VIK-Response

Verband der Industriellen Energie- & Kraftwirtschaft
Energie für die Industrie

Public questionnaire for the revision of the Emission Trading System (ETS) State aid Guidelines

14.05.2019

About you

Please describe the main activities of your company/organisation/association, if applicable:

VIK is the association of industrial energy consumers in Germany. For more than 70 years VIK represent in his role as industry-wide association the interests of companies from e.g. aluminum, chemicals, glass, paper steal and cement. VIK advises it´s members in all energy and energy-related environmental issues. About 80 percent of the industrial electricity consumption as well as nearly 90 percent of the supplier-independent industrial energy use and about 90 percent of the supplier-independent power generation in Germany is combined in the association.

Please indicate your sector of activity (NACE code), if applicable:

Not applicable. VIK is a non-sectoral association.

Please specify whether you have received indirect emissions cost compensation in the past (if applicable):

Yes	X
No	
I don´t know	

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If you replied yes to the question above, please specify the amount per year:

	Amount of compensation received (EUR in millions)
2012	No compensation
2013	311 Mio. Euro
2014	186 Mio. Euro
2015	243 Mio. Euro
2016	288 Mio. Euro
2017	Data not yet available
2018	Data not yet available

Please also specify how the share of indirect emissions costs over the total energy and operating costs of your undertaking has evolved since 2012 (if applicable).

The data above takes into account payments to the chemical industry, iron and steel, non-ferrous metals and paper. The profit margins of companies from different sectors diverge widely. But the reduction of the profit margin per MWh of power consumed is identical since each MWh contains the marginal cost of CO2 produced in the merit order. However only a part of the power consumed by companies is compensated. First, only power consumed by ETS installations is eligible for compensation. Auxiliary installations vital to operations are not eligible. Secondly, the power consumption of fall back installations (with no benchmark) is cut by a factor of 0.8. Thirdly, the aid intensity factor of 0.85 to 0.75 cuts the effective power compensation to 60-70% of the eligible power consumption. Fourthly, were production increases, only the power consumption of the past is compensated while companies with shrinking production and power demand get compensated for the present power consumption.

Please indicate in which Member State(s) you operate (if different from your location indicated above):

VIK represents industrial energy consumers that operate in Germany.

Section A: Evaluation questions

According to the ETS Directive, the beneficiaries eligible for aid for indirect emissions costs should be those sectors that are exposed to a genuine risk of carbon leakage due to significant indirect costs that are actually incurred from greenhouse gas emission costs passed on in electricity prices.

The 2012 ETS guidelines define "carbon leakage" as the prospect of an increase in global greenhouse emissions when companies shift production outside the European Union, because they cannot pass on the cost incurred by the EU ETS to their customers without significant loss of market share.

Financial support should therefore be limited to those electricity intensive sectors which are unable to pass through the electricity cost increase stemming from the CO2 price to their customers into product prices without significant loss of market share and which are likely for this reason to relocate to less carbon-constrained zones outside the EU.

The objective of the following questions is to gather evidence to establish whether the 2012 ETS Guidelines adequately targeted sectors exposed to a carbon leakage risk due to indirect emissions costs and whether the aid amount was adequately set to prevent carbon leakage without undermining cost-effective decarbonisation of the economy and creating undue competition distortion. The following questions are therefore only backward looking and only concern Phase 3 of the EU ETS, and should be answered taking into account the situation under Phase 3, in particular with the CO2 prices experienced during that period.

1. Are there sectors (at NACE 4 level) and subsectors (at Prodcom 8 level) which, according to you, were included in the list of eligible sectors for indirect emissions cost compensation (c.f. Annex II of the 2012 ETS Guidelines), but were not exposed to carbon leakage, as defined above?

Yes	
No	
I don´t know	X

2. Are there sectors (at NACE 4 level) or subsectors (at Prodcom 8 level) which, according to you, were exposed to a carbon leakage risk, as defined above, but were not included in the list of eligible sectors for indirect emissions cost compensation (c.f. Annex II of the 2012 ETS Guidelines)?

Yes	X
No	
I don´t know	

If you replied "yes" to question above, please list those sectors and subsectors and explain what makes them susceptible to carbon leakage:

The current circle of eligible sectors set under the 2012 ETS Aid Guidelines is too narrow. The risk of carbon leakage stems from both direct and indirect emission effects. As a methodology for defining the group of beneficiaries, we propose an approximation to the method for developing the carbon leakage list. Hence, all economic sectors should be analysed as to whether their product of trade intensity and emission intensity of indirect emissions exceeds a threshold value to be defined. In order to ensure the equal treatment of plants and a full relief of the overall process within electricity price compensation, power consumption required for the production of media necessary for the manufacturing of a product that is eligible for electricity price compensation must also be eligible for electricity price compensation, irrespective of whether these media are produced in the "own" plant of the product eligible for electricity price compensation or procured from another plant.

3. Can you identify any concrete example of carbon leakage due to indirect emissions costs?

Yes	X
No	
I don´t know	

If you replied "yes" to question above, please indicate which companies were involved:

The share of industry in the European GDP has been decreasing for many years. Deindustrialization of Europe is a reality showing that carbon leakage occurs. To a large extent, investments have been made outside Europe, much in China but also elsewhere. For example, the production of aluminum has been reduced by 1 million ton in Europe since the ETS implementation in 2005 -- leading to a production reduction of approximately 1/3. With an increasing demand for Aluminum in Europe and decrease in production in Europea carbon leakage is already happening.
A Dutch study on efficiency of the compensation shows concrete examples of carbon leakage: (https://www.rvo.nl/sites/default/files/2018/09/Beleidsevaluatie%20Subsidieregeling%20Indirecte%20emissiekosten%20ETS.pdf)

4. In case you identified any concrete example of carbon leakage due to indirect emissions costs under question 3, and based on your experience, please specify the main reasons that triggered this decision of shifting production outside the EU.

Please rate from 1 to 5, 1 being very minor reason and 5 being very important reason:

	1	2	3	4	5	I don´t know
Limited possibility to pass on indirect emissions costs to final customer					X	
Absence of indirect emissions cost compensation scheme in the Member State				X		
Other reasons. Please ate and specify in the field below			X			

Please explain the reasons for your rating and where possible provide figures:

Indirect emissions costs are only partially compensated. Other reasons of carbon leakage are energy costs and labor costs.

5. Based on your experience, has a compensation of indirect emissions costs, as defined by the 2012 ETS guidelines, been sufficient to prevent such carbon leakage?

Yes	
No	X
I don´t know	

Please substantiate your answer:

The question needs to be put in the context of the EU ETS phase 3 of the last years, where carbon prices were relatively low. The compensation level, where granted, in fact reduced the carbon leakage risk at that time. However, with rising carbon prices since last year (from almost 7 Euro to 25 Euro and a further increase is predicted) the compensation is not adequate in its present form. In 2020, in many sectors only 60 % of electrical consumption will be compensated (60 % is equal to electrical fall-back benchmark (80 %) multiplied by aid intensity (75 %).
As long as there is a risk of indirect CL, the compensation must be designed in such a way that it offers complete protection. Therefore, a full extent compensation level, the retention of the current CO_2-factors, and the cessation of the degressive approach should set the framework for the upcoming fourth trading period. In addition, green electricity (eg. PPA) should be treated equally with a view to balancing electricity prices.

6. Based on your experience, has a compensation of indirect emissions costs created market distortion?

Yes	
No	X
I don´t know	

Please substantiate your answer:

As a consequence of the different energy costs within Europe the competition in the different industry branches is clearly noticeable. This fact was also taken into account in the reform of the European Emissions Trading Directive.
Under the previous European Emissions Trading Directive, member states could grant compensation on indirect emissions costs. In the reformed Directive, the wording has been adapted so that member states should grant compensation. Those countries that do compensate for electricity costs, limit the risk of competition distortions, whereas those that do not compensate, create further distortion.
Currently, 11 member states and Norway have a legal framework to compensate indirect emission costs. Most of these member states grant companies the maximum compensation level. Clearly, the reformed directive encourages the rest of the member states to do the same.

7. Has the amount of compensation of indirect emissions costs undermined the incentive for cost-effective decarbonisation of the economy?

Yes	
No	X
I don´t know	

Please substantiate your answer:

Companies have an intrinsic interest in increasing energy efficiency due to economic viability. In fact the industrial sector in Germany has continuously increased its energy efficiency over the past decades and achieved further improvements in energy efficiency due to an overall increase of investments in energy efficient technologies during the last decade. The final energy consumption of the German industrial sector has decreased on average by 0.2 percent per year from 748 TWh in 1991 to 717 TWh in 2016 (see figure 1). During the same period, the gross value added by industry increased by 1 percent per year from 529.1 billion Euro in 1991 to 678.2 billion Euro in 2016. The energy productivity of the industrial sector increased on average between 1991 and 2016 by 1.1 percent. What is more, the German energy-intensive industry has been investing in energy efficiency for a long time and runs many of the most efficient installations in the world. Whereas investments of the industry in energy efficiency amounted to 0.13 billion Euro in 2006, this value has increased to 0.85 billion Euro in 2014. In 2012 and 2013 this number was even higher with 0.93 billion Euro and 0.94 billion Euro respectively.

8. Please specify which of the following reasons prevented carbon leakage.

Please rate from 1 to 5, 1 being very minor reason and 5 being very important reason:

	1	2	3	4	5	I don´t know
The undertakings were able to pass on most if not all the indirect emissions costs to their customers	X					
The indirect emissions cost compensation granted was effective			X			
Other support measures such as the allocation of free allowances, reductions from levies financing support to renewable energy sources or reductions on electricity taxation outweighed the higher costs linked to electricity consumption		X				
The level of CO2 price				X		
Other reasons. Please rate and specify in the field below						

Please explain the reasons for your rating and where possible provide figures:

The price development in the EU ETS during the last year (price increase from almost 7 Euro to 25 Euro and a further increase is predicted) has shown the compensation is not adequate in its present form. In 2020, in many sectors only 60 % of electrical consumption will be compensated (60 % is equal to electrical fall-back benchmark (80 %) multiplied by aid intensity (75 %). As long as there is a risk of indirect CL, the compensation must be designed in such a way that it offers complete protection.

9. The 2012 ETS Guidelines set the formulas to be used to calculate the maximum aid amount payable per installation for the manufacture of products within the sectors eligible for indirect emissions cost compensation. Do you consider these calculation formulas adequate or do you consider that they do not effectively compensate the indirect emissions costs paid by the undertakings concerned?

Yes, the calculation formulas are adequate	

No, the calculation formulas are not adequate	X

Please substantiate your answer:

For the calculation of the maximum aid amount payable per installation for the manufacture of products within the sectors eligible for indirect emissions cost compensation, the following needs to be considered: First, existing and further reductions of the aid intensity undermine the effectiveness of the carbon leakage provisions because the risk faced by the industry is not digressive. Hence, the degressive approach of the value of the aid intensity needs to be abolished. Second, in order to take into account the energy efficiencies achieved so far, the value of the electricity fall-back benchmark (currently 80%) should be increased.

10. How do administrative costs incurred by the aid application compare with the actual amount of compensation received?

Please rate from very low (administrative costs representing less than 1% of the actual amount of compensation received) to very high (administrative costs representing more than 20% of the actual amount of compensation received):

	Very low (less than 1%)	Low (between 1% and 5%)	Intermediate (between 5% and 10%)	High (between 10% and 20%)	Very high (more than 20%)	I do not know
Proportion of administrative costs in total actual amount of compensation received	X					

Please explain the reasons for your rating:

The monitoring and verification costs needed to administer compensation request are not significant.

11. Which benefits for society did the 2012 ETS Guidelines create in your view?

Please rate from 1 to 5, 1 being very minor benefit and 5 being very important benefit:

	1	2	3	4	5	I don´t know
Improved wellbeing of individuals						X
Energy Efficiency improvements						X
Reduced greenhouse gas emissions			X			
Wider macroeconomic benefits (GDP improvements, productivity enhancements, greater employment rates, improved job quality...)			X			
Other non monetisable benefits (protection of fundamental rights, social cohesion, reduced gender discrimination, international and national stability)						X
Other. Please rate and specify in the field below						

Please explain the reasons for your rating and where possible provide figures:

The protection against carbon leakage allows to safeguard employment and reduce the carbon footprint by avoiding imports from countries with lax greenhouse gas emissions governance and worse carbon footprint. Energy efficiency has improved in Germany. However, this is due to targets and measures determined in the EU Energy Efficiency Directive and the EU Governance Regulation that do work already as is explained in the answers to question 7 and 17. mix. X

12. Which costs for society did the 2012 ETS Guidelines create in your view? Please rate from 1 to 5, 1 being very minor cost and 5 being very important cost:

	1	2	3	4	5	I don´t know
Regulatory charges (fees, levies, taxes...)	X					
Substantive compliance burdens (costs to comply with substantive obligations or requirements contained in the 2012 ETS Guidelines)		X				
Administrative burdens (costs resulting from administrative activities performed to comply with information obligations included in the 2012 ETS Guidelines)	X					
Hassle costs (waiting time, delays, redundant legal provision...)	X					
Other. Please rate and specify in the field below						

Please explain the reasons for your rating and where possible provide figures:

The overall costs of the system are bearable compared to the positive impact of the compensation, provided they granted to the maximum extent.

13. Point 11 of the 2012 ETS guidelines states that “in case of electricity supply contracts that do not include any CO2 costs, no State aid will be granted”. Has this rule affected the potential for producers of renewable energy to sell their output through Power Purchase Agreements?

Yes	X
No	
I don´t know	

Please substantiate your answer:

The electricity price for PPAs is based on the wholesale price. The wholesale price is directly linked to the CO2 price. Hence, it is not justified that to exclude companies for claiming indirect compensation for PPAs. Therefore, green electricity should be treated equally in terms of electricity price compensation.

14. In your view, was it useful to have ETS State aid Guidelines compared to the counterfactual scenario where - in the absence of ETS State aid Guidelines - national measures to compensate for indirect emissions costs would have had to be designed by Member States without any guidance from the Commission?

Yes	X
No	
I do not know	

Please substantiate your answer:

ETS state aid guidelines provide legal certainty throughout the EU.

Section B: Impact Assessment questions

B1 Sectoral Eligibility

16. How should the list of eligible sectors be established for the next trading period?

The list should remain the same as the one currently applicable under the 2012 ETS Guidelines	
The list should be identical to the Carbon Leakage List for the period 2021¬2030	
The list should follow the same methodology as the Carbon Leakage List for the period 2021-2030 but only considering indirect emission intensity	
The list should be established through an adaptation of the quantitative criteria used to determine the Carbon Leakage List for the period 2021-2030	
Other	X
I do not know	

Please justify your choice:

The current circle of eligible sectors set under the 2012 ETS Aid Guidelines is too narrow. The risk of carbon leakage stems from both direct and indirect emission effects. As a methodology for defining the group of beneficiaries, we propose an approximation to the method for developing the carbon leakage list. Hence, all economic sectors should be analysed as to whether their product of trade intensity and emission intensity of indirect emissions exceeds a threshold value to be defined. In order to ensure the equal treatment of plants and a full relief of the overall process within electricity price compensation, power consumption required for the production of media necessary for the manufacturing of a product that is eligible for electricity price compensation must also be eligible for electricity price compensation, irrespective of whether these media are produced in the "own" plant of the product eligible for electricity price compensation or procured from another plant.

17. In your view, should the compensation be made conditional on?

The energy efficiency achieved (volume of production/MWh)	
The reduction of energy consumption (reduction of MWh)	
The participation in a national energy efficiency programme, where such programme exists	
It should not be made conditional	X
I do not know	

Please substantiate your answer:

The purpose of electricity price compensation is to relieve companies of the burden of higher electricity prices and the associated carbon leakage risk. For this reason, measures to increase energy efficiency must not be a criterion for maintaining electricity price compensation. In addition, there are other reasons why energy efficiency should not be a criterion for maintaining electricity price compensation. First, the targets and measures for increasing energy efficiency in the industrial sector are already regulated at EU level in the EU Energy Efficiency Directive and the EU Governance Regulation. As shown in question 7, the requirements to increase energy efficiency are already effective. Second, companies have an intrinsic interest in increasing energy efficiency due to economic viability. Therefore, further obligations at EU level within the framework of electricity price compensation would not deliver any added value.

B2 Level of Support

Aid intensity

18. Based on your experience, what should be the aid intensity at the beginning of the next trading period?

75%, as it is today	
Lower than 75%	
Higher than 75%	X
A variable aid intensity depending on trade intensity and/or the beneficiary's Gross Value Added (GVA), as defined in Annex 4 of the Guidelines on State aid for environmental protection and energy 2014-2020[12]	
I do not know	

Please substantiate your answer:

To be consistent with carbon leakage protection against direct costs, the aid intensity of indirect costs shall be set at 100 %.

Degressivity

The 2012 ETS Guidelines states that the aid granted to compensate indirect emissions costs must be reduced over time.

19. Based on your experience, should the aid intensity be degressive over the next trading period?

Yes	
No	X
I don´t know	

Please substantiate your answer:

To be consistent with carbon leakage protection against direct costs, the aid intensity shall remain stable at 100 % over the whole period 2021-2030.

20. How should the degressivity trend evolve in the next trading period?

It should remain the same as in Phase 3 (i.e. flat in years #1, #2 and #3, -5% in years #4, #5 and #6, -5% in years #7 and #8)	
The trend should be less degressive	
The trend should be more degressive	
The aid intensity should remain stable over the period, but the electricity consumption efficiency benchmarks should be updated more frequently to maintain the incentive to achieve cost-effective decarbonisation of the economy	X
I do not know	

Please substantiate your answer:

Electricity benchmark products should be updated with the same frequency as the benchmarks for direct emissions.

Electricity consumption efficiency benchmarks

The calculation formula defined under the 2012 ETS guidelines refers to electricity consumption efficiency benchmark in order to establish the level of aid that can be granted to compensate indirect emission costs. These benchmarks represent the product-specific electricity consumption per tonne of output achieved by the most electricity-efficient methods of production for the product considered.

21. How in your view should the efficiency benchmarks be updated in order to incentivise energy efficiency investments by beneficiaries?

Please substantiate your answer:

The methodology for calculating the product-specific energy efficiency benchmarks for offsetting indirect CO2 costs should be based on the methodology for calculating the product benchmarks for free allocation. In the future, the benchmarks should reflect the average performance of the 10 percent most efficient plants. Non-representative installations whose process or operating conditions cannot be replicated should not be taken into account in the calculation. For eligible products that do not have a product benchmark, the compensation aid is based on electricity consumption for the production of those products. The fallback benchmark is currently set at 80 percent electricity consumption. Due to continuous improvements in energy efficiency, the reduction potential decreases as the thermodynamic optimum is approached. The fallback benchmark should therefore be raised.

22. How often should the efficiency benchmarks be revised?

Never, they would be defined only once in the beginning of the trading period	
Every year	
One mid-term review in 2025	X
I do not know	
Other option: please specify	

CO2 emission factor

The CO2 emission factor corresponds to the CO2 emissions per MWh of electricity generated. The question is what CO2 factor to use as a basis for calculating the compensation.

23. Which type of CO2 emission factor should be used for the next trading period?

An EU-wide CO2 emission factor	
A regional CO2 emission factor	X
A national CO2 emission factor	
I do not know	

Please substantiate your answer:

The CO2 emission factor of the third trading period should be retained.

24. In case of a regional CO2 emission factor, how should the relevant regions be established?

Based on market coupling	X
Based on bidding zones	
On another basis	
I do not know	

Please substantiate your answer:

VIK supports a level playing field inside EU. Since 2012, huge investments have been made to reduce the congestion within the European electrical network. Before a single European CO2 emission factor can be applied, further investments in infrastructure are needed to establish a congestion free electricity market.

25. Do you consider appropriate and feasible to improve the current simplified marginal cost approach and determine the CO2 factor not by referring to the general electricity mix of a given area but by analysing who has been the actual marginal power plant in the relevant electricity market as observed over the entire year t-1? If so, which data sources should be taken into account?

Yes, it would be appropriate and feasible	X
No, it would not be appropriate nor feasible	
I do not know	

26. Are national energy regulators always able to identify the marginal power plant in the relevant price setting area for all relevant timeframes?

Yes	
No	
I don´t know	X

Please substantiate your answer:

CO2 price

27. Currently, the maximum amount of compensation is calculated inter alia on the basis of the forward price of the European Union Allowances (EUA) in the year t-1. Do you consider this an appropriate proxy or should alternatives be considered?

Yes, this is an appropriate proxy	X
No, this is not an appropriate proxy and alternatives should be considered	
I do not know	

Please justify your answer:

It is an appropriate approximation for the procurement situation of electricity.

Baseline output

28. What type of data should be used to determine the baseline output in the calculation formula?

Historical output determined ex ante over a sufficiently long and representative reference period	
Actual output determined ex post	X
Historical output corrected by the average of the actual output of the last 2 years, as established by Article 10a) of the ETS Directive for the allocation of free allowances	
Other	
I do not know	

Please justify your answer and specify which reference period should be considered:

In order to reflect the dynamic character of the reformed EU ETS, a baseline approach for electricity price compensation is to be rejected. Rather than that, a company should be compensated for the indirect emission costs that it faced during the previous year and therefore for the actual production that took place in that year. This approach uses real data and, hence, is the most dynamic methodology. Furthermore, it avoids over- and under-compensation due to unpredictable fluctuations in the level of production.