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**Position Paper** 

# Recommendations for Technical Screening Criteria

Delegated Act on Climate Change Mitigation Taxonomy Regulation

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## 1. General Remarks

The German Association of Energy and Water Industries (BDEW e. V.) supports the objective of mobilising sustainable investments aligned with the Paris Agreement and our climate and environmental targets. Creating a common language in the Taxonomy Regulation for all actors in the financial system and the real economy is crucial to mobilise sufficient investments to achieve climate neutrality by 2050.

According to the European Commission's Communication "The European Green Deal" from 11 December 2019, an additional annual investment of 260 billion Euros is needed to achieve the current 2030 climate and energy targets. To encourage sustainable investments, the European Union must send clear and long-term signals to economic actors.

The BDEW supports the target to achieve climate neutrality by 2050 in the EU and recognizes the outstanding role of the energy industry for this purpose. The European Union should create framework conditions for the transition to achieve the goal of climate neutrality in the EU by 2050 that ensure security of supply, competitiveness and social acceptance. The German energy industry is already making a decisive contribution towards reducing GHG emissions. Despite the nuclear phase-out, economic growth and population growth, the energy industry has achieved a GHG reduction of 44 percent by 2019 compared to 1990.

The Taxonomy is the fundamental development in sustainable finance and will have a wideranging impact on the energy sector. The current Corona crises and the urgent need for financial support for the economy short-term and even more during the recovery phase will make it even more challenging to allocate investments to sustainable activities. This places the Taxonomy and the sustainable finance agenda even more in the centre with an even higher need to implement it in a cost-efficient way that stimulates a broad transition movement.

From BDEW's point of view, it is most important to apply adequate provisions to those technologies which will play a key role in the energy transition. Regarding technological specific thresholds and definitions, the BDEW inter alia

- proposes provisions for the generation of electricity from highly efficient gas fired power plants and combined heat and power (CHP) to be classified as a transitional activity,
- recommends the expansion and retrofit of all gas transmission and distribution networks to be classified as a transitional activity,
- requests to take the retrofit and expansion of infrastructure enabling the transportation of hydrogen into account as a sustainable activity,
- calls on the Commission to clarify the threshold of a power density of more than 5W / m2 for hydropower,



• proposes to consider a concept with provisions for dismantling for wind power rather than contractual agreements with recycling companies.

#### In general, the BDEW

- strongly believes that the positive orientation in the original Commission's proposal can significantly contribute to more investments in sustainable activities in order to facilitate the transformation to more sustainable business models. This positive approach should not be undermined by the potential inclusion of a "brown category" in the Taxonomy. A so called "brown category" would penalise companies in the midst of the transformation based on historic investment decisions without taking into account a forward-looking perspective. The Taxonomy should not create barriers for companies converting to a more sustainable business model but facilitate these transformations. Therefore, the BDEW strictly opposes the introduction of a so-called "brown category" in the Taxonomy. The BDEW calls on the Commission to take into account the wide-ranging negative effects for transitioning existing business models to more sustainable business models in the review regarding the potential inclusion of a "brown category" in the Taxonomy.
- urges the Commission to reserve one third of the membership of the Platform on Sustainable Finance for a wide range of industry sector representatives.
- highlights the need to provide certainty for investors and operators. Therefore, calls on the Commission to clarify in a guidance that assets will be evaluated only once and continuous evaluation beyond existing regulatory obligations will be avoided. For example, regarding investments in new infrastructure, the duration of projects from initialisation to operation usually takes at least 8 - 10 years, in many cases even longer. To increase planning security and depending on the status of the economic activity during initialisation of the respective project, projects should be categorised as either sustainable or not until their finalisation.
- calls on the Commission to avoid extensive administrative burdens while implementing the new disclosure obligations in the Taxonomy Regulation. For example, the information generated in permitting procedures for much-needed new infrastructure, which comply with the high EU standards in areas such as spatial planning and biodiversity preservation today should be taken into account for the disclosure. In addition, the BDEW proposes a transition period of two years after the adoption of the delegated act for the specifying the new disclosure obligations to allow the companies to deploy the necessary processes.
- highlights that mainly Capex should be used for the sustainability rating of financial products as this is the only way to ensure a reliable allocation of capital to the companies and investments that promote energy system transformation and reduce emissions.



According to the political agreement reached in December 2019, the Taxonomy will be supplemented by delegated acts which contain detailed technical screening criteria for determining when an economic activity can be considered sustainable.

The screening criteria are at the heart of the Taxonomy. They should be practicable, easy to apply, verifiable within reasonable cost-of-compliance boundaries and provide for sufficient legal clarity. Therefore, they must be based on the relevant technological developments and consider the limits of technical feasibility. This requires the specialised practical knowledge and hands-on expertise of the affected industries.

In March 2020, the Technical Expert Group (TEG) published the final report on sustainable finance supplemented by a technical annex containing technical screening criteria inter alia for economic activities which can substantially contribute to climate change mitigation.

The BDEW acknowledges the work done by the TEG and inter alia welcomes the following changes based on the BDEW feedback on the preliminary report:

- In the category manufacturing of hydrogen, the increase of thresholds for direct CO<sub>2</sub> emissions to 5.8 tCO<sub>2</sub>e / t and for the electricity use for hydrogen produced by electrolysis at or lower than 58 MWh / t hydrogen.
- In the category construction, the references to the Energy Performance of Buildings Directive (EPBD) and the national regulation implementing the EPBD.
- In the category installation and operation of electric heat pumps, the reference to the energy efficiency requirements stipulated in the implementing regulations under the Ecodesign Framework Directive.

However, from BDEW point of view, further improvements and clarifications regarding the developed criteria by the TEG are necessary. Therefore, the BDEW urgently calls the Commission to take into account all technologies that can contribute to the success of the energy transition in the short-, medium- and long-term, to apply a technological-neutral approach and to ensure the most cost-efficient investment framework for achieving our climate and environmental targets while drafting the delegated act referred to in article 10 (3) of the Taxonomy Regulation.

In particular, the Taxonomy must be a tool for financing the transition to a more sustainable economy. This means that it must incentivise capital to flow to sustainable and transitional activities as recognized in article 10 (2) of the Taxonomy Regulation. The BDEW strongly believes that the TEG approach to transitional activities is not consistent with the Taxonomy Regulation and urgently calls the Commission to differentiate between the thresholds for green and transitional activities.

Across all activities, the BDEW proposes the following elements:

• In the framework of the proposed criteria, a Life Cycle Emissions Assessment (LCEA) provides an important contribution to assessing the emissions of all electricity and



heat / cool generating technologies. However, a science based, uniform LCEA methodology / application to ensure comparability and reliability is lacking today and extensive experience have not been made so far. The methodology development on LCEA is extensive, however, it is not coherently applicable yet. The proposed measurements based on ISO 14067 or a GHG Protocol Product Lifecycle Standard compliant Product Carbon Footprint (PCF) assessment are not comprehensive enough to apply it as common LCEA methodology.

To create a level playing field and to make LCEA results comparable, BDEW proposes to base the LCEA on a scientific, uniform methodology developed by the competent authorities, the Commission and taking into account the view of the Platform on Sustainable Finance in an open and transparent process. Until the LCEA methodology is developed based on a scientific, uniform LCEA methodology only the direct g CO<sub>2</sub>e / kWh emissions should be used as threshold values. In addition, the LCEA should uniformly be applied in form of technology-specific standard values for the upstream LCEA instead of project-specific individual measurements to avoid a disproportionate bureaucratic burden, which could pose an investment barrier.

- It is crucial to further improve the climate and environmental impact of existing assets for the energy system transformation. In line with article 10 (1) (a) and independent of the direct g CO<sub>2</sub>e / kWh emissions threshold, every retrofit of existing electricity and heat / cool generating assets should be taxonomy-eligible if it can be demonstrated, that it substantially improves the energy efficiency and / or the environmental and / or climate performance of the asset. In particular, this should include a coal to gas fuel switch for existing electricity and heat / cool generating assets. To avoid lock-in effects, the gas plant should be built in a way that allows for a gradual fuel switching to hydrogen or other renewable or decarbonised gases as soon as those gases are available in sufficient quantities.
- The BDEW advocates for the introduction of a technology-specific de minimis threshold. According to the de minimis threshold, no LCEA would be necessary for activities below the technology-specific MW threshold to be defined. The costs for commissioning a LCEA assessment is an additional financial burden for many small projects (e.g. small ROR hydroelectricity plants) that heavily rely on outside investments. Those additional costs could hamper sustainable investments in small projects.

Detailed technology specific recommendations are in the following chapters.

## 2. Production of Electricity and Cogeneration from Gas

## Recommendations for criteria for the classification as transitional activity

Natural gas and increasingly renewable and decarbonised gases are an enabler for the decarbonisation of all sectors. Highly efficient gas-fired power plants contribute to the success of the energy transition and CO<sub>2</sub>-savings can be achieved by using natural gas as an energy



source instead of other more carbon-intensive fossil fuels and in addition more and more renewable and decarbonised gases. Gas-fired power plants are and will be the backbone for security of supply for electricity and heat. In perspective, gas-fired power and CHP plants pave the way for hydrogen, biomethane and power-to-X technologies which contribute considerably to a climate-neutral economy.

In particular, highly efficient gas-fired power plants and CHP can be operated in the future in a climate-neutral manner through an increasing share of renewable and decarbonised gases in the fuel input and at the same time continue to provide the security of supply with the non-intermittent production of energy. In this function, they do not hamper the development and deployment of low-carbon alternatives. At the same time, due to the still necessary market development for renewable and decarbonised gases to provide for the necessary amounts and reasonable cost structures, they can only be phased in gradually.

Gas-fired Cogeneration of Heat / Cool and Power plants in combination with heating networks, heat storages and possibly power-to-heat modules are outstandingly capable of supporting the energy and heat transition. On the one hand, those systems can integrate surplus power from renewable energy sources into the heat market. On the other hand, they are capable of guaranteeing the security of electricity and heat supply in times of high residual load. Achieving climate protection targets in the energy and heating sector is especially difficult in urban areas. In these cases, CHP plants represent an efficient use of an energy carrier for the simultaneous production of energy and heat for multi-storey buildings.

BDEW urgently calls the Commission to incorporate the production of electricity and cogeneration from gas as taxonomy-eligible in the framework of article 10 (2) of the Taxonomy Regulation as transitional activity.

According to article 10 (3) of the Taxonomy Regulation a transitional activity

- (i) has greenhouse gas emission levels that correspond to the best performance in the sector or industry;
- (ii) does not hamper the development and deployment of low-carbon alternatives; and
- (iii) does not lead to a lock-in in carbon-intensive assets considering the economic lifetime of those assets.

In accordance with the conditions and the need to assess the potential contribution and feasibility of all relevant existing technologies as set out in article 10 (2), BDEW proposes provisions for the generation of electricity from gas to be classified as a transitional activity. To be taxonomy-eligible and classified as transitional activity gas-fired power and CHP plants should

 substantially contribute to the overall emission reduction by performing at least 10 percent better on average than the national average direct CO<sub>2</sub> emissions per kilowatthour of non-intermittent electricity produced;



- (2) emit less direct emissions than 390 g CO<sub>2</sub>e / kwh for CCGT and 500 g CO<sub>2</sub>e / kwh for OCGT. The specific emissions of CHP generation attributable to electricity production should be calculated in line
  - either with ANNEX VII section N° 8 (Data monitoring methods) to the Commission Delegated Regulation (C(2018) 8664 final draft) determining transitional Union-wide rules for harmonised free allocation of emission allowances pursuant to Article 10a of Directive 2003/87/EC (Free Allocation Rules FAR);
  - or with Annex VI B. N° 1 d) of the Directive (EU) 2018/2001 of 11 December 2018 on the promotion of the use of energy from renewable sources (RED II);
- (3) substantially contribute to the security of supply and, therefore, do not hamper the development and deployment of low-carbon alternatives;
- (4) avoid lock-in effects underlined by a technical assessment of the capability to blend in renewable and decarbonized gases in the lifetime of the asset.
- (5) comply as a minimum with Emission Limit Values for priority air pollutants and all other relevant environmental requirements in line with either the Medium Combustion Plant Directive in case of installations with a total rated thermal capacity of less than 50 MW or the Industrial Emission Directive and the corresponding applicable BAT-AEL ranges in case of installations with a total rated thermal capacity of 50 MW or more.

The TEG report suggest e.g. that an on-site installation of High Efficiency Micro CHP is eligible under the Taxonomy. However, the emissions in micro CHP installations (natural gas) are up to 900 g CO<sub>2</sub>e / kwh, calculated accordingly to method provided in Annex VI B. No. 1 d) RED II. It is therefore not plausible to introduce different thresholds for CHP plants. It would also be desirable to apply a uniform methodology throughout the document. Currently, the TEG report focuses, for example, on CO<sub>2</sub> emissions and for other activities at being within the best / top 15 percent (e. g. point 8.4). This is coherent with the proposed BDEW threshold for the production of electricity and cogeneration from gas "performing at least 10 percent better on average than the national average direct CO<sub>2</sub> emissions per kilowatt-hour of non-intermittent electricity produced".

From 2030 onwards, it can be assumed that an increasing amount of low carbon and renewable gases will be produced and injected into the public gas grid and used for electricity generation. Therefore, BDEW proposes that after 2030 the thresholds mentioned in (1) and (2) should be progressively reduced every 5 years following an ambitious reduction path to 2050. Also, the threshold mentioned in (1) will converge with the proposed threshold in the technical annex of  $100gCO_{2}e / kWh$ .

The production of electricity from biogas shall be assessed in relation to the relative fossil fuel comparator for electricity set out in the Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources (RED II). Therefore, the threshold should be determined analogously to the RED II. This means that RED's reduction targets, with 70 instead of 85 percent GHG reduction compared to the applicable fossil fuel comparator as a starting point, and 80 percent from 2026 onwards should be applied. In addition, the BDEW calls for a reassessment of biomethane from energy crops. The technical screening criteria should recognise the positive potential from biomethane from energy crops for GHG reductions.



In addition, cogeneration of heat / cool and power from waste-to-energy plants represents another key contribution to sector integration with the benefits described above (excess power or heat used rather than wasted, stability of the power system in times of high demand). The TEG consideration of Waste-to-Energy (WtE) is a welcome step and a good anticipation of the changes to occur in the field of circular economy. The BDEW calls for the assessment and recognition of the positive contribution of Waste-to-Energy to both circular economy and EU sustainability.

## 3. Retrofit and expansion of Gas Transmission and Distribution Networks

## Sector classification and activity

Chapter 4.14 has been slightly amended in the technical annex compared to the draft report from the summer of 2019. In the description, the following sentence has been added: "The complete system must have been in place and operating for a minimum of 5 years."

There is an urgent need to define the term "the complete system" and to provide a clear explanation to the stated condition why gas networks must have been in place and operating for a minimum of 5 years in order to qualify as eligible when retrofitted. This is essential in order to provide clarity to both investors and asset owners. Otherwise, grid operators will face legal uncertainty concerning the eligibility of their investment activities.

#### **Recommendations for mitigation criteria**

In general, the BDEW supports the principles to significantly reduce GHG emissions by reducing methane leakage and to increase the volume of hydrogen and other low-carbon gases in the gas system. It is straightforward to classify as "eligible" those retrofit activities of the gas transmission and distribution systems that support these principles.

However, the metrics mentioned in this context are not sufficient and fall short to provide definitions of key terms such as the "complete system", "hydrogen-ready", "other low-carbon gases ready", and "the gas system". It is not enough to classify as eligible activities that enable the network to increase the blend of renewable and low carbon gasses, the repair of H<sub>2</sub>ready / low-carbon-gasses-ready pipelines and the retrofit for the transport of captured CO<sub>2</sub>. Also, the sole connection of plants injecting hydrogen or biogas into the gas grid require grid investments which have to be taxonomy-eligible. Besides, other investments in the existing grids as well as new built, though not immediately liaised with the transport of H<sub>2</sub> or low-carbon gasses, are necessary to prepare the future transport of low-carbon gasses. In Germany, investments are needed to enable the main future gas transport directions (North to South) which will differ from today's (East to West). The same applies for some regional challenges in the distribution grid due to former different generation mix (e. g. in the South of Germany where electricity generation was until now dominated by nuclear and coal). These investments must be considered as taxonomy-eligible as well.

The same applies to the future expansion of pure hydrogen grids connected to the energy market: By definition, in these grids, the blend of hydrogen is already 100 percent and cannot be increased. It would be unreasonable to classify investments in these grids as "not eligible".



Therefore, BDEW urgently requests to take the transportation of hydrogen via pipelines into account as sustainable activity. Equivalent to the categorisation of electricity transmission and distribution (4.9) the operation of hydrogen pipelines and the revenues derived from the activity should qualify as eligible since the transportation of hydrogen via pipeline will represent a central feature of a fully decarbonised European energy system by connecting supply and demand across long distances. Therefore, the construction of new pipelines dedicated to transport hydrogen are to be acknowledged as sustainable activity within the Taxonomy.

Before H<sub>2</sub> will prevail in the gas grids, grid operators must retrofit and expand their grids, to ensure the safe and reliable gas supply to existing household and industrial customers and to connect household and industrial customers (e. g. efficient gas-fired units for the electricity production with comparably low CO<sub>2</sub> emissions). In the future, these existing and new customers will be supplied with amounts of H<sub>2</sub>. Yet, for today's demand, they have to be supplied with today's gas mixture. In order to enable continuous secure and reliable gas supply, gas distribution and transmission system operators have to be able to retrofit and to expand their grids and household costumers, also before the "H<sub>2</sub> / low carbon gases age".

An appropriate way to take this into account would be to classify these investments as transitional activities. From BDEW perspective, the provisions of article 10 (2) on the Taxonomy Regulations are fulfilled. Especially, gas grid retrofit and expansion activities do not hamper the development or deployment of low-carbon alternatives because also the future H<sub>2</sub> and low-carbon gasses will use the grids, thus they will benefit from today's investments. As long as they are hydrogen ready or can easily be upgraded, there is no risk of a lock-in effect and the same reasoning should apply as for the electricity grids. This should also incorporate storage facilities. At least, storage of other green or carbon free gases should also be included on the same footing as hydrogen.

BDEW therefore urgently calls the Commission to incorporate, in addition to the provisions in chapter 4.14, the expansion and retrofit of all gas transmission and distribution networks which are not yet covered by chapter 4.14 as taxonomy-eligible in the framework of article 10 (2) of the Taxonomy Regulation as a transitional activity.

In addition, similar to electricity grids, the operation of interconnections between gas systems should as well as the storage of gaseous fuels be recognised in the Taxonomy. If storage of gas would not be considered as taxonomy-eligible, this would exclude synthetic natural gas (SNG) produced from renewable hydrogen and CO<sub>2</sub> from biogas plants or from direct air capture as well as CO<sub>2</sub> from not substitutable industrial process, e. g. cement industry. SNG has the same chemical characteristics as fossil methane and offers the possibility to supply renewable gas to customers who are sensitive to an increasing hydrogen admixture or who need the energy content of methane for their industrial processes.

## Recommendations for do no significant harm assessment

The retrofit and the expansion of the existing gas distribution and transmission systems are meant to maintain the safe and reliable delivery of gas to customers and to prepare the grids



for future requirements. By paving the way for the future use of low-carbon gasses, biomethane and H<sub>2</sub>, it contributes substantially to the goal of climate change mitigation.

Besides, it does not harm any of the other five environmental objectives defined in the Taxonomy Regulation: neither does it hamper climate change adaption, nor is it detrimental to the protection of water and marine resources, to the transition to a circular economy or the goal of pollution prevention and control. The protection and restoration of biodiversity and ecosystems are ensured because the grid retrofit takes place in routes already used by infrastructure. In the case of grid expansion, gas DSOs and TSOs are forced by law to avoid any harm to protected biospheres and to grant participation to interested parties in the grid development processes. This ensures that biodiversity and ecosystems are protected.

## 4. Transmission and Distribution of Electricity

With a view to a climate neutral EU by 2050, many countries have already adopted ambitious targets to increase the renewable share in their electricity system. In order to realise this objective, new grid investments are necessary. In this respect, a sound coordination between generation and network investments is essential. The successful deployment of variable renewables and electrification of carbon intensive energy uses are key dimensions of this policy and require a timely and effective development of grid infrastructure. This objective implies structural changes in countries' electricity generation mix that national grid development plans will have to address.

Moreover, unlike conventional energies, renewable energies are not necessarily produced where required, but rather where the respective natural resources are available. This entails a bigger need for grid infrastructure.

## Sector classification and activity

The scope of chapter 4.9 has been slightly amended compared to the draft report from the summer of 2019. Mainly, the third point in the description has been added: "Construction and operation of interconnections that transport electricity between separate systems". BDEW supports the changes.

## Recommendations for mitigation criteria

BDEW supports the adaptations in the metrics and threshold part:

- considering newly connected generation capacity and introduction of the "average system grid emissions factor" as an alternative criterion qualifying a system to be "deemed to be on a trajectory to full decarbonisation";
- clarification that, based on the 2019 EU JRC assessment, the interconnected European System meets the criteria for "being on a trajectory to full decarbonisation";
- clarification that this is also valid for its subordinated systems.



The second and third points are very important. The authors acknowledge that the interconnected European system has to be seen as one system. Besides, they recognise that the subordinated systems – also the distribution systems – mustn't be considered separately, but also belong to this interconnected system. These are two important aspects which have now been dealt with appropriately.

BDEW very much appreciates that, as a result of this, the system currently (before the next review) meets the eligibility criteria and is derogated from carrying out quantitative assessments to prove eligibility. The basis for this is the assessment carried out in 2019 by the Joint Research Centre (JRC) of the EU. Considering the high importance of electricity grids for the integration and transport of large amounts of electricity from renewables and the decarbonisation of the energy system, this classification is appreciated and should therefore be reflected in the Delegated Act. Furthermore, it is important that the Delegated Act confirms that the integration and that the derogation is valid until a potential review as planned in accordance with the underlying Regulation.

## 5. Production of Electricity from Hydropower

Hydropower plays a major role to achieve the European climate and energy goals. In particular, it complements the increasing share of variable renewables in the European power system and provides flexibility, firm capacity and the ability to balance variable generation.

## **Recommendations for mitigation criteria**

The BDEW calls on the Commission to clarify the threshold of a power density of more than 5W / m<sup>2</sup> for hydropower. Presumably, this refers to the area of water, but questions of allocation as to where exactly the reservoir area begins remains unclear. In the case of run-of-river plants this should be restricted to the area where the water is retained up-front. It appears particularly critical that the threshold value does not take into account the multiple benefits of the reservoirs and impoundments, since a reservoir may contribute to other purposes than to generate energy such as the drinking water supply, flood control and drought management to encounter climate change. These synergetic multiple-use constellations should be positively considered in the criteria and case-by-case examinations should be avoided.

Also, pumped storage plants should be treated in the same way as other electricity storage facilities and should not have to meet additional criteria that apply to hydropower plants. They are not to be equated with producers, as they are storage facilities and provide pure system services.

In addition, in the case of new plants existing retention constructions the reservoir shouldn't be included in the calculation. There should be a focus on the sustainability of investments in the installation of turbines on already existing weirs and existing infrastructures. By doing so, not only energy production output can be improved but also the environmental situation by investing in ecological improvements.



Finally, the BDEW does not support the recommendation in the TEG report to avoid new small hydro power plants, especially where retention constructions already exist. Small hydro power plants are for some regions a source of reliable and green energy.

#### Recommendations for do no significant harm assessment

Regarding the "Do no significant harm assessment" we indicate a study prepared by the German Ministry of Environment (BMU) and Öko Institut Darmstadt in cooperation with ESU-Services GmbH from Switzerland that investigates on the environmental pressures when it comes to small hydropower (ESU Services Bulletin 2012: "Erkenntnisse aktueller Ökobilanzen zu Strom aus Wasserkraft"). They incorporate the construction as well as the operation phase. One result is that most emissions are caused in the grid system.

## 6. Production of Electricity from Wind Power

#### Recommendations for do no significant harm assessment

Sustainable Wind Power must comply with recycling requirements (e. g. blades) and the TEG suggests that contractual agreements with recycling companies need to be in place when seeking "sustainable" classification.

"State ambition to maximise recycling at end of life based on waste management plans, dismantling/decommissioning processes at time of decommissioning (e.g. through contractual agreements with recycling partners, reflection in financial projections or official project documentation)." (4.3 Production of Electricity from Wind Power, (4) pp.219)

This phrase leads to a not negligible risk for wind power in regards of the recycling requirements because a wide range of degrees of hardness seems possible here. It is crucial which exact requirements the Commission lays down on the basis of the examples given. The BDEW calls on the Commission to neglect the introduction of contractual agreements with recycling companies. It would be very difficult for all wind power installations, to comply with such binding contractual agreements. The signing of contracts long before decommissioning seems very questionable or even impossible. Moreover, it is associated with corresponding risks, because no one can predict whether a recycling company will still exist in 20 years' time or what the state of the art for recycling will be.

Therefore, the BDEW proposes to provide for a dismantling concept with a provision for dismantling (this is currently the standard for German offshore wind farms), to take greater account of the recycling of rotor blades in the dismantling concepts or to ensure that rotor blades are recycled in accordance with valid EU standards / country-specific standards. In general, a positive list of alternative forms of verification could be considered, which on the one hand provides sufficient flexibility for new plants and existing plants, but on the other hand still allows sufficient standardisation so that costly assessments in individual cases can be avoided.



## 7. Public Transport

## **Recommendations for mitigation criteria**

Currently mitigation criteria for public transport are based on actual ridership (passenger-km) instead of capacity offered (seat-km or places-km). Though it is proposed that data will be acquired through monitoring activities from operations as well as through ex-ante demand assessments, it can be questioned whether this method will acquire data to an adequate extent. For the public transport providers, it would be preferable to refer to (available) capacity kilometres that could be directly influenced by the public transport sector instead of passenger kilometres (especially in suburban areas the relation to CO<sub>2</sub>e can be misleading). Requesting transport operators to precisely monitor the actual ridership is disproportionate. The current Corona pandemic further illustrates the evidence of this approach: as social distancing (1,5m distance between passengers) is crucial, half-empty transport vehicles are strongly recommended by the institutions.

Criteria need to take cost efficiency and profitability into consideration. Most importantly, they need to be conditional to the availability of affordable low-carbon technologies. Thus, the technologies that comply with the criteria / thresholds set in the Taxonomy need to be profitable / available at reasonable costs. This factor has not been considered in the current report.

In addition to that, the currently proposed thresholds of 50g CO<sub>2</sub>e / pkm until 2025 and 0g CO<sub>2</sub>e / pkm inhibit further development of gas-related mobility. The Taxonomy needs to consider the contribution of new technologies to GHG-reduction more carefully. For example, biomethane or renewable power-to-x ("green gas") can reduce GHG-Emissions in the transport sector not only in fuel cells drives, but also in CNG and LNG technology drives. Thus, CNG and LNG drives can be used with 100 percent fossil methane as well as with 100 percent renewable gas (methane / hydrogen). Therefore, it is important for the Taxonomy to set the right incentives towards reducing GHG-emissions, however, without discriminating technologies that are currently on their way towards GHG-neutrality.

## 8. Infrastructure for Low Carbon Transport

## **Recommendations for mitigation criteria**

The current framework does not clarify how stated criteria can be applied on road and railway construction. It remains unclear how purchasers such as municipalities can prove that the criteria are met, as it is not realistic to exclude users of conventional fuels from using the general infrastructure.

Infrastructure that is required for low-carbon emission transport should be included as long as those transport options can have a positive impact on reducing the CO<sub>2</sub>-emissions. Furthermore, the infrastructure itself is not responsible for the fuel emissions. It is primarily important to set incentives for reducing CO<sub>2</sub>-emissions of the fuel, not the infrastructure. This is valid especially in the case of gas, where the infrastructure can be compatible with 100 percent renewable gas (biomethane / hydrogen).



## 9. Passenger Cars and Commercial Vehicles

#### **Recommendations for mitigation criteria**

Gas mobility in the form of CNG and LNG, the production and use of biofuels and renewable hydrogen in fuel cell vehicles as well as other e-fuels in the transport sector can make a significant contribution to achieving climate and environmental goals. In particular, power-to-x based on (certified) renewable energies will be an essential component. The criteria should acknowledge the cost-effective contribution of low-emission mobility to the climate objectives.

The threshold excludes CNG mobility and does not acknowledge the cost-effective contribution of this low-emission mobility technology to climate objectives. By using biomethane or synthetic methane (SNG) from power-to-gas, the CO<sub>2</sub>-emissions of CNG can be decreased even further. This is also not acknowledged due to the tailpipe emission approach used in the report.

The BDEW proposes to take into account the contribution of biomethane and SNG for reaching the proposed threshold and therefore welcomes the stance taken in the report to perspectively consider a more holistic approach in the assessment of CO<sub>2</sub>-emissions. BDEW proposes a starting threshold to include gas mobility. This threshold should be reduced every 5 years in line with a net-zero CO<sub>2</sub>e in 2050.

## 10. Freight Transport Services by Road

## **Recommendations for mitigation criteria**

The duty for ongoing monitoring and verification when using advanced biofuels or renewable liquid and gaseous transport fuels of non-biological origin as well as certified low-ILUC biofuels in combination with the demonstration that an alternative is not economically viable, is a disproportionate bureaucratic burden, which could pose an investment barrier. However, investments in alternative fuels are needed to activate the decrease of CO<sub>2</sub>-emissions in the freight sector. The transport sector is a very competitive environment and blending alternative fuels with fossil fuels is an economically viable step-by-step path to CO<sub>2</sub>-emission reductions in this sector. Therefore, the BDEW proposes to include fleets that transport blended fuels in this activity.

## 11. Interurban Scheduled Road Transport

## **Recommendations for mitigation criteria**

Currently mitigation criteria for interurban scheduled road transport are similar to the public transport based on actual ridership (passenger-km) instead of capacity offered (seat-km or places-km). Although it is proposed that data will be acquired through monitoring activities from operations as well as through ex-ante demand assessments, it can be questioned whether this method will acquire data to an adequate extent. For the transport operator it would be preferable to refer to (available) capacity kilometres that could be directly influenced



by the public transport sector instead of passenger kilometres (especially in suburban areas the relation to CO<sub>2</sub>e can be misleading). Requesting transport operators to precisely monitor the actual ridership is disproportionate.

BDEW supports the deletion of the transport operator's liability to prove that investing in more fuel-efficient alternative vehicles is not economically viable but replacing this liability with a fixed threshold for the efficiency.

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