

The Consumer Voice in Europe

EUROPEAN COMMISSION'S DRAFT DELEGATED ACTS ON RENEWABLE LIQUID AND GASEOUS TRANSPORT FUELS OF NON-BIOLOGICAL ORIGIN

BEUC response to public consultation



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Why it matters to consumers

Consumers' electricity bills skyrocketed as a result of the ongoing energy crisis. The increase in electricity prices also led to an increase in the price of all consumer products, as their production cost increased. The reason of the crisis has been a steep increase in the price of Russian gas, which in turn made electricity more expensive. Europe is currently striving to reduce its dependence on Russian fossil fuels and fast forward the green transition. However, the current plan to start boosting renewable hydrogen production without a contextual increase in renewable power production puts the achievement of this objective at jeopardy. To make the energy transition equitable, it is key that renewable hydrogen production is not subsidised through consumers' energy bills.

Summary

BEUC welcomes the opportunity to comment on the European Commission's draft delegated acts on renewable liquid and gaseous transport fuels of non-biological origin (hereinafter RFNBOs).

With the REPowerEU package, the European Commission is planning to ramp up hydrogen and RFNBO production capabilities, to be used in sectors such as aviation and maritime transport. The proposed rules detailing how RFNBOs should be produced for it to be considered renewable risk further increasing consumers' electricity prices.

RFNBOs should be considered renewable only if they are produced from electricity generated by new renewable power generation units, which were built for the specific purpose of producing these fuels. If this is not the case, then the production of RFNBOs will massively increase the overall demand for electricity, hence further increase electricity prices for consumers.

The sustainability criteria proposed by the European Commission in the delegated acts are potentially fit for purpose. However, the drafts envisage a transition period lasting until 2027 and therefore, the facilities starting their operation before that date will not need to comply with these rules during their lifetime.

The delegated acts should remove these loopholes to ensure that renewable hydrogen production is not subsidised by consumers' energy bills.



Introduction

BEUC, The European Consumer Organisation, welcomes the opportunity to respond to the consultation on the draft delegated acts on RFNBOs. These delegated acts set requirements for hydrogen and fuels produced from hydrogen, which will be used to decarbonise the transport sector.

To keep the energy transition affordable, hydrogen should be used only in those sectors where electricity is not a viable route for decarbonisation. For instance, a study by BEUC's Austrian member Arbeiterkammer shows that wide use of hydrogen would be costly and would lead to significant land use.¹

With the REPowerEU package, the European Commission is planning to ramp up hydrogen production capabilities, aiming to achieve the ambitious target of producing 10 million tonnes of renewable hydrogen by 2030, of which 2.3 million tonnes to be used in the transport sector.

The proposed rules risk further increasing consumers' electricity prices, which have been extremely high since the summer of 2021² and are expected to remain so until Europe frees itself from its dependence on gas, particularly gas coming from Russia. BEUC therefore calls on the European Commission to ensure that renewable hydrogen production is not subsidised by consumers' energy bills.

RFNBO production requires a large amount of renewable electricity. If the RFNBO production facility takes the electricity from the grid – and not from a direct connection to renewable power generators – this high demand will inevitably lead to a significant increase in electricity prices to consumers, unless:

- (1) The electricity needed is produced by new, additional renewable power generation facilities which were built on purpose for producing these fuels and financed by the hydrogen producer through power purchasing agreements. Hence, electricity demand for hydrogen production will not be in competition with demand for other uses and for this reason will not increase prices to consumers (i.e. additionality criterion).
- (2) The hydrogen production and the electricity generation from new, additional renewable power generators take place at the same time.³

 This ensures that hydrogen producers only take electricity that is produced by the renewable power generator they have an agreement with and does not take electricity from other power generation units, creating competition with demand for other uses, increasing prices to consumers (i.e. time correlation criterion).
- (3) The hydrogen producer and the renewable power generator are located close to each other.

This ensures that electricity will not need to be transported over long distances and will not lead to an increase in the cost of operating electricity networks. This cost would be paid by all electricity users, including households (i.e. geographical correlation criterion).

If all these requirements are not met, this means that RFNBOs will not be produced only with electricity generated from renewable power installations that were built on purpose. This will make overall electricity demand drastically increase and thereby also the price of

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¹ AK, <u>Edelsprit für alles?</u>, 2021.

Wholesale electricity prices at the beginning of October 2021 were double compared to 2020. See Communication from the European Commission Tackling rising energy prices: a toolbox for action and support, COM/2021/660 final

³ Or when electricity is withdrawn from the electricity grid to be stored in batteries from which electrolysers will draw the electricity that they need for their functioning, at the same time as new additional power renewable power generators generate the electricity.



electricity for all consumers will increase. In effect, this would mean that consumers will subsidise the production of RFNBOs.

Although the Commission sets out a methodology to ensure that this is not the case, BEUC regrets that the drafts contain significant shortcomings and loopholes that if not tackled will make consumers' bill further skyrocket.

It is alarming that these loopholes were proposed without even conducting any assessment of their impact on consumers' electricity bills. This is happening in a context in which tens of millions of households across Europe are struggling to pay their bills because of the high cost of gas power production, which will inevitably increase with the proposed measures.

At the same time, it is paradoxical that the European Commission is on one side aiming at keeping consumers' bills under check with the REPowerEU package, while on the other hand opens the door for further increases with the RFNBO delegated acts.

Therefore, BEUC calls on the Commission to strengthen the proposal as explained below and in Annex I.

1. Set strict requirements for hydrogen production and do not allow free riders

The target of 2.3 million tonnes of production of RFNBOs enshrined in the REPowerEU package is equal to 70% of fuel demand in domestic aviation and maritime transport, which are the two transport modes that will require these fuels, as they are hard to electrify. This means that the Commission aims at stimulating investments so that the majority of the investments in RFNBOs production that Europe will need in the future are deployed within this decade.

In the delegated act on additionality, the Commission is proposing that until 2027 RFNBO producers will not be required to invest in new renewable power production units, which were built on purpose for the production of this fuel.

This is worrying because the drastic increase in electricity consumption caused by RFNBO production will lead to a significant growth in the overall electricity demand. Hence, this will further increase consumers' electricity prices in a moment in which Europe will still be dependent on expensive gas to generate electricity.

In addition, the Commission proposal also foresees that all RFNBO producers starting their operations before 2027 will never need to invest in new renewable power production units, built on purpose for the task of producing this fuel. This will push the industry to speed up their investments to bring most production online before that date, making any additionality requirement in legislation meaningless.

Lastly, the Commission proposes that plants producing RFNBOs in electricity bidding zones⁴ where the share of renewable energy in the electricity generation mix is over 90% do not have to comply with additionality requirements and are automatically considered renewable.

BEUC is concerned that these proposals will massively impact consumers' electricity bills. If the new RFNBO production is not accompanied by an equivalent growth of renewable electricity production, the additional electricity demand will make consumers' electricity prices further increase. This will be problematic especially because in the next five years we will already see a significant amount of hydrogen production plants entering into operation according to the REPowerEU plan. During this time, even without the additional

⁴ A bidding zone is a geographical area in which there is a single wholesale electricity market where market players can purchase and sell electricity and hence where one single wholesale electricity price applies.



demand linked to RFNBO production, prices would be expected to remain high, as Europe will still be heavily dependent on expensive gas for power generation.

This is even more problematic considering that consumers' bills in many Member States are already used to subsidise hydrogen production to some extent, as consumers pay for charges and levies linked to the production of renewable electricity, which in some cases the hydrogen industry is exempted from.⁵

Moreover, the additionality requirement is also important to ensure that RFNBOs are truly sustainable. If RFNBOs are not produced from renewable electricity generated by new renewable power plants that were purposely built, then, to produce these fuels, the energy system will need to increase power generation from gas, nuclear or coal. The reason is that while electricity generation from fossil fuels power plants can be rapidly increased (or decreased) based on the needs of the energy system, this is not the case for wind and solar power, because renewable power generation companies cannot decide when the wind blows or when the sun shines. Therefore, if the additionality requirement is not met, the additional electricity demand in the short term will need to be covered by additional fossil fuel power production. This will consequently lead to higher emissions.

For these reasons, BEUC recommends that renewable hydrogen producers should only be allowed to use electricity from new renewable power installations, which were built for the specific purpose of producing this fuel to avoid further increase of electricity prices for consumers.

To achieve this goal, BEUC recommends that:

- 1. Additionality and time correlation requirements should apply as soon as when the delegated act enters into force.
- 2. No hydrogen production plant should be exempted from additionality and time correlation requirements.

2. Make the hydrogen industry pay a fair share of the network costs they generate

According to the Commission, requiring that hydrogen production and renewable power facilities are in the same or, under certain circumstances, in a neighbouring electricity bidding zone is sufficient to ensure there is no congestion in the network. However, as recently highlighted by ACER and by the Commission itself,⁶ this is incorrect because electricity markets do not reflect the physical status of electricity networks. For example, in Germany there are often congestion problems because most power production capacities are located in the north of the country, while most of the industry users are located in the south.

Although electricity in Germany is purchased and sold in one single bidding zone (i.e. in one single market) and the rules according to which electricity is purchased and sold in that market assume that electricity grids have sufficient capacity to transport infinite amounts of electricity from the north to the south, this is not the case.

On the contrary, the capacity of German electricity grids is very limited compared to the needs of the electricity system and, to avoid blackouts, grid operators need for example to shutdown (and remunerate) some power plants when the production is too high.

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⁵ vzbv, <u>Wasserstoff nicht zu Lasten der Verbraucher finanzieren</u>, May 2021

⁶ See <u>ACER's Final Assessment of the EU Wholesale Electricity Market Design</u>, April 2022 and Communication from the European Commission, Short-Term Energy Market Interventions and Long Term Improvements to the Electricity Market Design – a course for action, <u>COM/2022/236 final</u>, 18 May 2022



If the power generation units were more evenly distributed and located close to industrial facilities, then there would not be a need to transport the majority of the power generated in Germany from the north to the south of the country through large cables, which still have an insufficient capacity for this task. If there were smaller power generation units, located closer to each industrial user, then there would be no need to have power lines having a very large capacity, as smaller amounts of electricity would only need to be transported for shorter distances.

This risk that the transport of large amounts of electricity from one side of a bidding zone to the other may cause congestions in electricity networks is not even considered in the delegated act on the greenhouse gas emission savings of low-carbon hydrogen fuels. However, the production of low-carbon hydrogen, just like the production of renewable hydrogen, would risk creating congestions in electricity networks.

For these reasons, BEUC recommends that:

- 1. Member States and National Regulatory Authorities should be required to assess the impact of expected renewable power and hydrogen production on the cost of operating electricity networks.
- 2. Based on this assessment, they should set connection charges or network tariffs for renewable hydrogen production facilities at a level that allows system operators to recover their costs.
- 3. These rules should also be integrated in the delegated act on greenhouse gas savings from RFNBOs, which sets sustainability requirements for the production of low-carbon hydrogen.



Annex I

Proposed amendments to the draft delegated acts on:

- establishing a minimum threshold for greenhouse gas emissions savings of recycled carbon fuels and specifying a methodology for assessing greenhouse gas emissions savings from renewable liquid and gaseous transport fuels of non-biological origin and from recycled carbon fuels, and
- 2. supplementing Directive (EU) 2018/2001 of the European Parliament and of the Council by establishing a Union methodology setting out detailed rules for the production of renewable liquid and gaseous transport fuels of non-biological origin

1. Set strict requirements for hydrogen production and do not allow free riders

BEUC proposed amendments to European Commission Delegated Regulation (EU) .../... of XXX supplementing Directive (EU) 2018/2001 of the European Parliament and of the Council by establishing a Union methodology setting out detailed rules for the production of renewable liquid and gaseous transport fuels of non-biological origin

European Commission draft	BEUC recommendation
Recital 15	Recital 15
(15) Because of the time needed for the planning and construction of installations generating renewable electricity as well as for developing technologies allowing for a quick adjustment of hydrogen production and the synchronisation of electricity generation and hydrogen production, the requirements set out in Article 4(2), point (a) and (b) of this Regulation should apply only from 1 January 2027. For the same reasons, the hourly matching of the production of renewable hydrogen and the production of the renewable electricity set out in Article 4(2)(c)(i) and (ii) should be gradually phased in. Until 31 December 2026, a monthly matching should apply.	(15) Because of the time needed for the planning and construction of installations generating renewable electricity as well as for developing technologies allowing for a quick adjustment of hydrogen production and the synchronisation of electricity generation and hydrogen production, the requirements set out in Article 4(2), point (a) and (b) of this Regulation should apply only from 1 January 2027. For the same reasons, the hourly matching of the production of renewable hydrogen and the production of the renewable electricity set out in Article 4(2)(c)(i) and (ii) should be gradually phased in. Until 31 December 2026, a monthly matching should apply.

European Commission draft	BEUC recommendation
Article 7	Article 7
Article 7	Article 7
Transitional phase	Transitional phase



Article 4(2), points (a) and (b) shall apply from 1 January 2027.

Until 31 December 2026, by way of derogation from Article 4 (2) (c)(i) and Article 4 (2) (c)(ii), the renewable liquid and gaseous transport fuel of non-biological origin shall be produced during the same calendar month as the renewable electricity produced under the renewables power purchase agreement or from renewable electricity from a storage asset that is located behind the same network connection point as the electrolyser and that has been charged in during the same calendar month in which the electricity under the renewables power purchase agreement has been produced.

For projects involving State aid, other than where the aid remunerates only capital expenditure, the derogations in the second paragraph shall not apply.

Article 4(2), points (a) and (b) shall apply from 1 January 2027.

Until 31 December 2026, by way of derogation from Article 4 (2) (c)(i) and Article 4 (2) (c)(ii), the renewable liquid and gaseous transport fuel of non-biological origin shall be produced during the same calendar month as the renewable electricity produced under the renewables power purchase agreement or renewable electricity from a storage asset that is located behind the same network connection point as the electrolyser and that has been charged in during the same calendar month in which the electricity under the renewables power purchase agreement has been produced.

For projects involving State aid, other than where the aid remunerates only capital expenditure, the derogations in the second paragraph shall not apply.

European Commission draft

Article 8

Article 8

Scope of application

Article 4(2), points (a) and (b) do not apply to installations producing renewable liquid and gaseous transport fuel of non-biological origin that come into operation before 1. January 2027. Any additional production capacity added to these installations following their entry into operation will fall under the scope of application of this Regulation.

BEUC recommendation

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European Commission draft

Article 4.1

1. Fuel producers may count electricity taken from the grid as fully renewable if the installation producing the renewable liquid and gaseous transport fuel of non-biological origin is located in a bidding zone where the average proportion of renewable

BEUC recommendation

Article 4.1

1. Fuel producers may count electricity taken from the grid as fully renewable if the installation producing the renewable liquid and gaseous transport fuel of non-biological origin is located in a bidding



electricity exceeded 90% in the previous calendar year and the production of renewable liquid and gaseous transport fuel of non-biological origin does not exceed a maximum number of hours set in relation to the proportion of renewable electricity in the bidding zone. This maximum number of hours shall be derived by multiplying the total number of hours in each calendar year by the share of renewable electricity reported for the bidding zone where the renewable hydrogen is produced.

zone where the average proportion of renewable electricity exceeded 90% in the previous calendar year and the production of renewable liquid and gaseous transport fuel of nonbiological origin does not exceed a maximum number of hours set in relation to the proportion renewable electricity in the bidding zone. This maximum number of hours shall be derived by multiplying the total number of hours in each calendar vear by the share of renewable electricity reported for the bidding zone where the renewable hydrogen is produced.

2. Make the hydrogen industry pay a fair share of the network costs they generate

BEUC proposed amendments to European Commission Delegated Regulation (EU) .../... of XXX supplementing Directive (EU) 2018/2001 of the European Parliament and of the Council by establishing a Union methodology setting out detailed rules for the production of renewable liquid and gaseous transport fuels of non-biological origin

European Commission draft

Recital 12

(12) In order to ensure that there is no electricity grid congestion between the electrolyser producing renewable hydrogen and the installation generating renewable electricity, both installations should be located in the same bidding zone or, in case they are located in neighbouring bidding zones, the electricity price in the bidding where the installation generating renewable electricity is located should be equal or higher than in the bidding zone where the renewable liquid and gaseous transport fuel of non-biological origin is produced or the installation generating renewable electricity under the power purchase agreement should be located in an offshore bidding zone adjacent to the bidding zone where the electrolyser is located.

BEUC recommendation

Recital 12

(12) In order to *limit* ensure that there is no electricity grid congestion between the electrolyser producing renewable hydrogen and the installation generating renewable electricity, both installations should be located in the same bidding zone or, in case they are located in neighbouring bidding zones, the electricity price in the bidding where the installation generating renewable electricity is located should be equal or higher than in the bidding zone where the renewable liquid and gaseous transport fuel of non-biological origin is produced or the installation generating renewable electricity under the power purchase agreement should be located in an offshore bidding zone adjacent to the bidding zone where the electrolyser is located.

European Commission draft

Recital 12a (NEW)

BEUC recommendation

Recital 12a (NEW)



(12a) In the context of permit processes for renewable hydrogen production installations, Member and States National Regulatory Authorities shall assess the impact of expected renewable hydrogen production on the cost of operating electricity networks. Based on this assessment, National Regulatory Authorities shall set connection tariffs charges or network production renewable hvdroaen installations at a level that allows system operators to recover their costs.

BEUC proposed amendments to European Commission Delegated Regulation (EU) .../... of XXX establishing a minimum threshold for greenhouse gas emissions savings of recycled carbon fuels and specifying a methodology for assessing greenhouse gas emissions savings from renewable liquid and gaseous transport fuels of non-biological origin and from recycled carbon fuels

European Commission draft	BEUC recommendation
Recital 13a (NEW)	Recital 13a (NEW)
	(13a) In the context of permit processes for hydrogen production installations, Member States and National Regulatory Authorities shall assess the impact of expected hydrogen production on the cost of operating electricity networks. Based on this assessment, National Regulatory Authorities shall set connection charges or network tariffs for hydrogen production installations at a level that allows system operators to recover their costs.

END

