eu
T: +49 30 2028-0

Editors

Dr. Carsten Rolle, Head of Department
Department Energy and Climate Policy
Sigrid Linher, Senior Manager
Department Energy and Climate Policy
Dr. Joachim Hein, Senior Manager
Department Energy and Climate Policy

Uta Maria Pfeiffer, Head of Department
Department Mobility and Logistics
Petra Richter, Deputy Head of Department
Department Mobility and Logistics
Robin Kunst, Senior Manager
Department Mobility and Logistics

Dr. Monika Wünnemann, Head of Department
Department Taxation and Financial Policy
Annette Selter, Senior Manager
Department Taxation and Financial Policy

Matthias Krämer, Head of Department
Department External Economic Policy
Katherine Tepper, Senior Manager
Department External Economic Policy

Wilko Specht, Managing Director
BDI Initiative for Energy-Efficient Buildings
Michael Wolfram, Senior Manager
BDI Initiative for Energy-Efficient Buildings

Coordination

Sigrid Linher, Senior Manager
Department Energy and Climate Policy
T: +32 2 792 1004
s.linher@bdi.eu

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