GROW GREENER TOGETHER

Disclaimer: this is an Expression of Principles between Nobian, the Minister of Economic Affairs and Climate Policy, the State Secretary of Infrastructure and Water Management, and the State Secretary of Mining to establish a framework for future cooperation with the aim to significantly reduce greenhouse gas emissions by Nobian and is shared and discussed on a confidential basis, without prejudice and subject to all necessary internal and external approvals.

EXPRESSION OF PRINCIPLES TO JOINTLY ACCELERATE NOBIAN'S CLIMATE PROGRAMME, DATED 12 DECEMBER 2022

ENTERED INTO BETWEEN:

1. NOBIAN INDUSTRIAL CHEMICALS B.V., REPRESENTED BY ITS CEO, MR. M. KOENIG;

2. THE MINISTER OF ECONOMIC AFFAIRS AND CLIMATE POLICY, ACTING AS ADMINISTRATIVE BODY AND AS REPRESENTATIVE OF THE STATE OF THE NETHERLANDS, MRS. M.A.M. ADRIAANSENS;

3. THE STATE SECRETARY OF INFRASTRUCTURE AND WATER MANAGEMENT, ACTING AS ADMINISTRATIVE BODY AND AS REPRESENTATIVE OF THE STATE OF THE NETHERLANDS, MRS. V.L.W.A. HEIJNEN; AND

4. THE STATE SECRETARY OF MINING, ACTING AS ADMINISTRATIVE BODY AND AS REPRESENTATIVE OF THE STATE OF THE NETHERLANDS, MR. J.A. VIJLBRIEF

ON

A NON-BINDING FRAMEWORK FOR THE REDUCTION OF CO_2 EMISSIONS AND GAS USE AS WELL AS ENVIRONMENTAL AND INNOVATION PROJECTS WITH THE AIM OF REACHING BINDING AGREEMENTS AT A LATER STAGE.

WITNESSETH:

Whereas:

[Government policy regarding CO_2 reduction][1]

1. additional efforts for reduction of greenhouse gas emissions (hereafter referred to as "CO_2"), are required to achieve the goals of the Paris Agreement as also laid down in the European Climate Law, the Dutch Climate Law (in Dutch: *Klimaatwet*), and the Dutch Coalition Agreement (in Dutch: *Coalitieakkoord*);

2. in the Dutch Coalition Agreement as presented on December 15, 2021, CO_2 reduction targets are increased to 55% by 2030, while the Government aims for 60% CO_2 reduction by 2030, and for climate neutrality in 2050 and for establishing a green economy that is climate neutral, fossil free and circular;

3. for the industry, the Dutch Coalition Agreement aims to increase the ambition within the obligations under the European 'Fit-for-55' package;

4. in the letter regarding sustainability of the industry of April 5, 2022 (Parliamentary Paper: Kamerstukken II 2021/22, 29826, nr. 135) the Minister of Economic Affairs and Climate Policy expressed the intention to shape fundamentally new sustainable technologies together with the largest industrial emitter group, while at the same time agreeing on a programme for faster and more ambitious CO_2 reduction;

5. the Government aims to facilitate the climate transition of the industry in the Netherlands, with among other measures, a tailor-made approach for the 10 - 20 largest industrial emitters, and as set out in the letter informing Parliament on Tailor-Made agreements (in Dutch: *Zomerbrief Maatwerk Verduurzaming Industrie*), the aim of the tailor-made approach is to support these companies, based on mutual commitments, in achieving additional and accelerated CO_2 reductions and having a sustainable future in the Netherlands, and where possible, contribute to meeting other sustainability challenges in the Netherlands, also in the long term;

6. where needed the Government intends to support among others Nobian in its endeavour to contribute to additional CO_2 reduction while taking into account European regulations regarding state aid and a level playing field in the European Union's (EU) internal market, and in doing so, the Government aims for a level playing field both within Europe and globally;

[Introduction Nobian]

7. Nobian is the EU's largest producer of high-purity vacuum salt at a quality level required for strategic chemical and industrial production and value chains, and a European leader in the production of essential chemicals, also providing contributions towards the sustainable energy transition;

8. Parties acknowledge that salt mining based in the Netherlands is essential for the production of important materials contributing to the chemical industries, industrial and consumer product base in the Netherlands and Europe, and that it is therefore of great importance for the Dutch and European economy and society as a whole;

9. Parties acknowledge that by producing high-purity salt, various chlor-alkali products and hydrogen, Nobian provides indispensable products for the manufacturing of essential materials for daily life, and which are also needed for the transition to a sustainable economy, including PVC, Polyurethane, poly carbonate, aluminium, paper, and epoxy, applications of which include, among others, insulation materials, battery materials, windmill blades and magnets, solar cells, cleaning and water purification materials, as well as chlorine for the pharmaceuticals sector including for the production of medicines;[2]

[1] The text between brackets is merely indicative and is not a part of this expression.
[2] Salt Impact Study, Roland Berger, July 2022.

10. Nobian has committed itself to play an important role in sustainability, the energy transition and the circular economy, actively pursuing these commitments through the (co-) development of innovative projects in, for example, the reduction of carbon emissions and the usage of natural gas, water electrolysis for hydrogen production, underground storage of hydrogen, recycling of heat, water and raw materials, and stabilising the Dutch electricity network by operating at flexible production levels;

11. Parties acknowledge that Nobian as a knowledge partner actively contributes to the development of green initiatives through, among others, (i) active participation in the setup and implementation of growth fund proposals, such as GroenvermogenNL, MaterialenNL and FutureCarbonNL, (ii) conducting joint research projects with Dutch universities and knowledge institutes, (iii) developing and strengthening academic competencies and capacity at Dutch universities, particularly in the area of electrochemistry and energy technology, (iv) providing its expertise in sustainable development schemes, (v) co-developing green hydrogen projects and water electrolysis technology through its joint venture company HyCC, and (vi) co-developing projects with other partners for large-scale underground renewable energy storage in salt caverns;

12. Nobian's principal office and legal seat are based in the Netherlands, as are a large part of its research and technology activities, and the Nobian group intends to maintain operations in the Netherlands, Germany and Denmark;

[Policy Nobian regarding CO_2 reduction]

13. Nobian aspires to become one of the most sustainable chemical companies in Europe, and to this effect has set the initial goal to become climate neutral by the year 2040, 10 years ahead of the target under the Paris Agreement, building on credentials of past performance, including a 40% reduction in its carbon dioxide emissions in the period between 1990 and 2020, 35% renewable energy use, a platinum rating from EcoVadis, participation in the Carbon Disclosure Project (CDP), and commitment to the Science Based Target initiative (SBTi);

14. Nobian aims to reduce its impact on the environment and endeavours to address the full Environmental, Social and Governance (ESG) agenda as laid down in Nobian's audited Sustainability Report,[3] including targets on diversity, process and people safety;

15. Nobian emphasises its responsibility to (i) reduce greenhouse gas emissions by working towards its objective of climate neutrality by 2040 (subject to its ambition to accelerate the objective of climate neutrality as a result of the tailor-made approach) and (ii) contribute to the national 2030 CO_2 reduction target laid down in the Dutch Coalition Agreement and Dutch Climate Law;

16. Parties acknowledge that for the regional market for high-purity salt solution mining in the Netherlands is the option with the lowest CO_2 footprint, whereby local production and regional distribution of salt limits the need for salt imports, reduces its CO_2 footprint and enhances the economic and competitive position of users;

17. Parties acknowledge that the innovations required to achieve Nobian's objective of climate neutrality in 2040 will create the opportunity to simultaneously decrease emissions other than CO_2 (including NO_x), and increase circularity and external safety;

[Living environment]

18. Parties recognise the EU Zero Pollution ambition, in which environmental quality is progressively improved towards 2050 to levels no longer considered harmful to human health and natural ecosystems, and subsequent national emission reduction and health gain ambitions as formulated in the Clean Air Agreement (in Dutch: *Schone Lucht Akkoord*), the National Water Program (in Dutch: *Nationaal Water Programma*), the National Environmental Policy Framework (in Dutch: *Nationaal Milieubeleidskader*), the National Government wide program Netherlands Circular towards 2050 (in Dutch: *Rijksbreed programma circulaire economie*), and the Government policy regarding

[3] Nobian Sustainability report 2021.

substances of very high concern (in Dutch: *zeer zorgwekkende stoffen*, "*ZZS*") that includes the legal obligation to minimise the emissions thereof and inform the authorities on achieved reduction and next steps every 5 years;

19. Parties acknowledge the Clean Air Agreement goal of 50% health gains in 2030 relative to 2016, by decreasing emissions of air pollutants, notably NO_x, ammonia and fine particulate matter, which amongst others should be realized by decreasing industrial air emissions to levels comparable to the lower end of the Best Available Techniques (BAT) Associated Emission Level bandwidth;

20. Parties acknowledge that the Dutch Coalition Agreement aims to decrease its reactive nitrogen emissions in order to reduce the deposition thereof in 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;

21. the Government has laid down more detailed policy goals regarding sustainable energy, circular economy, sustainable mobility, strategic and green industry in several policy briefs;

22. Parties are aligned in their interests in building a clean, climate neutral and circular economy by 2050, and intend to cooperate within their capacities to achieve an accelerated and significant reduction of CO_2 emissions as well as a reduction of the use of natural gas and reduction of other emissions to air and water, among which is NO_x;

[Infrastructure and renewable electricity]

23. Parties acknowledge that timely realisation of energy-infrastructure is in their joint interest and crucial for the success of industrial decarbonisation projects;

24. the Government has developed a national and regional infrastructure programme (*Cluster Energie Strategieën "CES" and Meerjarenprogramma Infrastructuur en Klimaat "MIEK"*) to (i) take stock of all infrastructural needs for the industry, including for Nobian, and (ii) to enable acceleration of infrastructural projects where desirable and possible;

25. Nobian's production processes are energy intensive and currently require substantial amounts of steam, natural gas and electricity, as a result of which Nobian has recently made investments in projects including (i) participation in offshore wind projects, (ii) further electrification of its production processes as well as more efficient utilisation of energy and heat used in its own production processes and (iii) participation in projects in cooperation with other companies, operating in the same chemical clusters as Nobian;

26. as part of this Expression of Principles, Nobian expresses the ambition to electrify a significant part of its salt production, which will result in a net increase in electricity demand, whereby Parties acknowledge that access to new renewable power generation is essential to achieve zero Scope 2 CO_2 emissions;

27. Nobian will continue to implement the best possible application of residual heat from its existing and new installations in line with the Energy Efficiency Directive (Directive 2012/27/EU) and in anticipation to the forthcoming new Heat Act, and Nobian is prepared to engage with local authorities and stakeholders at their request to provide insight in its residual heat potential for sustainable district heating plans;

[Energy storage in salt caverns]

28. Nobian works, together with partners, on the development of a first series of salt caverns for energy storage in the Zuidwending area in the province of Groningen as an element of the sustainable energy infrastructure of the Netherlands and Europe;

29. Parties acknowledge that storage in salt caverns are among the options investigated in the National Roadmap for Energy Storage ('Routekaart Energieopslag') as promising storage methods for large-scale energy storage, and that Nobian, with its knowledge and existing operations in the Netherlands, has the ability to contribute to the realisation of additional salt caverns for energy storage;

30. Parties acknowledge that developing salt caverns for energy storage is a multi-year process, from preparation to commissioning, requiring timely investment and permit decisions;

31. Parties acknowledge that sufficient post-saturation capacity in existing caverns is required to achieve the intended storage capacity by 2030 and any additional storage capacity in a timely manner;

32. Parties acknowledge the importance of converting the brine resulting from the development of salt caverns for energy storage into vacuum salt, thereby ensuring that the salt can be converted in essential raw materials;

33. Parties acknowledge that Nobian, as part of its regular operations, will regularly plan and develop new salt caverns;

[Engagement with local community]

34. Nobian pursues an open dialogue with civil society, local communities, local and regional authorities and the Government, and aims for optimal transparency regarding its transition plans and the associated environmental risks, including risks from mining, spills and air and water emissions;

35. Nobian aims to maintain and improve its active dialogue with citizens and other stakeholders in the areas where it conducts its mining and production activities, and for that purpose has introduced various local initiatives to engage with stakeholders and to support communities;

[Permits]

36. Parties acknowledge that early alignment, effective prioritisation, planning and cooperation between the Government, the relevant (local) governmental authorities, the relevant public institutions and Nobian are important for effectively conducting permitting processes to obtain the relevant permits;

37. the Government acknowledges that accelerating Nobian's path toward climate neutrality is only warranted so long as the continuity of Nobian is sufficiently ensured, in particular through the timely obtainment of salt mining permits (including environmental permits) in the Netherlands;

[Financial]

38. Parties acknowledge that investment in the technologies required to achieve sustainability targets carry a significant market risk as the development of the gas, electricity and CO_2 emission prices (influenced by emission trading scheme and carbon taxation), which largely drives the project return, are challenging to predict and significantly influenced by geopolitical developments and governmental policies;

39. the required investments for Nobian's current ambition to be carbon neutral in 2040 are planned over a period of 18 years, since, as a result of its annual revenues and the investments required to sustain its operations and regulatory compliance, Nobian indicates it is not economically viable to significantly accelerate its already ambitious targets with its own additional investments fully without additional government support as a result of the tailor-made approach; and

40. Parties acknowledge that additional reductions by companies under the tailor-made approach should not be offset by other companies doing less, and therefore CO_2 dispensation rights that directly ensue from the CO_2 reduction realised by the tailor-made approach should not be traded to other parties.

Now, therefore, the Parties have agreed to the following principles:

1. Definitions

The following terms, if capitalised as indicated, shall have the following meanings:

a. "CO_2'' is to be understood as all greenhouse gases in CO_2 equivalent terms, unless stated otherwise;
b. "climate neutrality" is to be understood as net-zero greenhouse gas emissions in CO_2 equivalent terms;
c. "Dutch Climate Law" means the law enacted on 2 March 2022, also known as the *Klimaatwet*;
d. "Dutch Climate Agreement" means the agreement dated 28 June 2019 between the Government, Dutch companies and other interested parties for the reduction of greenhouse gases as part of the Dutch climate policy, also known as the *Klimaatakkoord*;
e. "Dutch Coalition Agreement" means the coalition agreement (*Coalitieakkoord "Omzien naar elkaar, vooruitkijken naar de toekomst"*) of the sitting Government dated 15 December 2021;
f. "European Climate Law" means European climate law for Europe's economy and society to become climate-neutral by 2050 that was published in the Official Journal on 9 July 2021 and entered into force on 29 July 2021;
g. "Existing Subsidy Programme" means each existing subsidy programme in the context of the Projects for which Nobian is potentially eligible including, without limitation, SDE++;
h. "FID" means the final investment decision by Nobian on whether to invest in (a) Project(s);
i. "Government" means the government of the Kingdom of the Netherlands, as represented by the Minister of Economic Affairs and Climate Policy, the State Secretary of Mining and the State Secretary of Infrastructure and Water Management;
j. "greenhouse gas emissions" means the gases listed in Annex II to Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 system for greenhouse gas emission allowance trading within the Union and amending Council Directive 96/61/EC (PbEG 2003, L 275);
k. "HyCC" means the green hydrogen joint venture of Nobian and Green Investment Group Limited;
l. "National Roadmap for Energy Storage" means *Routekaart Energieopslag 2030* dated 25 March 2015;
m. "NIKI" means an aid scheme currently being developed by the Government aimed at, among others, the reduction of CO_2 in energy-intensive industrial sectors and accelerating the further upscaling of technologies from demonstration to commercial scale by supporting first-movers and named '*Nationale Investeringsregeling Klimaatprojecten Industrie*';
n. "Nobian" means Nobian Industrial Chemicals B.V.;
o. "Paris Agreement" means the international treaty on climate change adopted at COP 21 in Paris on 12 December 2015 and entered into force on 4 November 2016;
p. "Parties" means the parties whose names appear on the first page of this Expression of Principles;
q. "Permits" means any permits, licenses, exemptions, consents or other authorisations that Nobian requires from the Government or any (local) governmental organisation for the realisation of the Projects, and "Permit" means any of them for one or more individual Projects;
r. "Projects" means the projects listed in table 3.1 in Article 3, as further specified in Appendix 2, and each individually referred to as a "Project";
s. "Project Agreement" means a legally binding agreement setting out the terms and conditions between the Parties (and potential other stakeholders) pertaining to the Projects listed 1 through 4 in table 3.1 in Article 3 (in connection with the tailor-made approach between the Government and Nobian);
t. "RCR" means the Dutch governmental coordination scheme (*Rijkscoördinatieregeling*) for the central coordination by the Government of decisions including spatial planning, permitting procedures, exemptions, and any other authorisations in relation to projects and programmes deemed in the national interest;
u. "SDE++" means the aid scheme 'Stimulation of sustainable energy production and climate transition' through which the Government can subsidise the unprofitable component of a project during the operational period of that project; and

v. "Site" means each of Nobian Industrial Chemicals B.V.'s production sites in the Netherlands being Delfzijl, Hengelo and Rotterdam, collectively referred to as "Sites".

2. Objectives of the cooperation between the Parties

1. The primary objective of this Expression of Principles is to establish a non-binding framework, based on which specific binding agreements will be entered into between the Parties at a later stage. The aim is to achieve sustainable solution mining and production of salt, chlorine, sodium caustic and hydrogen and their derivative products in the Netherlands as strategic materials for daily use and for the transition towards a clean, climate neutral and circular economy through:
   a. acceleration of Nobian's CO_2 targets;
   b. reduction and eventual end of the use of natural gas;
   c. reduction and eventual end of air and water emissions, notably, NO_x emissions; and
   d. enabling the realisation of the energy transition and renewable hydrogen market.

2. Specific climate related targets as referred to in paragraph 1, part a, of this article 2 include:
   a. Scope 1 CO_2 emissions: acceleration of the scope 1 CO_2 emission reduction at the sites by more than 600 kton per year with reference to the year 2020 and with the ambition to reach zero emissions in 2030, being 10 years earlier than the current Nobian ambition of 2040. This CO_2 reduction is almost completely additional to the Dutch CO_2 tax (see graph in Appendix 1);
   b. Scope 2 CO_2 emissions: Nobian strives for zero Scope 2 emissions from the electrification projects (see table 3.1) under the condition of sufficient availability of renewable electricity at economically viable costs;
   c. Scope 3 CO_2 emissions: projects will lead to a reduction of Scope 3 emissions, with no transfer from Scope 1 and 2 emissions to Scope 3;
   d. Electricity consumption: achieve electricity savings of 135 GWh[4] per year at the electrolysis plant in Rotterdam by 2030, to free up capacity on the medium-voltage electricity grid and enable faster electrification of chemical processes of Nobian's customers and other parties in the Rotterdam Botlek area; and
   e. Steam use: achieve more efficient use of steam from existing biomass and waste incineration.

3. Specific climate related targets as referred to in paragraph 1, part b, of this article 2, include: reduction of the natural gas consumption at the sites from more than 350 million m^3 now to almost zero by 2030[5].

4. Specific climate related targets as referred to in paragraph 1, part c, of this article 2, include: realisation of a yearly NO_x emission reduction of about 500 tons (the level in 2020), to zero in 2030.

5. Specific climate related targets and considerations as referred to in paragraph 1, part d, of this article 2, include:
   a. Nobian is in the process of realising, in the Zuidwending area in the province of Groningen and together with partners, 4 to 5 salt caverns for hydrogen storage as an integral part of the national hydrogen transport network (MIEK project). The timely development of these caverns requires sufficient post-saturation capacity in existing, operational salt caverns. Parties agree to work together to align the timeline of permit procedures (RCR and regular) for all Nobian developments in Zuidwending (including but not limited to the 4-5 hydrogen storage caverns and the extension of the existing caverns for post-saturation capacity).
   b. Parties agree that Nobian will contribute to the National Roadmap for Energy Storage in which the long-term vision on energy storage is established. Until the National Roadmap for Energy Storage is confirmed, Nobian will plan and design new-to-be-developed caverns for brine to be processed at the Delfzijl Site (beyond the aforementioned 4-5 salt caverns for hydrogen storage in the Zuidwending area), ensuring these caverns can be used for energy storage in the future. Upon completion of the National Roadmap for Energy Storage, and provided that salt caverns are

[4] 135 GWh is equivalent to the electricity consumptions of about 50,000 households.
[5] 350 million m3 gas is equivalent to the consumption of approximately 280,000 households.

confirmed to be part of the future energy storage set-up in the Netherlands, Parties will work together on the timely realisation of these caverns.

c. The Government will continue to coordinate the accelerated realisation of MIEK projects, notably the 380kV electrical infrastructure at Rotterdam and Delfzijl sites, and the national Hydrogen Transport Network.

d. Parties intend to explore the potential to increase the share of flexible electricity consumption, to allow for the efficient integration of renewable electricity into the electricity grid.

3. Projects

1. The Projects[6] which will be considered in this cooperation framework are summarised in the table below**.**

Table 3.1: Climate and energy transition projects

	PROJECT	SHORT DESCRIPTION	EXPECTED CLIMATE AND ENVIRONMENT IMPACT	EXPECTED REALISATION
CLIMATE AND ENERGY TRANSITION PROJECTS WITHIN SCOPE OF PROJECT AGREEMENTS				
1	**2 large scale heat pumps for salt production in Delfzijl**	Installation of 2 large scale salt plants based on industrial electrical heat pump technology replacing gas fuelled based steam driven salt plants.	295 kton CO_2/ yr[a])) ↓ 165 million m^3/yr gas ↓ 235 ton NO_x ton/yr ↓	2027 (1st installation) 2028 (2nd installation)
2	**Zero emission heat supply for salt production in Hengelo**	Installation of 1 or 2 salt plants based on industrial electrical heat pump technology and possibly increased utilisation of steam from municipal waste incineration, including additional heat cascading to district heating.	245 kton CO_2/yr[a]) ↓ 135 million m^3/yr gas ↓ 195 ton NO_x ton/yr ↓	2026 (in case of increased steam intake from waste incineration) 2029 (heat pump-based salt plant)
3	**New electrolysis technology in Rotterdam**	Replacement of existing electrolysers for chlor-alkali production with newest technology.	135 GWh/yr electricity saving	2027-2030 (step wise implementation)
4	**Energy storage in salt caverns**	Realisation of salt caverns suitable for energy storage as an element of the sustainable energy infrastructure of the Netherlands and Europe.	Facilitator of Energy Transition (e.g. every 1 mln m^3 salt cavern leads to 250 GWh hydrogen storage capacity)	2025-2030 (and possibly beyond if more energy storage caverns are required)
ENERGY EFFICIENCY PROJECTS OUT OF SCOPE OF PROJECT AGREEMENTS				
5	**Portfolio of other energy efficiency projects**	Several smaller and medium-sized projects to save energy and electrify processes.	120 kton CO_2/yr[a]) ↓ 30 million m^3/yr gas ↓ 90 ton NO_x ton/yr ↓	2023-2030

NOBIAN

2. Permitting

a. Nobian is responsible for submitting permit applications for the permits in accordance with applicable law.

b. The Government 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.

c. Parties will consult with the relevant national, regional and local authorities and their advisers (if any) to come to an aligned view on relevance and prioritisation of the Projects.

d. Nobian will periodically schedule a meeting between Nobian and the coordinating authority under the RCR (if applicable) to discuss the progress in the permitting process ,or, if not (i) applicable or (ii) applied by the Government for a permitting process pertaining to (a) Project(s), the Government will set up a similar process for such Project(s).

[6] The Projects are described in more detail in the Appendix 2 to this Expression of Principles.

3. Financing of the Projects
    a. Nobian is responsible for the financing of the Projects listed table 3.1 in article 3 hereof.
    b. Nobian has indicated that financial support is required to ensure the economic viability of these Projects, a more detailed estimation of the costs incurred for realising the Projects will be made for the relevant Project Agreements at a later stage. These cost estimates adjusted based on the information obtained from the determination of the basic engineering package, together with the permitting and financing needs will be the basis for the FID.
    c. Parties acknowledge that for the financing of some or all of these Projects, the availability of subsidies and incentives provided by the Government would increase the viability of the business case of the relevant Projects.
    d. Parties intend to use financial support through generic financial mechanisms, including SDE++ and the VEKI for which Nobian can apply. The Government will proactively seek feedback from Nobian in the upcoming regular yearly reviews for SDE++.
    e. Parties will cooperatively investigate the possibilities for Nobian to apply for (partial) financing for the Projects under the new to be established NIKI scheme.
    f. If the above mentioned general schemes are deemed insufficient or not fit for purpose, the Government will consider to contribute to the financing of the Projects through one or a combination of the following financing instruments:
        i. other future subsidy programmes;
        ii. provision of subordinated loans; or
        iii. other specific mechanisms for financial support,

    in each case while strictly adhering to applicable European and Dutch laws for state-aid support and the procedures and parameters for those financing instruments. The Government will investigate possibilities to provide the mechanisms listed in paragraphs d through f above to (i) accelerate the objectives as set out under article 2 hereof and (ii) support Nobian in (arranging) financing of a potential funding gap in order to realise the required rate of return of the Projects in accordance with the timeline for completion thereof as discussed between the Parties. In addition, the Government will use its best efforts to promote the Projects for qualification of applicable EU subsidies, loans and other financial support instruments. The Government's investigation into potential financial support mechanisms for the Projects is dependent upon the willingness of Nobian to confidentially provide detailed financial and commercial information.

4. Process and time schedule

1. The aim is to reach separate conditionally binding project agreements between the Parties for the Projects.

2. Each Project Agreement will have a concrete timeline for the realisation of the relevant Project(s) as from the signing of the Project Agreements pertaining to that Project.

3. The Project Agreements will follow the decision gates as described in Appendix 3 and when all the deliverables are met positively the FID will be made.

4. The Project Agreements will include:
    a. a clear stage gating process with well-defined go/no-go decisions with clear deliverables and commitments from the Parties to move to the next phase;
    b. a financing structure of the Project(s) based on the business plan and the assumptions in this plan, including NPV funding gap calculations based on the discounted value of project CapEx and OpEx costs, revenues, eligible costs, terminal value, WACC, CO_2 price, tax and dispensation rights, financing of the project, and cash flow projections; and
    c. an integral governance structure with all relevant stakeholders to ensure on time completion of the Projects.

5. Next steps

The Parties agree on the following next steps:

[Next documents]

a. To develop and agree a Joint Letter of Intent (JLOI), latest by end March 2023, which will be reviewed by a Governmental advisory committee in April 2023.
b. To develop and agree the separate conditionally binding Project Agreements, intended to be signed latest by the end of June 2023.
c. To enter into the Project Agreements the provinces of South Holland, Groningen and Overijssel (and the corresponding environmental agencies) are indispensable. These provinces have been informed and approached to participate in discussions on this Expression of Principles. The aim of the Parties is to develop and enter into the JLOI and Project Agreements together with these provinces.

[Government]

d. To ensure progress of the Projects and above actions and to solve arising issues, there will be a quarterly review meeting between senior level representatives of the Government and Nobian. Once a year, or as often a required, such review meeting will be on ministerial and CEO level.
e. To agree on the responsibilities and arrange the joint appointment for the account of each Party equally, of an independent programme management officer to track and stimulate progress towards the execution of the steps and principles as set out in this Expression of Principles and the terms and conditions agreed in the subsequent Project Agreements.
f. In the coming months the Ministry of Economic Affairs and Climate Policy will present a national roadmap to accelerate the transition in the industry. The further development of the Expression of Principles and future documents to be agreed between the Parties must be adjusted in accordance this national roadmap.

[Financial]

g. Nobian will engage a financial adviser to analyse the business case of each of the Projects and share the outcome of this analysis with the Government.
h. To assess the required and available financial support mechanisms for the Projects.

[Studies]

i. To ensure a timely FID for project 1 "Two salt plants on heat pump technology in Delfzijl" (see Appendix 2 part 1), Nobian will start internal engineering activities ahead of a Project Agreement (expected mid 2023). In parallel, Nobian will submit a grant application for financial support on external costs incurred for engineering activities for this project. This grant application will be urgently processed, assessed and tested for state aid by the Ministry of Economic Affairs and Climate Policy.
j. To conduct, together with other regional partners, a study on the optimal use of heat pump technology and increased steam supply from the waste incineration plant of Twence, for the Nobian salt plant at the Hengelo Site. This would include assessing the differences in implementation time for the various options and deciding on the preference for the parties, considering the long-term perspective on waste incineration and the potential of increasing the cascading of heat towards use for heating of residential housing in the area.

[Energy storage]

k. To align, before the end of Q1 2023, on the timeline of permit procedures for (i) the abovementioned 4-5 salt caverns for hydrogen storage, (ii) the necessary extension of extraction plans for existing caverns and (iii)) other planned activities by Nobian in the Zuidwending area.
l. To work together in the existing trajectory to develop the National Roadmap for Energy Storage ('*Routekaart Energieopslag'*), with targeted completion by the end Q2 2023. Based on the outcomes, Parties will align on the next steps.

6. Costs

Each Party will bear its own costs associated with the cooperative activities intended to be carried out under this document unless the Parties agree otherwise in writing. Activities under this Expression of Principles are subject to the availability of appropriate funds, in conformity with budgetary provisions and the relevant laws and regulations.

7. Interpretation of terms and substance of this document

1. The terms of this Expression of Principles are solely meant to lay down the joint current understanding of, approach to, and next steps to be undertaken jointly in an effort to realise the objectives as set out under article 2 of this Expression of Principles.

2. The terms of this Expression of Principles are not legally binding and not legally enforceable by or upon either Party hereto.

3. This Expression of Principles is governed by and shall be construed in accordance with the laws of the Netherlands. Any dispute about the interpretation or implementation of this Expression of Principles will be resolved through consultations between the Parties.

8. Other

This document comes into effect on the signature date and will be amended upon written request of one of the Parties and agreement by the other Party.

Signed in four original copies, each in the English language.

Minister of Economic Affairs and Climate Policy,

_____

By: Mrs. M.A.M. Adriaansens

Title: Minister of Economic Affairs and Climate Policy

Date:

Location:

State Secretary of Infrastructure and Water Management,

_____

By: Mrs. V.L.W.A. Heijnen

Title: State Secretary of Infrastructure and Water Management

Date:

Location:

State Secretary of Mining

_____

By: Mr. J.A. Vijlbrief

Title: State Secretary of Mining

Date:

Location:

Nobian Industrial Chemicals B.V.

_____

By: Mr. M. Koenig

Title: Chief Executive Officer

Date:

Location:

APPENDIX 1: Projected acceleration of climate targets and gas reduction as a result of tailer-made agreements

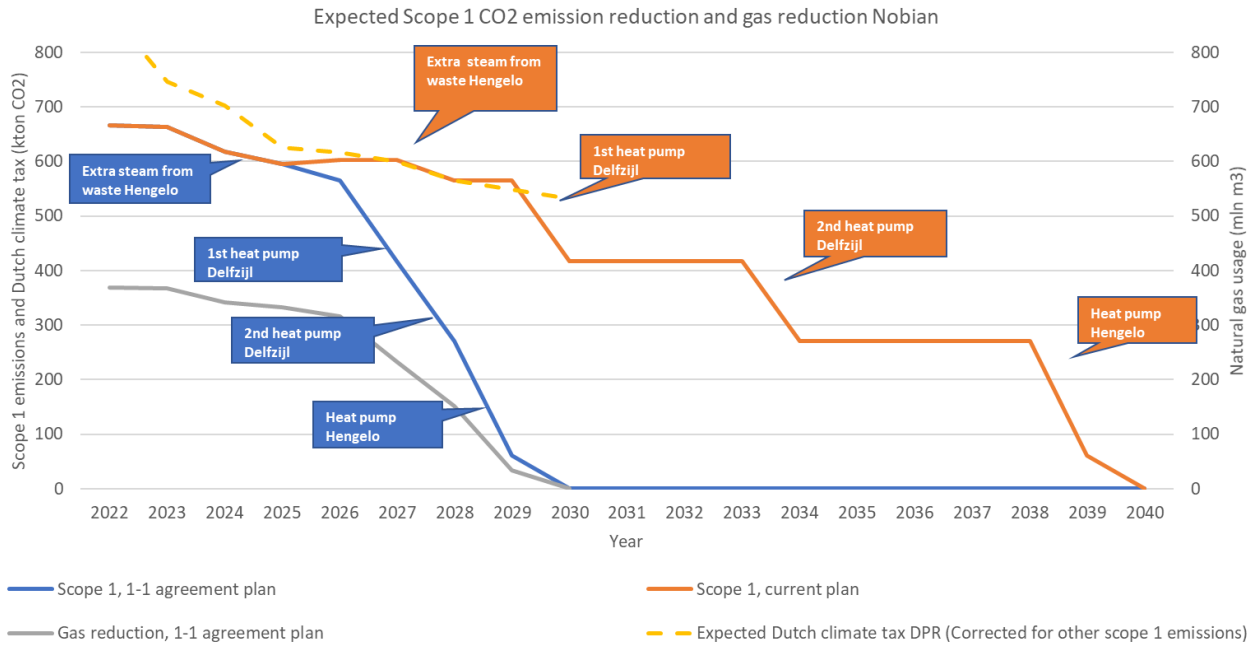

Figure 2.1: *Acceleration of climate targets and gas reduction as a result of tailor-made agreements. The line for the Dutch climate tax is calculated as: number of dispensation allowances (DPR) under the Dutch climate tax + emissions associated with electricity production*

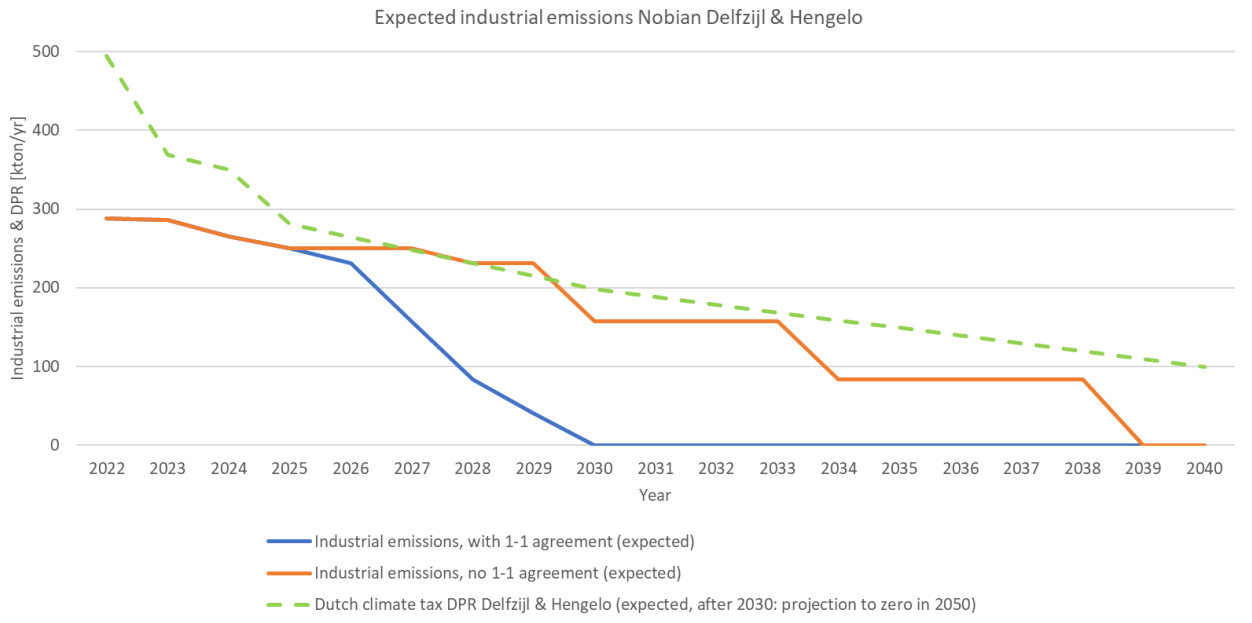

Figure 2.2: *Acceleration of industrial emission reduction as a result of tailor-made agreements*

APPENDIX 2: PROJECTS IN SCOPE OF TAILOR-MADE AGREEMENT

Project 1: Two salt plants based on heat pump technology in Delfzijl

Short description:
Replacement of gas fuelled, steam driven multiple effect evaporators (MEE) for salt production by two salt plants based upon heat pump technology (Mechanical Vapor Recompression or MVR) running on electricity. As a consequence, a significant amount of energy is saved, since MVRs are 70-75% more energy-efficient compared to MEE. MVR is a proven technology. Nobian has already one MVR running on the Delfzijl Site. The new MVR will become the largest in Europe to date.
In line with the renewable energy targets of Nobian, the MVR is expected to run on 66% renewable electricity by 2030 and 100% by 2040.

Figure A1: *Current heat pump (MVR) in Delfzijl*

Key figures of targeted project (table 3.1 project 1):
- Investment: ca 200 mln Euro (+50/-30%)
- Scope 1 CO_2-emission reduction: 295 kton CO_2/yr
- Natural gas saving: 165 million m^3/yr
- NO_x emission reduction: 235 ton NO_x ton/yr

Main hurdles:
- Poor business case as a result of insufficient savings to pay for the investment cost
- SDE++ does not cover the unprofitable margin (*onrendabele top*) and works with inadequate reference installation
- Capital availability for investments within accelerated time frame
- Availability of renewable energy for Dutch industry

Additional consideration:
Nobian is currently the main steam supplier and distributor of the ChemiePark Delfzijl using its Delesto 1 CHP installation. As a result of the implementation of the two MVR based salt plants, the steam production by Delesto 1 will become obsolete for Nobian.
Notwithstanding that Nobian will no longer have a contractual obligation to supply steam as from the end of the contract term in the utility contracts between Nobian and its current steam customers, Nobian will make reasonable efforts to facilitate and enter into good faith discussions for the future set up of the steam (and other utilities) supply and distribution to the current steam consumers in the ChemiePark Delfzijl cluster after termination of the relevant utility contracts.

Project 2: Heat pump and extra steam from waste Hengelo

Short description:
The current salt production process runs on gas fueled, steam driven, multiple effect evaporators. The steam for these evaporators is partly coming from Nobians Combined Heat Power (CHP) unit and partly from the municipal waste incineration Twence, located nearby Nobian's production location. The salt production plant and Twence are closely integrated with the district heating in the municipalities of Enschede and Hengelo.

The objective of the project is to replace the steam driven process by a heat pump driven process (MVR). As a first step two options will be assessed; the installation of 2 MVR plants or the installation of 1 MVR combined with additional steam from Twence. Since the MVR is proven technology (same as in Delfzijl, see project 1) and Nobian is already partly running on steam there are no technical risks foreseen for this projects. However, due to the complexity of the integration with steam from the municipal waste incineration, the production of electricity in the CHP and the connection with the district heating, a study needs to be performed first in order to determine the best solution for the decarbonisation of the Hengelo Site. Also the longer term perspective of incineration of Bio and Municipal sourced waste is required in order to make a sustainable investment decision.

Figure A2: *Current steam pipe from Twence to Nobian in Hengelo*

Key figures of targeted project (table3.1, project 2):
- Investment: 100 – 200 mln Euro (+50/-30%, dependent on scenario)
- Scope 1 CO_2-emission reduction: 245 kton CO_2/yr
- Natural gas saving: 135 million m^3/yr
- NO_x emission reduction: 195 ton NO_x ton/yr

Main hurdles:
- Poor business case as a result of insufficient savings to pay for the investment cost
- Energy tax regulation works counterproductive for using more steam from Twence
- Complexity of the very efficient cascaded re-use of heat for multiple purposes
- Capital availability for investments within accelerated time frame
- Unclear long-term vision on future municipal waste incineration

Project 3: New electrolysis technology in Rotterdam

Short description:
The current chlor-alkali electrolysis plant in Rotterdam, when built in 1983 was the best available technology for the electrolysers based on membranes. In 2005, new technology called *zero gap*, was developed making the electrolysis process much more energy efficient and bringing it close to its theoretical optimum. The aim of this project is to replace the current electrolysers with zero gap technology including the associated equipment change towards the production of 32% caustic and thus saving a significant amount of electricity.

The *zero gap* technology has already been applied in our plants in Delfzijl, Rotterdam, Frankfurt and Ibbenburen and is running very well. It is therefore proven technology and the technical risks are considered very low. Replacing the electrolysers is however expensive, complex, time consuming, thus can only be done in combination with a turnaround to limit the production loss and create a safe work environment for the project. It will therefore be done in a few steps.

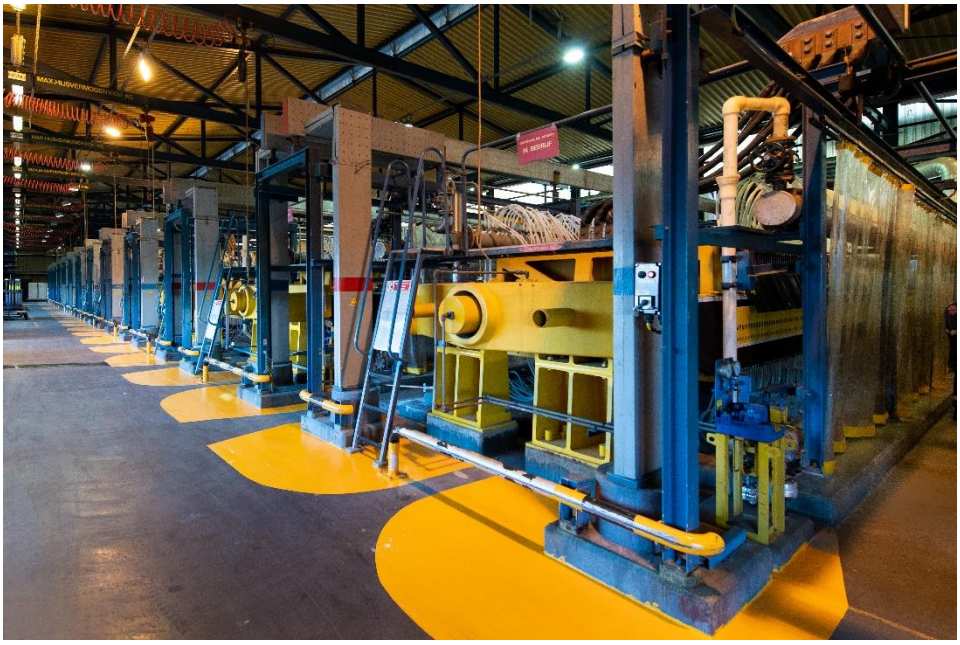

Figure A3: *Electrolysers for chlor-alkali production in Rotterdam*

Key figures of targeted project (table 3.1, project 3):
- Investment: 110 mln. Euro (+50/-30%)
- Electricity saving: 135 GWh/yr

Main hurdles:
- Poor business case as a result of insufficient savings to pay for the investment cost
- Indirect cost saving
- Loss of production during the installation
- Capital availability for investments within accelerated timeframe
- Risk of delay in permitting procedures due to complexity of many projects on the Rotterdam Site and new regulations

Project 4 Salt caverns for renewable energy storage:

Short description:
Development of energy storage caverns in the Netherlands:

- Phase 1: Realisation of 4-5 hydrogen storage caverns in Zuidwending, in addition to other (new) cavern developments by Nobian in the same area.
- Phase 2 (partially in parallel to phase 1): Define the National Roadmap for Energy Storage ('Routekaart Energieopslag'), and based on the outcomes, align on the timely development of additional energy storage caverns.

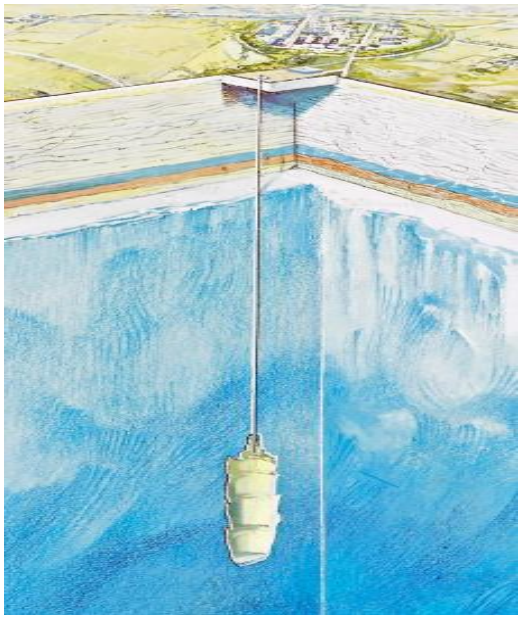

Figure A4: *Schematic of salt cavern for renewable energy storage*

Key benefits:

- Energy storage is a key building block of Energy Transition

Main hurdles:

- Timely development of energy storage caverns requires sufficient post-saturation capacity. For this, it is important that the extraction plan for existing Nobian is extended beyond the current end date of November 2025 (if not extended, the realisation of the first energy storage caverns takes approximately double the time, implying the first caverns are not ready before 2030)
- Close alignment with local stakeholders on impact of salt mining and creation of energy storage caverns
- Substantial investments in investigating specific areas for suitability of salt mining and/or creating energy storage caverns and developing new brine fields (e.g. pumping station, pipelines, drilling of relatively small caverns)
- Possible decision to dimension new caverns as if they can be converted to energy storage caverns over time has an impact on development CapEx and pace at which salt reserves are depleted (given smaller cavern size)

Project 5: Portfolio of other energy efficiency projects (outside scope project agreements)

Short description:
A programme of about 20 smaller and medium-size projects with overall a significant CO_2 and gas reduction effect. The projects are done on all sites and vary from energy saving measures, recycling of a customer salt waste stream in Delfzijl, an energy integration project in the Rotterdam Chlor-alkali cluster and further electrification of processes currently running on steam. These projects will be outside the scope of the binding project agreements.

Figure A5: *Chemiepark Delfzijl*

Key figures of targeted project (table 3.1, project 5):
- Scope 1 CO_2-emission reduction: 120 kton CO_2/yr
- Natural gas saving: 30 million m^3/yr
- NO_x emission reduction: 90 ton NO_x ton/yr

Main hurdles:
- Speed and predictability of permitting procedures

APPENDIX 3: Indicative decision gates and deliverables
Subject to agreement

Stage gate			
	Stage gate 1	**Stage gate 2: Conditional FID**	**Stage gate 3: Final FID**
Engineering & Cost estimates	Technical concept, scope & capacity chosen Cost estimate (-30%/+50%)	One technical alternative Cost estimate (-20%/+30%)	Basic engineering package Budget (-10%/+10%) Commitment from equipment suppliers
	Project plan and costs for FEL2 (study)	Project plan and costs for FEL3 (basic engineering phase)	Project plan for execution phase
Finance	Conceptual financial instrument portfolio identified Financial stakeholders identified and case discussed Check whether EU approval is required Clarification of Government support for FEL2 engineering committed	Approval by Board Nobian to start basic engineering (FEL3) Commitment from all financial stakeholders on time schedule and financial instruments State support check at EU started Clarification of Government support for FEL3 engineering committed	Subsidy request submitted in time, finance secured Financial instruments available in time for submission and accessible for Nobian
Permits	Stakeholder analysis for permits prepared Permit plan ready & competent authorities involved and first indication that granting the permit is possible and identification of right approach for those elements where legislation is less clear. Agree meeting structure and escalation model. First indication of resource and competency required.	Concept permit application ready for submission and pre-discussed with competent authorities. Permit requirements clarified and accounted for in project scope and plan. Stakeholder analysis ready, aligned with *bevoegde gezagen*. Clarification on resource availability at permit authorities (e.g. omgevingsdienst NoordNL (Delfzijl), DCMR (Botlek), EZK (Hengelo)) and legal periods for permits incl. governance structure.	Permit application submitted in time. All requirements for permits for construction and license to operate clarified and accounted for in design and plan. Delivery of permits according to planning. Joint stakeholder management in operation.
Business case	Feasibility proven Identification of required support	Subsidy/financing requirements for feasible business case	Frozen