

## JOINT LETTER OF INTENT

### PARTIES:

1. **The State of the Netherlands**, represented by the Minister of Climate Policy and Green Growth and the State Secretary for Public Transportation and the Environment, and for administrative matters (*bestuursrechtelijke aangelegenheden*) the Minister of Climate Policy and Green Growth and the State Secretary for Public Transport and the Environment, each in their capacity as administrative body (*bestuursorgaan*), hereafter also referred to as: the "**State**";
2. **The Province of North-Holland**, as a legal entity represented by the King's Commissioner of the Province of North-Holland, and for administrative matters (*bestuursrechtelijke aangelegenheden*) the Provincial Executives (*Gedeputeerde Staten*) of the Province of North-Holland, in their capacity of administrative body (*bestuursorgaan*), hereafter also referred to as: the "**Province of North-Holland**";
3. **Tata Steel Nederland B.V.**, with its registered office in IJmuiden, the Netherlands, and its office address at Wenckebachstraat 1, 1951 JZ, Velsen-Noord, the Netherlands hereafter also referred to as: "**TSN**";
4. **Tata Steel Limited**, with its registered office in Mumbai, India, and its office address at Bombay House, 24 Homi Mody Street, Fort, Mumbai, Maharashtra, 400001, India, hereafter also referred to as: "**TSL**".

The State, the Province of North-Holland, TSN and TSL, hereafter individually also referred to as "**Party**" and jointly also referred to as "**Parties**".

## CONSIDERATIONS

### Introduction Tata Steel Nederland (TSN)

- a. TSN is a steel producer producing high-quality steel for sectors such as the automotive, manufactured goods, packaging and construction sectors based in IJmuiden. TSN's yearly average output of approximately 6-7 Million tons (hereafter: "Mton") steel roughly equals the national consumption of steel in the Netherlands (~5.6 Mton in 2023 according to the World Steel Association<sup>1</sup>);
- b. TSN is the largest industrial Greenhouse Gas emitter in the Netherlands. With maximum emissions of 12.6 Mton CO<sub>2</sub> annually, TSN is currently responsible for 7.6% of the total Dutch Greenhouse Gas Emissions. TSN is also the largest individual emitter of nitrogen oxides (hereafter: "NO<sub>x</sub>") in the Netherlands. Next to this, emissions associated with steel production, such as fine particulate matter, are seen to have a negative impact on the environment and are seen to pose risks to the health of local residents. To ensure a sustainable future for TSN, protect the environment and keep the steel sector as a backbone of the European manufacturing system, the Parties recognize and acknowledge that TSN has to transform its production process;
- c. The aim of the tailor-made approach with TSN is twofold: 1) to reduce the impact of TSN on the local environment and the associated risks to the health of local residents as quickly and as much as possible, both in terms of emissions, immissions and nuisance, and 2) to significantly reduce CO<sub>2</sub> emissions, both in the short term as well as towards net zero in the longer term.

## GENERAL CONSIDERATIONS

### Legal and policy framework for sustainable industry

- d. Parties acknowledge that additional efforts for reduction of Greenhouse Gas Emissions are required to achieve the goals of the Paris Agreement, the European Climate Law, the Dutch Climate Law (Klimaatwet) and the last two consecutive Government Programs in place (regeerprogramma's);
- e. The State aims to facilitate the sustainability transition of the industry in the Netherlands with, amongst other instruments, the tailor-made approach, initially for the 10-20 largest industrial emitters;
- f. The tailor-made approach was introduced in the Government Program of cabinet Rutte IV (dated 15 December 2021) as one of the instruments to increase the national CO<sub>2</sub> reduction targets to at least 55% in 2030, whilst aiming for a 60% CO<sub>2</sub> reduction in 2030 and for climate neutrality in 2050 as well as for the establishment of a green economy that is climate neutral, fossil free, circular and operates in a clean and healthy environment. Under the subsequent Government Program of cabinet Schoof (dated 16 May 2024), the tailor-made approach was continued;
- g. The aim of the tailor-made approach is to support the largest industrial emitters, based on mutual efforts, in having a sustainable future in the Netherlands by achieving additional and accelerated CO<sub>2</sub> reduction<sup>2</sup> and reducing the impact on the local environment;
- h. As laid down in the letter informing parliament about the additional climate policies (Kamerbrief Voorjaarsbesluitvorming Klimaat, dated 26 April 2023, Kamerstukken II, 2023/24, 32813, nr. 1230), the proposed target is to reduce CO<sub>2</sub>-emissions from the industry to a maximum of 29.6 Mton in 2030. This target has been adjusted to 29.1 Mton with the "Augustusbesluitvorming" (Kamerbrief Kabinetsaanpak Klimaatbeleid, dated 19 September 2023, Kamerstukken II, 2023/24, 32813 nr. 1291) and to 28.8 Mton with the "voorjaarsbesluitvorming"<sup>3</sup>;

<sup>1</sup> World Steel Association, steel statistical yearbook 2024, p.75.

<sup>2</sup> Meaning CO<sub>2</sub> reduction that goes beyond the CO<sub>2</sub> reduction required to achieve an emission level equal to the expected amount of CO<sub>2</sub> dispensation rights for a given year under the Dutch CO<sub>2</sub> Levy.

<sup>3</sup> <https://open.overheid.nl/documenten/898070cf-bccc-4922-b10f-c587ade3b9e9/file>

- i. On 14 July 2023, the former Minister of Economic Affairs and Climate Policy presented a national roadmap<sup>4</sup> (Routekaart verduurzaming industrie 1.0), that was updated on 2 October 2024<sup>5</sup>, to accelerate the transition of the Dutch industry towards a climate neutral, fossil free, circular economy with limited impact on the environment;
- j. In a letter to Parliament dated 10 April 2025, the State Secretary for Infrastructure and Water Management – Environment and Public Transport reaffirmed the State's ongoing commitment to a clean and sustainable steel industry in the Netherlands, both through the regulatory framework of permitting, supervision, and enforcement, and through the tailor-made approach;
- k. In the letters to parliament dated 20 February 2025<sup>6</sup> and 30 June 2025<sup>7</sup> regarding 'Progress on Tailor-Made Agreements with Tata Steel' and 'Progress on the Tailor-Made Agreements Sustainable Industry' respectively, the Minister for Climate and Green Growth once again confirmed that the State aims to support the sustainability and cleaner production of steel in the IJmond region through a tailor-made agreement with TSN;
- l. Parties recognize the aim, in line with the European Zero Pollution Ambition, to progressively reduce air-, water- and soil contamination to levels that are no longer harmful to general health and natural ecosystems by 2050, thereby taking into account the limits of planet earth with the aim of realizing a toxin-free environment. The State has formulated emission reduction and health gain ambitions in several policy acts to this end;
- m. Parties recognize that the State has initiated and signed the Clear Air Agreement with the goal of 50% health gains in 2030 relative to 2016, sought to be achieved by decreasing emissions of air pollutants, notably NO<sub>x</sub>, ammonia and fine particulate matter, which among others should be realized by decreasing industrial air emissions to levels comparable to the strictest achievable emission limit values by applying the Best Available Techniques ("BAT");
- n. Parties acknowledge that the State aims to decrease Reactive Nitrogen Emissions in the Netherlands (particularly NO<sub>x</sub> and ammonia) in order to reduce the deposition thereof in Dutch Natura 2000 nature areas, and that each sector, including the industrial sector, is expected to contribute fairly to the necessary reduction of Reactive Nitrogen Emissions. The letter to parliament on 15 July 2022 regarding nitrogen explains the policy framework<sup>8</sup>;
- o. Parties recognize the State policy that includes the legal obligation to prevent and minimize emissions of persistent pollutants and pollutants of very high concern – in Dutch referred to as 'zeer zorgwekkende stoffen' (ZZS) and inform the authorities, on achieved reduction and next steps to further reduce emissions, every five years;
- p. As stipulated in the Dutch Climate Policy Programme, the State intends to support, among others, TSN in its endeavours to contribute to additional CO<sub>2</sub> reduction, reduce its impact on the environment and the associated health risks of local residents, reduce its nitrogen emissions and enhance its circularity while considering European principles regarding state aid and a level playing field on the internal market. In doing so, the State aims for a level playing field within Europe;
- q. Parties acknowledge that their mutual cooperation will take place in the context of the developing policy around accelerating the transition of the industry;
- r. Parties are aligned in their interests in building a clean, climate neutral, circular economy with limited impact on the environment and human health by 2050 and intend to cooperate within their capacities to achieve an accelerated and significant additional reduction of CO<sub>2</sub> emissions as well as a reduction of other emissions;

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<sup>4</sup> [MinEZK-Routekaart-Def](#)

<sup>5</sup> [Routekaart NPVI - Van grijs naar groen | Rapport | Rijksoverheid.nl](#)

<sup>6</sup> Kamerstuk 2024/2025, 29826-233

<sup>7</sup> Kamerstuk 2024/2025, 29826-260

<sup>8</sup> Kamerbrief Stand van zaken stikstof en landelijk gebied, d.d. 15 juli 2022.

- s. Parties recognize the aim, in line with 'het Nationaal Programma Circulaire Economie 2023-2030' to increase circularity to reduce the use of raw materials, energy-use and dependence on other countries for raw materials, in combination with a reduction of CO<sub>2</sub>-emissions.

Process Tailor-Made Approach Sustainable Industry (Maatwerkaanpak Verduurzaming Industrie)

- t. With the tailor-made approach the State intends to structure the discussions with the largest industrial emitters along the following lines:
  - i. First, discussions will be held to see whether parties can come to an expression of principles ("**EoP**"), in which they express their intention to further discuss the possibilities of reducing additional CO<sub>2</sub> emissions, reducing the impact of the respective companies on the local environment and thereby address health risks and the possibilities for the State to assist therewith;
  - ii. Second, if an EoP appears to be a good basis for further discussions, parties intend to continue discussions with the aim of defining the specific measures to be taken and agreeing on those in a draft joint letter of intent ("**JLoI**");
  - iii. Third, the draft JLoI will be submitted to the Advisory Committee for an expert advice to the Minister of Climate Policy and Green Growth with respect to, among other things, feasibility, cost-effectiveness and level of ambition;
  - iv. Finally, if a final JLoI has been agreed upon and signed, parties intend to implement and elaborate on their agreements in binding tailor-made agreements.

## **SPECIFIC CONSIDERATIONS**

Strategic importance

- u. The Parties acknowledge that TSN contributes to the strategic autonomy of Europe with respect to steel and is an important employer in the IJmond region and the metropolitan region of Amsterdam;
- v. The Parties acknowledge that, amongst other things, Wijers and Blom have highlighted in their report to the former Minister of Economic Affairs and Climate of March 2024<sup>9</sup> that maintaining control over the steel supply chain and safeguarding domestic production are of fundamental strategic importance to Europe, particularly in the current geopolitical climate;
- w. The Parties believe that TSN can play an important role in the energy and sustainability transition in the Netherlands.

Living environment, health risks and acceleration of environmental measures

- x. TSN has developed a Roadmap in 2019 and updated by the Roadmap Plus program ("**Roadmap+**") in 2021 as part of its efforts to address public, environmental and health concerns. TSN has already executed a large number of measures included in Roadmap+, leading to – when fully implemented – a substantial reduction of industrial NO<sub>x</sub> emissions, among other things;
- y. On 13 April 2023, the Dutch Safety Board (*Onderzoeksraad voor Veiligheid* "**OVV**") presented its report "Industry and local residents", which resulted in, among other things, recommendations on the environment and health of local residents for the industry as a whole<sup>10</sup>;
- z. Research of the *Rijksinstituut voor Volksgezondheid en Milieu* ("**RIVM**")<sup>11</sup> states that the emissions from the Tata Steel site contribute to the quantities of particulate matter, nitrogen dioxide, polycyclic aromatic hydrocarbons (PAHs) and metals in the immediate surroundings. In particular, it states that the emissions of particulate matter and nitrogen dioxide and dust, odour and noise nuisance

<sup>9</sup> <https://www.rijksoverheid.nl/documenten/rapporten/2024/03/29/hoe-tata-steel-nederland-te-verduurzamen>

<sup>10</sup> [Industrie en omwonenden | Rapport | Rijksoverheid.nl](#)

<sup>11</sup> [De bijdrage van Tata Steel Nederland aan de gezondheidsrisico's van omwonenden en de kwaliteit van hun leefomgeving RIVM](#)

increase the likelihood of adverse health effects. The likelihood of these effects is identified to be highest in Wijk aan Zee and decreases the further away one gets from the TSN site.

- aa. The results of the research by OVV and RIVM can be used to address health risks of local residents and the environment in the IJmond region. Based on those results, the best way to mitigate adverse health risks is to reduce the quantities of particulate matter and nitrogen dioxides being emitted and decrease dust, odour and noise nuisance, thereby decreasing the exposure to these factors in the surrounding area;
- bb. For TSN specifically, the previous Dutch State Secretary of Infrastructure and Water Management (*Staatssecretaris van Infrastructuur en Waterstaat*) installed the Expert Group Health IJmond (*Expertgroep Gezondheid IJmond*) ("**Expert Group**"). The Expert Group has published two reports<sup>12</sup>. In these reports the Expert Group has advised to make health improvement an important point of reference for the JLoI and tailor-made agreement with TSN and when issuing Permits to TSN. Additionally, the Expert Group advised to accelerate the process for the improvement of air quality and the health of local residents and the need for more transparency in measuring and monitoring environmental and health effects. A specific tool for this is the "*Gezondheidseffectrapportage*" ("**GER**").
- cc. A working group has been set up to develop the GER-TSN. This working group consists of content experts from the RIVM, the *Gemeentelijke Gezondheidsdienst* ("**GGD**") Kennemerland and other experts. To improve health and environment, additional environmental and health measures are included in this JLoI intended to accelerate the reduction of fine dust (*fijnstof*) and coarse dust (*grofstof*) [immission], NO<sub>x</sub> emissions, SO<sub>2</sub> emissions, peak and tonal noise, odour emission as well as certain Substances of Very High Concern for the benefit of, but not limited to, the local environment;
- dd. Parties agree that an incorrect application of slag can cause risks. The State examines different measures to immediately mitigate these risks, especially in applications with high risks for human health and the environment. To regulate and monitor the application of slag, the State intends to develop a number of policy improvements that are intended to work from both government and businesses perspective. The criteria for determining the status of slags as a by-product are and will remain based on EU legislation<sup>13</sup>. Simultaneously the applicator of slag has a Duty of Care to minimize the risk of the incorrect application of slag;
- ee. In the tailor-made agreement, the Parties wish to agree on a monitoring system to verify whether the aims specified in the tailor-made agreement are met, and to increase transparency on measuring and monitoring the effects of TSN's activities on the local environment and the societal benefits achieved by the Projects;
- ff. As part of TSN's future sustenance, it is essential for TSN to continue to take action to structurally transform the company and it acknowledges its commitment to continuing to improve the compliance and control (- function) of the operation. TSN views it as its responsibility to cultivate and uphold a proactive organizational culture, recognizing this as fundamental to retaining its 'license to operate'. TSN is committed to being a future-proof and robust company. This is without prejudice to legal requirements that TSN has to fulfil at all times;
- gg. In accordance with the recommendation of the Expert Group, TSN has done an investigation, validated independently by two third parties, into the health and wellbeing of former employees of TSN<sup>14</sup>.

#### Engagement with local community

- hh. The Parties acknowledge that the 'license to operate' for the steel industry in a densely populated and intensively used country such as the Netherlands requires marked efforts to seek good relations with the direct surroundings;

<sup>12</sup> [Gezondheid geborgd | Rapport | Rijksoverheid.nl](#) and [Gezond groen staal in de IJmond | Rapport | Rijksoverheid.nl](#)

<sup>13</sup> Article 5, par 1, 2 and 3 of the Waste Framework Directive

<sup>14</sup> <https://www.tatasteelnederland.com/sites/default/files/2025-rapport-sterfte-medewerkers-tata-steel.pdf>

- ii. Parties are aware that the vicinity of large population centers, critical and well-informed citizens and an attractive and healthy living environment are important aspects of location. TSN therefore intends to engage with and consider local community and stakeholders in an early phase of (transition) plans.

Risks

- jj. TSN operates in an international context and wishes to highlight the importance of stability of climate related policies, legislation, energy costs, network tariffs and energy taxation and other level playing field conditions with surrounding countries. Level playing field conditions with surrounding countries are essential to secure a competitive future proof position for TSN. It is for TSN of eminent importance that the transition towards a more sustainable footprint in the Netherlands goes hand in hand with being able to properly compete in the market;
- kk. Parties acknowledge that investment in the technologies required to execute the Projects carries a significant market risk, as the development of grid tariffs, as well as gas, electricity and CO<sub>2</sub> emission prices (influenced by the emission trading scheme and Dutch CO<sub>2</sub> Levy) largely drives the ability to compete in the future, are challenging to predict and are significantly influenced by geopolitical developments and governmental policies.

Documentation entered into between Parties

- ll. On 15 July 2022, TSN, the State and the Province of North-Holland signed an amended and restated EoP (which replaced the original EoP dated the 30<sup>th</sup> of March 2021) as defined in Article 1 of this JLoI, in which they have outlined a framework for mutually beneficial cooperation between the Parties and to lay down joint views on the Projects to be realised, in order to facilitate the execution of the Projects by TSN (Annex I);
- mm. In line with the EoP, Parties have discussed the Projects in further detail and wish to conclude this JLoI in which the steps to be taken are further concretised;
- nn. Parties have agreed to conclude this JLoI in accordance with Article 2 of this JLoI and the terms and conditions set out below.

## PARTIES HAVE AGREED AS FOLLOWS:

### Article 1 - Definitions

1. The following terms, if capitalised as indicated, shall have the following meanings:
  - a. **Advisory Committee:** the advisory committee Maatwerkafspraken Verduurzaming Industrie as mentioned in the letter informing parliament on the progress of the tailor-made approach dated 27 February 2023<sup>15</sup>;
  - b. **Article:** refers to an article of this JLoI;
  - c. **BAT:** Best Available Techniques;
  - d. **Biomethane:** biomethane that is in compliance with the criteria set out in Directive 2018/2001/EU of the European Parliament and of the Council on the promotion of the use of energy from renewable sources (Renewable Energy Directive II, "RED II"), which sets out the sustainability and greenhouse gas reduction criteria for biomethane, including any relevant implementing or delegated acts, as amended or replaced from time to time;
  - e. **CCS (Carbon Capture and Storage):** the process of capturing, transporting and permanently storing carbon dioxide to prevent it from entering the atmosphere;
  - f. **CEEAG:** Guidelines on State aid for climate, environmental protection and energy 2022 (2022/C 80/01);
  - g. **Climate Neutrality:** net-zero Greenhouse gas emissions in scope 1 and 2 (as applicable) in CO<sub>2</sub> equivalent terms;
  - h. **CO<sub>2</sub>:** carbon dioxide, one of the greenhouse gases that contributes to global warming;
  - i. **DRP-EAF:** a Direct Reduction Plant and Electric Arc Furnace;
  - j. **Dutch Climate Law:** the law enacted on 2 March 2022 (*Klimaatwet*);
  - k. **Dutch Climate Policy Programme:** the governmental policy programme (*beleidsprogramma Klimaat*) dated 2 June 2022 on the main features of the climate policy until 2030 aimed at the realisation of the objectives of the Dutch Climate Law;
  - l. **Dutch CO<sub>2</sub> Levy:** the national levy on industrial CO<sub>2</sub> emissions, governed by the 'Wet belastingen op milieugrondslag' chapter VIB;
  - m. **Duty of Care:** the duty of care (*zorgplicht*) as stipulated in environmental law such as the Dutch Environment and Planning Act (*Omgevingswet*);
  - n. **EoP:** the Expression of Principles signed on the 15<sup>th</sup> of July 2022;
  - o. **Expert Group:** the *Expertgroep Gezondheid IJmond* or Expert Group Health IJmond is a group of 10 experts installed by the Dutch State Secretary for Public Transport and the Environment;
  - p. **GER:** the *Gezondheidseffectrapportage* by a third party that will give insight in the health benefits of the Groen Staal Plan;
  - q. **Government Program:** the plans of the current cabinet of the Netherlands (*regeerprogramma*);
  - r. **Greenhouse Gases:** gases listed in Annex II 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 European Union;
  - s. **Greenhouse Gas Emissions:** the emissions of Greenhouse Gases;
  - t. **Groen Staal Plan:** TSN's sustainability plan towards green, cleaner and circular steel production, consisting of Roadmap +, Green Steel phase 1, additional environment and health measures and Green Steel phase 2;
  - u. **Hydrogen:** whenever hydrogen is mentioned in this JLoI, it refers to renewable hydrogen that has been produced through the process of electrolysis, using renewable electricity to split water into hydrogen and oxygen and is in compliance with the criteria laid down in Directive 2018/2001/EU of the European Parliament and of the Council on the promotion of the use of energy from renewable sources (Renewable Energy Directive II, "RED II") and as supplemented by Commission

<sup>15</sup> Kamerbrief Voortgang Maatwerkafspraken, d.d. 27 February 2023, Tweede Kamer, vergaderjaar 2022–2023, 29 826, nr. 173

- Delegated Regulations 2023/1184/EU and 2023/1185/EU, including any relevant amendments or replacements;
- v. **Industrial Emissions Directive:** Directive 2010/75/EU of the European Parliament and the Council on industrial emissions;
  - w. **JLoI:** this Joint Letter of Intent;
  - x. **NEa:** the Dutch Emissions Authority (*Nederlandse Emissieautoriteit*);
  - y. **MER/EIA:** the *Milieueffectrapportage*/Environmental Impact Analysis;
  - z. **Mta:** Million tons per annum;
  - aa. **Mton:** Million tons;
  - bb. **ODNZKG:** Regional Environmental Agency Noordzeekanaal Area (*Omgevingsdienst Noordzeekanaalgebied*);
  - cc. **Parties:** the Parties to this Joint Letter of Intent;
  - dd. **Permits:** any permits, licenses, exemptions, consents or other formal authorisations that TSN requires from the State, (local) governmental organisation(s) or other competent authority for the realisation of the Projects;
  - ee. **Project Green Steel Phase 1:** the Subproject DRP-EAF to replace the Blast Furnace 7 ("BF7") and Coke and Gas Plant 2 ("CGP2"), Subproject CCS and Subproject Biomethane/Hydrogen as defined in Article 6;
  - ff. **Project of additional environmental and health measures:** Subproject Windbreaker and coverages, Subproject slag processing and storage and Subproject noise reduction as defined in Article 6;
  - gg. **Projects:** The projects outlined in Article 6, consisting of Project Green Steel Phase 1, which encompasses Subproject DRP-EAF, Subproject CCS and Subproject Biomethane/Hydrogen and the Project of additional environmental and health measures, which encompasses Subproject Windbreaker and coverages, Subproject slag processing and storage and Subproject noise reduction;
  - hh. **SVHC:** Substances of Very High Concern as defined by the criteria in Article 5.22a *Besluit activiteiten leefomgeving* and Regulation (EC) No 1907/2006 Article 57<sup>16</sup>;
  - ii. **TSIJ:** Tata Steel IJmuiden B.V., with its registered office in IJmuiden, the Netherlands, and its office address at Wenckebachstraat 1, 1951 JZ, Velsen-Noord, the Netherlands.

## Article 2 – Path to final JLoI and tailor-made agreements

1. Parties agree that this JLoI was concluded in two phases as described in this JLoI.
2. In Phase I, the JLoI was drawn up in draft form (*concept*). In Phase I, the State also conducted a financial, legal, environmental and technical review of TSN's Projects as mentioned in Article 6 and TSN's (confidential) business case. The draft JLoI was subsequently submitted to the Advisory Committee;
3. The Advisory Committee rendered a non-binding advice to the Minister of Climate Policy and Green Growth and the State Secretary for Public Transport and the Environment with respect to, among other things, feasibility, cost-effectiveness and level of ambition of the intended tailor-made agreements;
4. The Advisory Committee consulted the Expert Group in order to assess the Projects in regard to possible health effects in more detail;
5. The Advisory Committee and the Expert Group may further advise the Minister of Climate Policy and Green Growth and the State Secretary for Public Transport and the Environment on their request;
6. In Phase II – after receipt of the advice of the Advisory Committee – the Minister of Climate Policy and Green Growth and the State Secretary for Public Transport and the Environment concluded whether or not the JLoI could be finalised and signed;
7. After the advice of the Advisory Committee:
  - a. the JLoI is finalised and signed by all Parties; or
  - b. Parties resume the negotiations and amend the JLoI, after which the JLoI is signed by all Parties; or

<sup>16</sup> Note that this definition refers to the Dutch 'ZZS' substances, which includes but, as a result of the additional criteria listed in Art 5.22a *Besluit activiteiten leefomgeving*, is not limited to the REACH SVHC substances.

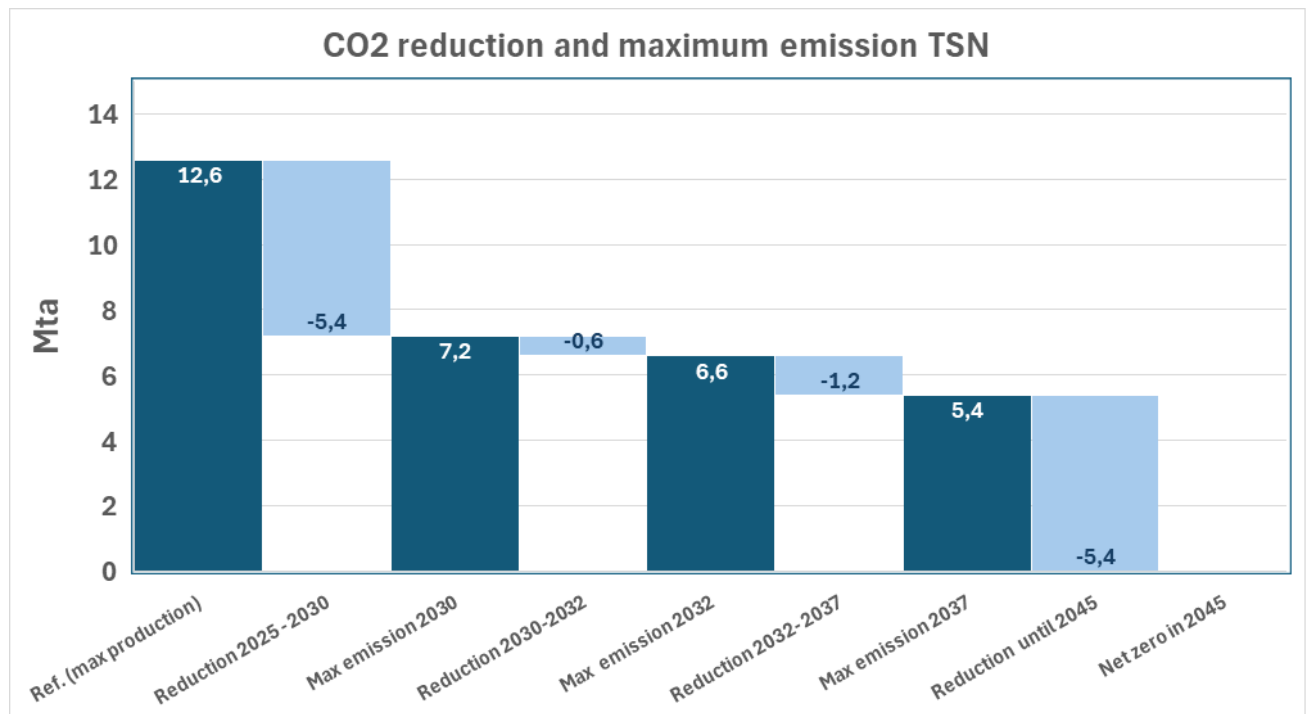
- c. (one of) the Parties terminate(s) the negotiations about the JLoI;
8. Parties decided that after some amendments to the draft JLoI, the JLoI could be finalised and signed;
9. Parties acknowledge that until the JLoI is duly signed, the draft JLoI is neither concluded nor binding and Parties are entitled to terminate the negotiations at any time for any reason, in which case the terminating Party is not liable for any damages or compensation of costs towards (any of) the other Parties;
10. Parties acknowledge that any support of the State shall always be subject to the condition of compliance with the applicable State aid framework, including but not limited to public consultation regarding certain aspects of the intended support and subsequent approval from the European Commission ("**EC**");
11. Parties will discuss which circumstances and risks could be included in the tailor-made agreement for the execution of the Projects or as relevant circumstances to include in a force majeure provision;
12. Since the Netherlands is part of the Aarhus Convention, the State is required under this convention to ensure effective public participation in decision-making on environmental matters. Therefore, this JLoI will be used as a basis in a public consultation organized by the State, in addition to any required participation that is part of the permitting and State aid procedure. The results will be considered by the State in negotiating the final tailor-made agreement;
13. After agreeing and signing the JLoI, Parties will continue their discussions in good faith and intend to reach agreement on the final tailor-made agreement ultimately by 30 September 2026, unless Parties mutually agree to extend this date. The JLoI confirms the aims and objectives of Parties and sets out a framework to come to a tailor-made agreement. The JLoI is neither binding on the execution of the Projects or the Subsidy, nor with respect to any of the other commitments made herein by any of the Parties, with the exception of the commitment of the Parties on good faith negotiations towards a tailor-made agreement including the commitments related specifically to the period prior to the tailor-made agreement. If no tailor-made agreement has been reached on 30 September 2026, or such later date as agreed between the Parties, each Party may terminate the JLoI and any commitment thereunder;
14. After agreeing and signing the JLoI, the signed JLoI and the advice of the Advisory Committee will be made public by the State.

### Article 3 – Aim

The primary aim of this JLoI is for the Parties to lay down the intention and reasonable effort obligation (*inspanningsverplichting*) to come to a tailor-made agreement, which is intended to include firm obligations (*resultaatsverplichtingen*) regarding the realisation of the Projects and achievement of the following environmental and societal benefits<sup>17</sup>:

#### 1. Reduction of CO<sub>2</sub> emissions

- a. TSN's annual scope 1 CO<sub>2</sub> emissions to be reduced as follows:
  - i. Reduce TSN's annual scope 1 CO<sub>2</sub> emissions with 5.4 Mta in 2030 relative to the maximum of 12.6 Mta<sup>18</sup> through the DRP-EAF on natural gas;
  - ii. Further reduce TSN's annual scope 1 CO<sub>2</sub> emissions with 0.6 Mta in 2032 through CCS;
  - iii. Further reduce TSN's annual scope 1 CO<sub>2</sub> emissions with 1.2 Mta between 2032 and 2037<sup>19</sup> by replacing natural gas with Biomethane and/or Hydrogen;
- b. These reduction objectives aim to result in a maximum CO<sub>2</sub> emission of 7.2 Mta from 2030 onwards; 6.6 Mta from 2032 onwards and 5.4 Mta starting between 2032 – 2037 onwards. The results will be measured in accordance with the procedures applied by the NEa for purposes of the EU-ETS. As part of those procedures, TSN will annually report on the emission reductions.
- c. Parties strive towards the maximum reduction target, however the Parties acknowledge that there is a margin of (technical) uncertainty about the CO<sub>2</sub> reduction of 0.6 Mta in total. In the tailor-made agreements the Parties will agree on exact reduction targets.
- d. In the long term TSN aims to further reduce its annual scope 1 CO<sub>2</sub> emissions stepwise to achieve its goal of climate neutrality ultimately by 2045 and within that as soon as reasonably possible.
- e. With respect to any reference to current CO<sub>2</sub> emissions and the reductions sought, references to TSN shall be read and construed as references to emissions of TSIJ and attributable emissions from the Vattenfall power plants.



<sup>17</sup> These objectives have been validated by independent advisors of the State ('Technical advisory report in support of the Joint Letter of Intent for Tata Steel Netherlands')

<sup>18</sup> TSN is emitting approximately 12.6 Mta of CO<sub>2</sub> scaled to the maximum production capacity / production rate of 7.23 Mta of liquid steel.

<sup>19</sup> Exact year depends on the success of the yearly tenders between 2032 and 2037

## 2. Addressing health risks: reduction of other emissions, immissions and nuisance

Addressing health risks for local residents is one of the key objectives of the tailor-made agreement. Research of RIVM states that the emissions and nuisance from the TSN site increases the risk of adverse health effects to local residents. The objectives in the below paragraph therefore focus on reducing this likelihood of adverse health effects: the emissions, immissions and nuisance of the TSN site<sup>20</sup>. TSN is fully committed to address these health risks.

- a. TSN's<sup>21</sup> annual emissions to be reduced as follows:
  - i. Reduce TSN's annual NOx emissions to a maximum annual emission of 4.00 kton/yr by 2030;
  - ii. Reduce TSN's annual SO<sub>2</sub> emissions to a maximum annual emission of 2.52 kton/yr by 2030;
  - iii. Reduce its contribution to the PM10 immission (*immissie*) at Wijk aan Zee (measure location Banjaert) with at least 35% based on current methodology by 2030<sup>22</sup> which relates to a maximum annual emission in PM10 of 467 ton/yr;
  - iv. Reduce TSN's overall annual emission of SVHC by 2030. A legal obligation to minimize emissions of SVHC applies. At least the following maximum emission objectives that go beyond current legal requirements for minimalization will apply for the SVHC listed below:
    1. Benzo[a]pyrene (BaP): 14 kg/yr;
    2. Beryllium: 55 kg/yr;
    3. Mercury: 33 kg/yr;
    4. Lead: 0.45 ton/yr;
    5. Dioxin: 0.8 g TEQ/yr<sup>23</sup>;
    6. Benzene: 6.1 ton/yr.
  - v. Reduce TSN's overall annual emission of the following substances by 2030:
    1. Chromium: 229 kg/yr;
    2. Manganese: 0.8 ton/yr;
    3. Vanadium: 57 kg/yr.
  - vi. The Advisory Committee has advised to include additional substances on top of the above listed i-v. Parties intend to include 2030 targets for these advised substances in the final tailor-made agreement. For reasons of transparency, initial targets, based on current assumptions, are included below. These preliminary targets will be further reviewed and agreed upon prior to the signing of the final tailor-made agreement.
    1. Reduce TSN's annual NO<sub>2</sub> emissions to a maximum annual emission of 0.2 kton/yr;
    2. Reduce TSN's annual PM<sub>2.5</sub> emissions to a maximum annual emission of 305 ton/yr;
    3. Chromium (VI) 4,4 kg/yr;
    4. Nickel 256 kg/yr;
    5. Arsenic 45 kg/yr;
    6. Cadmium 31 kg/yr;
    7. For the following substances initial targets could not yet be determined but are expected to be set in the final tailor-made agreement: Thallium, VOC's, and Polychloorbifenylen (PCB's).
- b. Reduce the sources of peak-, low frequency, impulse and tonal noise by 2030 and onwards. This will be achieved by expanding and enhancing TSN's noise monitoring system and analytical capabilities and identifying and realizing additional noise

<sup>20</sup> See Annex III for insights into the reductions compared to baseline

<sup>21</sup> The definition and determination of the above listed annual freights was done in line with the eMJV of TSN, including TSN's on site chain partners and mobile sources.

<sup>22</sup> Please also refer to Article 6.11 of this JLoI.

<sup>23</sup> As a result of higher scrap usage dioxins will increase compared to current levels

measures. The monitoring system will be realized by 2027, with the monitoring data being made publicly available. In close collaboration with the local community and local governments, TSN will target specific sources of peak-, low frequency, impulse and tonal noise and identify and realize measures to mitigate those sources. One already identified measure is the construction of a sound enclosure around scrap yard 3 (SOP3).

- c. TSN will expand and enhance its odour monitoring and analytical capabilities with the view to mitigate as much as possible unpleasant peak odour hindrance and make these findings publicly available by 2027. No specific targets that go beyond current legal requirements are set for odour since TSN's total odour emissions will reduce in line with the Provincial Odour Decisions (*Geurbesluiten*) dated 22 May 2022.
  - d. Due to the current technical difficulties of measuring and mitigating the emissions of ultra fine particles TSN shall i) conduct further research into the measurement of ultra fine particles emissions and dispersions and how to reduce the emissions hereof ii) use reasonable best efforts to apply such identified options to reduce emissions taking into account technical feasibility and cost effectiveness.
  - e. With respect to any reference to current emissions and reductions sought, references to TSN shall be read and construed as references to emissions of TSIJ and, where relevant, the activities of chain partners on the TSIJ site (Vattenfall, Harsco, Pelt&Hooykaas and Gasunie) and mobile sources on the TSIJ site.
3. Other societal benefits
- a. Circularity: TSN's intake of scrap will be increased from 17% in 2019 to 30% in 2030<sup>24</sup>;
  - b. Slag: TSN to implement new processing methods with the aim (i) to improve the quality of LD and EAF slag<sup>25</sup> and (ii) contribute to PM10 reductions by 2030 (see Article 6.1.b.II for more details).

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<sup>24</sup> As specified in Article 11.11 the Parties will further agree to a clear definition and monitoring system in the final tailor-made agreement

<sup>25</sup> LD steel slag is released in Linz-Donawitz (LD) steel production and EAF steel slag is released during steel production in an electric arc furnace (EAF stands for electric arc furnace).

#### Article 4 – TSN strategic plan towards green, clean and circular steel

1. TSN has started developing plans to become climate neutral in 2045. In March 2023, the Province of North-Holland started the procedure for a "Projectbesluit" for an important part of Project Green Steel Phase 1 (more specifically for the components as mentioned in the 'Gewijzigde Notitie voornemen Heracleus-Groen Staal') in order to accelerate the Permit procedures for the transition of TSN<sup>26</sup>.
2. TSN has since developed an amended plan to become climate neutral by 2045, called and hereafter referred to as: the "**Groen Staal Plan**". This plan was submitted to the Dutch government in November 2023 and a public letter was shared in this regard on January 9, 2024<sup>27</sup>.
3. Since January 9, 2024, the Groen Staal Plan has been further developed with other parties to address risks to health of local residents and achieve climate benefits. The updated plan is attached as Annex II.
4. The (updated) Groen Staal Plan has three main themes: green, cleaner and circular. Green concerns reducing Greenhouse Gas Emissions emitted by steel production, ultimately to net zero. Cleaner relates to reducing environmental impact and addressing risks to the health of local residents. Circular refers to sensible resource use and the reuse of steel products as raw materials.

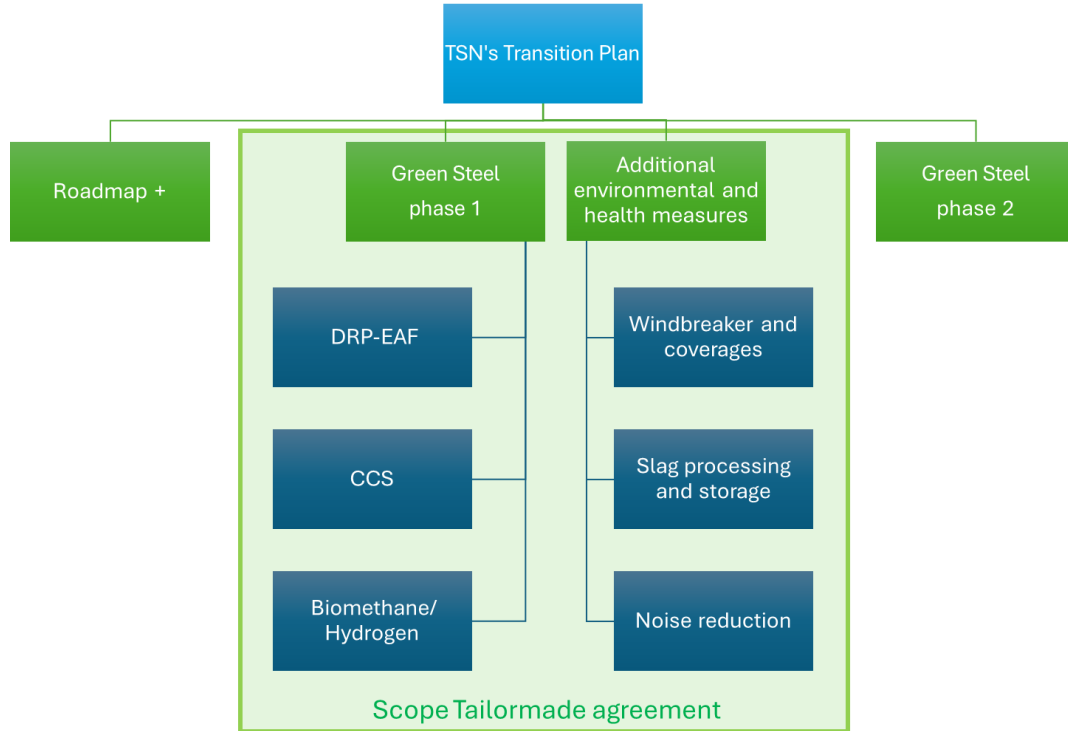
#### Article 5 – Scope of JLoI and the intended tailor-made agreement

1. The updated Groen Staal Plan consists of four elements, each also divisible into different parts:
  - a. **Roadmap+**: Environmental measures which are already (being) implemented by TSN before the tailor-made agreement will be signed. The Roadmap+ is being executed without support from the State.
  - b. **Project Green Steel Phase 1**: Construction of a DRP-EAF to replace the Blast Furnace 7 ("**BF7**") and Coke and Gas Plant 2 ("**CGP2**"), which is intended to be operational on natural gas and with increased scrap-intake. Subsequently, CCS will be added to the DRP and Biomethane and/or Hydrogen will be used.
  - c. **Project of additional environmental and health measures**: The construction and implementation of these measures will take place before 2030.
  - d. **Green Steel Phase 2**: Plans for, with current insights, a second DRP and two smelters. This phase will take place after the transition date of Green Steel Phase 1 of TSN's transition and, as it currently stands, there will be no tailor-made support from the State for this phase.
2. Project Green Steel Phase 1 and the Project of additional environmental and health measures (b. and c. under Article 5.1) together will form the scope of this JLoI and the intended tailor-made agreement.
3. The implementation of TSN's Roadmap+ is taking place without tailor-made support. However, the benefits of its execution are included in the aims mentioned in Article 3. This ensures that the expected results of the Roadmap+ will be achieved. TSN intends to complete any remaining outstanding Roadmap+ actions required for this purpose.
4. The Parties intend to end the tailor-made agreement after the transition date of Project Green Steel Phase 1 and the implementation of the Project of additional environmental and health measures, it being understood that certain provisions will be of a longer term due to their nature and extend beyond Project Green Steel Phase 1.
5. Beyond the Parties, other relevant stakeholders or parties that are or will be involved in the Projects are, without limitation:
  - a. Local citizens, communities and municipalities in the vicinity of TSN's operations;
  - b. Permitting, supervising and advisory bodies such as Omgevingsdienst Noordzeekanaalgebied (OD NZKG), Omgevingsdienst IJmond (OD IJ), Omgevingsdienst Noord-Holland Noord (OD NHN), Rijkswaterstaat (RWS), Autoriteit Nucleaire Veiligheid en Stralingsbescherming (ANVS), Inspectie Leefomgeving en Transport (ILT);
  - c. RIVM, GGD Kennemerland, GGD Amsterdam;

<sup>26</sup> [Brief aan PS over start procedure projectbesluit Heracleus-Groen Staal.pdf](#)

<sup>27</sup> [Gezondheid en milieu | Tweede Kamer der Staten-Generaal](#)

- d. The Expert Group;
- e. Chain partners: Pelt & Hooykaas, Harsco;
- f. grid operators responsible for the electrical grid and connections to TSN's locations;
- g. COR TSN,
- h. Unions e.g. FNV, CNV;
- i. VNO-NCW/local entrepreneurs; and
- j. NGO's.



## Article 6 – TSN's Projects

1. The Project Green Steel Phase 1 and the Project of additional environmental and health measures to achieve the objectives as mentioned in Article 3, can be divided into the following subprojects:
  - a. Project Green Steel Phase 1:
    - i. First, constructing a DRP-EAF using natural gas to replace BF7 and CGP2, including implementing several additional environmental measures, such as i) installing encasing and dust extraction systems on conveyor belts, ii) building and covering scrapyards SOP4 and SOP5, iii) using brackish water for process cooling, iv) using a DeNOx on the EAF and v) an increase in scrap input (**"Subproject DRP-EAF"**);
    - ii. Subsequently, implementation of CCS on the DRP reactor (**"Subproject CCS"**); and
    - iii. Replacing natural gas as feedstock for the DRP with Biomethane and/or Hydrogen (**"Subproject Biomethane/Hydrogen"**).
  - b. Project of additional environmental and health measures:
    - i. Windbreakers and coverages on raw material fields MV1, MV2, EO2 (**"Subproject Windbreaker and coverages"**);
    - ii. Steel slag: project for the improvement of the quality of slag, such as implementation of a rapid cooling process for EAF slag that results in an amorphous slag morphology which enables use in applications such as bound products; wind breaker to limit wind erosion; a building or coverage on the granulation process and storage at chain partners as currently Harsco and Pelt & Hooykaas; dedusting of open storages and roads; dedusting of the Metal Recovery Plant; dedusting of break sieve installations (**"Subproject slag processing and storage"**); and

- iii. Noise reduction measures are taken in two phases: first an enclosure of scrapyard SOP3 and a noise monitoring system are realized. Simultaneously additional measures for reduction of peak and tonal noise will be identified and realised as soon as reasonably possible in collaboration with the local community ("**Subproject noise reduction**").
4. The Projects are described in more detail in Annex II.
5. The table in Annex III gives a general overview of how much each subproject is expected to contribute to each objective as formulated in Article 3. The main goal is to reach the total objectives as formulated in Article 3. How much is contributed to the overall objectives per subproject should be considered as best estimates based on current insights and is of secondary importance.
6. Parties acknowledge that the measures under this Article (under 1.) exceed current Dutch and EU legal requirements and exceed anticipated future requirements.
7. The State, TSN and TSL acknowledge that the OD NZKG has taken an enforcement step concerning CGP2. Therefore, compliance of the further operation of CGP2 (until it will be replaced by the DRP) and the resolution and/or potential consequences resulting from the enforcement step is a matter between OD NZKG and TSN.
8. Parties acknowledge that between the signing of this JLoI and the tailor-made agreement, the project schedule will be impacted by various other external factors and risks such as those flagged by the Advisory Committee<sup>28</sup>. The Parties have therefore agreed to develop and pin down the final project schedule including milestones to be met by TSN and TSL, in the tailor-made agreement.
9. As already mentioned in Article 5, the implementation of TSN's Roadmap+ is not in scope of this JLoI. However, the benefits of its execution contribute to the objectives of the tailor-made agreement and have therefore been added to the table in Annex III.
10. The State has performed a financial, legal, technical and environmental review on TSN's Projects and related (confidential) business cases and will continue to do so until the tailor-made agreement is realized.
11. In an effort to accurately determine the societal benefit of fine dust reduction in the local communities as attributed to TSN, a specific method is being developed by TNO. In short, the method uses the existing air quality measurements of the *Luchtmeetnet stations* and deducts the above wind station from the below wind station to determine the difference in air quality before and after air has blown over TSN's industrial site. This method aims to allow Parties to objectively and continuously measure and monitor TSN's contribution to fine dust in the ambient air and is currently being reviewed by RIVM. In the tailor-made agreement, Parties strive to translate the aim on fine dust (set in Article 3.2.a.c) into an output indicator, assuming the method of TNO is successfully finalized.
12. The Parties take note of the advice of the Advisory Committee concerning emission targets.
  - a. TSN will identify how the reduction as a result of the Projects, and the expected reductions of Green Steel Phase 2 of the transition, relate to the emission targets referred to by the Advisory Committee.
  - b. TSN will continue to develop and optimize its operation, with the intention of limiting emissions further than mentioned in article 3.2 taking into account technical and operational feasibility and cost-effectiveness.
  - c. The outcomes will be reviewed by the other Parties.
13. Dispensation rights under the Dutch CO<sub>2</sub> Levy:
  - a. In order to prevent a "waterbed effect", CO<sub>2</sub> dispensation rights under the Dutch CO<sub>2</sub> Levy linked to the intended CO<sub>2</sub> reduction Projects to be realized by TSN under the tailor-made approach must not be used to compensate for a shortage of

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<sup>28</sup> The plans are substantial and complex, both in terms of their technical implementation and their environmental and health consequences. The size and volume of the planned projects and the fact that they must be completed on the site of factory components yet to be removed entail risks. The Advisory Committee considers the timeline until 2030, the benchmark year for the customized agreements, to be very tight. Furthermore, additional capacity will be needed for all permit applications and additional measurements.

dispensation rights of any other industrial installation or for any other purpose (except for carry back<sup>29</sup>). Therefore, in the tailor-made agreement and/or relevant subsidy decision TSN will guarantee (*garandeert*) with respect to each TSN industrial installation that any surplus of CO<sub>2</sub> dispensation rights under the Dutch CO<sub>2</sub> Levy that may result from the tailor-made approach are not used (with exception of use for carry back) and/or transferred inside or outside TSN, and that it will take all necessary actions to ensure this. An exact calculation (method) will be included in the relevant tailor-made agreement between the State and TSN.

- b. In case of any breach of paragraph 13.a, as included in the tailor-made agreement or subsidy decision, TSN shall be in default and shall forfeit to the State without further notice of default a penalty equal to 110% of the amount as referred to in section 71p subsection 1. under a. in conjunction with subsection 2. of the Dutch Environmental Taxes Act (*Wet belastingen op milieugrondslag*) for each concerning CO<sub>2</sub> dispensation right, without prejudice to the right of the State to claim any damages suffered as a result of a breach of paragraph 13.a or to claim performance, in addition to the penalty thus forfeited. The State and TSN agree that the aforementioned amount is a reasonable penalty amount, in light of the purpose of this provision mentioned in paragraph 13.a.
- c. This provision (paragraph 13.a and 13.b) will be included in each tailor-made agreement between the State and TSN and/or the relevant subsidy decision(s).

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<sup>29</sup> Artikel 71q Wet belastingen op de milieugrondslag.

## Article 7 – Efforts and actions regarding financing

In this Article 7, the Parties have agreed on various reasonable efforts and actions regarding financing. By stating that “the following reasonable efforts are required”, the Parties express their intention to come to firm obligations (*resultaatsverplichtingen*) in the tailor-made agreement and/or relevant subsidy decision(s) regarding the matters covered by these provisions, except when such matters specifically relate to the period prior to the tailor-made agreement.

Based on the financial model prepared by TSN dated November 2023, the State, TSN and TSL agree that TSN requires financial support to realize the Projects. This financial model has been reviewed by the State's (external) financial advisors and further modified several times on the basis of this review<sup>30</sup>.

Based on the current insights and available forecasts, the total investment (CAPEX) costs of the Projects<sup>31</sup> are in the range of 4,000 – 6,500 million<sup>32</sup> Euro. The intended contribution of each Party and the related intended financial structures for the CAPEX costs are further specified in Article 7.1 and 7.2.

### 7.1 Efforts and actions by TSN and TSL

7.1.1 For the realisation of the Projects, excluding Subproject CCS, an estimated investment of approximately 4,000 – 6,500 million is required. To achieve this, and as a condition for the efforts and actions by the State as described in Article 7.2, the following reasonable efforts are required from TSN and/or TSL:

- a. TSN and TSL to contribute (together the “**Contribution**”) and to arrange for external debt financing for a combined amount in the range of 2,300 – 4,000 million euro to the Projects. Any required residual financing would be quantified in the tailor-made agreement, such residual financing not to be provided by the State;
- b. TSN to reserve a sufficient to be agreed upon amount on its balance sheet consisting of available cash and internal accruals, earmarked and available for (pre-Final Investment Decision) financing of the Projects;
- c. TSL to commit to arrange for the Contribution (equity and/or subordinated shareholder loans) under the terms of the tailor-made agreement (on terms satisfactory to the State);
- d. TSN to firstly reinvest all of its free cash flow as well as any amounts received by way of financing by TSL (as to be specified in the tailor-made agreement), by way of reinvesting in the Projects, until completion and realisation of the objectives stated in Article 3, and TSN may not reinvest remaining free cash flow or amounts received by way of financing by TSL in any other existing or future projects or otherwise in its operations unless as otherwise agreed in this JLoI or in the tailor-made agreement;
- e. In the event of any CAPEX shortages related to the Projects, TSL and TSN are responsible for a commercially workable solution to reach the agreed targets (societal benefits) under the tailor-made agreement, whereby the State may postpone the grant payments for as long as TSN does not appropriately finance such CAPEX shortages and no obligation to provide additional funding or support (beyond what is to be provided under the tailor-made agreement) shall arise for the State;
- f. TSN and TSL shall adhere to their respective covenants to take measures to avoid unauthorized leakage from TSN to TSL until completion of the Projects and TSN to do its utmost to ensure that TSN will continue to generate the cash flow needed to complete the Projects.

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<sup>30</sup> The quality/correctness of the financial model is solely the responsibility of TSN.

<sup>31</sup> For the use of the definition here the costs for Subproject CCS are excluded. No financial tailor-made support is foreseen for CCS.

<sup>32</sup> All numbers in this Article are in nominal terms.

- g. TSN to grant security to the State for the Subsidy. The appropriate security structure will be finalized at the same time the external debt financing is arranged taking into account the different interests of the relevant parties. The Contribution will be subordinated to the Subsidy in the intercreditor arrangements.

7.1.2 Besides TSN and TSL's respective own investment, a bank financing is needed. In order to achieve this, the following reasonable efforts are required from TSN and/or TSL:

- a. Obtaining a fully committed term sheet between TSN and/or TSL and a lead bank/consortium of banks for the required debt financing on a European-style certain funds basis in such a manner as further specified in this Article as soon as possible and ultimately as a condition to funding in the tailor-made agreement;
- b. In the event that TSN or TSL is not able to timely enter into a committed term sheet to enable entering into the tailor-made agreement, TSL to put in place adequate bridge financing for the same amount;
- c. After entering into a committed term sheet with a lead bank/consortium of banks, TSN and/or TSL to take all necessary steps to timely enter into a final long form agreement to ensure, together with the State grant and TSL and TSN funding, certainty of funds to implement the Projects and other measures to be taken pursuant to the tailor-made agreement;
- d. TSL and TSN commit to arrange the required debt financing to execute the Projects in the amount committed in the tailor-made agreement. In the event that TSN or TSL, as a condition under entering into a tailor-made agreement, is not able to secure the debt financing in time to execute the Projects in line with the agreed timeline, TSL to put in place adequate bridge financing.

7.1.3 Furthermore TSN has applied for a subsidy from the European Innovation Fund (EIF) for Subproject DRP-EAF. In case of a negative grant decision, the investment shall be increased with an amount equivalent to the part of the grant from EIF, to be provided by TSN/TSL external debt financing and/or an alternative national generic subsidy scheme (such as NIKI), as the case may be. Parties acknowledge that there will be no change in the total tailor-made support of the State.

7.1.4 For the financing structure and principles, the following reasonable efforts are required from TSN and/or TSL:

- a. Any funds provided by the State, TSL and external financing parties in relation to the Projects' investments to be solely applied to the agreed investments and not for any other corporate purposes of TSN. TSN to put a structure in place that allows for separate accounting, reporting and monitoring of the agreed investments;
- b. TSN shall ensure that the Projects are not affected by 'leakage' to the TSL group (through distribution or non-arm's length arrangements or practices) prior to completion of the Projects in full;
- c. TSN shall ensure that the Projects are not affected by any contingent liabilities materialising at TSN (e.g., in case of fines, lawsuits or legacy issues);

7.1.5 For the Subproject CCS and Subproject Biomethane/Hydrogen, the following reasonable efforts are required from TSN:

- a. To mature the Subproject CCS and to take all actions necessary to prepare for (i) the implementation of CCS on the DRP reactor in the year 2032 (ii) annual procurement(s) during a 5 year period, for Biomethane and/or Hydrogen, such that the use thereof can start two years from being fully operational with the DRP-EAF production facility. The two years are expected to ensure stable operations of the DRP-EAF to allow Biomethane and Hydrogen usage as well as final operational tests. With the use of CCS, Biomethane and/or Hydrogen point 127 and 129 of the CEEAG is intended to be fulfilled, subject to analysis and approval of the EC<sup>33</sup>.

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<sup>33</sup> [Communication from the Commission – Guidelines on State aid for climate, environmental protection and energy 2022](#)

#### 7.1.6 Additional commitments TSL:

- a. TSL confirms that it intends to continue encouraging TSN in its ambition to be among the most competitive and leading European steel producing companies and employer of choice.
- b. TSL confirms that it is willing and able to reasonably cooperate with TSN and fully encourages TSN to comply with its obligations under this JLoI to deliver on its transition, including the fulfilment of the aims set out in Article 3, and the execution of the Projects set out in the Project Schedule (Annex II).
- c. TSL to take all commercially reasonable actions necessary to encourage TSN to fulfil its obligations under this JLoI and the tailor-made agreement and to achieve the reduction targets (societal benefits) of the tailor-made agreement. The tailor-made agreement will contain specific agreements on TSL's financial commitments.

If needed and to the extent available, the State to be permitted to share relevant documents such as the committed term sheet with the EC for receiving approval of the State support by the EC.

If necessary, TSN is allowed to reallocate its investment between the Projects as long as the total investment remains at least the same. In any case, there will be no effect on the (aggregate) State support and the funding gap and TSN shall not be permitted to reallocate State subsidies earmarked for the Projects to other projects.

### 7.2 Efforts and actions by the State

7.2.1 For the realisation of the Projects, excluding Subproject CCS, the State shall use reasonable efforts to reduce the remaining funding gap of the Projects, excluding Subproject CCS, with a one-off subsidy with a maximum of 2,000 million Euro (the "**Subsidy**"), subject to EC and parliamentary approval and the conditions as mentioned in this JLoI. The support will need to comply with all applicable national and European rules and regulations at the time of the subsidy decision(s), such as the applicable budget rules and procedures. More specifically, the following reasonable efforts are required from the State;

- a. The State shall continue developing a tailor-made subsidy within Section 4.1 and 4.5 of the framework of CEEAG, for the realisation of Project Green Steel Phase 1 and Project of additional environmental and health measures, as further described below;
- b. There have already been several consultations with the EC on the intended aid measure. The State shall continue the meetings with the EC, to enable – to the extent possible – the EC to come to a timely decision regarding the intended aid measure prior to the entering into of a tailor-made agreement.

#### 7.2.2 Intended financial structure

##### *Project Green Steel Phase 1*

For Subproject DRP-EAF, it is intended for the subsidy to be provided to TSN in line with the capital expenditures of the Subproject DRP-EAF after reaching a tailor-made agreement, with a maximum of 1.200 million Euro<sup>34</sup> and proportionate to the equity and/or shareholder loan investment into TSN.

The final instalment (*voorschot*) of the subsidy will only be provided upon completion of the entire Subproject DRP-EAF, including closure of CGP2 and BF7 and the Project of additional environmental and health measures.

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<sup>34</sup> The total subsidy amount can never exceed the funding gap. Due to business confidentiality, the funding gap has not been made public with this JLoI.

The efforts of TSN to ensure no lock-in on natural gas (points 127 and 129 CEEAG) are stated in Article 7.1.5 of this JLoI. Based on these efforts, TSN will be obliged to realise Subproject Biomethane/Hydrogen and the State intends to support TSN in these OPEX costs for the use of Biomethane and/or Hydrogen with a subsidy in the form of a loan after reaching a tailor-made agreement, with a maximum of 200 million Euro. The subsidy in the form of a loan is intended to be provided to TSN at the beginning of the Project Green Steel Phase 1 period, allowing for TSN to use the aid during the DRP-EAF construction phase for financing purposes at TSN's own risk. If, and to the extent that the intended Biomethane and/or Hydrogen tenders/procurement(s) fail, the subsidy in the form of a loan, including interest and potentially a penalty, must be repaid. However, in case of successful tender(s), repayment of the loan will be (proportionally) waived. TSN is aware of these obligations and is supportive of TSN in its obligations regarding the no lock-in.

To avoid overcompensation, due to a higher profitability of Subproject DRP-EAF, a clawback mechanism is intended to be introduced and agreed upon in the tailor-made agreement and/or relevant subsidy decision.

*Project of additional environmental and health measures*

For the Project of additional environmental and health measures, it is intended for the subsidy to be provided to TSN in line with the capital expenditures after reaching a tailor-made agreement, with a maximum of 600 million Euro.

*Other*

- a. TSN will be responsible for providing ex-post verification of the expenditures of the Projects for external, independent review.
- b. For both Projects a penalty mechanism is intended to be introduced and agreed upon in the tailor-made agreement and/or relevant subsidy decision.
- c. TSN receives no financial support from the State for the implementation of its Roadmap+ activities. For the Subproject CCS, TSN does not receive tailor-made support either, but can apply for support using generic instruments, notably SDE++, which will then be dealt with like any other application. In addition, TSN also makes investments to keep the necessary plants running and phasing out of plants. No financial support from the State will be provided for these costs either.
- d. Assuming the maximum support for the Subproject DRP-EAF of EUR 1,200 million, the cost effectiveness of the support is EUR 25 per tonne of CO<sub>2</sub> saved. If the EUR 0.2 billion in support for the use of Biomethane and/or Hydrogen and the associated CO<sub>2</sub> reduction are specifically considered, EUR 27 in support is provided per tonne of CO<sub>2</sub> saved.

## **Article 8 – Efforts and actions regarding Permits**

### **8.1 Efforts and actions by the State**

- a. The State will facilitate, where possible and within its purview, timely decision making on Permit applications for any Permit and, whilst respecting their respective authority and function under public law, encourage relevant public entities and authorities whose actions and/or decisions are required for obtaining any Permit to contribute to timely decision making.
- b. The State has provided financial support to the authorities responsible for the relevant permitting procedures under Dutch law. This included a *Specifieke Uitkering* and an 'Expert Pool' to expand human capital resources and generate a context within which permitting procedures can be executed in a timely manner. The State may at its sole discretion provide additional (financial) support.
- c. The State will continue in good faith discussions with TSN and TSL in order to make a decision on whether to enter into the negotiated tailor-made agreement, so as to the extent possible to enable TSN to timely apply for the relevant Permit applications to meet relevant Permit deadlines. The State will continue to participate in the regularly held Project meetings with TSN, the Province of North-Holland and other relevant authorities.
- d. Parties will discuss in good faith any significant developments regarding the Dutch nitrogen issues and related policies and case law, to which any obligations, representations, or warranties by TSN and TSL are subject. Parties acknowledge that changes in jurisprudence and/or in case law may occur and express that they participate in good faith in discussions for the permitting process for nature permits regarding to the nitrogen case.
- e. The State intends to ensure sufficient resources continue to be allocated to the relevant governing bodies mandated by the State to ensure these bodies can operate independently and effectively.

### **8.2 Efforts and actions by TSN**

TSN assesses the Permit timelines as ambitious and partly dependent on factors outside the control of TSN. Supplying complete and high quality Permit applications is within the control of TSN and of importance for meeting desired Permit timelines. Delays in obtaining the relevant Permits, regardless of its cause, could impact the business case of the individual Projects.

- a. TSN will as timely as appropriate prepare and submit all complete necessary Permit applications for the Projects, covered by the 'Projectbesluit', among others the Subproject DRP-EAF.
- b. TSN will as timely as appropriate prepare and submit all other complete necessary Permit applications for the Projects, not covered by the 'Projectbesluit', among others the Project of additional environmental and health measures and Subproject Biomethane/Hydrogen. TSN will submit the Permit applications for the Project of additional environmental and health measures as soon as appropriate.
- c. TSN will use reasonable efforts to enhance/maintain a good relationship with surrounding communities, inform local residents during the permitting process and consider their input during Permit applications, and continue to ambitiously fulfil participation requirements.
- d. TSN will investigate how it can strengthen independent and transparent measuring and monitoring, which may need an update of the current legal framework. Outcomes and follow-up will be discussed with the other Parties and agreed upon in the tailor-made agreement.

### **8.3 Efforts and actions by the Province of North-Holland**

- a. The Province of North-Holland will use reasonable efforts to procure the capacity and capabilities needed for Permit applications and regulatory oversight within its purview that are necessary for the Projects.

- b. The Province of North-Holland will continue to facilitate and continue regular coordination with the OD and TSN to discuss progress in the permitting process for Project Green Steel Phase 1.
- c. Since the EoP, the Parties have been working closely together to ensure fast yet careful permitting process. The Parties will continue the permitting process in accordance with current practice procedure and continue to explore options for this throughout the process.
- d. The Province of North-Holland will facilitate, where possible and within its purview, timely decision-making on Permit applications for any Permit and, whilst respecting the respective competent authority and function under public law, encourage relevant public entities and authorities whose actions and/or decisions are required for obtaining any Permit to contribute to timely decision making. More specifically, the Province of North-Holland will use reasonable efforts:
  - i. To continue to pursue the 'Projectbesluit' for Project Green Steel Phase 1 (more specifically for the components as mentioned in the 'Gewijzigde Notitie voornemen Heracleus-Groen Staal'), consistent with the submitted application;
  - ii. To facilitate timely decision-making on Nature Permit applications. This is a separate Permit procedure, not covered by the 'Projectbesluit';
  - iii. Timely decision-making on Permit applications regarding other projects within the scope of this JLoI which are not part of or coordinated with the 'Projectbesluit' and/or MER for Heracleus Groen Staal;
- e. The Province of North-Holland intends to ensure sufficient resources continue to be allocated to the relevant governing bodies mandated by the Province of North-Holland to ensure these bodies can operate independently and effectively.

## **Article 9 – Efforts and actions regarding infrastructure**

### **9.1 Efforts and actions by the State**

- a. The State is to use reasonable efforts, within its purview, to procure that the envisaged Aramis CCS infrastructure will be realized.
- b. The State is to use reasonable efforts, within its purview, to procure that the national Hydrogen backbone will be constructed in a timely manner.
- c. The State is to use reasonable efforts, within its purview, to stimulate the development of the Biomethane and Hydrogen markets, thereby maximizing the likelihood that TSN can hold successful tenders for required volumes of Biomethane and Hydrogen.

### **9.2 Efforts and actions by TSN**

- a. TSN to use reasonable efforts to plan and prepare all infrastructural changes on TSN's site which are necessary for the Projects.
- b. TSN to use reasonable efforts to make transport arrangements and arrange contracts with CO<sub>2</sub>-storage facilities which are necessary to implement Subproject CCS.
- c. TSN to use reasonable efforts to prepare the necessary infrastructure to replace natural gas with Hydrogen after successful tenders, while Parties acknowledge that Biomethane will be supplied through the already existing natural gas grid connection of TSN.
- d. The Parties will discuss in good faith and will come to an agreement in the tailor-made agreement on (which pieces of) land that have become vacant as a result of the realisation of the Projects, will be used to support the energy transition by creating an energy harbour. The Parties will further discuss in good faith whether and for what purpose the remaining pieces of land, that are to become vacant after completion of the Project can be used.

### 9.3 Efforts and actions by the Province of North-Holland

The Province of North-Holland shall use reasonable efforts:

- a. To investigate the requirements necessary for keeping the current air measurement network in place at the Banjaert, IJmuiden/Kanaaldijk, Beverwijk West, Bosweg, Reyndersweg and Staalstraat locations until at least 2040. This does not preclude the possibility that evaluations and/or new scientific insights may lead to adjustments in the air quality monitoring network.
- b. To assess the annual emission report (e-MJV) in a timely manner in accordance with legal obligations, depending on the timely submission by TSN.

## **Article 10 – Other efforts and actions by TSN and/or TSL**

### 10.1 Employees

TSN aims to undertake in the tailor-made agreement to, until completion of the Projects and at least five years thereafter:

- a. remain a substantial employer at its IJmuiden Site;
- b. endeavour to retain as many jobs as reasonably possible and to prevent as much as reasonably possible involuntary dismissals in its transition to a clean, green and circular steel company, it being understood that companies, including TSN, will need to periodically adjust their operations to align with economic and business dynamics, from time to time need to take measures to ensure that its operations remain economically viable;
- c. to support its current employees to, as much as reasonably practicable, re-educate and re-train where needed and possible to remain part of TSN's future workforce;
- d. commit to the "Sociaal Contract Groen Staal" as agreed from time to time with the relevant trade unions, and to duly involve the Central Works Council and the trade unions where required;
- e. continue to implement Risk Survey and Evaluations ("Risico Inventarisatie & Evaluatie") and corresponding plans of action including appropriate measures to safeguard the interests (including health) of employees in accordance with legal obligations;
- f. implement and execute a reasonable, suitable and explainable remuneration policy for its management board, with any amendments to the bonus policy currently in place (as reviewed by the State) being established after reasonable consultation with the State.

### 10.2 Environment and health

- a. Subject to the tailor-made agreement, TSN undertakes to keep investing in, and engaging constructively with, local communities, for a period to be reasonably agreed upon by Parties in the tailor-made agreement, including by:
  - i. continuing to foster support among the local communities for TSN's operations and transition to a sustainable steel producer; and
  - ii. establishing a fund for the benefit of the local community (e.g., by supporting local initiatives in respect of sports, education, culture and nature), the funds of which shall be allocated in consultation with the three municipalities in which the TSN site in IJmuiden is located. The local community will actively participate in determining fund allocation through an application process, ensuring alignment with community needs and priorities.
- b. TSN will take, among others, the following measures to strengthen its Duty of Care regarding the handling and application of steel slag:
  - i. TSN, as one of the REACH-members in a consortium, has initiated an update for the REACH classification<sup>35</sup> for steel slag based on the current knowledge and research and will make reasonable efforts to change the classification as soon as possible. This registration applies on multiple European steel producers and slag processors;

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<sup>35</sup> EC number 294-409-3

- ii. TSN is strengthening its Duty of Care for the application of slag by taking, as soon as practically possible, greater (chain) responsibility for its application. TSN will supply a 'risk document' for customers of slag in the Netherlands (in accordance with the requirements regarding the '*milieuverklaring bodemkwaliteit*' in the applicable legislation)<sup>36</sup>. In this document a safe application is defined and guidance is given where it can be used safely taking into account negative consequences for human health or the environment. TSN will make sure that customers confirm in writing that they have understood this document before applying slag;
- iii. In the 'risk document' extensive attention shall be given to prevent situations where harm to health from inhalation and skin, mouth and eye contact between humans and steel slag can be expected;
- iv. TSN will aim to develop concrete projects (see Article 6) to improve the quality of LD and EAF slag.
- c. TSN will make reasonable efforts to conduct – in collaboration with the State and the Province – further research in the coming years, into the formation of ultra fine particles and ways to limit it. Results will be shared publicly and used to improve business operations and project implementation, taking into account technical feasibility and cost effectiveness.
- d. TSN will provide timely and high-quality data to the Province of North-Holland for the annual emissions report (e-MJV), which will also be used as part of the monitoring of the tailor-made agreement.

### 10.3 Establishment and operation

- a. TSN has the ambition to remain among the most competitive and leading European steel producing companies and to be an employer of choice in the Netherlands. In light of this ambition and the financial support to be provided by the State, TSN aims to undertake in the tailor-made agreement to, until completion of the Projects and during the period for which the tailor-made agreement is in place (or such period as may be stipulated in the tailor-made agreement):
  - i. keep TSN's registered office in the Netherlands;
  - ii. maintain the centre of TSN's business operations and production in the Netherlands for the long term;
  - iii. keep its production for the assets being built for the Projects in the Netherlands at least at levels foreseen in the Business Plan, provided that this is reasonably economically viable and reasonably possible given the global supply and demand;
  - iv. refrain from directly or indirectly selling, transferring, pledging or otherwise encumbering all or a substantial part of Tata Steel IJmuiden B.V.'s physical assets, unless (i) the value unlocked by such action is deployed in TSN's business or (ii) any such encumbrances already exist or relate to the financing to be obtained for ongoing business operations or in the context of the execution of the projects, including as envisaged in this JLoI, or otherwise in line with the tailor-made agreement; and
  - v. keep investing in steel production related R&D, innovation, knowledge institutions and education in the Netherlands.
- b. TSN will use reasonable efforts to strengthen its 'licence to operate'. This is without prejudice to legal requirements that TSN has to fulfil at all times.

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<sup>36</sup> at this time Regeling bodemkwaliteit 2022.

## **Article 11 – Other topics for the tailor-made agreement**

In addition to the previous articles the Parties aim to reach agreement on the following topics, among others, in the tailor-made agreement and/or relevant subsidy decision:

1. Consent rights: from the moment of signing the tailor-made agreement until the completion of the Projects, the State shall have consent rights, such consent not to be unreasonably withheld, in respect of the following key decisions to be taken by TSN:
  - a. material deviations from the Project plan (materiality thresholds to be agreed);
  - b. TSN decisions to make capital expenditures, or take on obligations, with a value exceeding 200 million Euro that are not foreseen in the agreed Project plan;
  - c. material related party transactions that are not at arms' length;
  - d. the sale or transfer of all or a substantial part of the business or assets of TSIJ;
  - e. the closure or winding down of a substantial part of TSIJ business, excluding the closure of the existing heavy end assets which are part of the value chain reliant on coal to produce steel;
2. Coal ban: Parties will discuss details on the potential coal ban in good faith towards the tailor-made agreement, taking into account the reasonable interests of each of TSN and of the State and without prejudice to the State's authority to adopt such policies or laws following due process by law.
3. Land: Upon cessation of its activities, TSN shall be responsible for the remediation of the soil contamination linked to its activities, if and to the extent required by applicable legal requirements and obligations, permits and regulations. In the event that TSN decides to lease and/or sell part of the site, TSN shall first offer such part(s) of the site to the State to designate such alternative activities that do not interfere with TSN's business operations.
4. Remuneration: TSN commits to implementing a reasonable, suitable and explainable remuneration policy for its Management Board, with any amendments to the bonus policy currently in place (as reviewed by the State) being established after reasonable consultation with the State.
5. Control system: Parties acknowledge they will put in place a system to monitor the achievement of the societal benefits. This monitoring system will be aimed at achieving the societal benefits, and an effective penalty system will be discussed and put in place as a fallback.
6. Health impact assessment (GER): Parties will in any case discuss the incorporation of the health impact assessment (GER) in the tailor-made agreement.
7. Payout scheme: the payout scheme of the subsidies will be included in the subsidy decision(s) and will be conditional on sufficient progress being made by reaching milestones.
8. Clawback: Parties will agree on appropriate clawback mechanisms *inter alia* to avoid overcompensation in the final tailor-made agreement and/or relevant subsidy decision(s), which shall meet EC requirements.
9. Project delivery: Parties will further discuss the approach to Permits, project delivery, including the key milestones, timing of funding.
10. NOx: Parties will further discuss the manner in which the NOx required for the build, transition and operational phases will be addressed in the permitting process, it being understood that TSN will implement a DeNOx plant at the pellet factory, which will constitute a significant offset.
11. Scrap and circularity: Parties will discuss and agree on ways of monitoring the percentage mentioned in Article 3.3 in the tailor-made agreement.
12. The definitive envisaged timing, conditions and measuring/calculation (methods) and milestones for any 'maximum' referenced in Article 3.2 will be further discussed and agreed upon in the tailor-made agreements. This will concern:
  - a. a monitoring protocol;
  - b. the effects of, including possible adjustments in relation to, measurement of (unexpected) additional substances, additional measuring points, knowhow improvements or additional mechanisms; and
  - c. actualisation of the numbers and/or baseline in Article 3.2 in case of amongst others an updated Environmental Impact Assessment.

- d. the outcome of the Health Impact Assessment that is currently being prepared by a working group.
13. Dividend payments: appropriate arrangements to ensure that dividend payments do not jeopardize the intended realisation of objectives outlined in Article 3.

#### **Article 12 - Governance**

1. Both TSN and the State have appointed a dedicated project team consisting of different areas of expertise. The project teams of TSN and the State meet on a frequent basis to further develop and monitor progress of the tailor-made agreement. Until at least the binding tailor-made agreement is signed, the project team will remain in place and continue to perform its duties.
2. Upon signing the tailor-made agreements, the Parties will agree on the adequate future governance structure, including an adequate monitoring system. During the monitoring, information will be collected on the progress made at crucial project stages, the steps taken by the Parties; the realisation of the aims specified in the agreement (CO<sub>2</sub> emission reduction, CO<sub>2</sub> dispensation rights, addressing health risks, reduction of NO<sub>x</sub> emissions, etcetera); timelines of the realisation. The company will report publicly on the progress on a regular basis, but at least once a year. The tailor-made agreement will describe the details of the monitoring process.
3. The State and TSL agree that any potential new CEO of TSN must have a certain profile and certain qualifications, which will be elaborated on in the tailor-made agreement. The Parties agree that, prior to TSL appointing a new CEO of TSN, the State shall be provided with the opportunity to discuss with TSL potential candidates for the position, and share its views with TSL, and TSL shall reasonably take such views into account until the date of completion of the transition.
4. TSN will present a plan to the State, with a view to incorporating in the tailor-made agreement, to further strengthen its culture and operation in relation to the importance of the environmental and health aspects. This means a further strengthening of the culture into one of proactive and transparent compliance and emissions stewardship by establishing an independent Risk and Compliance Function, embedding compliance and emissions into daily operations. TSL and TSN will also further strengthen the governance of TSN to continue to ensure expertise on environmental and health aspects. TSN will formulate a detailed program to achieve the further strengthening as set out in this Article. The State will take into account the progress TSN made.

#### **Article 13 - No limitation of authority and discretion public bodies and authorities**

This JLoI or its content in no way limits or affects the authority and/or discretion of the relevant public bodies or authorities, for instance with respect to, but not limited to, licensing, review of Permit applications or enforcement

#### **Article 14 – Change of law, unforeseen circumstances**

1. In this JLoI, unless the context requires otherwise, references to a statutory provision include references to that statutory provision as amended from time to time, extended or re-enacted and any regulations made under it, provided that in the event that the amendment, extension or re-enactment of any statutory provision or introduction of any new statutory provision has a material impact on the obligations of one or more Parties, the Parties will negotiate in good faith to agree to such amendments to this JLoI as may be appropriate in the circumstances as to minimize the consequences for any terms and obligations hereunder.
2. If, within a reasonable period of time, TSN and the other Parties cannot reach agreement on the nature of the changes required or other terms and conditions, either Party may seek to have the matter determined in accordance with Article 27 (Jurisdiction) below.
3. During the term of this JLoI, circumstances or developments might occur, or new insights may arise, which are not provided for in this JLoI, but which are relevant for the implementation of this JLoI. It is possible that as a consequence of such circumstances or developments, the unaltered maintenance of this JLoI cannot

reasonably be expected from one or more Parties. In that case, the Parties shall at the first request of one of the Parties enter into consultations in good faith about such reasonable amendment of this JLoI as is necessary to overcome the negative consequences of those circumstances or developments as much as possible (or reflect such amended provisions directly in the tailor-made agreement that is being negotiated), whilst the content and purport of this JLoI are maintained as much as possible. If such an amendment is not agreed upon within two months after such request was submitted, either Party may bring an action before the competent court to amend this JLoI with the application of the principles referred to above.

#### **Article 15 – Term and termination**

1. This JLoI comes into force after all Parties have signed the JLoI and shall then constitute legally valid, binding and enforceable obligations for the Parties hereto.
2. A Party may terminate (*opzeggen*) the JLoI with immediate effect, upon service of a notice in writing, if:
  - a. Parties have not reached an agreement on the final tailor-made agreement on 30 September 2026, or such later date as agreed between the Parties, at the latest;
  - b. one of the other Parties becomes bankrupt or insolvent, goes into liquidation, has a receiving or administration order made against it, compounds with its creditors, or carries on business under a receiver, trustee or manager for the benefit of its creditors; or
  - c. The EC does not approve the proposed state aid.
3. The State may terminate the JLoI with immediate effect, upon service of a notice in writing, if:
  - a. there is a change in the identity of the party or parties that directly or indirectly control TSN and/or TSL;
  - b. Any investigation (administrative, criminal or otherwise) by a competent authority into TSN, TSL and/or its affiliates, officers or employees that results – in the reasonable assessment of the State – in serious concerns for the State with regard to the entering into of the tailor-made agreement, including the accompanying subsidy decision(s);
  - c. TSN or TSL, or any of TSN's other affiliates, directors or key employees is convicted of a material criminal offence relating to TSN's business operations by a court of first instance or settles with a public prosecutor in connection with any such alleged offence. In case of a criminal prosecution, Parties will discuss whether this falls under this Article 15 paragraph 3.
  - d. TSN does not adequately address its legacy liabilities (in particular CGP2) including further improving the compliance and control of the operation.
4. TSN and TSL, acting jointly, may terminate the JLoI with immediate effect, upon service of notice in writing, if:
  - a. The national policy or policies regarding the Dutch CO<sub>2</sub> Levy results in, or is expected to result in, a significant cost to TSN;
  - b. The national policy or policies regarding the network tariffs significantly increases the costs relative to prevailing levels, indexed for inflation;
  - c. The national policy or policies regarding steel slag change in a way that it affects TSNs businesses, Projects, operations or financial position significantly in a negative way. This is without prejudice to the obligation of TSN to handle slag in a responsible way in accordance with the current applicable rules and legislation.
5. For the avoidance of doubt, the aforementioned termination grounds shall lapse once the Parties have entered into the tailor-made agreement and the Parties acknowledge that by agreeing to these termination rights in the JLoI, the Parties do not intend to pre-empt the outcome of any upcoming discussions on force majeure provisions or other risk allocation arrangements in the tailor-made agreement.
6. The terminating Party is not liable for damages or compensation of costs towards (any of) the other Parties. In case of termination of this JLoI, Parties are no longer bound to the obligations set out in this JLoI.

**Article 16 – (Termination) clause in case of new or changed policy; status controversial**

1. Without prejudice to any other (termination) rights and/or obligations and/or remedies the State and/or TSN and/or the Province of North-Holland may have, invoke or rely on under this JLoI, either the State or TSN can terminate (*opzeggen*) this JLoI partially or entirely with immediate effect upon serving a notice in writing to the Parties, if and to the extent this JLoI becomes partially or entirely incompatible with:
  - a. any policy of a new government installed after the fall of the government on 3 June 2025 not to proceed with the tailor-made approach not to make available (sufficient) funds for the tailor-made approach; and/or
  - b. the Second and/or First Chamber of Dutch Parliament (*Eerste en/of Tweede Kamer*) having declared controversial (*controversieel verklaren*) in view of the government's status as caretaker government (*demissionair kabinet*) since 3 June 2025:
    - i. the tailor-made approach sustainable industry (*maatwerkenpak verduurzaming industrie*); and/or
    - ii. this JLoI or a part thereof; and/or
    - iii. all or part of the obligations ensuing from this JLoI for the State; and/or
    - iv. the full or part of the execution of this JLoI by the State; and/or
    - v. any further negotiations about or the conclusion of – binding – tailor-made agreements (*(bindende) maatwerkafspraken*) with the selected companies, including TSN.
2. The State shall not be liable towards nor be required to otherwise compensate TSN and/or the Province of North-Holland:
  - a. for any damage TSN and/or the Provinces of North-Holland may suffer as a consequence of any termination of this JLoI or any part thereof pursuant to Article 16 paragraph 1; nor
  - b. for any costs and/or for any investments made by TSN and/or the Province of North-Holland in respect of any:
    - i. obligation ensuing from the JLoI that was – partially – fulfilled and/or
    - ii. activity that was carried out in relation to the part or parts of this JLoI which is or are terminated pursuant to Article 16 paragraph 1, prior to the moment as of which that part or those parts of this JLoI is or are terminated pursuant to Article 16 paragraph 1.
3. In the event of termination of this JLoI or any part thereof as per Article 16 paragraph 1 the Parties shall remain committed to discuss with each other if and to what extent the State's policy in respect of the Paris Agreement, European Climate law and the Dutch Climate Law (*Klimaatwet*) on the one hand and TSN sustainability and carbon dioxide (CO<sub>2</sub>) emission reduction goals and environmental and health improvements in the Netherlands on the other can be reconciled, however not as part of the tailor-made approach. This Article does not imply or entail any rights or entitlements for any Party to compensation whatsoever nor any commitment by any Party to support the other Party's policy or goals as meant in the preceding sentence.

**Article 17 - Implementation in accordance with the law**

1. The agreements set out in this JLoI and their further elaboration will be implemented in accordance with international law, European law and Dutch law, in particular to the extent that the agreements are within the scope of the international, European and Dutch rules on procurement, competition, state aid and technical standards and regulations.
2. The Parties acknowledge that for the determination and provision by the State of the financial support that TSN may be entitled to, the applicable national and European legislation at the time of the provision of the support, or at the time that a final draft subsidy decision (and where applicable a final draft of an implementation agreement or other documentation) is submitted to the EC for approval (whichever is earlier), will be decisive to determine whether and if so, to what extent the Project meets the criteria for additional CO<sub>2</sub> reduction and the principles of state aid. If that determination

deviates from the current expectations, the Parties shall discuss an adjustment of this JLoI in good faith.

#### **Article 18 – Notices**

Any notice and correspondence under this JLoI must be in writing and sent to a Party by letter or email to the address set out in Annex IV of this JLoI.

#### **Article 19 – Costs**

Each Party bears its own costs incurred with the negotiation, preparation, signing and performance in connection to this JLoI (and any documents referred to in the JLoI) and its own costs associated with the activities intended to be carried out under this JLoI, unless otherwise specified in this JLoI or if and when Parties agree otherwise in writing.

#### **Article 20 – Assignment**

Unless provided otherwise in this JLoI, no Party may assign this JLoI (*contractsoverneming*), assign any of its rights hereunder, or have such rights transferred by way of a legal merger or demerger, without the prior written consent of all other Parties.

#### **Article 21 – Amendments**

Any amendments or additions to this JLoI shall be valid and binding only if made in writing and signed by all Parties.

#### **Article 22 – Partial Invalidity**

If, at any time, any term of this JLoI is or becomes illegal, invalid or unenforceable in any respect, or this JLoI is or becomes ineffective in any respect, under the laws of any jurisdiction, such illegality, invalidity, unenforceability or ineffectiveness shall not affect:

1. the legality, validity or enforceability in that jurisdiction of any other term of this JLoI or the effectiveness in any other respect of this JLoI in that jurisdiction; or
2. the legality, validity or enforceability in other jurisdictions of that or any other term of this JLoI or the effectiveness of this JLoI under the laws of such other jurisdictions.

#### **Article 23 – Third Party Rights**

Parties do not intend for any third party to have any rights under this JLoI or to be able to enforce this JLoI. Furthermore, Parties exclude - to the extent permitted under applicable law - any such third-party rights that might otherwise be implied.

#### **Article 24 – Entire Agreement**

This JLoI constitutes the entire agreement between Parties with respect to the subject matter thereof.

#### **Article 25 – Counterparts**

This JLoI may be executed in any number of counterparts, and this has the same effect as if the signatures on the counterparts were on a single copy of this JLoI.

#### **Article 26 – Governing law**

This JLoI and any non-contractual obligation arising out of or in connection with it are governed by and shall be construed in accordance with the laws of the Netherlands.

#### **Article 27 – Jurisdiction**

Any dispute in connection with this JLoI, including a dispute regarding the existence, validity or termination of this JLoI or the consequences of its nullity or any non-contractual obligation arising out of or in connection with this JLoI, shall be subject to the exclusive jurisdiction of the courts of The Hague, the Netherlands.

**Signed in six original copies, each in the English language.**

**Minister of Climate Policy and Green Growth**

*acting in her capacity as administrative body (bestuursorgaan) and as representative of the State of the Netherlands,*

**State Secretary for Public Transport and the Environment**

*acting in his capacity as administrative body (bestuursorgaan) and as representative of the State of the Netherlands,*

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By: Sophie Hermans  
Place: The Hague  
Date: 29-09-2025

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By: A.A. Aartsen  
Place: The Hague  
Date: 29-09-2025

**Province of North-Holland,  
King's commissioner**

**Provincial Executives**

*In their capacity as administrative body (bestuursorgaan)*

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By: J. Olthof, in his capacity as authorized representative  
Title: Provincial executive of Public Health and Environment of the Province of North-Holland  
Place: The Hague  
Date: 29-09-2025

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By: J. Olthof  
Title: Provincial executive of Public Health and Environment of the Province of North-Holland  
Place: The Hague  
Date: 29-09-2025

**Tata Steel Nederland B.V.**

**Tata Steel Nederland B.V.**

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By: J. van den Berg  
Title: Chair of the Board  
Place: The Hague  
Date: 29-09-2025

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By: J. Turkesteen  
Title: Chief Financial Officer  
Place: The Hague  
Date: 29-09-2025

**Tata Steel Limited**

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By: T.V. Narendran  
Title: Chief Executive Officer & Managing Director  
Place: The Hague  
Date: 29-09-2025

Annex I: Expression of Principles between TSN, TSL and Minister of Climate Policy and Green Growth and the State Secretary of Infrastructure and Water management

Annex II: TSN's Project description and Project schedule

Annex III: Overview of the societal benefit objectives for the Projects

Annex IV: Addresses

**Annex I – Expression of Principles between TSN, TSL and Minister of Climate Policy and Green Growth and the State Secretary of Infrastructure and Water management**

[Herziene Expression of Principles Tata Steel Nederland | Kamerstuk | Rijksoverheid.nl](#)

## Annex II – TSN's Project description

The purpose of this Annex is for TSN to provide more background on the Projects and goals set in the JLoI and why the Projects are set up the way they are. For the sake of readability, the text may have been written in a less legally conclusive manner in some cases and describes the main (Sub)Projects but not all underlying projects necessary to realise the Projects. In case of discrepancies between the articles of the JLoI and this Annex, the articles of the JLoI shall take precedence.

The reading guide for the individual project within this document is as follows:

### 1. Main Project | Roadmap + program

### 2. Main Project | DRP-EAF project (Green Steel Phase 1)

- A. **Subproject** | DRP-EAF: from CGP & BF to DRP & EAF project
- B. **Subproject** | CCS: Carbon Capture and Storage to further decarbonize the steelmaking process
- C. **Subproject** | Biomethane/Hydrogen: Required renewable energy feedstock and tender mechanisms
- D. **Subproject** | Circularity increase: increasing scrap uptake
- E. **Technical description**

### 3. Main Project | Additional environmental and health measures

- A. **Subproject** | Windbreaker and coverages
- B. **Subproject** | Slag processing and storage
- C. **Subproject** | Noise reduction

Additionally, information is given about generic topics which are directly related to the individual topics. This information is divided into the following chapters:

- 4. **Risks and mitigation measures**
- 5. **Green Steel phase II**
- 6. **Planning of the projects in scope of tailor-made agreement**
- 7. **Scope difference with Environmental Impact Assessment**

In **Table 1** below, the reduction target of each individual project is specified. Throughout the document, the projects are described in more detail.

**Table 1:** Overview of TSN's transition projects, their scope, impact and targets.

| TSN's transition project              | Project scope                                                                                              | Impact on substances                                                                            | Reduction targets <sup>37</sup>                                                                                                                                                                                                                                                                                              |
|---------------------------------------|------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Subproject DRP-EAF</b>             | DRP-EAF, replacing BF7 and CGP2                                                                            | <b>CO<sub>2</sub></b> , PM <sub>10</sub> , NO <sub>x</sub> , noise, odour, coarse dust and SVHC | <ul style="list-style-type: none"> <li>• &gt;40% <b>CO<sub>2</sub></b> reduction (5.4 Mt/a)</li> <li>• 35% PM<sub>10</sub> immission reduction Wijk aan Zee</li> <li>• 38% PM<sub>10</sub> emission reduction</li> <li>• ~40% NO<sub>x</sub> emission reduction</li> <li>• ~37% SO<sub>2</sub> emission reduction</li> </ul> |
|                                       | Measures beyond legal requirements in DRP-EAF design to minimize environmental impact of new installations |                                                                                                 |                                                                                                                                                                                                                                                                                                                              |
| <b>Subproject CCS</b>                 | Additional CO <sub>2</sub> reduction through CCS on the DRP reactor                                        | CO <sub>2</sub>                                                                                 | Up to 0.6 Mt/a per annum through CCS                                                                                                                                                                                                                                                                                         |
| <b>Subproject Biomethane/Hydrogen</b> | Additional CO <sub>2</sub> reduction through the use of biomethane and/or hydrogen in the DRP              | CO <sub>2</sub>                                                                                 | Up to 1.2 Mt/a per annum through biomethane and/or H <sub>2</sub> uptake in the DRP                                                                                                                                                                                                                                          |
| <b>Main project Additional</b>        | Windbreaker and coverages                                                                                  |                                                                                                 |                                                                                                                                                                                                                                                                                                                              |

<sup>37</sup> These reductions include the current environmental measures of the Roadmap. The complete list of targets per substance and project are described in Article 3.2 and Annex III.

|                                          |                             |                                                      |                                                                                                                            |
|------------------------------------------|-----------------------------|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <b>environmental and health measures</b> | Slag processing and storage | PM <sub>10</sub> , PM <sub>2,5</sub> and coarse dust | Contribution to PM <sub>10</sub> and PM <sub>2,5</sub> targets (see for detail on PM <sub>10</sub> table 2, and Annex III) |
|                                          | Noise reduction             | Noise                                                | Reducing peak noise nuisance                                                                                               |

## 1. Main Project | The Roadmap+ program

The main goal of the Roadmap+ program<sup>38</sup> is to significantly reduce emissions and nuisance in the local environment and communities around the IJmuiden site. The program was set up in 2019 and was expanded in 2021. The implementation of TSN's Roadmap+ is taking place without tailor-made support. However, the benefits the program are included in the aims to reach a certain maximum emission level of the tailor-made agreement. The Roadmap+ program includes over 30 projects to reduce emissions including dust, noise, odour, heavy metals, and nitrogen, with a budget of ~€300 million. These measures are based a.o. on reports and feedback/criticism from local residents. The largest projects include a dedusting installation for the Pellet Plant, a wind breaker around the coal fields, a large dedusting installation at the Steel Plant, and a DeNO<sub>x</sub>-installation at the Pellet Plant. Almost all measures have been completed. Only the DeNO<sub>x</sub> is awaiting the receipt of permits before it can be taken in use.

## 2. Main Project | DRP-EAF project (Green Steel Phase 1)

### A. Sub-project | DRP-EAF: from CGP & BF to DRP & EAF project

- CO<sub>2</sub>-reduction:** With the DRP-EAF project, TSN intends to build two new factories: a Direct Reduction Plant (DRP) and an Electric Arc Furnace (EAF), that will replace ~60% of its current steelmaking capacity. Two factories will be closed: Cokes and gas plant 2 (CGP2) and Blast Furnace 7 (BF7). With the replacement of CGP2 and BF7 with DRP-EAF technology, TSN will reduce its CO<sub>2</sub> emissions by 5.4 million tons per year (~40%) when natural gas is used in the DRP.
- Environmental measures:** The DRP and EAF are designed using standards that go beyond what is legally required to reduce their environmental impact. The additional environmental measures TSN will take for the DRP and EAF focus on reducing emissions of fine dust (PM<sub>10</sub>), NO<sub>x</sub>, heavy metals, dioxins, SO<sub>2</sub>, as well as improving energy efficiency, resource efficiency, and reducing fresh water usage.

### B. Sub-project | CCS: Carbon Capture and Storage to further decarbonize the steelmaking process

- TSN intends to build a Carbon Capture and Storage (CCS) installation, which is highly compatible with DRP technology. TSN's planned CCS installation delivers early CO<sub>2</sub> reductions, even when the DRP still runs on natural gas. By installing carbon capture technology on the DRP, TSN can capture 600 thousand tonnes of CO<sub>2</sub> per year, assuming the DRP is operated using biomethane or natural gas.
- Aramis, the largest CCS initiative in both the Netherlands and the EU, plans to start with a capacity of 7.5 million tons of CO<sub>2</sub> per year, expanding to 22 million tons per year by 2035. While TSN is also exploring alternatives, Aramis stands out due to its scale, proximity, pipeline access and support from the Dutch state. With a projected storage need of 0.6 million tons per year, TSN has a clear and low-risk path forward to implement CCS.

### C. Sub-project | Biomethane & H<sub>2</sub>: Required renewable energy feedstock and tender mechanisms for biomethane and hydrogen

- TSN will run its new factories on natural gas and electricity from the moment they are taken into use. The DRP has the flexibility to operate using various mixtures of hydrogen, biomethane and natural gas. This enables TSN to reduce its CO<sub>2</sub>

<sup>38</sup> Roadmap+ program | [tatasteelnederland.com](https://tatasteelnederland.com)

emissions further while markets of renewable gases are still developing, and allows TSN to gradually increase hydrogen usage. TSN aims to use biomethane and/or hydrogen instead of natural gas when and to the extent that it is available, the infrastructure is in place, and it can be procured via the agreed tendering mechanism

- b. Biomethane is a renewable gas that is typically produced through the anaerobic digestion (*NL: vergisting*) of agricultural by-products, manure or food waste. Biomethane is chemically identical to natural gas. Hence, biomethane can be injected into the natural gas grid, and off-takers can buy certificates for biomethane use, similar to buying green electricity off the electricity grid. TSN intends to source sustainable, EU-certified biomethane also from countries like Romania, Poland, Spain, and Ukraine, because Dutch supply likely won't suffice due to high demand from other sectors. Long-term contracts will support producers and encourage new output.
- c. Green Hydrogen<sup>39</sup> is a renewable gas that is typically produced through the electrolysis of water in an electrolyser using green electricity. TSN plans to gradually increase the use of green hydrogen—sourced via EU-compliant tenders—as infrastructure and supply mature. In particular, TSN currently expects to be connected to the hydrogen backbone, Hynetwork, in 2032, enabling TSN to write out tenders for hydrogen off-take starting in 2032.

#### **D. Circularity increase: increasing scrap uptake**

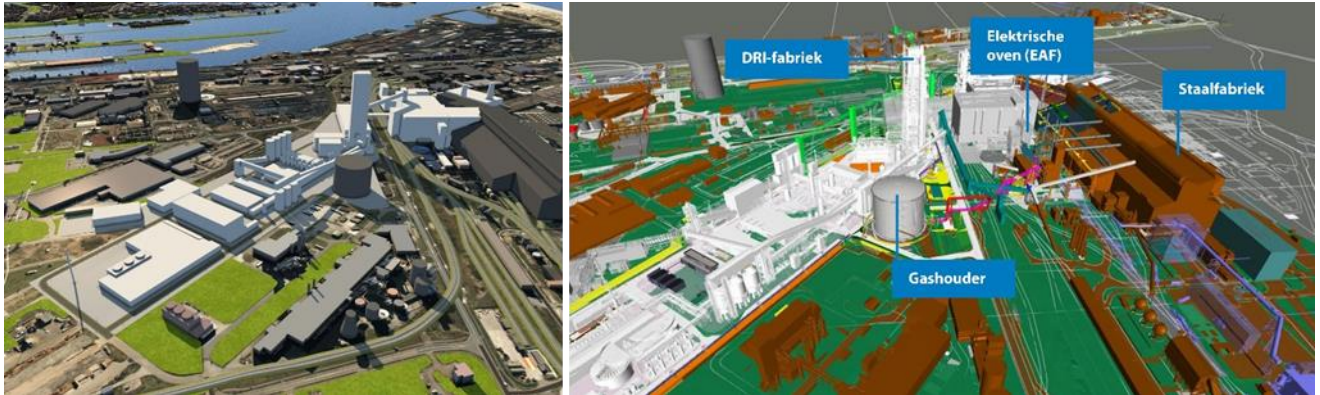
- a. TSN also aims to increase its use of end-of-life resources in its production process, mainly scrap steel, and thereby increase the circularity of its steel products. With the DRP-EAF, TSN has the ambition to almost double the amount of scrap that it uses for the production of steel from 17% to 30%. Because of this, TSN intends to build new, completely covered scrapyards and cover the already existing scrapyard. The latter is part of the Additional environmental and health measures. To satisfy the increased scrap need while high-quality scrap sources are limited, TSN intends to source the majority of its' additional scrap demand through shredder scrap, processed from end-of-life vehicles, appliances, and end-of-life sources such as decommissioned ships, wind turbines and other infrastructure sources.
- b. In addition, several measures are taken to ensure the high-quality processing of waste streams through reuse, recovery, and beneficial application of by-products and residual materials.

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<sup>39</sup> TSN intends to source RFNBO-compliant Hydrogen

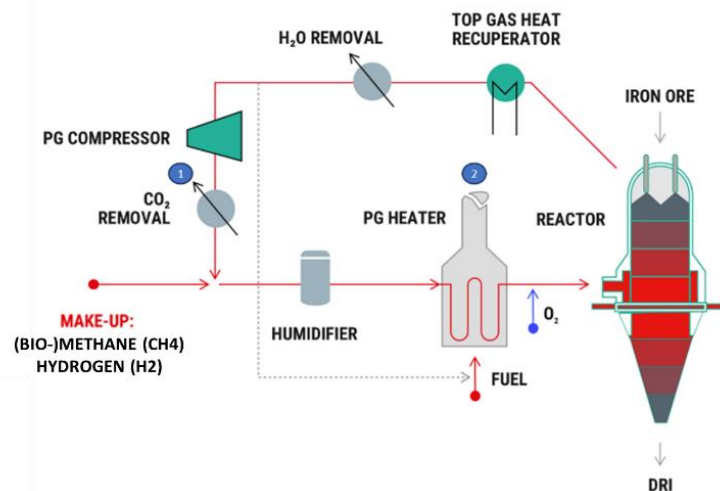
## E. Technical description DRP-EAF

- a. This section gives a brief technical description of installations of the DRP-EAF project. **Figure 1** gives an impression of the size and the layout of the installations.



**Figure 1:** Visualizations of project DRP-EAF

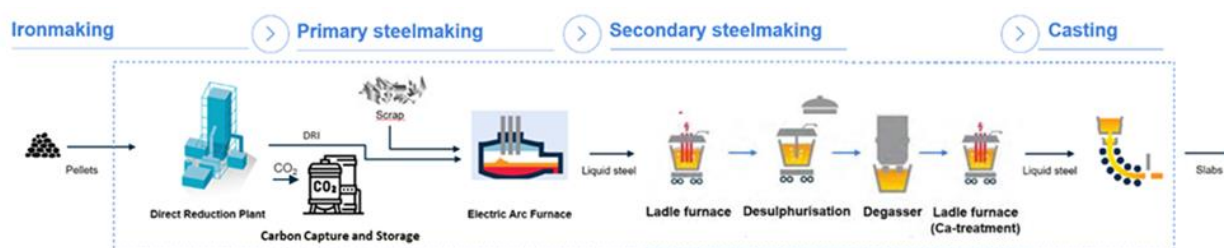
- b. A DRP produces direct reduced iron (DRI), a metallic iron feedstock used in steelmaking. The process begins with iron ore, which is processed in a pellet plant to form iron ore pellets. These pellets are then fed into the DRP, a shaft furnace, where they are heated in the presence of a pre-heated reducing gas such as natural gas, biomethane or hydrogen. The reducing gas reacts with iron oxide in the pellets, removing oxygen and transforming the material into metallic iron, DRI. The resulting DRI is transported to the EAF for melting and refining into liquid steel. DRP technology was chosen because it is a proven technology, enables direct reduction using renewable gases such as biomethane and hydrogen, and enables direct integration of CCS in the reactor. In figure 2, emission point 1 shows the DRP reactor emission point where CCS can be integrated, while emission point 2 shows the emission point of the DRP process gas heater. When hydrogen is used, TSN aims to initially use it in the process gas heater as this results in maximum CO<sub>2</sub> capture when CCS is used on the DRP reactor.



**Figure 2:** Flow scheme DRP showing emission points 1 and 2 (Energiron® DRP technology)

- c. An EAF melts and refines steel using an electric arc, which heats the material above its melting point. The furnace vessel, lined with refractory material, withstands extreme temperatures. Inside, an electric arc is generated between the electrodes and the metal charge, producing the heat required to melt the feed. TSN's EAF

- uses a combination of DRI from the DRP and steel scrap.. During melting, a protective slag layer forms to absorb impurities from the steel. Once the steel is fully melted and has reached its target quality, it is tapped into a ladle for further refining, while the slag is removed during the batch process.
- d. To meet the high-quality standards of TSN's product portfolio, the DRP-EAF project includes an advanced secondary metallurgy setup, where the EAF steel is further refined. The existing secondary metallurgy process must be adapted to enable production of the desired steel qualities and properties, since the EAF-produced liquid steel differs in characteristics from the liquid steel produced in TSN's current blast furnace-based process. This setup – comprising ladle furnaces, a desulphurisation station and Ruhrstahl Heraeus (RH) vacuum degassing units, and associated processing facilities – enables precise control of critical steel properties, including carbon and sulphur content. The DRP-EAF will partially feed the liquid steel to the slab casters and hot strip mill and partially feed directly into the direct sheet plant. The whole process is schematically visualized in Figure 3.
  - e. The additional environmental measures TSN has taken for the DRP-EAF installation include but are not limited to:
    - i. Installing encasing and dust extraction systems on conveyor belts.
    - ii. Building and covering scrapyards SOP4 and SOP5 with designs similar to the SOP3 enclosure described in the Windbreaker and Coverages section.
    - iii. Reducing NO<sub>x</sub> emissions through a DeNO<sub>x</sub> installation on the EAF using SCR (Selective Catalytic Reduction/ (SNCR (Selective Non-Catalytic Reduction) PM TSN technology to reduce NO<sub>x</sub> emissions, as well as through low-NO<sub>x</sub> burners and a SCR system on the process gas heater of the DRP.
    - iv. Reducing freshwater usage **8%** by using brackish water instead of fresh water for process cooling.
    - v. Improving wastewater quality by decommissioning installations (e.g. CGP2, BF7) and implementation of advanced water treatment for new installations (CombiBio technology), thereby also reducing thermal load on surface water by **~30%**.
  - f. CCS captures CO<sub>2</sub> at the emission source, followed by compression, conditioning, and transport to permanent geological storage or potential utilisation. In the DRP-EAF configuration, CO<sub>2</sub> emissions originate from three main sources: the DRP reactor, the DRP heater, and the EAF. CCS will initially be applied to the DRP reactor, which produces an almost pure CO<sub>2</sub> stream when operating using (bio)methane, making it particularly well-suited for efficient capture and treatment. While the reactor is the primary focus for early CCS deployment, additional measures to reduce emissions from the DRP heater and the EAF, such as electrification or future CCS integration, are also being explored as part of TSN's broader decarbonisation roadmap towards net-zero in 2045. CCS technology was chosen because it enables flexibility in decarbonisation and enables further emission reductions in case hydrogen availability and affordability do not improve as fast as anticipated.



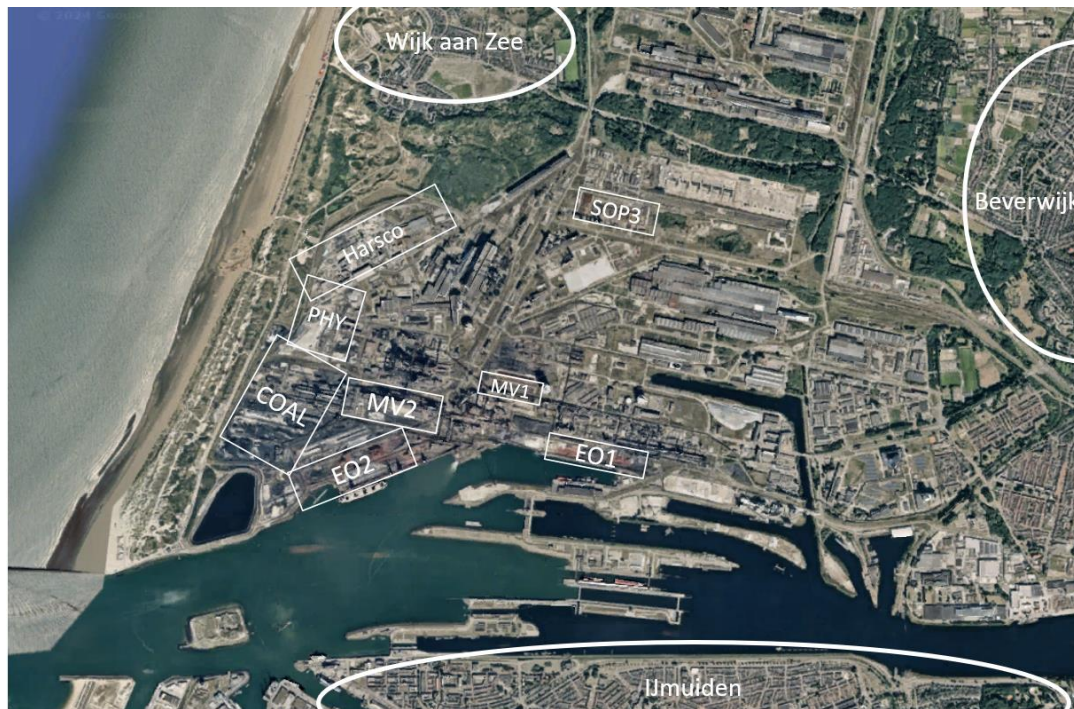
**Figure 3:** Production of steel slabs via the new DRP-EAF route

### 3. Main Project | Additional environmental and health measures

TSN has developed a set of additional environmental and health measures, including raw material coverages and handling at the IJmuiden site, dust measures for steel slag processing and storage at TSN's chain partners and a noise reduction package. The individual effects of the additional environmental and health measures described on PM<sub>10</sub> and NO<sub>x</sub> are summarized in Table 3 below. These are the most cost effective measures to achieve the fine dust reduction aim. A map of the relevant areas in relation to neighbouring communities can be seen in **Figure 4** below.

**Table 2:** Impact of proposed projects on PM<sub>10</sub> and NO<sub>x</sub>, % reduction

| Project                | PM <sub>10</sub> immission reduction [%] <sup>40</sup>    | NO <sub>x</sub> reduction [%] <sup>41</sup> |
|------------------------|-----------------------------------------------------------|---------------------------------------------|
| Roadmap <sup>42</sup>  | ~15%                                                      | ~30%                                        |
| DRP-EAF                | ~10%                                                      | ~10%                                        |
| Raw material coverages | ~9%                                                       | -                                           |
| Slag processing        | ~4%                                                       | -                                           |
| Combined effect        | ≥35% immission reduction in Wijk aan Zee compared to 2019 | ~40% emission reduction compared to 2019    |



**Figure 4:** Overview of open PM<sub>10</sub> sources on the IJmuiden site and their location relative to neighbouring communities.

<sup>40</sup> Reductions are measured in terms of a reduction of immission in Wijk aan Zee versus 2019 baseline of 5.64 ug/m<sup>3</sup> the reduction in the contribution of TSN's emissions to the local air quality in Wijk aan Zee. The estimates will be validated by the environmental impact analysis (Q2-2025) and the additional dispersion calculation for the coverages project and the slag processing project (Q2 2025).

<sup>41</sup> Reductions are measured in terms of emissions.

<sup>42</sup> The current Roadmap activities are not part of the tailor-made agreement but do contribute to the overall targets for the specific substances.

## A. Sub-project | Raw material coverages

- a. **TSN** has fields for storing and handling raw materials near the deep-sea harbour where coal and ores are offloaded. The storage, handling (e.g. blending) and transport of raw materials and scrap cause emission of coarse dust and fine dust (PM<sub>10</sub>). TSN intends to reduce these emissions by taking measures such as covering activities which traditionally have been done outdoors. **Table 3** lists the raw material coverages that TSN intends to construct, and **Figure 5** shows three-dimensional renders of the coverages.

**Table 3:** Raw material coverages, measures and the intended effect of the measures (subject to rounding differences)

| Emission source | Description          | Measure              | Effect of measure                            |
|-----------------|----------------------|----------------------|----------------------------------------------|
| MV1             | Ore blending field 1 | Windbreaker          | ~ 3% PM <sub>10</sub> , coarse dust          |
| MV2             | Ore blending field 2 | Coverage shed design | ~ 2% PM <sub>10</sub> , coarse dust          |
| SOP3            | Scrapyard 3          | Enclosure design     | ~ 2.5% PM <sub>10</sub> , coarse dust, noise |
| EO2             | Ore storage field 2  | Coverage             | ~ 2% PM <sub>10</sub> , coarse dust          |

### b. Technical description of raw material coverages

- i. The coverage chosen for MV1 is an open coverage in the form of a windbreaker surrounding ore blending field 1. The windbreaker has a total length of ~800 meters and a height of 21 meters, and reduces dust emissions by reducing wind speeds, resulting in a dust reduction effectiveness of ~50%
- ii. Ore blending field 2 (MV2) will be relocated to ensure that steel production during construction of the DRP-EAF remains possible. The new MV2 will be enclosed in a closed shed design and will include new material handling equipment. The coverage will be 312 meters long, 55 meters wide and 23 meters high.
- iii. Scrapyard 3 (SOP3) will be covered by a building that includes mechanical ventilation and a dry fog system. The building will use acoustic panels throughout to reduce peak noise coming from the scrapyard. In total, the enclosure will be 375 meters long, 94 meters wide and 23 meters high.
- iv. Ore storage field 2 (EO2) will be relocated to the current location of MV2. The new EO2, including new material handling equipment, will be enclosed and future operations will therefore take place inside.

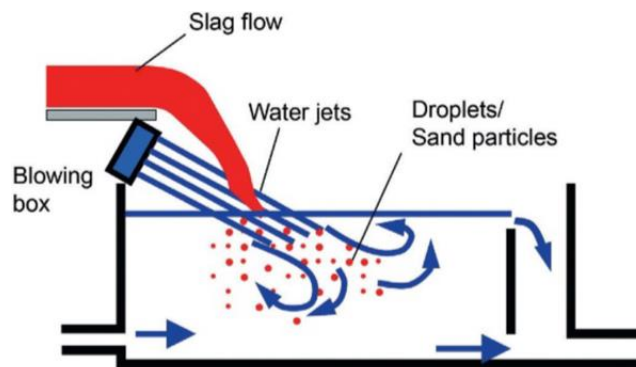


**Figure 5:** Models of the coverages. Top left: MV1 windbreaker. Top right: Inside MV2. Bottom: Scrapyard SOP3

## B. Sub-project | Steel slag processing and storage

- a. Steel slag, a by-product of production, is processed and stored at Harsco and P&H which are located on the TSN terrain. The steel slags are transported to Harsco, where it is processed through steps like metal recovery, crushing, and screening. The processed slag is then temporarily stored at P&H, where it undergoes further refinement into a final product suitable for use in construction and other industries. These operations involve multiple handling stages that can release fine dust.
- b. The goals of TSN for slag are: (i) to reduce the local dust emissions of slag processing, and; (ii) to develop new slag products. To achieve these goals, TSN is taking measures to reduce dust emissions from several slag processing steps, such as a wind breaker, building an enclosure around a processing step and several other dedusting measures which are detailed in the technical description. In addition, TSN intends to build a water granulation plant for EAF slags, which has the dual effect of both decreasing dust emissions as well as improving the quality of the slag to enable new slag products.
- c. **Technical description of slag processing measures:** TSN currently intends to take the following measures to reduce dust emissions from slag processing and storage:
  - i. Wind breaker along processing and storage fields to limit wind erosion.
  - ii. Construction of a building, including dedusting system, around the water granulation installation.
  - iii. Dedusting of open storages and roads, e.g. by installing sprinklers systems to keep the slag moist and reduce wind erosion.
  - iv. Dedusting of the Metal Recovery Plant to reduce dust emission from the building.

- v. Dedusting of break sieve installations, e.g. by enclosing installations and installing fogging systems at conveyor outlets.
- d. In addition, TSN intends to build a water granulation installation to minimize dust emissions during EAF slag cooling and to produce slags that can be used in high-value applications. The conventional (slow) cooling process through water spraying leads to steam formation and requires heavy machinery to remove the slag after cooling. These steps are prone to the formation of dust and can require mitigation measures. In the water granulation plant, liquid slag is fed through a trough and is subjected to a fast water jet before it falls into a water bath. The water granulation plant hence rapidly cools the slag, which results in considerably lower dust emissions compared to conventional cooling, and results in a slag with properties suitable for products such as concrete and cement.



**Figure 6:** Water granulation working principle

### C. Sub-project | Reduction of Peak Noise

- a. TSN recognizes that noise can be a large nuisance to surrounding communities, and TSN intends to take measures to reduce the sources of peak noise. It is difficult to match the noise nuisance that is experienced in the surrounding communities to specific installations.
- b. For this reason, TSN is implementing a state-of-the-art noise monitoring system with measurement points both on TSN's site and outside. This should enable TSN to better identify the sources of noise that cause nuisance. The gained insights are intended to guide the development of additional technically, operationally and economically feasible measures, for the implementation of which TSN intends to allocate funds of €20 million.
- c. The coverage on scrap yard SOP3, with the primary goal of reducing dust emissions, is also designed to further reduce noise nuisance in the surrounding communities, further to the RIVM<sup>43</sup> report indicating that the main cause of noise nuisance in the environment is scrap handling.
- d. The new DRP-EAF installations are designed specifically to reduce the noise they produce. This is substantiated by the Environmental Impact Analysis which was submitted to the authorities in Q2-2025.

## 4. Risks and mitigation

Completion of TSN's transition projects is subject to a variety of risks which are (not exhaustively) listed below:

- a. Policy and sourcing risks stem from TSN's dependence on stable and supportive regulatory frameworks on an EU (e.g., CBAM, EU ETS) and a national (e.g., network costs, energy taxes and slag) level. Potential mitigation includes close cooperation and progress monitoring between Parties and competent authorities.

<sup>43</sup> RIVM: "De bijdrage van Tata Steel Nederland aan de gezondheidsrisico's van omwonenden en de kwaliteit van hun leefomgeving" – 22 September 2023

- b. Permitting of the DRP-EAF and the environmental measures program presents several risks with regards to the timely granting of irrevocable permits due to scale and complexity of the projects. Potential mitigation measures include:
  - i. TSN has agreed a 'fast track' permitting process with the competent authority that streamlines the application and reduces the appeal period.
  - ii. TSN has employed a reputable party (Royal Haskoning DHV) to aid in the permitting process and TSN has proactively submitted drafts of the environmental impact assessment (EIA) to streamline the process.
  - iii. TSN has engaged proactively with the local community and stakeholders through information and participation sessions, open days, and accessible communication.
  - iv. TSN conducts peer reviews to strengthen legal defensibility and keeps flexibility for re-engineering within the permitting procedure to make the permitting process more resilient
- c. Execution Risks are related to logistics, labour availability, and the complexity of executing multiple mega-projects simultaneously (e.g., DRP-EAF, wind breaker and coverages, slag processing and storage). Non-standard design requirements to reduce environmental impact introduce additional complexity. Potential mitigation measures include:
  - i. Front-end loading: Making critical decisions early and preparing well to reduce surprises during execution.
  - ii. Selecting a reputable and experienced EPCM contractor (Fluor): Accountable for planning and managing execution.
  - iii. Leadership and governance: Appointment of leaders with megaproject experience in the Board of Management and other key leadership roles.
  - iv. Controls and reviews: Strengthening project controls and quality management, and utilising third-party stage-gate reviews.
- d. Technology risks stem from the shift to a new (DRP-EAF) technology, including the required build-up of expertise, unknown hydrogen deployment outcomes due to novelty of process and challenges in redesigning TSN's product portfolio. Potential mitigation measures include:
  - i. TSN engages in joint R&D with universities and in research partnerships with other steel companies.
  - ii. TSN follows a phased hydrogen introduction strategy and will increase hydrogen content only after validated performance.
  - iii. TSN employs technology roadmaps for knowledge development and risk reduction.
  - iv. TSN investigates scrap upgrading technologies and steelmaking techniques allowing for use of lower scrap qualities.
- e. Financial and business risks of the DRP-EAF are highlighted in in the main text of the JLoI (risk considerations) and are for business confidential reasons not further discussed in this Annex.
- f. Energy infrastructure presents TSN with the risk of insufficient network capacity for both natural gas (and biomethane) and hydrogen, as evolving energy demands necessitate significant investment in new infrastructure. In addition, as timely availability of hydrogen, biomethane and carbon capture and storage contracts on viable and competitive terms is critical for the project. Potential mitigation measures include:
  - i. Hydrogen Infrastructure: TSN is engaged in advanced discussions with local authorities to secure a connection to the hydrogen backbone. Where feasible, existing infrastructure will be partially re-purposed, reducing the need for entirely new construction and facilitating a smoother transition to hydrogen.
  - ii. Electricity Infrastructure: The risk associated with electricity supply is mitigated by the presence of a high-voltage substation located on TSN's site. This substation enables direct connection of off-shore wind energy to the main grid, thereby minimising additional strain on the national grid and supporting the integration of renewable energy sources.

## 5. Planning of the projects in scope of tailor-made agreement

**Table 4:** High-level planning of TSN's projects [*Preliminary – subject to review by TSN*]

| Main project                                 | Sub-project                 | Start construction                                            | Start commissioning/ tendering                                | ofirst year of operation                                                |
|----------------------------------------------|-----------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------------------|
| DRP-EAF (green steel phase 1)                | DRP-EAF                     | DRP: H1 2026<br>EAF: H1 2026                                  | DRP: H2 2028<br>EAF: H1 2029                                  | Closure CGP2: H2 2029<br>Closure BF7: H1 2030                           |
|                                              | CCS                         | H2 2030                                                       | H2 2032                                                       | H1 2033                                                                 |
|                                              | Biomethane/ Hydrogen        | -                                                             | 2027 (H2) /2028 (Biomethane)                                  | H1 2032                                                                 |
| Additional environmental and health measures | Windbreaker and coverages   | MV1: H1 2026<br>MV2: H1 2026<br>SOP3: H2 2026<br>EO2: H2 2027 | MV1: H1 2027<br>MV2: H2 2027<br>SOP3: H2 2027<br>EO2: H2 2029 | MV1: H1 2027<br>MV2: H2 2027<br>SOP3: H2 2027<br>EO2: H1 2030           |
|                                              | Slag processing and storage | Dust measures: H1 2028<br>Water granulation: H1 2028          |                                                               | Dust measures: H1 2030<br>Water granulation: H1 2030 (in line with EAF) |
|                                              | Noise reduction             | H2 2025                                                       | H1 2027                                                       | H1 2027                                                                 |

## 6. Green Steel Phase 2

For the second phase of the transition (~2037) TSN is looking at replacing the remaining BF6 and CGP1 with another technology. With current insights, the plans involve a second DRP and two smelters. The smelters may either be EAF's or a so-called 'REF' (reducing electrical furnace). Due to technological and market developments, the configuration for Phase 2 is still subject to change. The remaining BF6 and CGP1 will, however, be shut down in phase 2, thereby phasing out the coal use of TSN. In parallel, TSN is investigating options to reduce CO<sub>2</sub> emissions from its other processes.

## 7. Scope difference with Environmental Impact Assessment

TSN has published the Environmental Impact Assessment (EIA, NL: *milieueffectrapport (MER)*) of the DRP-EAF project. The EIA is part of the permitting process for the DRP-EAF, and thereby has a limited scope, focusing on the DRP-EAF, also describing CCS and hydrogen variants. It thus only covers a part of the tailor-made agreement scope. This results in differences in the societal benefits for CO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2,5</sub> as reported in the EIA, and as described in the JLoI. Table 4 shows a brief overview of the key differences.

**Table 5:** Key Differences between tailor-made agreement and Environmental Impact Assessment

|                          | <b>Tailor-made agreement</b>                                                                                                                                                                                  | <b>Environmental Impact Assessment</b>                                                         | <b>Remarks</b>                                                                                                                                                                                                        |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Projects in scope</b> | <ul style="list-style-type: none"> <li>• Roadmap</li> <li>• DRP-EAF</li> <li>• CCS</li> <li>• Hydrogen</li> <li>• Coverages</li> <li>• Slag processing measures</li> <li>• Noise reduction program</li> </ul> | <ul style="list-style-type: none"> <li>• DRP-EAF</li> <li>• CCS</li> <li>• Hydrogen</li> </ul> | <i>The additional environmental and healthy living environment measures (coverages, slag processing measures and noise reduction program) are not included in the EIA, as they follow a separate permitting route</i> |
| <b>Parties in scope</b>  | Not all chain partners                                                                                                                                                                                        | All chain partners                                                                             | <i>This also impacts the baseline and reductions reported</i>                                                                                                                                                         |

### **Annex III– Overview of the societal benefit objectives for the Projects**

TSN has submitted the MER/EIA in support of Subproject DRP-EAF. Though the primary objective of the MER/EIA is in the permitting procedure for the Subproject DRP-EAF, for recognizability the same numbers are used here. The GER will use the EIA as base, and the GER is also referenced as deliverable in this JLoI.

For all substances listed in the JLoI (excluding PM10 and PM2.5) the emission data derived from the MER/EIA may be directly applied to establish maximum emission objectives under the JLoI. For PM10 and PM2.5, the additional impact of the Project of *additional environmental and health measures* is assessed outside the DRP-EAF EIA/MER scope through supplementary calculations.

Incorporating the MER/EIA emission data into the tailor-made agreement offers several key advantages: i) the MER/EIA will undergo comprehensive evaluation and independent external validation; ii) the MER/EIA is publicly accessible; and iii) it ensures alignment between the assessment framework of the GER Commission.

The baseline ("current situation") is based on an annual production volume of 7.23 Mtpa of liquid steel (the target production volume for TSIJ) and reflects conditions prior to the implementation of the Roadmap+ program. The emissions considered are from:

1. Point source emissions: TSN emissions from identifiable and fixed locations such as chimneys, smokestacks and other outlets.
2. Open sources emissions: TSN fine dust emissions resulting from raw material flows and manipulations (coal, iron ore and scrap).
3. Mobile sources emissions: Emissions from transport activities on and around the site. These pertain to the combustion of fuels used by ships, mobile machinery, trains and traffic related to TSN activities.
4. Chain partners emissions: Emissions from partner companies' activities serving TSN, these include Vattenfall, Harsco, Pelt&Hooykaas and Gasunie.

The yearly e-MJV report of TSN is the basis for the MER/EIA, however only contains emissions data of categories 1 and 2. Per substance, an assessment is made whether to include e-MJV 2022 data (base case), e-MJV 2019 data (for substances impacted by Roadmap+), or use an alternative methodology (e.g. multi-year average)<sup>44</sup>. Per emission source it is assessed whether the emission required be scaling to the 7.23 Mtpa liquid steel production. This results in the baseline emission values.

The post-transition scenario reflects the situation following full implementation of all Projects in scope of the tailor-made agreement, with the accompanying maximum emission values. Further clarification regarding baseline assumptions and emission objectives is provided by TSN<sup>45</sup>.

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<sup>44</sup> The freeze of data for the baseline for MER/EIA and the table below happened before the data of e-MJV2024 became available, therefore changes may occur.

<sup>45</sup> [Milieu Effect Rapport \(MER\) | Tata Steel](#)

**Table 6:** Objectives on societal benefits of the Projects compared to the baseline.

*Note: Percentages are for overview and subordinate to the maximum emissions stated in Article 3 and in column "Post transition", and subject to rounding differences*

| Substance                |                               |          | Unit | Current situation | Post transition         | Total objective |
|--------------------------|-------------------------------|----------|------|-------------------|-------------------------|-----------------|
| Carbon dioxide (scope 1) | CO <sub>2</sub>               | Mt/yr    |      | 12.6              | 7.2 / 5.4 <sup>46</sup> | -43%/ -57%      |
| Nitrogen oxide           | NO <sub>x</sub>               | kton/yr  |      | 7.2               | 4.0                     | -44%            |
| Sulfur dioxide           | SO <sub>2</sub>               | kton/yr  |      | 4.0               | 2.5                     | -38%            |
| Fine dust (10)           | PM10                          | ton/yr   |      | 753               | 467                     | -38%            |
| Benzo[a]pyrene           | BaP                           | kg/yr    |      | 33                | 14                      | -57%            |
| Beryllium                | Be                            | kg/yr    |      | 67                | 55                      | -17%            |
| Mercury                  | Hg                            | kg/yr    |      | 67                | 33                      | -51%            |
| Lead                     | Pb                            | ton/yr   |      | 1.4               | 0.4                     | -68%            |
| Dioxins                  |                               | g TEQ/yr |      | 0.3               | 0.8                     | 136%            |
| Benzene                  | C <sub>6</sub> H <sub>6</sub> | ton/yr   |      | 8.9               | 6.1                     | -32%            |
| Chromium                 | Cr                            | kg/yr    |      | 329               | 229                     | -30%            |
| Manganese                | Mn                            | ton/yr   |      | 1.8               | 0.8                     | -54%            |
| Vanadium                 | V                             | kg/yr    |      | 119               | 57                      | -53%            |
| Nitrogen dioxide         | NO <sub>2</sub>               | kton/yr  |      | 0.3               | 0.2                     | -27%            |
| Fine dust (2.5)          | PM2.5                         | ton/yr   |      | 466               | 305                     | -35%            |
| Arsenic                  | As                            | kg/yr    |      | 69                | 45                      | -35%            |
| Cadmium                  | Cd                            | kg/yr    |      | 31                | 31                      | 0%              |
| Chromium VI              | Cr6                           | kg/yr    |      | 4.4               | 4.4                     | 0%              |
| Nickel                   | Ni                            | kg/yr    |      | 444               | 256                     | -42%            |

<sup>46</sup> CO<sub>2</sub> reduction objectives aim to result in a maximum CO<sub>2</sub> emission of 7.2 Mta from 2030 onwards; 6.6 Mta from 2032 onwards and 5.4 Mta starting between 2032 – 2037 onwards.

#### **Annex IV– Addresses**

Any notice and correspondence under this JLoI must be in writing and is sent to a Party by letter to the following address:

**For the State:**

Ministerie van Klimaat en Groene Groei  
Directie Verduurzaming Industrie  
Postbus 20401  
2500 EK Den Haag

**For TSN:**

Tata Steel Nederland B.V  
Legal department  
Wenckebachstraat 1  
1951 JZ, Velsen-Noord, the Netherlands

**For TSL:**

Tata Steel Limited  
Legal department  
Bombay House, 24 Homi Mody Street,  
Fort, Mumbai, Maharashtra, 400001, India

**For the Province of North-Holland:**

Provincie Noord-Holland  
Sector Gezonde Leefomgeving en Klimaat  
Postbus 3007  
2001 DA Haarlem