*[09/03/2024]*

*[VLAIO]*

*Measure name:*

*[MILESTONE 22 /I-1.16 An Industrial value chain for Hydrogen]*

**Milestone/target description:**

Award of contracts to additional non-IPCEI hydrogen projects. Are excluded from selected projects: all activities under the Emission Trading Scheme (ETS) with projected CO2 equivalent emissions that are not substantially lower than the relevant benchmarks established for free allocation.

Selected research and innovation (R&I) projects shall comply with the following conditions:

- The R&I exclusively or primarily focuses on low-impact options (such as renewable hydrogen production or other zero emission environmental innovations); or

- The R&I is dedicated to improving “best in class” technology (such as technologies with the most limited impact (but not zero / low impact) among those currently available), and appropriate flanking measures are put in place to prevent lock-in effects (measures enabling the uptake of low impact technologies, or their development); or

- The results of the R&I process are technologically neutral at the level of their application (i.e. they may be applied across all available technologies)

- Any electricity used in the projects is of green origin (such as using RES-e) or based on green PPAs.

**Verification mechanism:**

Summary document duly justifying how the milestone (including the relevant elements of the milestone, as listed in the description of milestone and of the corresponding measure in the CID annex) was satisfactorily fulfilled. This document shall include as an annex the following documentary evidence:

1. Copy of the communication to the applicants, internal guidance documents, selection guidelines, copy of the jury reports that ensure compliance of selected projects with provisions specified in the CID annex (exclusion of ETS activities with emissions that are not significantly below ETS benchmarks and conditions on R&I projects) and demonstrating the application of the above-mentioned selection criteria for each selected project.

2. As far as GHG emissions for activities subject to ETS are concerned, instructions to applicants requiring the applicants to:

i) provide and substantiate the projected level of GHG emissions per unit of product for awarded projects with activities under the EU ETS;

ii) indicate the sector to which the activity concerned by the project belongs and to indicate which ETS benchmarks are applicable; and

iii) to detail the hypotheses taken in account to estimate demonstrate that the project will achieve GHG gas emissions that are significantly lower than the relevant benchmarks for free allocation, as set out in the Commission Implementing Regulation (EU) 2021/447.

3. Copy of contract(s) award notification.

4. Spreadsheet with a list of selected projects with beneficiaries, brief description of project, location, justifications that requirement of the CID are fulfilled.

5. The copy of the DNSH assessment for each project including supporting evidence on which the decision has been taken upon.

6. For awarded projects with activities under the EU ETS:

a) Extract from the application demonstrating that the projected level of GHG emissions per unit of product will be significantly lower compared to the relevant benchmarks under the followed hypothesis;

b) Summary information on the type of intervention and/or the change of technology implemented.

c) For EU ETS operators a unique identifier, the name, the location, the Installation ID/Aircraft Operator ID in the European Union Transaction Log (EUTL).

7. For projects involving the use of electricity, abstract from contractual clauses requiring the electricity to be used for the production of hydrogen to be of green origin or based on green PPAs.

8. For R&I projects:

- evidences (i.e. abstract from the project description, description of the state of the art, description of the energy supply for hydrogen, GHG emissions output) demonstrating the R&I focus of the project on low impact technologies or zero emission

OR

- a demonstration the projects have focused on improving technologies with the most limited impact including a comparison grid. A description of planned/adopted flanking measures to prevent lock-in effects and the contribution of measures taken for the uptake or development of low impact technologies.

OR demonstration of how the selected technologies can be applied across different fields. It is expected for R&I project to include a description of the state of the art for available technologies, a description of the current performance of the technology in terms of emissions and evidence on the expected improvement.

**A. Evidence provided:**

* Annex 1. Internal guidance - Werkwijze DNSH - I-1.6: internal guidance for the application of DNSH-requirements
* Annex 1bis – Notes VR - Projects milestone 22.zip: decision notes of the Flemish government with a short description of the project and the conditions that have to be met by the projects
* Annex 3. Award notifications - Projects milestone 22.zip: a copy of the contract award notifications for the projects in milestone 22
* Annex 4. Spreadsheet selected projects milestone 22.xlsx: list of the selected projects under milestone 22
* Annex 5. DNSH-assessments milestone 22.zip: copy of the DNSH assessment for each project
* Annex 5bis DNSH-assessment IPCEI Hydrogen Industry Hyoffwind (2022.09.09): copy of the DNSH assessment for IPCEI.2021.0005 Hyoffwind as submitted as part of the CEEAG state aid notification
* Annex 6. IPCEI.2022.0002 ArcelorMittal Belgium DNSH.docx: DNSH assessment for IPCEI.2022.002 Arcelor Mittal RecHycle-DRP FID with an annex containing the information specific to ETS-related projects.
* Annex 6bis. ArcelorMittal Belgium DNSH - CEEAG - RFI 5 for SA.64641 BE15 RecHycle-DRP.docx
* Annex 6ter. Annex calculation phase A - DNSH and substantial contribution calculation 20230323.xlsx
* Annex 6quater. ArcelorMittal Belgium - state aid SA.104897.pdf

**B. Detailed justification:**

*[Explain clearly how the achievement of the milestone/target is demonstrated by the evidence provided,* ***covering ALL elements of the milestone/target.***  *(e.g. the fact that (i) a certain institution had (ii) to accomplish something (iii) in a certain way in order (iv) to achieve a certain goal (v) by a certain date). The Commission is looking* ***for a clear link between the elements of the milestone/target and the evidence provided.***

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| **1. Copy of the communication to the applicants, internal guidance documents, selection guidelines, copy of the jury reports that ensure compliance of selected projects with provisions specified in the CID annex (exclusion of ETS activities with emissions that are not significantly below ETS benchmarks and conditions on R&I projects) and demonstrating the application of the above-mentioned selection criteria for each selected project.**  The internal guidance for the application of DNSH-requirements in the CID can be found in “Annex 1. Internal guidance - Werkwijze DNSH - I-1.6”. This document describes the way in which DNSH has been applied in this measure. The template for the self-assessment requires the applicant to provide all the necessary information to demonstrate the application of DNSH selection criteria for each selected project. There are no separate documents for the evaluation of the self-assessments by the applicants. The definitive versions of the assessments were validated by VLAIO and added as an annex to the decision of the Flemish government on the grants for these projects.  The notes of the Flemish government reflect the evaluation of the projects and also make the subsidies conditional on the correct application of DNSH. The notes of the Flemish government for the projects under milestone 22 are included in Annex 1bis – Notes VR - Projects milestone 22.zip. These documents include a short description of the project and all conditions that have to be met by the projects. As for DNSH, the following condition was included in the decision:  *“De steunverlening blijft afhankelijk van het voldoen aan al de vereisten en rapporteringen gesteld door de IPCEI-mededeling en de RRF-verordening, met inbegrip van de vereisten gesteld door het DNSH-principe.”*  [*“The aid remains conditional on fulfilling all the requirements and reporting requirements set by the IPCEI Communication and the RRF Regulation, including those set by the DNSH principle”*]  In the case of Hyoffwind, 2 notes from the Flemish government were included in the annex. The first note concerns the conditional approval of the subsidy for the project by the Flemish government. Flanders conditionally granted 22.95 million euros of subsidy to the project on 15 July 2022 subject to approval by the Commission in the CEEAG framework in the notification that was pending at the time. Due to an issue with the shareholder structure of the company, which has since been remedied, the application was 'on hold' for a considerable time. When reopening the dialogue with DG Competition, the Commission drew Flanders' attention to the now changed regulatory environment whereby many of the measures originally foreseen in IPCEI were embedded in the basic state aid rules (General Block Exemption Regulation) which offered opportunities for Flanders to fund the project without the requirement for individual approval. The second note (IPCEI.2023.0001 - Hyoffwind Infrastructure Note\_VR 2) confirms the support to the project, integrates the two grants previously awarded for the project, contains an update of the activities and a confirmation of the reorganisation of the work plan within the amounts set out in the 2 previous decisions. The total grant for the project is €30 million. This second decision also includes a condition on DNSH.  Regarding the investment in decarbonisation of steel production at Arcelor Mittal Gent: this investment was split into four different administrative files: a grant for the feasibility study of this investment (HBC.2022.0457), a grant for the R&D activities linked to this investment (HBC.2022.0289) and two files that were part of the IPCEI portfolio but were shifted to a notification under the CEEAG (IPCEI.2022.0002 & IPCEI.2022.0010). For this investment, a DSNH assessment was carried out and added to the note from the Flemish government. This DNSH assessment was further refined during the course of the CEEAG notification. In the note from the Flemish government dated 1 March 2024 confirming the support for this investment and concretising the conditions of the CEEAG notification, the following passage was included with regard to DNSH:   1. *DNSH*   *Bij de beslissing tot steuntoekenning werd de overeenstemming met het DNSH-principe (Do No Specific Harm) vastgesteld op basis van gegevens opgenomen in deel 3 van bijlage 2 bij de bijgevoegde besluiten. De overeenstemming met het DNSH-principe maakt deel uit van RRF-regelgeving maar is ook een voorwaarde in de goedkeuring bij de notificatie op basis van het CEEAG-kader.*  *De overeenstemming met het DNSH-principe was reeds gemeld in de beslissingen van de Vlaamse regering, waarbij eveneens de overeenstemming met de CEAAG-mededeling (waar het DNSH-principe deel van uitmaakt) reeds opgenomen was in beide besluiten. De huidige aanpassing betreft (1) een verduidelijking van de overeenstemming met het DNSH-principe als een voorwaarde in het besluit en (2) het opnemen van een meldingsplicht (ook vermeld in de goedkeuring bij notificatie).*  *Bij afwijking van de vastgestelde normen is het bedrijf gebonden aan een meldingsplicht. Indien na analyse blijkt dat niet langer voldaan is aan de DNSH-principes gedurende de projectuitvoering en een periode van vijf jaar na de beëindiging van de in aanmerking komende kosten kan de steun teruggevorderd worden overeenkomstig de bepalingen van artikel 14 van het bijgevoegde besluit.*  **2. As far as GHG emissions for activities subject to ETS are concerned, instructions to applicants requiring the applicants to:**  **i) provide and substantiate the projected level of GHG emissions per unit of product for awarded projects with activities under the EU ETS;**  **ii) indicate the sector to which the activity concerned by the project belongs and to indicate which ETS benchmarks are applicable; and**  **iii) to detail the hypotheses taken in account to estimate demonstrate that the project will achieve GHG gas emissions that are significantly lower than the relevant benchmarks for free allocation, as set out in the Commission Implementing Regulation (EU) 2021/447.**  The instructions to the applicants requiring them to provide the above-mentioned information regarding activities subject to ETS were included in the template for the self-assessment that can be found in “Annex 1. Internal guidance - Werkwijze DNSH - I-1.6”.  **3. Copy of contract(s) award notification.**  Attachment “3. Award notifications - Projects milestone 22.zip” contains a copy of the contract award notifications for the projects in milestone 22. These contract award notifications were sent to the applicants on 10th of January 2023. The DNSH conditions to be met by projects in measure I-1.16 An industrial Value chain for Hydrogen are attached to this communication.  There is no separate award notification for the feasibility study for a DRI-installation at Arcelor Mittal Ghent (HBC.2022.0457) as this project is part of a larger investment (DRI). A DNSH assessment was carried out (Annex 6. IPCEI.2022.0002 ArcelorMittal Belgium DNSH.docx) for the whole of the investment.  **4. Spreadsheet with a list of selected projects with beneficiaries, brief description of project, location, justifications that requirement of the CID are fulfilled.**  Annex “4. Spreadsheet selected projects milestone 22.xlsx” is a list of the selected projects under milestone 22 containing a brief description of the projects, the budget allocated for each project, the beneficiary and address of the beneficiary.  **5. The copy of the DNSH assessment for each project including supporting evidence on which the decision has been taken upon.**  The copy of the DNSH assessment for each project including supporting evidence on which the decision has been taken upon can be found in annex “5. DNSH-assessments milestone 22.zip“. These are the final versions of the companies' self-assessments, validated by VLAIO, which in some cases required several iterations to obtain the necessary information before an assessment could be made. These assessments were added to the file for the Inspection of Finance and the decisions of the Flemish Government.  In addition, DNSH assessments for projects IPCEI.2021.0005 Hyoffwind and IPCEI.2022.0002 – IPCEI.2022.0010 Arcelor Mittal and were also sent to DG COMP as part of IPCEI/CEAAG state aid prenotifications. (see Annex 5bis DNSH-assessment IPCEI Hydrogen Industry Hyoffwind (2022.09.09) and Annex 6. IPCEI.2022.0002 ArcelorMittal Belgium DNSH.docx)  **6. For awarded projects with activities under the EU ETS:**  **a) Extract from the application demonstrating that the projected level of GHG emissions per unit of product will be significantly lower compared to the relevant benchmarks under the followed hypothesis;**  **b) Summary information on the type of intervention and/or the change of technology implemented.**  **c) For EU ETS operators a unique identifier, the name, the location, the Installation ID/Aircraft Operator ID in the European Union Transaction Log (EUTL).**  The investment at Arcelor Mittal Ghent relates to activities subject to ETS (HBC.2022.0457,  HBC.2022.0289,IPCEI.2022.0002,IPCEI.2022.0010). Annex 6. IPCEI.2022.0002 ArcelorMittal Belgium DNSH.docx is a copy of the DNSH assessment for this project. The DNSH assessment for this project includes an annex with the requested information specific to ETS-related projects.  This assessment was also sent to DG COMP as part of the CEAAG state aid prenotification of the file. In the course of the CEEAG pre-notification several requests for additional information were made regarding the DNSH-compliance of the investment and more particular on whether or not a separate DNSH assessment should be made for Phase A of the investment (IPCEI.2022.0002), or whether an integral assessment of the investment was adequate. In answer to the 5th Request for Information (RFI 5), questions 1 and 2, additional information on this was provided by the company. This answer can be found in annexes 6bis. ArcelorMittal Belgium DNSH - CEEAG - RFI 5 for SA.64641 BE15 RecHycle-DRP.docx and 6ter. Annex calculation phase A - DNSH and substantial contribution calculation 20230323.xlsx. In response to these answers DG COMP indicated that there were no follow-up questions about the explanations provided concerning DNSH.  The decision of DG COMP on the state aid for the Arcelor Mittal investment, Annex 6quater. ArcelorMittal Belgium - state aid SA.104897.pdf, contains an assessment of the DNSH-compliance of the investment:  *(48) Furthermore, the Belgian authorities provided evidence with a view to demonstrate that the RecHycle project complies with the principle of ‘do no significant harm’ as referred to in Article 17 of Regulation (EU) 2020/852 (24), by reference in particular to the screening criteria developed in Commission Delegated Regulation (EU) 2021/2139 of 4 June 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council for determining the conditions under which an economic activity qualifies as contributing substantially to climate change mitigation or climate change adaptation and for determining whether that economic activity causes no significant harm to any of the other environmental objectives (25). In particular, the Belgian authorities submitted that:*   1. *In relation to climate change mitigation, the RecHycle project aims at implementing a production process avoiding direct CO2 emissions and thus achieving CO2 emission levels below the thresholds set out in the Commission Delegated Regulation (EU) 2021/2139 on climate change mitigation for steel products as well as substantially below ETS benchmarks;* 2. *In relation to climate change adaptation, the beneficiary has conducted a screening of the risks of acute and chronic climate-related hazards and established a moderate risk of water stress and drought heat for the Ghent site;* 3. *In relation to the sustainable use and protection of water and marine resources, ArcelorMittal Belgium is currently conducting environmental impact assessment covering, inter alia, water;* 4. *As regards the circular economy objective, the RecHycle project is not expected to significantly increase the generation, incineration, or disposal of waste or lead to significant inefficiencies in the use of natural resources;* 5. *In relation to air, water and land pollution, the Belgian authorities confirmed that the project does not involve any of the substances listed in Appendix C to the Commission Delegated Regulation (EU) 2021/2139 on climate change mitigation;* 6. *In relation to the impact on the protection and restoration of biodiversity and ecosystems, it is unlikely that the RecHycle project will have a significant negative impact on the protection and restoration of biodiversity and ecosystems, given that the project will not be located in a protected area, and will be subject to an environmental impact assessment.*   **7. For projects involving the use of electricity, abstract from contractual clauses requiring the electricity to be used for the production of hydrogen to be of green origin or based on green PPAs.**  Three projects in milestone 22 portfolio relate to hydrogen production by electrolysis (IPCEI.2021.0005, IPCEI.2022.0004, IPCEI.2022.0005). It concerns 2 small electrolysers and 1 medium-sized electrolyser (25MW). All of the applicants have indicated in their DNSH assessment that the electricity for electrolysis will come from locally produced green power, from power purchased through PPA’s or a combination of both. In the Flemish government's decision, the aid was granted subject to compliance with DNSH obligations. The decision letters (see Annex 3. Award notifications - Projects milestone 22.zip) restate this condition and also impose the obligation to provide supporting documents for this.    **8. For R&I projects:**  **- evidences (i.e. abstract from the project description, description of the state of the art, description of the energy supply for hydrogen, GHG emissions output) demonstrating the R&I focus of the project on low impact technologies or zero emission**  **OR**  **- a demonstration the projects have focused on improving technologies with the most limited impact including a comparison grid. A description of planned/adopted flanking measures to prevent lock-in effects and the contribution of measures taken for the uptake or development of low impact technologies.**  **OR**  **- demonstration of how the selected technologies can be applied across different fields. It is expected for R&I project to include a description of the state of the art for available technologies, a description of the current performance of the technology in terms of emissions and evidence on the expected improvement.**  For R&I projects the requested justification was included in the DNSH assessments (see annex “5. DNSH-assessments milestone 22.zip“).  Two of the projects are (in part) focusing on R&I:   * HBC.2022.0289 ArcelorMittal Belgium: R&I is dedicated to improving “best in class” technology (see justification in Annex 6. ArcelorMittal Belgium DNSH.docx) * IPCEI.2022.0009 BelgHyCo-HD (DATS): R&I focus on low impact technologies or zero emission ((see justification in Annex 5. DNSH-assessments milestone 22.zip - IPCEI.2022.0009 DNSH\_richtsnoeren Hydrogen - BelgHyCo-HD.docx)   Project descriptions can be found in the documents from the Flemish government (Annex 1bis – Notes VR - Projects milestone 22.zip) |

**Achievement of the requirements in the description of the measure:**

**Description of the measure in the CID Annex**

Investment I-1.16 ‘An industrial value chain for hydrogen transition’ of the Flemish Region

This measure aims at supporting the transition to a sustainable hydrogen industry in Flanders through investment and project financing. In large part, the funding shall support a portfolio of projects which, like the planned wider cross-border Important Project of Common European interest (IPCEI) project, of which it shall form an integral part, aims at developing an industrial value chain towards hydrogen production, transport, storage and related applications. Outside the IPCEI portfolio, additional projects with a focus on hydrogen are also included, mostly both in the field of research and development and investment projects.

**Milestone 22 - Award of contracts for non-IPCEI hydrogen projects**

**Qualitative indicator:** Written notification of contract awards to successful candidates

**Requirements:**

**i) Award of contracts to additional non-IPCEI hydrogen projects under the measure “An industrial value chain for hydrogen transition” (Flanders).**

Written notifications have been sent out to the applicants for the IPCEI-projects in the beginning of 2023. At the request of the European Commission, two applications originally envisaged under the IPCEI notification were transferred to notification based on in the CEEAG frame. In addition, some proposals have been shifted to the general block exemption regulation with support granted under existing notified state aid frameworks, either on request of the Commission or on their own initiative. This resulted in only 2 projects being notified and approved under the IPCEI state aid notification (milestone 21), 6 projects under existing frameworks under the GBER and 2 projects under CEEAG. One of the projects that was notified under CEEAG (Hyoffwind) was withdrawn due to a legal issue concerning the stakeholders of the company. The legal issue was resolved, and the project was resubmitted in September 2023. Aid was granted under the (renewed) the general block exemption regulation. On 22/06/2023 the state aid for the remaining project under the CEEAG (Arcelor Mittal Belgium) was approved.

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| **Project** | **Notification status** |
| **BE19 Air Liquide** | Submitted as part of Wave H2-Mobility & Transport. Transferred to GBER Support granted on the basis of existing scheme SA 60018 (GBER). |
| **BE03 Power to Methanol** | Support granted on the basis of existing scheme SA 60018 (GBER) |
| **BE02 DATS** | Support granted on the basis of existing scheme SA 60018 (GBER) |
| **BE05/07 Terranova (Terranova Hydrogen and Aertssen)** | Support granted on the basis of existing scheme SA 60018 (GBER) |
| **BE10 HyoffWind** | Submitted for prenotification as part of wave IPCEI H2-use on 31 August 2021. Transferred to CEEAG on advice of the Commission. Notification withdrawn. Resubmitted in September 2023. Aid granted under GBER. SA.111892 |
| **ArcelorMittal DRI Feasibility Study** | Support granted on the basis of GBER SA103371 |
| **ArcelorMittal R&D** | Support granted on the basis of existing scheme (SA 63759) |
| **BE15 ArcelorMittal**  (IPCEI.2022.0002 and IPCEI.2022.0010) | Submitted for pre-notification in wave H2-use on  31 August 2021.  Transferred to CEEAG on advice of the Commission. State aid approval on 22/06/2023. SA 104897 |

Project beneficiaries were notified in writing. This notification also includes a reference to the DNSH terms and conditions applicable to the projects.

For milestones 21 and 22 together, an amount of € 180.132 was committed.

In terms of expected electrolyser capacity, the projects under milestones 21 and 22 represent a total capacity of 100 MW.

**II) Are excluded from selected projects: all activities under the Emission Trading Scheme (ETS) with projected CO2 equivalent emissions that are not substantially lower than the relevant benchmarks established for free allocation**

A question on whether activities under the application of ETS occur in the project was included in the template for the DNSH assessment provided to applicants.

One of the selected investments relates to activities subject to ETS: the investment at Arcelor Mittal Ghent. Information on ETS and projected CO2 equivalent emissions was provided in the DNSH-assessment. Additional information regarding the DNSH-compliance of the investment was provided in the course of the CEEAG pre-notification. The investment was assessed as being DNSH-compliant.

**III) Selected research and innovation (R&I) projects shall comply with the following conditions:**

**- The R&I exclusively or primarily focuses on low-impact options (such as renewable hydrogen production or other zero emission environmental innovations); or**

**- The R&I is dedicated to improving “best in class” technology (such as technologies with the most limited impact (but not zero / low impact) among those currently available), and appropriate flanking measures are put in place to prevent lock-in effects (measures enabling the uptake of low impact technologies, or their development); or**

**- The results of the R&I process are technologically neutral at the level of their application (i.e. they may be applied across all available technologies)**

A question on Research & innovation was included in the template for the DNSH assessment provided to applicants. Based on this self-assessment by the company and the project descriptions in the application, VLAIO concluded that the projects do indeed focus on R&D dedicated to low-impact options and aims to improve best-in-class technology.

**IV) - Any electricity used in the projects is of green origin (such as using RES-e) or based on green PPAs.**

A question on whether the electricity used in the projects for the production of hydrogen is of green origin or based on green PPAs was included in the template for the DNSH assessment provided to applicants. The applicants indicated that all electricty that will be used in the production of hydrogen will be of green origin. Consequently, this requirement was imposed as a condition in the grant award as part of the general condition that DNSH-conditions have to be met by the projects at all times. In addition, a requirement is imposed that all relevant supporting documents showing that the DNSH conditions are respected must be added to the reports on the projects. ( e.g. power purchase agreements,… )