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# DRAFT REPORT

on the European Hydrogen Bank  
(2023/0000(INI))

Committee on Industry, Research and Energy

Rapporteur: Robert Hajšel

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## MOTION FOR A EUROPEAN PARLIAMENT RESOLUTION

### on the European Hydrogen Bank (2023/0000(INI))

*The European Parliament,*

- having regard to the Treaty on the Functioning of the European Union (TFEU), and in particular to Article 194 thereof,
- having regard to the agreement adopted at the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change in Paris on 12 December 2015 (the Paris Agreement),
- having regard to the Commission communication of 16 March 2023 on the European Hydrogen Bank (COM(2023)0156),
- having regard to the Commission communication of 1 February 2023 entitled ‘A Green Deal Industrial Plan for the Net-Zero Age’ (COM(2023)0062),
- having regard to the Commission communication of 18 May 2022 entitled ‘REPowerEU Plan’ (COM(2022)0230),
- having regard to the Commission communication of 8 July 2020 entitled ‘A hydrogen strategy for a climate-neutral Europe’ (COM(2020)0301),
- having regard to the Commission communication of 8 July 2020 entitled ‘Powering a climate-neutral economy: An EU Strategy for Energy System Integration’ (COM(2020)0299),
- having regard to the Commission communication of 10 March 2020 entitled ‘A New Industrial Strategy for Europe’ (COM(2020)0102),
- having regard to the Commission communication of 11 December 2019 on the European Green Deal (COM(2019)0640),
- having regard to the Commission proposal of 16 March 2023 for a regulation of the European Parliament and of the Council establishing a framework for ensuring a secure and sustainable supply of critical raw materials and amending Regulations (EU) 168/2013, (EU) 2018/858, 2018/1724 and (EU) 2019/1020 (COM(2023)0160),
- having regard to the Commission proposal of 16 March 2023 for a regulation of the European Parliament and of the Council on establishing a framework of measures for strengthening Europe’s net-zero technology products manufacturing ecosystem (Net Zero Industry Act) (COM(2023)0161),
- having regard to Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity<sup>1</sup>, which is currently being

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<sup>1</sup> OJ L 158, 14.6.2019, p. 54.

revised,

- having regard to Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU<sup>2</sup>, which is currently being revised,
- having regard to Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources<sup>3</sup>, which is currently being revised,
- having regard to Directive 2014/94/EU of the European Parliament and of the Council of 22 October 2014 on the deployment of alternative fuels infrastructure<sup>4</sup>, which is currently being revised,
- having regard to Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC<sup>5</sup>, which is currently being revised,
- having regard to Regulation (EC) No 715/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the natural gas transmission networks and repealing Regulation(EC) No 1775/2005<sup>6</sup>, which is currently being revised,
- having regard to Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC<sup>7</sup>,
- having regard to Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy<sup>8</sup>, which is currently being revised,
- having regard to Council Regulation (EU) 2022/2576 of 19 December 2022 enhancing solidarity through better coordination of gas purchases, reliable price benchmarks and exchanges of gas across borders<sup>9</sup>,
- having regard to Council Regulation (EU) 2021/2085 of 19 November 2021 establishing the Joint Undertakings under Horizon Europe and repealing Regulations (EC) No 219/2007, (EU) No 557/2014, (EU) No 558/2014, (EU) No 559/2014, (EU) No 560/2014, (EU) No 561/2014 and (EU) No 642/2014<sup>10</sup>,
- having regard to Council Regulation (EU) No 559/2014 of 6 May 2014 establishing the

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<sup>2</sup> OJ L 158, 14.6.2019, p. 125.

<sup>3</sup> OJ L 328, 21.12.2018, p. 82.

<sup>4</sup> OJ L 307, 28.10.2014, p. 1.

<sup>5</sup> OJ L 211, 14.8.2009, p. 94.

<sup>6</sup> OJ L 211, 14.8.2009, p. 36.

<sup>7</sup> OJ L 275, 25.10.2003, p. 32.

<sup>8</sup> OJ L 327, 22.12.2000, p. 1.

<sup>9</sup> OJ L 335, 29.12.2022, p. 1.

<sup>10</sup> OJ L 427, 30.11.2021, p. 17.

Fuel Cells and Hydrogen 2 Joint Undertaking<sup>11</sup>,

- having regard to Commission Delegated Regulation (EU) .../... of 10 February 2023 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 (C(2023)1087),
- having regard to Commission Delegated Regulation (EU) .../... of 10 February 2023 supplementing Directive (EU) 2018/2001 of the European Parliament and of the Council by establishing a minimum threshold for greenhouse gas emissions savings of recycled carbon fuels and by 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 (C(2023)1086),
- having regard to Commission Delegated Regulation (EU) 2019/856 of 26 February 2019 supplementing Directive 2003/87/EC of the European Parliament and of the Council with regard to the operation of the Innovation Fund<sup>12</sup>,
- having regard to its resolution of 19 May 2021 on a European Strategy for Hydrogen<sup>13</sup>,
- having regard to its resolution of 19 May 2021 on a European strategy for energy system integration<sup>14</sup>,
- having regard to its resolution of 10 July 2020 on a comprehensive European approach to energy storage<sup>15</sup>,
- having regard to its resolution of 15 January 2020 on the European Green Deal<sup>16</sup>,
- having regard to its resolution of 14 March 2019 on climate change – a European strategic long-term vision for a prosperous, modern, competitive and climate neutral economy in accordance with the Paris Agreement<sup>17</sup>,
- having regard to its resolution of 25 October 2018 on deployment of infrastructure for alternative fuels in the European Union: time to act!<sup>18</sup>,
- having regard to its resolution of 6 February 2018 on accelerating clean energy innovation<sup>19</sup>,
- having regard to the opinion of the European Economic and Social Committee of ... on the EU Hydrogen Bank,
- having regard to the opinion of the European Committee of the Regions of ... on the EU

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<sup>11</sup> OJ L 169, 7.6.2014, p. 108.

<sup>12</sup> OJ L 140, 28.5.2019, p. 6.

<sup>13</sup> OJ C 15, 12.1.2022, p. 56.

<sup>14</sup> OJ C 15, 12.1.2022, p. 45.

<sup>15</sup> OJ C 371, 15.9.2021, p. 58.

<sup>16</sup> OJ C 270, 7.7.2021, p. 2.

<sup>17</sup> OJ C 23, 21.1.2021, p. 116.

<sup>18</sup> OJ C 345, 16.10.2020, p. 80.

<sup>19</sup> OJ C 463, 21.12.2018, p. 10.

Hydrogen Bank,

- having regard to Rule 54 of its Rules of Procedure,
  - having regard to the opinion of the Committee on Budgets,
  - having regard to the report of the Committee on Industry, Research and Energy (A9-0000/2023),
- A. whereas the EU is a party to the Paris Agreement and has committed to reducing greenhouse gas emissions by at least 55 % by 2030 compared to 1990 levels and to achieving climate neutrality by 2050;
  - B. whereas hydrogen can be used as a feedstock, a fuel or an energy carrier and has the potential to decarbonise hard-to-abate industries and heavy transport;
  - C. whereas hydrogen can also be used as energy storage to balance the energy system, thereby contributing to energy system integration;
  - D. whereas the EU hydrogen strategy has set an objective of installing at least 40 GW of renewable hydrogen electrolyzers and producing 10 million tonnes of renewable hydrogen in the EU by 2030 and the REPowerEU plan has proposed to complement this objective by importing the same amount of renewable hydrogen;
  - E. whereas fuel cells and electrolyzers require chemicals, technology-intensive components and several critical raw materials, in particular platinum-group metals, the main producers of which are not located in the EU;
  - F. whereas a market for renewable hydrogen remains to be built and will require appropriate customer protection and significant investments;
1. Welcomes the Commission communication on the European Hydrogen Bank (EHB); notes that the name ‘European Hydrogen Bank’ can be misleading, as this is not a bank but an initiative aiming to coordinate activities and financing to support renewable hydrogen projects;
  2. Recalls that the only sustainable form of hydrogen is renewable hydrogen; notes that electrolyzers account for less than 4 % of total hydrogen production in the EU; notes that low-carbon hydrogen could play a role during the transition to a net-zero economy;
  3. Considers that, to secure the EU’s industrial sovereignty in a context of open strategic autonomy, the EHB should strongly prioritise ramping up domestic production;
  4. Underlines that hydrogen production via electrolysis is water-intensive; calls on the Commission and the Member States to pay specific attention to resource efficiency and to the Water Framework Directive, in particular for regions at risk of drought;
  5. Emphasises that Hydrogen Valleys play an important role in fostering innovation and contributing to the local economy;

***Financial support for the domestic production of renewable hydrogen***

6. Welcomes the Commission's decision to launch a first pilot auction to support renewable hydrogen; takes note of the budget of EUR 800 million over 10 years;
7. Asks the Commission to consider complementary mechanisms such as grants, contracts for difference and carbon contracts for difference;
8. Reiterates the importance of geographical balance to enable the production and use of renewable hydrogen across the EU; calls on the Commission to develop regional auctions;
9. Stresses that the design of future auctions should restrict the sale of renewable hydrogen to hard-to-abate industries and heavy transport;
10. Asks the Commission to not only consider price, but also to include a clear system of bonus points for the ranking of bids; notes that such a system should reward bids that deliver the highest level of sustainability or lead to significant job creation and promote high-quality traineeships and the reskilling or upskilling of workers;
11. Recognises the urgent need to scale up the production of electrolyzers in the EU; proposes differentiating between operating and capital expenditure; considers that potential support for capital expenditure on low-carbon hydrogen should only be directed towards investments that can contribute to the production of renewable hydrogen at a later stage, in particular the purchase of electrolyzers, and should not cover operating expenditure on low-carbon hydrogen;

#### ***Non-financial support for the EU hydrogen ecosystem***

12. Welcomes the Commission's idea of launching the concept of 'auctions as a service'; considers that this could lower the administrative costs for the Member States;
13. Notes the Commission's intention to assess the possible extension of demand aggregation and joint auctioning to renewable hydrogen; takes note that the Commission is exploring options for an instrument inspired by the transparency provisions of the EU Energy Platform;
14. Calls for an evaluation of the EU Energy Platform and the joint purchases of gas established by the Council under Article 122 TFEU; calls on the Commission to start working on a legislative proposal under the ordinary legislative procedure to extend the duration of the EU Energy Platform;

#### ***Imports of renewable hydrogen***

15. Notes that, despite an increase in the domestic production of renewable hydrogen, growing demand would require imports from non-EU countries;
16. Recalls that the CBAM will apply to hydrogen; calls on the Commission to deliver a robust certification scheme for imports of renewable hydrogen, equivalent to the rules applying to domestic production;
17. Urges the Commission to prepare guidelines with clear criteria for the selection of producers from non-EU countries that would be eligible for support, based on

geopolitical risks, alignment with EU values and commitment to sustainability;

18. Stresses the importance of diversifying suppliers and maintaining a fair global playing field when providing support for renewable hydrogen production in non-EU countries; proposes requiring the use of the euro for imports of renewable hydrogen receiving EU support;

#### ***Streamlining of EU instruments and financial implications***

19. Takes note of the budget of EUR 3 billion for the EHB that was announced in the 2022 State of the Union address; calls on the Commission to increase this budget;
20. Asks the Commission to clarify the yearly budget available under each pillar of the EHB, prepare a road map of planned auctions and, where appropriate, make a legislative proposal for a financial instrument targeting imports from non-EU countries;
21. Expresses concerns about the overall budget of the EHB compared to the subsidies given by economic partners and competitors, in particular China and the USA; encourages the Commission to expand the share of the Innovation Fund dedicated to the EHB and use the midterm review of the multiannual financial framework (MFF) to increase the resources allocated to the EHB;
22. Insists on making the EHB the single point of contact for information on EU funding available to support renewable hydrogen projects;

#### ***Accountability and reporting***

23. Stresses the need for an annual report by the Commission assessing progress in the development of the renewable hydrogen market and evaluating the activities of the EHB; asks that this report also evaluate the geographical breakdown of funding, the number of jobs created, changes in supply and demand, the cost of renewable hydrogen compared to other forms of hydrogen, and the development of dedicated hydrogen infrastructures;
24. Requests that the Commission submit a comprehensive evaluation of the EHB before its proposal for a new MFF;

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25. Instructs its President to forward this resolution to all EU institutions and the Member States.

## EXPLANATORY STATEMENT

Renewable hydrogen is essential for the decarbonisation of the European economy, in particular in hard-to-abate industries and heavy transport. It can be also used for energy storage, contributing to the integration of energy systems. The European Commission has set an ambitious objective of producing 10 million tonnes of renewable hydrogen by 2030 in the EU. In the REPowerEU communication, the Commission set an additional target of importing 10 million tonnes by 2030.

An EU market for renewable hydrogen still needs to emerge. Creating an efficient and transparent market will require significant investments, primarily from the private sector. The Commission estimates that domestic production of renewable hydrogen will cost between EUR 335 and 471 billion. Imports would require a further EUR 500 billion. Considering the size of those investments, public funding should only serve as a catalyst for the creation of a hydrogen market. Financial support should not continue once the market has been developed.

Renewable hydrogen needs to overcome multiple challenges. First, the production of renewable hydrogen is not at scale; manufacturing fuel cells and electrolysers requires chemicals, technology-intensive components and several critical raw materials for which the main producers are not located in the EU. Second, markets are price-driven, and consumers are not willing to pay more for renewable hydrogen, which currently has a higher price compared to other forms of hydrogen. Third, infrastructures are yet to be deployed to allow hydrogen to be transported. Last, the production of renewable hydrogen is water-intensive. Therefore, specific attention is required to ensure resource efficiency in line with the Water Framework Directive, in particular in regions at risk of water scarcity.

The Communication on the European Hydrogen Bank (EHB) is a positive step towards ramping up the domestic production of renewable hydrogen and allowing a market to emerge. It also suggests a framework for importing renewable hydrogen in the EU and streamlining existing EU financial instruments to support the production of renewable hydrogen.

This draft report identifies areas where improvement is necessary.

### ***Financial support for the domestic production of renewable hydrogen***

The Commission decided to set up a first pilot auction with a budget of EUR 800 million over 10 years with a fixed premium per kilogram of renewable hydrogen. There should be an immediate assessment of this pilot auction, including the possibility of introducing contracts for difference and/or carbon contracts for difference.

Auctions should ensure geographical balance and take into account sustainability and social aspects. In that regard, the Commission should create regional auctions to ensure that renewable hydrogen is produced and used across the EU. It should also create a system rewarding bids that commit to the highest level of sustainability criteria, deliver significant job creation in the EU, and promote skills development.

The first auction does not specify the sectors that would be eligible for using renewable hydrogen. However, renewable hydrogen will only be available in limited quantity.

Therefore, priority should be given to sectors with the highest potential for decarbonisation, namely hard-to-abate industries and heavy transport.

The Commission should not only focus on fixed premium allocated via auctions, but also create grants. Even with regional auctions, there is a risk that auctions would only allocate funding to existing leaders on the market. Grants should help scale up production of renewable hydrogen by SMEs or emerging players.

### ***Non-financial support for the EU hydrogen ecosystem***

In its communication on the EHB, the Commission expresses interest in exploring the possibility of including a mechanism for demand aggregation and joint auctioning of renewable hydrogen. The Commission also mentions the transparency provisions of the EU Energy Platform. Before applying aggregation of demand, joint auctioning or transparency requirements, the Commission should prepare a comprehensive evaluation of the effects of those existing measures on natural gas and an impact assessment of the expected effects on hydrogen flows.

As the EU Energy Platform was created under an emergency regulation of the Council based on Article 122 TFEU, its application is only temporary. The Regulation will expire at the end of 2023. Prolonging the EU Energy Platform via another emergency regulation would unfairly exclude Parliament from the decision-making process. If the provisions of the EU Energy Platform are to be implemented also on hydrogen and on a permanent basis, the Commission should immediately start working on a legislative proposal under the ordinary legislative procedure.

### ***Imports of renewable hydrogen***

A general principle should be that domestic production of renewable hydrogen remains the priority when discussing potential support for imports. If the cost for production and transportation of renewable hydrogen from third countries is lower compared to that of domestic production, the justification for providing an additional fixed premium or any form of financial support covering non-EU production seems, at best, questionable.

Furthermore, a prerequisite to establish an international market for renewable hydrogen is trust. Protecting consumers and a fair global playing field should be a top priority. Renewable hydrogen from third countries must be fully compliant with the delegated acts on renewable liquid and gaseous fuels of non-biological origin (RFNBOs). Hence, the Commission needs to guarantee a robust certification scheme for imports of renewable hydrogen.

### ***Streamlining of EU instruments and financial implications***

The Commission's intention to streamline EU financial instruments to secure coherence is a very positive development. However, the Commission should also focus on providing clarity about the financial envelope of the EHB. The 2022 State of the Union announced a budget of EUR 3 billion. Since then, the only substantial delivery has been the planning of the first pilot auction of EUR 800 million over 10 years. More information is required on the remaining EUR 2.2 billion. The Commission should explain the yearly budget available under each pillar of the EHB. It should also deliver a roadmap detailing the size and the general features of auctions foreseen in the coming years.

In a situation where global economic partners and competitors provide public investment in clean technologies, the budget of EUR 3 billion needs to be increased. For comparison, the US Inflation Reduction Act creates a general tax credit of up to USD 3 per kilogram. Considering growing competition and the limited size of the current financial envelope compared to the size of needed investments, expanding EU support for hydrogen should be a priority in the midterm review of the current multiannual financial framework and the discussions on an EU Sovereignty Fund.

### *Accountability and reporting*

The EHB operates with funding from the Innovation Fund that derives from the allocation of EU Emissions Trading System allowances. As the Commission is accountable for the execution of the EU budget, it should present an annual report on the activities of the EHB and the progress achieved in creating a market that will eventually not rely on public subsidies.

In addition to the annual report, the Commission should prepare a comprehensive evaluation in time for the discussions on the next multiannual financial framework and in the framework of the debate on possible new sources of funding for renewable hydrogen.

## **ANNEX: LIST OF ENTITIES OR PERSONS FROM WHOM THE RAPPOREUR HAS RECEIVED INPUT**

The following list is drawn up on a purely voluntary basis under the exclusive responsibility of the rapporteur. The rapporteur has received input from the following entities or persons in the preparation of the draft report:

<b>Entity and/or person</b>
CEFIC
Clean Air Task Force
Duslo Šaľa
ECOS
EPICO
ERCST
Eurofer
Eurogas
Fertilizers Europe
Gasunie
GD4S
Hydrogen Europe
Norsk Hydro
P2X Solutions
Redes Energéticas Nacionais (REN)
Sandbag
Slovak National Hydrogen Association
Slovnaft (MOL Group)
SolarPower Europe
SPP – Slovensky plynarensky priemysel
U.S. Steel Košice
Yara International