

BASF Response to the European Commission Targeted Public Consultation on the Public consultation on the revised Climate, Energy and Environmental Aid Guidelines (CEEAG)

BASF supports the Green Deal and the EU's ambition to be climate neutral by 2050, coupled with the right enabling framework for competitiveness and transformation to get there. BASF welcomes the declared objective of the Revised (hereafter CEEAG) of (i) preserving European competitiveness and (ii) facilitating the transformation toward the 2050 climate neutrality goal by enabling low carbon process development and faster substitution of carbon intensive energy carriers and feedstock from low-carbon energy.

BASF agrees with the technology neutral approach deemed necessary to deliver the Green Deal, and increasing flexibility when it comes to Aid for GHG reduction e.g. CAPEX, OPEX, 100% coverage and new funding measures such as Contracts for Difference, which are an essential range of measures to cover the cost delta for instrumental low carbon process technologies. At the same time, we have some strong concerns about some of the conditionalities, the exclusion of NACE 20.11 as an eligible sector and the absence of a real European state aid framework which would both preserve competitiveness and unleash the industrial electrification business case in a non-discriminatory way. Some of the conditionalities may inadvertently negate any Aid that undertakings would be eligible to even if they qualify for the Trade Intensity/Emissions Intensity criteria and 20.11 is a key sector for building a green Hydrogen economy. These concerns are described further below.

In addition, BASF supports the expansion of the scope of the Guidelines and the stronger focus on Circular Economy and Battery materials. The alignment of terms and definitions with the Waste Framework Directive 2008/98/EC is important. These ensure consistency and stable investment conditions under the European legal framework. We also welcome that investments eligible to state aid are rated based on the European Waste hierarchy.

With regards to section 4.5 Aid for the prevention or the reduction of pollution other than from greenhouse gases in § 224 the section notes that "*aid for the prevention or the reduction of pollution other than from greenhouse gases may be granted for investments enabling undertakings to go beyond Union standards for environmental protection...*". BASF seeks to better understand what beyond Union standards means qualitatively and/or quantitatively.

We have also provided some input with regards to the section 4.2 Aid for the improvement of the energy and environmental performance of buildings, where we have some concerns about the listed thresholds which may inadvertently discourage deep renovation measures such as insulation. This feedback can be found at the end of the document.

BASF Strategic investment projects for RES integration

For the remainder of the document, BASF feedback is focused on the sections 4.1 and 4.11, which we consider instrumental not only to contribute to our own Strategic objective of 25% absolute GHG emissions reduction by 2030 based on the year 2018, and climate neutrality by 2050, but also for the deep emissions reductions of the European Chemical sector. This programme is called Carbon Management. The key pillars are backwards RES integration and scaling low carbon process technologies such as the electric cracker and emission-free Hydrogen production via methane pyrolysis and investment in onsite electrolyzer.

BASF has recently engaged in **two strategic RES integration** projects with European partners, **the first is with [RWE](#)**. Here we focus on Green electricity and innovative downstream technologies **which could make the Ludwigshafen chemical site a lighthouse for climate protection in the chemical industry**. It would result in an additional offshore wind farm with a capacity of 2 GW and would provide BASF with green electricity for CO₂-free production processes from 2030 (including CO₂-free hydrogen). **The second is with [Vattenfall](#)**, where BASF has purchased 49.5% of the offshore wind farm Hollandse Kust Zuid (HKZ). **Once fully commissioned it will be the largest offshore wind farm in the world and the first offshore wind**

farm ever to be built without subsidies for the power produced. BASF is acquiring the electricity from the wind farm for its ownership share through a long-term power purchase agreement (PPA). It will enable BASF to implement innovative, emission-free technologies at several of its production sites in Europe. BASF's Antwerp Verbund site will benefit from the renewable power to a significant extent. The BASF Antwerp site is the largest chemical production site in Belgium and the second largest BASF Group site worldwide.

If the EU is to be a front runner for climate friendly manufacturing through the deployment of emission-free process technologies and ground-breaking innovations, the key enablers are infrastructure, access to abundant renewable electricity supply and rapid commercialization of new processes at **competitive energy prices (this includes an urgent need for removal of and/or drastic reduction of RES levies/surcharges)**. Without a stronger European policy focus including State Aid for RES levies/surcharges reduction, it will impede the transformation towards CO₂ free chemical manufacturing and negatively affect industrial competitiveness resulting in carbon and investment leakage.

RES levies/surcharges exemption should be applicable to all undertakings making GHG reduction efforts, in a non-discriminatory way

Today, BASF today cannot qualify for EEAG/German Renewable Energy Act (EEG) "Besondere Ausgleichsregelung's" cap/super-cap – special compensation scheme for electro-intensive undertakings, due to the way electro intensity is calculated (EEAG Annex 4) – as ratio of electricity costs to GVA at undertaking (legal entity) level. BASF SE's GVA is huge, given our integrated production that includes many components which are not necessarily related to a specific energy-intensive manufacturing process. In other words, BASF is currently not eligible for any RES levy relief through the German special compensation scheme – despite our huge RES integration potential (6 TWh). Any RES kWh substituting our CHP kWh would increase the cost of this very kWh by more than 100%, even if produced with own RES plants. It is critical that RES levy exemptions are applied in a non-discriminatory way to all undertakings active in a respective sector/process, to prevent competition distortion in the internal market.

To increase the uptake of large-scale RES for industrial consumers and transform our processes, operators of electro-intensive installations which procure their electricity from the public grid, or self-generate and consume, must either way receive the necessary exemptions from RES surcharges, when certain conditions are met. **The eligibility for such surcharge reductions should be non-discriminatory and based on:**

- i) undertakings operating in electro-intensive sectors and exposed to international competitiveness:
- ii) accepting different ways of RES integration like grid-procurement, on-site generation or hybrid set-ups:
- iii) the intrinsic energy intensity of a given sector or process, and not according to whether a given legal entity has the optimum boundaries to reach a specific threshold.

We are still far from the needed volumes and capacity in terms of renewable energy to unleash the industrial electrification business case. A European framework which integrates national attempts and ensures state aid for GHG reduction projects is essential in this regard. In parallel, to speed up industrial electrification efforts, we must also abolish grid bottlenecks quickly, ensure that cross-border interconnectors enable free flow of energy between countries, avoid barriers for renewable energy integration of the power used in industry and ensure access to industrial consumers with no local/regional capacities.

Section 4.1 - Aid for the reduction and removal of greenhouse gas emissions including through support for renewable energy

BASF supports the proposed new approach open to all technologies reducing GHG emissions and the fact that Aid may cover CAPEX, OPEX and up to 100% coverage. This supports ground break low carbon process solutions such as the electric cracker, methane pyrolysis (CO₂ free H₂) but also green Hydrogen, and CCS in locations where it is appropriate. Especially for RES based projects OPEX costs is a prerequisite for a strong business case and project approval. At the same time, the Guidelines must maintain a flexible approach to rapidly adapt to technological progresses, which may not yet be in R&D or pilot phase and ensure that the cost delta can be covered by State Aid.

BASF fully supports the introduction of Carbon Contracts for Difference (CCfDs) as a policy measure to close the cost gap between conventional industrial processes and CO₂-free industrial process and the scaling of e.g. Green Hydrogen or Methane Pyrolysis. CCfDs have the potential to make the abovementioned

technologies and others market ready. They can help to bridge this gap, to offer products to markets, develop these markets, and to de-risk these processes. However, we **consider instruments such as these an addition to carbon leakage protection via the EU ETS Free Allocation system**. New technologies for climate-friendly chemical production should gradually replace existing plants. To incentivize this, additional instruments (supplementary to ETS) such as CCFDs in addition to competitive electricity prices and the establishment of a hydrogen economy will be needed. For the chemical industry, which competes globally, this is necessary as long as there is no global carbon pricing. However, the introduction of carbon pricing should remain the goal. Finally, CCFDs should be drafted at a European level and be integrated with ETS as well as the State Aid Guidelines.

Section 4.11 - Aid in the form of reductions from electricity levies for energy-intensive users.

BASF values the recognition that the Chemical sector provides important building blocks to decarbonize the whole European Economy, and recalls the urgent need for section 4.11, as one of the most critical and urgent policy measures for RES integration into large scale production sites which are exposed to high RES levies/Surcharges. This provision alone can on the downside discontinue strategic investments projects, or on the upside expedite the projects and kick start deep decarbonization before 2030.

With regards to section 4.11 we have four main concerns

1. **NACE 20.11 needed as eligible sector for building a H2 economy, and other critical manufacturing processes (e.g. battery materials) and ensuring EU level playing field.** We are glad to see the confirmation of the chemical industry among the eligible sectors (annex I), as this is a critical starting point to secure the chemical industry's international competitiveness while transitioning towards climate neutrality. The inclusion of 20.13, 20.14, 20.15, 20.16 are of particular importance in this regard. However, the exclusion of NACE 20.11 (industrial gases) a.o. hydrogen production (20.11.11.50) in the draft list is highly concerning. Bundling industrial gases including H2 in a legal entity that would most likely be subject to NACE 20.11 is likely to be an attractive option for businesses to ramp up hydrogen manufacturing and sales in a growing hydrogen market. Not being eligible for levy relief would harm those businesses and the hydrogen economy at-large. And second, carbon leakage risk needs consider the full value chain impact. Industrial gases may not be trade intensive, companies active in intermediate elements of the manufacturing value chains such as H2 would be at serious risk for carbon and investment leakage. In the context of the future production of battery materials, industrial gases (NACE 20.11), is a key medium for the value chain and plays an important and economic role. Without optimized costs (RES levy exemption) for the preliminary work, the end-product, battery material, the economic feasibility would be at risk. This can distort competition and increase the risk of carbon leakage. For this reason, the industrial sector "Industrial gases (NACE Code 20.11)" must continue to be retained in the sector list.
2. **BASF is strongly against additional conditions as a basis for providing aid to eligible sectors, such as the introduction of a minimum level of levies (EUR/MWh) referring to § 356.** There are two main reasons for this:
 - Identifying the hypothetical minimum level at European level would also be a challenge: there is no single cost across Europe (and often not even with a given country), not across industries, and not even across companies. Any chosen value would be arbitrary. Two equal undertakings would thus be unequally treated.
 - It constitutes a regulatory cliff edge: it would be sufficient for prices to move by 1 c€/MWh below the threshold to suddenly move from 15% to 100% of costs to be incurred by companies. This is a too risky regulatory environment to support any industrial activity.
3. **BASF does not support the increase the minimum level of contribution for industry, from the current 15% to 25% (paragraph 359), and to increase the limit for additional costs by a factor of 3 from 0.5% to 1.5% of the gross value added (§ 360).** At a time when CO2 prices are soaring, investments in technologies need to happen and RES electricity costs incl. levies and taxes are still higher than the ones of global competitors, this would increase the carbon leakage risk and cost burden for industry significantly and impede other investments which all need to happen at the same time. A strong industrial policy requires a supporting framework and not one that gives with one hand but takes from another. Therefore, the current 15% own contribution and 0.5% GVA should be maintained.

4. Too high / disproportionate conditionality criteria risks negating any Aid given to undertakings and diverting investments to other carbon steering plans.

- BASF fully supports energy efficiency investments and optimization. BASF sites across all regions were certified in accordance with ISO 50001 in 2020. At the end of 2020, 81 sites were certified worldwide, representing 91% of our primary energy demand.
- However, energy efficiency cannot be the only KPI for aid eligibility. Reduction of energy consumption cannot be the main indicator when considering large scale industrial electrification taking place in the coming years, which will require huge volumes of green power (to replace grey power).
- The main concern is that a too simplistic view/absolute thresholds towards energy efficiency, especially in some areas where technological improvements have reached their thermodynamic levels, undertakings may find themselves 'forced' to make cost ineffective investments, and this would divert the investments needed to switch to other more effective options such as electrification.
- Therefore, the steering mechanisms which allow aid eligibility should be broadened beyond in § 365 from 'one or more' to include investments such as replacement of fossil fuels for energy input (including PPAs, Guarantees of Origin), carbon footprint of the energy (CO2 emissions factor – based on European grid), reduction in specific CO2 emissions (where entities need to demonstrate based on their portfolio and company data).

Section 4.2 aid for the improvement of the energy and environmental performance of buildings

We recommend formulating EU-wide guidelines for the promotion of energy efficiency for the building sector, in the corresponding regulations – the Energy Performance of Buildings Directive (EPBD) and the Energy Efficiency Directive (EED).

We expressly welcome the EU Commission's approach of establishing the "Efficiency First Principle" as the guiding principle for eligibility. Without the reduction of the energy demand of buildings, renewable energies will not be sufficient in 2050.

It is important to give preference to deep renovations in principle, but we do not agree with the mandatory energy saving rates in the proposed form.

- §118 (a): Individual measures and step-by-step renovations are compared to deep renovations for many homeowners – due to limited financial possibilities (despite funding) – the preferred approach to energy-efficient renovation.
- The proposed minimum reduction in energy demand of 20% would exclude many individual measures from eligibility, including individual measures on the building envelope such as basement ceiling insulation which are important for the energy efficiency and climate protection goals to be achieved. This is because these measures do not contribute to the minimum primary energy savings of 20%. We therefore ask that the 20% threshold for reducing primary energy demand be applied only to deep renovations of the entire building and, in the case of improvements through individual measures or partial renovation, to refer the 20% threshold to the improvement of the energy efficiency by the implemented measures.
- Step-by-step renovations – in particular in combination with an individual renovation roadmap – (which can lead to full renovations as a result) are extremely important for the implementation of climate targets in the building sector. Therefore, the requirements in §118 to reduce the energy demand by at least 30% over a maximum of 3 years are even more incomprehensible. This does not consider the fact that available financial possibilities are limited, nor does it take into account the timing in the normal refurbishment cycle of the components and systems that makes sense for the profitability of measures.
- We therefore ask for the deletion of the 3-year period, or the addition: "If gradual energy-efficient modernizations are implemented within the framework of an individual renovation schedule, these must be completed within 15 years."

I thank you in advance for considering the BASF feedback, and would be glad to discuss this further with the DG COMP team.

With best wishes,
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