



bijlage

Europese gedelegeerde handelingen voor hernieuwbare waterstof

Nederlandse reactie op de publieke internetconsultatie door de Europese Commissie

Directoraat-generaal Klimaat
en Energie

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Tot 17 juni vond een publieke consultatie plaats over de gedelegeerde handelingen met regels voor onder meer hernieuwbare waterstof. De Nederlandse reactie daarop vindt u hieronder. De Nederlandse reactie bevat vooral technisch commentaar, omdat het kabinet de conceptregels in lijn acht met de waterstofambities. De Europese Commissie komt binnenkort met een definitief concept en zal deze regels na twee maanden vaststellen, tenzij een meerderheid van Lidstaten of Europarlementariërs tegenstemt.

Met de twee gedelegeerde handelingen stelt de Europese Commissie dat waterstof als hernieuwbaar kwalificeert als deze 1) aantoonbaar is gemaakt met elektriciteit uit 'additionele' hernieuwbare bronnen (uitgezonderd biomassa) en 2) 70% CO₂-reductie oplevert. Waterstofproducenten moeten dan bijvoorbeeld gebruik maken van relatief nieuwe, ongesubsidieerde hernieuwbare energiebronnen en waterstof gelijktijdig produceren met de productie van de gebruikte elektriciteit. Deze regels gelden zowel voor waterstofproductie binnen de EU, als geïmporteerde waterstof. EZK en RVO hebben een informatiesessie hierover georganiseerd.¹

Het kabinet heeft gereageerd op de consultatie vanwege het grote belang van deze regels voor de vormgeving van het beleid. Ten eerste bepalen deze regels in sterke mate de ruimte voor het geven van subsidies vanwege een verwijzing naar deze regels in de Europese kaders voor Staatssteun. Ten tweede bepalen ze wat meetelt voor de voorgestelde bindende doelen voor gebruik van hernieuwbare waterstof in de industrie en transportsector (zie Kamerstuk 32 813, nr. 1043).

Amendment proposal

Motivation / comments

¹Te bezoeken via: <https://www.nat.onaewaterstofprogramma.nl/actueel/nieuws/2229843.aspx?t=Terugblik-kennissessie-%e2%80%98delegated-acts%e2%80%99-1-juni>

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DA 27.3 Recital 8	<p>If the installation producing renewable electricity and the installation producing hydrogen are not only directly connected but are also connected to the grid, evidence should be provided that the electricity used to produce hydrogen is supplied through the direct connection or that electricity taken from the grid complies to the rules for counting electricity taken from the grid as fully renewable as set out in this Regulation. The installation supplying electricity for hydrogen production through a direct connection should always supply renewable electricity. If it supplies non-renewable electricity, for instance electricity obtained from the grid that does not comply to the rules for counting electricity taken from the grid as fully renewable as set out in this Regulation, the resulting hydrogen will not be considered renewable.</p>	<p>To our opinion the combination of complying to the rules in articles 3 and 4 should be allowed. This is not clear from the original text. By making these additions it is made explicit.</p>
DA 27.3 Recital 15	<p>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 3(b) and 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</p>	<p>If the requirement on simultaneity for net-coupled electrolysers is exempted until 1-1-2027, then the same requirement for direct-coupled electrolysers should also be exempted until 1-1-2027.</p>

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	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.	
DA 27.3 Art.3(c)	the installation producing electricity is not connected to the grid, or the installation producing electricity is connected to the grid but a smart metering system that measures all electricity flows from the grid shows that no electricity has been taken from the grid to produce renewable liquid and gaseous transport fuel of non-biological origin, or the electricity taken from the grid complies to the rules for counting electricity taken from the grid as fully renewable as set out in this Regulation.	To our opinion the combination of complying to the rules in articles 3 and 4 should be allowed. This is not clear from the original text. By adding this sentence it is made explicit.
DA 27.3 Art.4.1		How is the 90% limit defined? And is the exemption for a full year (e.g. for 2023 when the average share in 2022 >90%), or should it be updated more frequently? Monthly or daily?
DA 27.3 Art.4.1	Add the following sentence to the end of the article: The average proportion of renewable electricity is calculated using the definition of renewable energy in Directive (EU) 2018/2001 article 2(1).	In the DA 27.3 a definition is given for 'installation generating renewable electricity' in which electricity from biomass is excluded. It should be clear that for calculating the average proportion of renewable electricity the RED-II definition of renewable energy is taken as electricity from biomass is to be included in calculating this proportion.

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DA 27.3 Art.4.2(b)		1. Are EU subsidies treated as subsidies under this requirement? Or only State aid? 2. When should the electricity producers demonstrate they have received 'no net support'? Before coming into operation of the hydrogen production installation?
DA 27.3 Art.4.2(d)	Please renumber the points (a), (b) and (c) in article Art.4.2(d) into (i), (ii) and (iii).	This will make numbering consistent (the numbering in 4.2(c) is done in the same way) and will improve readability of article 4.
DA 27.3 Art.4.3		How will 'installations used for research, testing and demonstration' be defined?
DA 27.3 Art.5(a)	Add to the end of this article 5.(a): “(v) the amount of electricity that does count as fully renewable according to the criteria set out in Article 4(4).”	This should be added as to make the documentation complete.
DA 27.3 Art.5		1. Which party is responsible for this disclosure obligation? 2. Shouldn't more information be added? Like which RES source is used in case a hydrogen producer has concluded multiple PPAs?
DA 27.3 Art.6		Article 6 touches upon two different issues or topics (imports as well as certification) which is unusual and might therefore be ambiguous and cause confusion. We assume article 6 was meant to state that certification should be allowed and would exempt from following the regulation FOR IMPORTED FUELS ONLY.

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		Also a full exemption of the regulation would most likely not be in line with article 7 and 19 RED (as mentioned in recital 14). Could the Commission confirm this and specify the text accordingly by explicitly mentioning imported fuels?
DA 27.3 Art.7	The first sentence should be removed as it overlaps with the exemption created by article 8.	If the points (a) and (b) in article 4(2) don't apply for projects built before 1/1/2027, then obviously they will apply from 1/1/2027 onwards for new projects.
DA 27.3 Art.7, first paragraph	Article 3(b) , Article 4(2), points (a) and (b) shall apply from 1 January 2027.	If the requirement on simultaneity for net-coupled electrolysers is exempted until 1-1-2027, then the same requirement for direct-coupled electrolysers should also be exempted until 1-1-2027.
DA 27.3 Art.8		Please clarify whether this indeed means that projects built before 1/1/2027 will never have to adhere to the requirements mentioned in the article over their entire lifetime, and that this also applies for any additions made to the hydrogen production installation after 1/1/2027 but within the 24/36 months period during which the additional capacity would qualify as having the same starting date.
DA 28.5 Annex A, point 1		"E i elastic" and "e i rigid" should be defined / have not been defined unambiguously.

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		<p>The meaning of "E ex use" should be explained more in detail (or rather defined as well) as there might be room for different interpretations. Given recital 10 it should be clarified that solely emissions which are avoided and are already accounted for should be declared as E ex use. Furthermore the producer of RCF should be obliged to prove that the emissions are properly accounted for during the original use of carbon before the production of the RCF.</p> <p>The last sentence of A 1. is most likely not in line with art 30.1 RED (at least not for a mixture in which "other fuels" as mentioned would constitute of biofuels). According to 30.1 a mass balanced approach should be applied.</p>
<p>DA 28.5 Annex A, point 1 and point 2</p>	<p>Emissions from the manufacture of machinery and equipment and emissions from compressing and distribution of hydrogen[†] for its direct use of hydrogen in vehicles shall not be taken into account.</p> <p>For all renewable liquid and gaseous transport fuels of</p>	<p>The formula in the beginning of point 1 makes clear that GHG emissions of RFNBO's shall be calculated along the total pathway of production (including emissions due to electricity production), transport and end-use of the RFNBO. Why then exclude emission for compression and transport of the RFNBO's, such emissions are also included in GHG calculations on biofuel pathways and can be significant depending on for instance travel distance?</p>

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	<p>non-biological origin and recycled carbon fuels, the total emissions from the fossil fuel comparator referred to under point 2 shall be 94 gCO₂eq/MJ.</p>	<p>In order to do so, the FFC of 94 gCO₂eq/MJ should be recalculated to include compression from 30 to 300 bar and to include transport in a tube trailer over an average distance of e.g. 100 km.</p> <p>This is an important point, as the current (unamended) formulation does not include a GHG incentive to limit the emissions due to transport of hydrogen. For instance, hydrogen transported by tube trailer from the far east of Russia into The Netherlands would be considered to meet the 70% GHG reduction limit (whereas it will not when taking transport emission into account). Also transport distances by ship might be limited by the 70% GHG reduction limit when the ship is fueled by fossil fuels.</p>
DA 28.5 Annex A, point 5	<p>Electricity qualifying as fully renewable according to Article 27(3) of the methodology set out in Directive 2018/2001, shall be attributed zero greenhouse gas emissions.</p>	<p>Using the same formulation in points 5 and 6 makes the methodology clearer.</p>
DA 28.5 Annex A, point 6 second paragraph	<p>Alternatively, electricity taken from the electricity grid that is used in the production process of renewable liquid and gaseous transport fuels of non-biological origin and recycled carbon fuels that does not qualify as fully renewable according to Article 27(3) of Directive 2018/2001, may be attributed greenhouse gas emissions values depending on the number of full load hours the</p>	<p>Remove point 6, second paragraph from DA 28.5 Annex A, because "the marginal unit" is a theoretical concept that is used when the electricity market is described and/ or modelled. For this point 7 to be applied, it will be necessary to know which electricity production unit is the actual marginal unit in a given member state for each hour of a year. The Dutch TSO</p>

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	<p>installation producing renewable liquid and gaseous transport fuels of non-biological origin and recycled carbon fuels is operating. Where the number of full load hours the electrolyser is producing is equal or lower than the number of hours in which the marginal price of electricity was set by installations producing renewable electricity or nuclear power plants in the preceding calendar year for which reliable data are available, grid electricity used in the production process of renewable liquid and gaseous transport fuels of non-biological origin and recycled carbon fuels shall be attributed a greenhouse gas emissions value of zero g CO₂eq/MJ. Where this number of full load hours is exceeded, grid electricity used in the production process of renewable liquid and gaseous transport fuels of non-biological origin and recycled carbon fuels shall be attributed a greenhouse gas emissions value of 183 g CO₂eq/MJ.</p>	<p>indicates that "the complex European electricity market makes it impossible to identify which is the marginal unit, as there will not be a single electricity plant that can be considered to be the marginal unit". On request we will provide a more detailed substantiation.</p>
<p>DA 28.5 Annex A, point 7</p>	<p>Alternatively, the greenhouse gas emissions value of the marginal unit generating electricity at the time of the production of the renewable liquid and gaseous transport fuels of non-biological origin in the bidding zone may be used if this information is publicly available from a reliable source.</p>	<p>Remove 7 from DA 28.5 Annex A, because "the marginal unit" is a theoretical concept that is used when the electricity market is described and/ or modelled. For this point 7 to be applied, it will be necessary to know which electricity production unit is the actual marginal unit in a given member state for each hour of a year. The Dutch TSO indicates that</p>

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		<p>“the complex European electricity market makes it impossible to identify which is the marginal unit, as there will not be a single electricity plant that can be considered to be the marginal unit”. On request we will provide a more detailed substantiation.</p>
<p>DA 28.5 Annex A, point 7</p>	<p>Alternatively, the greenhouse gas emissions value of the marginal unit generating electricity at the time of the production of the renewable liquid and gaseous transport fuels of non-biological origin in the bidding zone may be used if this information is publicly available from a reliable source the national transmission system operator. <i>This alternative may only be used if it is applied during all hours in which grid electricity used in the production process of renewable liquid and gaseous transport fuels of non-biological origin and recycled carbon fuels does not qualify as fully renewable according to Article 27(3) of Directive 2018/2001 within the time span over which the greenhouse gas calculation is made.</i></p>	<p>This proposal is for when point 7 will not be removed (see line above).</p> <p>On the amendment proposal in bold: The national transmission system operator is the only reliable source that knows which electricity plant is the marginal unit at a given hour.</p> <p>On the amendment proposal in <i>italic</i>: To our understanding the non-amended text would allow that for every single hour in the time span over which the calculation is made, the person making the calculation can – for grid electricity used that does not qualify as fully renewable according to Article 27(3) – choose between the GHG intensity following from article 6 first paragraph and the GHG intensity following article 7. Such cherry-picking should be avoided, therefore, the person making the calculation should to our opinion choose which of the methods (art. 6 first paragraph, art. 6 second paragraph, art. 7) is used for the whole period over which the GHG calculation is made.</p>

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		For the method described in article 6 second paragraph it is clear that this method is applied for all hours in the whole period over which the GHG calculation is made.
DA 28.5 Annex A, point 7	7. Alternatively, As a second alternative, the greenhouse gas emissions value of the marginal unit generating electricity at the time of the production of the renewable liquid and gaseous transport fuels of non-biological origin in the bidding zone may be used if this information is publicly available from	This proposal is for when point 7 will not be removed (see line above). Combine point 7 to point 6, as point 7 is a (second) alternative to the method proposed in point 6. By putting this alternative in a new point it is not fully clear to what it is an alternative. Cherry-picking should be avoided.
DA 28.5 Annex A, point 8	Replace (two times) "GHG emissions of elastic inputs" with "GHG emissions of elastic inputs other than electricity".	Electricity is also an elastic input, however, GHG emissions of the elastic input "electricity" should not be taken from sources such as the JEC WTW report, ECOINVENT, E3, GEMIS, etc, as this delegated act contains detailed rules on the GHG emissions for grid electricity and for electricity that qualifies as fully renewable according to the methodology set out in Directive 2018/2001.
DA 28.5 Annex A, points 8 and 9	Remove either 8. GHG emissions of elastic inputs that are obtained from an incorporated process shall be determined based on data from their actual production process. This shall include all emissions arising due to their production	If GHG emissions from elastic inputs are not based on the values included in Part B of Annex A, then they cannot both be (i) taken from the latest version of the JEC-WTW report, the ECOINVENT database, official

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	<p>over the whole supply chain (including emissions arising from the extraction of the primary energy required to make the input, processing of the input and transportation of the input). Combustion emissions related to the carbon content of fuel inputs shall not be included⁴.</p> <p>However, GHG emissions from the elastic inputs that are not obtained from an incorporated process shall be determined based on the values included in Part B of this Annex. If the input is not included in the list, information of the emission intensity may be drawn from the latest version of the JEC-WTW report, the ECOINVENT database, official sources such as the IPCC, IEA or government, other reviewed sources such as the E3 and GEMIS database and peer reviewed publications.</p> <p>or</p> <p>9. The supplier of each input, excluding those where the values are taken from part B of this Annex, shall calculate the emissions intensity⁵ of the input following the procedures in this document, and report the value to the next production step or final fuel producer. The same rule applies to the suppliers of inputs further back in the supply chain.</p>	<p>sources such as the IPCC, IEA or government, other reviewed sources such as the E3 and GEMIS database and peer reviewed publications, and (ii) be calculated by the supplier of the input.</p> <p>So one of the two options should be deleted. As GHG calculations will be checked by the auditors of voluntary schemes, and as values from the latest version of the JEC-WTW report etc. can also be checked by the auditor but calculations by suppliers of inputs will not be checked (as the conformity assessment will not be performed by suppliers of inputs) we suggest to remove point 9 and keep the second paragraph of point 8.</p> <p>if point 9 should also apply to rigid inputs, then point 9 should be rephrased into "9. The supplier of each rigid input, excluding.. etc. "</p>
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DA 28.5 Annex A, point 14	The greenhouses-gases greenhouse gases taken into account ...	Spelling error
DA 28.5 Annex B	In the first table, the values for lignite are not taken over correctly. The correct order should be (from left to right in this row): Lignite 116.7 1.7 115.0	
DA 28.5 Annex C	Update the values in Table A to the latest year (2019 or 2020) for which values from EuroStat are available. Related question to the European Commission services: Can the Commission services share these calculations via the Committee on the Sustainability of Biofuels, Bioliquids and Biomass fuels?	The values in this table are important for making GHG calculations for RFNBO's. As 2019 or 2020 numbers are probably lower than the 2018 number (as a result of increasing shares of renewables in the electricity mix) the table should be updated using the latest Eurostat numbers available. The calculation as described In Annex C which leads to the values in Table A of DA 28.5 Annex C is not straightforward. It should be avoided that many stakeholders try to make this calculation and that – as a result of the complexity of this calculation – several numbers will be used for the emission intensity of electricity for a certain member state in a certain

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		<p>year. This will lead to cherry-picking when stakeholders will look for the lowest number that is accepted by auditors (as part of checking the calculations in the certification process using the voluntary schemes). The Committee on the Sustainability of Biofuels, Bioliquids and Biomass fuels (or the member states participating in the Committee on the Sustainability of Biofuels, Bioliquids and Biomass fuels) can avoid such cherry-picking by distributing an updated Table A once updated underlying numbers have become available through Eurostat.</p>