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5 June 2026

DUH-Statement on Proposal and Participation Plan & Draft Memorandum on Scope and Level of Detail of the fossil gas extraction N04-A

Dear Sir or Madam,

I hereby submit, on behalf of Deutsche Umwelthilfe, a statement of views on the Proposal and Participation Plan and the Draft Scope and Level of Detail Memorandum (draft NRD) dated 27 January 2026, which Haskoning Nederland B.V. (Haskoning) has drawn up on behalf of ONE-Dyas B.V. and which was published by the ministry of Economic Affairs and Climate (hereafter EZK) with a time limit until 5 June for submitting observations.¹ The draft NRD concerns natural gas extraction in the N04-A and N04-C areas (the Project). The Project comprises the installation and operation of a satellite platform, the conversion of the exploration well N04-04 into a production well, the drilling of up to five further production wells and, if necessary, five sidetracks (underground branches), the construction of a pipeline from the satellite platform to the existing production platform N05-A, and the extraction of natural gas for a period of ten to twenty-four years.

I request that, taking all points of our statement into account, you amend the draft NRD, the Proposal and the Participation Plan, and have the EIA carried out accordingly.

Kind regards

Sascha Müller-Kraenner
CEO of Deutsche Umwelthilfe

Appendix

DUH-Statement on Proposal and Participation Plan & Draft Memorandum on Scope and Level of Detail of the fossil gas extraction N04-A

¹ Rijksdienst voor Ondernemend Nederland (2026, May). Gasgewinning N04. RVO.nl. <https://www.rvo.nl/onderwerpen/bureau-energieprojecten/lopende-projecten/gaswinning-n04/n04>



Proposal and Participation Plan & Draft Memorandum on Scope and Level of Detail of the fossil gas extraction N04-A

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1. Scope of the Project

First of all, the scope of the project under review has been incorrectly defined. What the EZK presents as 'Project Gaswinning N04-A' is not an independent project, but rather an expansion of the N05-A project, which is itself part of the larger 'Gateway to the Ems' (GEMS) project. The draft NRD itself demonstrates that N04-A/N04-C cannot be assessed as an isolated project. One-Dyas plans to transport the gas and condensate extracted by the N04-A satellite platform via a new pipeline to the N05-A processing platform. The power and data connection for N04-A will also run from N05-A. Furthermore, the draft NRD states that N05-A is equipped and authorised to process gas from N04-A prior to transporting to land. The project N04-A alone cannot process its own extracted gas and is reliant on its connection to N05-A. Therefore, the alleged project boundary follows ONE-Dyas's permit strategy rather than the project's physical, technical, and ecological reality.

The consequences are legally decisive. The EIA Directive and the Habitats Directive require assessments of the entire project and all effects that are functionally linked to it. The satellite platform N04-A associated drilling and sidetracks, the deposition of produced water and drilling mud, the N04-A to N05-A pipeline, the cable, and processing at N05-A are all elements of the same ONE-Dyas gas extraction project. The authorities cannot remedy this situation by splitting the project into 'N05-A' and 'N04-A' phases, nor can they treat a new satellite platform as a separate project simply because another permit is necessary.

Satellite platforms including the satellite platform N04-A were part of the OneDyas project from the beginning as is clear from the N05-A Wabo Planning Application, Appendix 1 Technical Description from October 2020, par. 5.2.6, p. 27:

*“Two risers and two J-tubes are attached to the platform jacket. The risers are intended to connect to pipelines to be laid in the future from **satellites**. The J-tubes are used to route and connect (bundles of) cables, control and communication lines, and lines for utility supplies (umbilicals) into the platform. This concerns the power cable to the Riffgat wind farm and, in future, bundles to connect future satellites to the main platform. **Gas from satellite platforms** is processed and dried on the main platform before being transported on to the NGT.”¹ (own translation)*

The Administrative Law Division of the Council of State already ruled in 2007 that two interrelated phases are part of a single project:

“2.6. It follows from the aforementioned judgment of 4 May 2005 that the proposed interrelated activity must be understood to mean the total development of Lelystad Airport into a business airport in two phases. Pursuant to Article 7.10 of the Environmental Management Act, the EIA required in this context must contain a description of the aforementioned proposed interrelated activity and the alternatives thereto. The Division finds that three alternatives are included in the EIA. The so-called ‘plan alternative’ concerns the full implementation of the first phase set out in the A-decision, the most environmentally friendly alternative concerns an optimisation of the plan alternative, and the so-called ‘PKB alternative’ concerns the total development of the airport in two phases. It follows that, contrary to Article 7.10(1)(a) and (b) of the Environmental Management Act, the total development of Lelystad Airport in two phases

¹ N05-A Wabo-Vergunningsaanvraag, Bijlage 1 Technische beschrijving oktober 2020, par. 5.2.6, p. 27, <https://www.rvo.nl/sites/default/files/2021/04/Bijlagen-aanvraag-Wabo-vergunning-Gaswinning-N05-A.pdf>

Original quote: “In het jacket van het platform zijn twee risers en 2 J-tubes bevestigd. De risers zijn bedoeld om in de toekomst aan te leggen pijpleidingen vanaf satellieten op aan te sluiten. Door J-tubes dienen voor de aansluiting en geleiding van (bundels) kabels, besturings- en communicatieleidingen en leidingen voor hulpstoffen naar binnen getrokken worden (umbilicals). Dit betreft de elektriciteitskabel naar windpark Riffgat en toekomstig voor bundels om toekomstige satellieten te verbinden met het hoofdplatform. Het gas van satellietplatformen wordt behandeld en gedroogd op het hoofdplatform voordat het verder getransporteerd wordt naar de NGT.”

was not taken as the proposed activity for which alternatives must be described. The proposed related activity has, wrongly, been described in the EIA merely as one of the alternatives for the first phase contained in the A-decision.”²

The rules regarding the requirements with which an environmental impact assessment must comply have now been incorporated into the provisions laid down in and pursuant to Articles 16.52 and 16.53 of the Dutch Environment and Planning Act (Omgevingswet). Under this Act too, the overall development must be the starting point; this means that the entire coherent activity of gas extraction via platform N05-A and the satellite platforms N04-A and N04-C must be the subject of the impact assessment in the environmental impact report. On this point, the draft NRD therefore contains a serious shortcoming.

DUH therefore requests that this NRD explicitly requires an integrated Environmental Impact Assessment (EIA) and appropriate assessment for the entire ONE-Dyas GEMS project with all cumulative effects. This should include N05-A, N04-A/N04-C, all permitted and foreseeable wells and sidetracks, the pipeline between N04-A and N05-A, the integrated cables for electricity and data connection, all processing activities at N05-A, decommissioning and the effects of discharges from N04-A.

2. Consulted target groups

Paragraph 3.2.4 of the Proposal and Participation Plan refers to nature and environmental organisations. It states that these organisations would also be represented in the North Sea Consultative Body (NZO). However, this fails to recognise that these organisations are only partially represented within the NZO. Various organisations committed to the North Sea, including Deutsche Umwelthilfe (DUH), are not part of the NZO. DUH, a German NGO, has never even had the opportunity to become part of this. Furthermore, DUH is critical of the NZO because it contains several concessions that contravene applicable European nature conservation regulations. Therefore, the Ministry of Economic Affairs and Climate Policy cannot simply regard the NZO on its own as representative of nature conservation interests. DUH has never been invited to discuss the project, despite being the leading NGO in a major lawsuit against the N05a project in the Netherlands. The relevant Dutch ministries and ONE-Dyas are therefore aware of the importance that DUH attaches to the area. Additionally, organisations such as Stichting Doggerland, through their legal proceedings for protecting Borkumse St, and Scientists for Future NL, through their actions, have demonstrated that they are relevant stakeholders in the public participation process of One-Dyas’ projects.

² Vereniging Natuur en Milieu Flevoland et al v. Minister van Verkeer en Waterstaat et al. 10 October 2007. Raad van State. No. 200606568/1. ECLI:NL:RVS:2007:BB5231. <https://uitspraken.rechtspraak.nl/details?id=ECLI:NL:RVS:2007:BB5231>

Original quote: “2.6. Uit voormelde uitspraak van 4 mei 2005 volgt dat onder de voorgenomen samenhangende activiteit de totale ontwikkeling van de luchthaven Lelystad tot business airport in twee fasen moet worden verstaan. Het in dit verband verplicht te maken MER moet ingevolge artikel 7.10 van de Wm een beschrijving bevatten van voormelde voorgenomen samenhangende activiteit en de alternatieven daarvoor. De Afdeling stelt vast dat in het MER drie alternatieven zijn opgenomen. Het zogenoemde planalternatief betreft de volledige realisering van de in het A-besluit vervatte eerste fase, het meest milieuvriendelijke alternatief betreft een optimalisatie van het planalternatief en het zogenoemde PKB-alternatief betreft de totale ontwikkeling van de luchthaven in twee fasen. Hieruit volgt dat in strijd met artikel 7.10, eerste lid, onder a en b, van de Wm niet is uitgegaan van de totale ontwikkeling van de luchthaven Lelystad in twee fasen als voorgenomen activiteit, waarvoor alternatieven moeten worden beschreven. De voorgenomen samenhangende activiteit is ten onrechte slechts als één van de alternatieven voor de in het A-besluit vervatte eerste fase in het MER beschreven.”

DUH therefore requests that the Dutch Ministry of Economic Affairs and Climate Policy, respective relevant authorities and ONE-Dyas designate DUH and other nature conservation organisations committed to protecting the North Sea, but not represented in the NZO, as 'stakeholders' that will be informed about all developments and consulted in the process and have the possibility to join stakeholder meetings.

3. Necessity of the Project

a. Unsubstantiated Public-Interest Narrative

The draft NRD repeatedly presents the development of N04-A as if it were supported by an overriding public interest in domestic offshore gas extraction. That framing is legally and factually misleading. The relevant public interest is not the expansion of fossil gas production, but the protection of the climate system, the fulfilment of the Paris Agreement and the prevention of further harm to protected marine ecosystems. The North Sea Programme and the North Sea Agreement do not provide a general mandate for expanding gas extraction. Rather, they place any remaining gas extraction expressly within the context of the Paris climate objectives, decarbonisation and a gradual phase-out of fossil fuels. The Agreement for the North Sea states that Dutch energy and climate policy, including the extraction and use of natural gas, must at all times remain aligned with the Paris Agreement, including the objective of limiting warming to 1.5°C. In that context, the public interest is legally established as limiting the earth overheating at 1.5°C and thus the logically required policy direction is not the opening of new gas fields, but the rapid reduction of fossil gas extraction.

Haskoning's suggestion that N04-A is necessary for the energy transition is not supported by evidence. The draft NRD gives the impression that the energy transition cannot proceed without additional natural gas production, but it does not demonstrate that new gas extraction is required, nor that N04-A would make a measurable contribution to energy security, affordability or climate protection. Even if one accepted the general proposition that some gas may still be needed during a limited transition period, this does not justify opening new gas production sites. In fact, the IEA clearly stated in 2021 that beyond projects already undertaken as of 2021, no new oil and gas fields can be approved for development in its 1.5°C-compatible pathway.³ Since then, One-Dyas has already opened a new project, N05-A, which is currently under legal scrutiny by the Raad van State. Therefore, permitting yet another fossil fuel project would undermine rather than advance the energy transition and the achievement of the Paris climate objective.

This conclusion is reinforced by the Deloitte and Öko-Institute analysis "Natural Gas Demand Outlook to 2050". The study shows that natural gas is rapidly losing relevance in the German and EU energy systems on the pathway to net zero. In a climate-compatible pathway, gas demand declines by more than one quarter in Germany and the EU by 2030 compared with 2018 levels, and by 80% in the EU and 95% in Germany by 2050. This decline is not a supply problem that requires new gas fields; it is the intended result of the phase-out of fossil fuels, compensated by the sustained deployment of renewables, increased electrification, clean hydrogen and derivatives, and efficiency measures. Gas consumption decreases across all sectors: in buildings, mainly through thermal renovation and heat pumps and in the power sector, through coal phase-out and rapid renewable deployment.⁴ These findings are consistent with recent

³ IEA. (2021, May). *Net Zero by 2050*. International Energy Agency. <https://www.iea.org/reports/net-zero-by-2050>

⁴ Deloitte (2023, September 22). Sustainability and Climate: Natural Gas Demand Outlook to 2050. <https://www.deloitte.com/de/de/what-we-do/capabilities/sustainability-climate-dsc/natural-gas-demand-outlook-to-2050.html>

German and EU energy outlooks and directly contradict the draft NRD's implication that new gas production is required for the energy transition.

Fig. 1 – Breakdown of natural gas consumption in the EU, 2018-2050



Figure 1⁴

This is particularly relevant because renewable generation is already increasingly capable of covering a very large share of electricity demand under normal weather conditions. The bottleneck is not the absence of fossil gas fields, but the insufficient deployment of grid capacity, flexibility, storage, demand-side management and renewable generation. In 2025, wind and solar together produced more electricity in the EU than fossil fuels for the first time, while higher gas use is leading to higher bills and renewed concerns about geopolitical dependence on imported gas. A recent Ember Climate study of the current oil and gas price shocks confirms that Europe's continuing dependence on gas remains a major vulnerability: exposure to volatile gas markets undermines affordability, security and industrial competitiveness rather than strengthening them.⁵ New fossil infrastructure therefore does not solve the structural security problem posed by fossil dependency; it prolongs it.

Through its citations and assertions, Haskoning implies that the N04-A project could reduce LNG supplies, thereby preventing greenhouse gas emissions. This is a false claim. Due to the long-term take-or-pay LNG supply contracts already concluded and well-known by the Netherlands, Germany, and the EU over several decades, fossil gas will continue to be supplied well into the 2040s, with or without N04-A. According to an analysis by Zero Carbon Analytics conducted in January 2025, the EU will enter into a situation of LNG oversupply in 10 years already, provided it continues to advance towards its climate targets.⁶ Since this analysis was conducted, long term supply agreements totalling more than 100 bcm of LNG have been concluded by European importers, exacerbating the coming LNG glut even more.

The Gate terminal in Rotterdam, with an import capacity of 12 bcm—which is set to increase to 16 bcm shortly—is fully booked through 2036.⁷ Numerous long-term LNG supply contracts have long been firmly

⁵ Ember (2025). Latest energy shock reminds Europe of its risky gas reliance. <https://ember-energy.org/latest-insights/latest-energy-shock-reminds-europe-of-its-risky-gas-reliance/>

⁶ ZCA Team (2025, January 17). The EU does not need new US LNG to replace Russian gas. Zero Carbon Analytics. <https://zero-carbon-analytics.org/insights/briefings/new-us-lng-not-needed-by-eu-to-replace-russian-gas/>

⁷ Gasunie NL (2025). 2025 Annual Report - Security of supply. <https://www.publicatiesgasunie.nl/en/2025/2025-annual-report/security-of-supply>

negotiated, as exemplified by the 27-year contract between Shell and Qatar Energy, which calls for the annual delivery of 3.5 bcm of LNG to the Netherlands.⁸ With the currently concluded and announced supply contracts, LNG deliveries to Germany alone will total over 450 bcm of LNG in the coming decades, with some of these contracts running well past Germany's climate neutrality target of 2045.⁹ The trend is clearly moving toward even more long-term LNG contracts—most recently, for example, with SEFE's announcement of a new 8-year-long agreement with Argentina.¹⁰ All of these contracts have already been concluded. None of them will be reduced or even terminated if low-methane gas were to be produced from N04-A. The idea that the N04-A platform will reduce the Dutch or German reliance on LNG is a myth. It would merely add further fossil supply to an already oversaturated market.

The appropriate comparison is not “domestic gas versus imported LNG” in the abstract. The EIA must compare the project with the legally and practically available alternative of accelerated demand reduction, energy efficiency, heat pumps, electrification and renewable energy. The draft NRD currently frames fossil gas expansion as part of the energy transition while failing to assess whether new supply infrastructure delays that transition and creates a fossil lock-in for 10–24 years.

Nor can N04-A be justified by reference to stable energy prices. The gas quantities involved are far too small to affect European or global gas prices. In the German parliamentary expert hearing on gas extraction off Borkum, even the representative of the German Federal Association for Natural Gas, Petroleum and Geoenergy confirmed that quantities of this magnitude would have no price effect.¹¹

The amounts of gas that lie in the envisaged fields is estimated by the investor of the project TENAZ energy with 2.43bcm for N04-A and 1.98 bcm for N04-C, resulting in a total of 4.41 bcm to be produced **over 10-24 years**.¹² Divided up over even only ten years, the total gas contribution per year would therefore be at 0.441bcm. This amount will have to be split between Germany and the Netherlands since this is a joint gas reserve. Assuming an equal split of the gas and a gas production phase of only 10 years for the entire gas, the Netherlands and Germany would each only receive a maximum amount 0.22bcm per year. The Dutch gas consumption only in 2025 is at 27.2bcm (285 TWh)¹³ making 0.22bcm a contribution of 0.8%. For Germany, the amount would be even less with 0.2% of the 82.5bcm (864 TWh) of total gas

⁸ Loon, R. van. (2023, October 18). Nederland voor 27 jaar voorzien van lng door deal Qatar en Shell. Bnr.nl; BNR Nieuwsradio. <https://www.bnr.nl/nieuws/economie/10528462/nederland-voor-27-jaar-voorzien-van-lng-door-deal-qatar-en-shell>

⁹ DUH (2026). Research of LNG supply agreements concluded since 2022 conducted by DUH.

¹⁰ SEFE (2026). SEFE und Southern Energy unterzeichnen Liefervertrag über zwei Millionen Tonnen LNG pro Jahr. https://www.sefe.eu/de/medien/newsroom/pressemitteilungen/pressemitteilungen-details_2368.html

¹¹ Deutscher Bundestag (2026). Erschließung des deutsch-niederländischen Erdgasfeldes vor Borkum in der Kritik. https://www.bundestag.de/ausschuesse/a09_wirtschaft/wp21_a09_Anhoerungen/1140336-1140336

Excerpt from the verbatim transcript of the public hearing of the German Bundestag's Economic Committee on the unification agreement regarding the development of cross-border hydrocarbon deposits in the North Sea:

“Rep. Steffen Kotré (AfD): My question is now directed at Mr. Radermacher and Dr. von Hammerstein. Are there any calculations regarding the economic benefit we actually gain from this exploration as opposed to imports? Is there already a specific price per kilowatt-hour of gas that can be achieved on the market there? Or are there other facts that can serve as direct arguments, for example, against LNG imports?

SV Ludger Radermacher (BVEG): Well, I'm not aware of anything regarding that. I can say that quite frankly. Of course, there's the basic rule that the more gas you have on the market overall, so to speak, the more it could affect prices. However, that doesn't normally apply to the quantities we're talking about here. As I said, they have an important effect on resilience and security of supply. **I don't believe these volumes, on this scale, would have an impact on prices.** I don't have a study on this, nor do I have any reliable figures. That's all I can say on the matter.” (own translation)

¹² TENAZ ENERGY (2026, January). Corporate Presentation. <https://share.google/oJxueZ3ErZApG9eXp>

¹³ Nationaal Energie Dashboard (2025). Jaaroverzicht 2025. Ned.nl. <https://ned.nl/index.php/nl/achtergrond/jaaroverzicht-2025>

consumption in 2025.¹⁴ Assuming a production period of up to 24 years would result in an even smaller contribution to both countries' gas supply.

On top of that, according to the NRD p. 7, the methane content of the gas that One-Dyas intends to produce (69.7%) is extremely low, reducing the relevance of N04-A even more. Therefore, any claimed benefit from "domestic natural gas" must be assessed with particular caution and considered when indicating bcm drilling amounts.

In contrast to the NRD's suggestions, the project is hindering the energy transition, since starting a new fossil project with a potential operating period of up to 24 years creates a fossil lock-in precisely when the Netherlands and Germany must accelerate the reduction of gas demand. The draft NRD itself states that extraction is expected to last 10 to 24 years. However, for climate protection reasons, Germany currently only permits framework operating plans for new gas drilling projects until 2042, which is why not even the full volume of gas claimed by One-Dyas could likely be extracted.

The EIA must therefore reject the draft NRD's unsupported public-interest narrative. It must assess N04-A against the real public interest: staying within the 1.5°C limit, meeting binding Dutch, German and EU climate targets, reducing fossil gas demand, avoiding new fossil lock-in, and protecting the sensitive marine nature areas Borkum Riffgrund, Borkum Riff and Borkumse Stenen. Given the minimal quantities of low-methane gas, the absence of any proven price or security effect, the lack of LNG substitution, the availability of demand-reduction and renewable alternatives, and the serious risks to protected marine ecosystems, N04-A cannot be justified as necessary, proportionate or in the public interest.

b. Significant public costs and biased sources

The draft NRD relies heavily on the April 2025 sector agreement "Gas extraction in the energy transition". It notes that EBN will increase its participation in gas projects from 40% to a maximum of 85%, thereby reducing financial risk for private companies. This is a significant public intervention in favour of fossil extraction, which creates risks for taxpayers and uses up funds that could otherwise be invested in clean alternatives to fossil gas. This fact must be balanced against the assessment of whether this gas production has any economic benefit at all. This consideration of competing values must be an explicit part of the necessity and alternatives assessment, and not be pre-empted by presentation as neutral background.

The EIA must therefore disclose the project's financial structure, including EBN participation, public risk-sharing, tax advantages, subsidies, guarantees, and any other public support. The competent authorities must assess whether public funds are being used to prolong fossil fuel extraction that is inconsistent with climate targets, whether the asserted public benefits outweigh the environmental and climate harms, and whether the funds could be invested in renewable alternatives to improve energy security while also addressing climate obligations.

DUH also requests that the final NRD require transparent disclosure of the role of EBN and other fossil-sector actors in the development of the project and of the policy documents invoked by the draft NRD. Where the draft NRD relies on EBN graphics (e.g. p. 12 and 13) or sector-agreement assumptions, the EIA must not present them as neutral facts like Haskoning does in the NRD but **critically test those materials against multiple other sources and scenarios** and disclose underlying data, assumptions and

¹⁴ Bundesnetzagentur (2025). Rückblick: Gasversorgung im Jahr 2025. https://www.bundesnetzagentur.de/DE/Gasversorgung/a_2025/start.html

uncertainties. A graphic prepared by or for an actor with a direct financial interest in continued gas extraction is no substitute for an independent assessment.

c. Methane content

The EIA must reflect a central factual point: according to the draft NRD, samples from the N04-A and N04-C test wells showed a methane content of approximately 69.7%. The chemical composition determines the calorific value, the necessary treatment, the composition of the condensate and production water, air emissions, hazardous substances, operational risks and climate effects – as well as the costs and processing effort needed to make this gas usable by consumers. Therefore, the EIA must disclose and assess the full gas composition, not just the methane content. It must also explain the legal consequences of treating the activity as the extraction of a gas that, according to the draft NRD, does not meet the legal definition of natural gas.

Moreover, the EIA must quantify the expected composition and volumes of methane, carbon dioxide, nitrogen, hydrogen sulphide (if present), volatile organic compounds, condensate and formation water. In consequence, the name of the project as to be adjusted to be legally correct. Furthermore, it must evaluate whether the lower methane content results in a greater environmental footprint per unit of useful energy compared with the generic and unproven assertion that domestic gas is cleaner than LNG employed in the draft NRD.

The draft NRD correctly notes that methane is a much stronger greenhouse gas than CO₂ over shorter time horizons, but it does not translate that into a binding scope for measurement, monitoring and assessment. The EIA must quantify methane emissions from all stages: drilling, completion, production, separation, processing at N05-A, compression, pipelines, maintenance, abnormal operations and accidents, taking into account the specificities of the gas composition.

The assessment must use both GWP₂₀ and GWP₁₀₀ values, disclose leakage-rate assumptions, include a continuous monitoring and public reporting plan, and apply a zero-routine-flaring and zero-routine-venting standard. Methane emissions from a blow-out scenario must be assessed not only as a safety event but also as a climate event.

4. Project Procedure: Premature and unlawful exclusion of reasonable alternatives

The draft NRD states that the procedure will be based solely on the alternative proposed by the initiator and that the State Secretary for Climate and Green Growth will not take a preference decision. It further states that alternatives concerning the platform location, platform type, wells and pipeline route have already been assessed by ONE-Dyas during the preparatory phase and that, apart from the proposed alternative, there are no reasonable alternatives. This approach is highly problematic.

The purpose of the NRD is to define the scope and level of detail of the environmental impact assessment. It should therefore identify which alternatives must be assessed in the EIA, not pre-emptively exclude alternatives before the EIA has been carried out. By accepting, at this early stage, the initiator's own conclusion that only one alternative is "reasonable", the competent authority risks depriving the EIA of one of its core functions: enabling a transparent, comparative and evidence-based assessment of the environmental impacts of different technically and legally feasible options.

This is particularly concerning because the draft NRD does not show that all relevant alternatives have in fact been examined. For example, it is not sufficiently explained whether the EIA will assess the alternative of processing the gas already at N04-A, including the associated treatment and discharge of production water at that platform, instead of transporting the gas and associated waste streams to N05-A or concentrating discharges through the broader N05/N04 infrastructure. Such an alternative is directly relevant to

the assessment of water pollution, dispersion of hazardous substances, cumulative toxic loads, operational risks, emissions, shipping movements and impacts on protected marine habitats. It cannot simply be dismissed without a detailed environmental comparison.

Other potentially relevant alternatives also appear to have been excluded too early or insufficiently substantiated. These include, at least, alternatives concerning the treatment and disposal of production water, the location and technical design of discharge points, the energy supply of the platform during both drilling and production, the number and timing of wells and sidetracks, the sequencing of N04 and N05 activities, and less damaging pipeline or cable-routing options. The mere assertion that certain alternatives are technically infeasible, financially unattractive or “not problem-solving” is not sufficient. Financial preference of the operator cannot be equated with environmental reasonableness, and a private initiator’s business model cannot determine the scope of the EIA.

Under the EU EIA Directive, the environmental impact assessment must include a description of the reasonable alternatives studied by the developer and the main reasons for the option chosen, taking into account the environmental effects. This requirement presupposes that alternatives are assessed in a transparent and reviewable manner within the EIA process itself. While plainly unrealistic options may be excluded at an early stage, the wholesale narrowing of the procedure to one initiator-led alternative before the EIA has been conducted risks violating the purpose and effectiveness of the EIA Directive.

The EIA must therefore not be limited to ONE-Dyas’ preferred alternative. It must include a full and transparent alternatives assessment, with clear criteria, verifiable evidence and an explicit comparison of environmental impacts. This assessment must include, at minimum, alternative approaches to the platform location i.e. further away from Natura2000-area Borkum Riffgrund, gas processing, production-water and drilling cuttings disposal at sea i.e. transport and disposal on land, platform energy supply and power supply for the drillings, drilling scope and phasing, and pipeline routing. It also needs to assess an alternative renewable energy project instead of the fossil fuel project since this would be able to create the same amount of energy without dangerous CO₂-emissions. Until such an assessment has been carried out, it cannot lawfully be concluded that the proposed alternative is the only reasonable alternative.

5. Violations of Dutch Climate Legislation

The planned N04-A project is incompatible with Dutch climate legislation and the Netherlands’ binding climate obligations. Under the Dutch Climate Act, the Netherlands is legally committed to reducing greenhouse gas emissions by 55% by 2030 and achieving climate neutrality by 2050. These targets mirror the binding EU climate targets under the European Climate Law, which requires at least a 55% reduction by 2030 and net-zero greenhouse gas emissions by 2050. The draft NRD fails to assess whether the authorisation of a new fossil gas project with a possible operating period of up to 24 years can be reconciled with these binding reduction pathways – particularly since no commensurate reduction in LNG imports can be assumed, as demonstrated above.

This omission is particularly serious because Dutch courts have now confirmed that the Netherlands is not on track to meet its own climate targets. In the Bonaire climate case, the District Court of The Hague held that there is a “less than 5% chance” that the Netherlands will achieve its 2030 climate target and that, without stronger implementation policy, the 2050 target will also move out of reach. The Court further held that the Netherlands lacks a concrete and coherent regulatory framework with intermediate targets and pathways for the full period until climate neutrality is achieved. It also criticised the State for failing

to quantify the remaining national emissions allowance within the global carbon budget compatible with limiting warming to 1.5°C.¹⁵

Against this background, the NRD and EIA cannot lawfully treat N04-A as an isolated project whose climate effects may be ignored or deferred. The authorisation of additional fossil gas extraction must be assessed in the context of the Netherlands' already insufficient mitigation pathway. If the State is already highly unlikely to meet its 2030 target and lacks a coherent pathway to 2050, it cannot approve new fossil infrastructure without demonstrating, on the basis of a transparent carbon-budget analysis, that the project will not further jeopardise those targets. The draft NRD contains no such assessment. On the contrary, the NRD states that One-Dyas and Haskoning want to only "partly" consider the climate crisis (p. 29, German version).

In *Greenpeace Nordic and Others v. Norway*, the European Court of Human Rights clarified that environmental impact assessments for petroleum production projects must include, at a minimum, an assessment by public authorities whether the activity is compatible with their obligations under national and international law to take effective measures against the adverse effects of climate change.¹⁶

This requirement is directly relevant here. Gas extracted from N04-A is intended for combustion. The resulting CO₂ emissions are therefore not speculative or remote; they are the foreseeable and intended consequence of the project. The same is true of methane emissions which occur from all fossil gas infrastructure in some quantities. The EIA must quantify these Scope 3 emissions and assess them against the Dutch Climate Act, the EU Climate Law, the Paris Agreement, the remaining Dutch carbon budget and the Netherlands' duty of care under Articles 2 and 8 ECHR. An EIA that does not fully include the climate crisis into the reference situation outlined on p. 36 of the draft-NRD (German version), would not provide the public or the decision-makers with a complete picture of the project's climate consequences.

Recent case law also confirms that the 1.5°C limit has become the legally relevant benchmark for assessing state climate obligations. The International Court of Justice has treated the 1.5°C threshold as the parties' agreed primary temperature goal under the Paris Agreement, based on the subsequent agreement of the parties at COP26 and the requirement that mitigation measures be guided by the best available science. The European Court of Human Rights likewise relied on the 1.5°C limit and the remaining carbon budget in *KlimaSeniorinnen Schweiz and Others v. Switzerland*, finding that a failure to quantify national greenhouse gas limitations through a carbon budget or equivalent method may violate Article 8 ECHR.¹⁷ The District Court of The Hague applied the same reference framework in the Bonaire climate case, holding that Dutch climate policy must make an equitable contribution to limiting global warming to 1.5°C.

The N04-A project therefore raises a direct legal compatibility problem. Authorising new fossil gas extraction at a time when the Netherlands is already failing to meet its climate targets risks seriously undermining the achievement of legally binding national and European objectives. This is especially the case where the draft NRD fails to include an assessment of the project against the remaining 1.5°C-compatible carbon budget, and an explanation how additional fossil gas extraction can be compatible with climate neutrality by 2050 in the EIA.

¹⁵ *Greenpeace Netherlands and 8 citizens of Bonaire v. The Netherlands*. 28 January 2026. Raad van State. No. C/09/659832 / HA ZA 24-53. ECLI:NL:RBDHA:2026:1347. https://www.climatecasechart.com/documents/greenpeace-netherlands-and-8-citizens-of-bonaire-v-the-netherlands-decision_cfd

¹⁶ *Greenpeace Nordic and Others v. Norway*. no. 34068/21. 28 October 2025. ECHR. https://www.climatecasechart.com/documents/greenpeace-nordic-and-others-v-norway-judgment_86b9

¹⁷ *Verein KlimaSeniorinnen Schweiz and Others v. Switzerland*. no. 53600/20. 9 April 2024. ECHR. https://www.climatecasechart.com/documents/klimaseniorinnen-v-switzerland-ecthr-judgment_0a07

In conclusion, the EIA must include a full climate-legality assessment. It must quantify all greenhouse gas emissions, including Scope 3 combustion and methane emissions; include a full analysis of all aspects of climate change for assessment into the reference situation; assess the project's compatibility with the Dutch Climate Act, the EU Climate Law and the Netherlands' 1.5°C-compatible carbon budget; and explain whether and how the project can be authorised without further jeopardising the Netherlands' already fragile pathway to the 2030 and 2050 climate targets. In the absence of these scoping benchmarks, the draft NRD is incomplete and the project cannot lawfully be considered climate-compatible.

6. Violations of Dutch and German Environmental Law

a. Nitrogen emissions and missing consideration of drilling electrification

Drilling operations from the platform N05-A are permitted under the Dutch permit only because all drilling, with the exception of the first well, is conducted using electrical power. However, the decision to drill all five wells from N04-A exclusively using diesel generators, i.e. without any electrical power, cannot be justified given the high levels of nitrogen pollution this would result in. The justification given is that the power cable between N05-A and N04-A does not have the capacity to supply such power. Haskoning states on p. 33 of the draft-NRD (German version):

“Although electrified drilling is technically feasible, the capacity of the cable to be laid is insufficient to carry out the planned drilling operations. Electrifying the drilling platform requires not only a stronger cable but also additional electrical equipment on the N04-A platform. Given the need for sustainable material use and economic efficiency, this additional electrical equipment cannot be justified for drilling a maximum of five boreholes. Electrified drilling is therefore not a viable alternative.”¹⁸ (own translation)

According to the NRD, the environmental impact assessment will not consider increasing the capacity of the power cable to enable all drilling operations to be carried out electrically, which would significantly reduce harmful nitrogen deposition. However, an assessment of alternatives is mandatory within the EIA. One-Dyas and Haskoning cannot simply decide to omit evaluations of environmentally friendlier alternatives on economic grounds, claiming this in a three-sentence paragraph without providing evidence. The mere assertion that certain alternatives are technically infeasible, financially unattractive, or 'not problem-solving' is insufficient. The financial preferences of the operator cannot be equated with environmental reasonableness, nor can a private initiator's business model determine the scope of the EIA.

The purpose of the NRD is to define the scope and level of detail of the environmental impact assessment. It should therefore identify which alternatives must be assessed in the EIA rather than pre-emptively excluding them before the EIA has been carried out. By accepting the initiator's conclusion at this early stage that only one alternative is 'reasonable', the EIA is deprived of one of its core functions: enabling transparent, comparative, evidence-based assessments of the environmental impacts of different technically and legally feasible options.

According to the EU EIA Directive, the environmental impact assessment must include a description of the reasonable alternatives studied by the developer, as well as the main reasons for choosing a particular option, taking environmental effects into account. This pre-supposes that the alternatives are assessed

¹⁸ Original quote in German version: “Obwohl elektrifiziertes Bohren technisch möglich ist, reicht die Kapazität des zu verlegenden Kabels nicht aus, um die geplanten Bohrungen durchzuführen. Die Elektrifizierung der Bohrplattform erfordert nicht nur ein stärkeres Kabel, sondern auch zusätzliche elektrotechnische Einrichtungen auf der N04-A-Plattform. Diese zusätzlichen elektrotechnischen Einrichtungen sind im Hinblick auf nachhaltigen Materialeinsatz und wirtschaftliche Effizienz für das Bohren von maximal fünf Bohrlöchern nicht zu rechtfertigen. Elektrifiziertes Bohren scheidet daher als Alternative aus.”

transparently and can be reviewed within the EIA process itself. While plainly unrealistic options may be excluded at an early stage, narrowing the procedure down to one initiator-led alternative before the EIA has been conducted violates the spirit and letter of the EIA Directive. **The EIA must therefore not be limited to ONE-Dyas' preferred alternative. It must include a full and transparent assessment of the alternatives, with clear criteria, verifiable evidence, and an explicit comparison of environmental impacts.**

Furthermore, when calculating nitrogen deposition, the extent and duration of construction and mooring work required for installing and mooring the platform, and for all drilling operations and laying pipelines and power cables, must be recorded with the utmost precision. The nitrogen oxides and sulphur dioxide deposition resulting from the arrival and departure of ships transporting construction materials and workers, as well as from construction and anchoring work, must be quantified. Additionally, the expected deposition levels and locations must be clearly explained, as well as the potential impact on protected, nitrogen-sensitive natural areas in both the Dutch and German environments. This includes areas of nature that are sensitive to nitrogen deposition and sulphur compounds on Borkum and Schiermonnikoog, in the Ems-Dollart area and in the German part of the North Sea and the Wadden Sea.

The project will certainly lead to significant NO_x and SO₂ deposition at every stage. NO_x and SO₂ deposition both have acidification and eutrophication effects on aquatic habitats when dissolved in the water column. Atmospheric deposition is also a problem: Coastal habitats such as dunes and certain forest and meadow habitats are very sensitive to those gaseous substances. Background levels of nitrogen already exceed the critical loads in many habitats, the threshold below which significant effects of deposition can be ruled out in principle. Examples include the Natura 2000 areas near Borkum and on Schiermonnikoog, and the Natura 2000 areas of the Wadden Sea, the North Sea Coastal Zone and the Lower Saxony Wadden Sea. **Without comprehensive models of NO_x and SO₂ deposition, a detailed analysis of the impacts, a comparison with the reference situation without these massive nitrogen inputs from the project and, above all, an examination of upgrading the power cable's capacity and conducting the drilling operations using electric power, an Environmental Impact Assessment (EIA) would not be lawful.**

b. Deposition of production water and drilling cuttings at N04-A

The draft NRD selects the separation of free produced water on N04-A, treatment in a water treatment plant including an oil separation vessel and activated carbon filter, and discharge of the treated produced water into the sea from N04-A. Although the NRD mentions transport of the water-gas mixture to N05-A as an alternative, it rejects this option and does not assess it as the chosen project configuration. The EIA must nevertheless clarify whether any residual water or condensate-associated water will still be separated, treated or discharged at N05-A during further gas treatment and drying. Produced-water management must be treated as a central environmental issue, not as a minor operational detail. Production water from gas extraction may contain oil, aromatic hydrocarbons, heavy metals, methanol and other persistent or bioaccumulative substances, including after filtering and processing.

In addition, the EIA must not limit its assessment to the separation and discharge of free produced water on N04-A. The draft NRD states that further gas treatment, including drying and compression, will take place on N05-A, but does not specify the drying technology, the resulting water and chemical streams, or their treatment and discharge pathways. The EIA must therefore provide a full mass-balance assessment for the entire N04-A/N05-A production chain, including any water, condensate, regeneration water or other process streams generated during further gas treatment on N05-A. It must identify the exact drying technology proposed, specify the substances that may occur in these streams, including hazardous substances such as hydrogen sulphide, aromatic hydrocarbons, heavy metals, salts, corrosion products,

methanol or other process chemicals, and assess reasonable alternatives that avoid or minimise offshore discharges.

DUH's 2022 appeal regarding N05-A already raised serious concerns about the discharge of hazardous substances and heavy metals into the North Sea. These concerns are directly relevant for N04-A because the same or similar production chain will be used and cumulative discharges will affect the same marine environment. According to the EIA for gas production from N05-A, production water may contain mercury at 1.1 µg/l, approximately 15.7 times above the maximum permitted concentration of 0.07 µg/l under the Dutch Decree on water quality requirements and monitoring 2009, which implements the environmental quality standards framework of the EU Water Framework Directive. The Water Framework Directive requires Member States to prevent deterioration of the status of surface waters and to reduce pollution from priority substances.

The EIA for N04-A must therefore assess whether comparable or additional discharges will occur, including their cumulative effects with N05-A and other offshore activities. Since N04-A is located in the exclusive economic zone, the assessment must explicitly be carried out under the Marine Strategy Framework Directive (MSFD), in particular **Descriptor 8** on contaminants and pollution effects and, where relevant, **Descriptor 9** on contaminants in fish and seafood. It must also consider links to **Descriptor 1** on biodiversity, **Descriptor 4** on marine food webs and **Descriptor 6** on sea-floor integrity. The EIA must not rely on dilution alone. A guide developed by the MSFD Expert Network on Contaminants confirms that Water Framework Directive priority substances and river basin specific pollutants must also be considered beyond territorial waters where they may still give rise to pollution effects. It also highlights that offshore waters may be affected by sea-based industrial emissions and that contaminants can be transported, re-distributed and re-concentrated through currents, sediment resuspension, bioaccumulation, biomagnification and marine food webs.¹⁹ Produced water is a complex waste stream whose dispersion and effects depend on site-specific factors such as discharge rate, current speed, turbulence, stratification, water depth, density differences and chemical composition. Given the fact that N04-A is located in a particularly shallow area of the North Sea, as indicated in the NRD, large open-ocean dilution effects cannot simply be assumed. The water depth at the location is only 25 meters. The EIA must therefore examine cumulative toxic loads in seawater, sediment and biota, cross-border dispersion towards Borkum Riffgrund, Borkum Riff and Borkumse Stenen, and long-term accumulation in marine food webs. The EIA must also include a **zero-discharge alternative**, as well as alternatives such as reinjection, full onshore treatment, improved treatment technology and different configurations for water separation and discharge.

The EIA must also not assess produced-water management only at the point of free-water separation on N04-A. The draft NRD states that only free water is removed on N04-A and that further gas treatment takes place on N05-A. It must therefore determine whether additional water, condensate-associated water, regeneration water or other process streams from the N04-A gas stream will be separated, treated or discharged at N05-A. If such discharges occur from N05-A, they must be assessed under the Water Framework Directive and the Dutch Decree on water quality requirements and monitoring 2009, in addition to the Marine Strategy Framework Directive assessment required for N04-A in the exclusive economic zone. The EIA must therefore provide a full mass-balance assessment for the entire N04-A/N05-A production chain and apply the applicable water and marine protection standards according to the actual discharge location.

¹⁹ Tornero, V., Hanke, G., & MSFD Expert Network on Contaminants. (2021). Guidance on potential exclusion of certain WFD priority substances from MSFD monitoring beyond coastal and territorial waters: A pragmatic and qualitative approach for the open sea (EUR 30655 EN). Publications Office of the European Union. <https://doi.org/10.2760/839892>

This is essential because heavy metals such as mercury are persistent, toxic and bioaccumulative. They can accumulate along the food chain and reach critical concentrations in marine mammals and seabirds. In addition, produced-water substances of particular concern include aromatic hydrocarbons, certain alkylphenols and metals, which may contribute to toxicity, bioaccumulation and chronic ecological harm. In shallow or low-turbulence waters, contaminant concentrations may remain elevated long enough to affect marine life. Chronic exposure can cause sub-lethal effects such as reduced reproductive success, reduced growth and fecundity, respiratory and physiological stress, behavioural changes, developmental effects and endocrine disruption. For harbour porpoises, seals and other protected species, such contamination may impair immune function, reproduction, fitness and survival. Significant adverse effects on marine ecosystems and the conservation status of protected species therefore cannot be excluded without a full precautionary assessment.²⁰

The same precautionary approach must apply to the disposal of drilling cuttings and water-based drilling mud. These waste streams must not be treated as harmless merely because they are water-based. They may contain drilling additives, formation particles, hydrocarbons, heavy metals and naturally occurring radioactive materials. Their discharge can create turbidity plumes and sediment deposition, with potential toxic and physical effects on marine organisms. In the shallow N04-A area, this is particularly relevant for benthic habitats such as H1170 reefs and H1110 sandbanks, whose ecological productivity and habitat quality may be reduced by increased turbidity, sediment cover and smothering of filter feeders and sessile reef organisms. The EIA must therefore assess the chemical composition, toxicity, plume formation, sedimentation and cumulative effects of drilling mud and cuttings, and must include an alternative in which these materials are collected and transported to shore instead of discharged into the sea.

c. Underwater noise and disturbance of marine mammals

The draft NRD does not sufficiently define the scope of the underwater noise assessment. N04-A involves several noise-emitting activities that must be assessed together: seismic surveys, pile driving for the platform foundation, installation of conductor pipes, drilling with a jack-up rig for up to one year, vessel and helicopter traffic, pipeline and cable installation, flaring during well tests, maintenance operations and decommissioning. The draft NRD itself acknowledges that these activities may cause underwater and airborne noise, vibrations, light disturbance and flaring noise, and may disturb birds, fish, marine mammals and bats.

This acknowledgement is not sufficient. The EIA must include a quantitative underwater-noise assessment for all project phases, including peak sound pressure levels, sound exposure levels, cumulative exposure, frequency characteristics and worst-case scenarios. It must assess risks of temporary and permanent hearing threshold shifts of marine mammals, their behavioural disturbance, displacement from feeding or breeding areas, masking of communication and cumulative stress. This is particularly important because N04-A is located close to Borkum Riffgrund and within an ecologically important area for harbour porpoises, harbour seals and grey seals.

The EIA must also include seismic surveys and VSP-related activities connected to the wider OneDyas GEMS project. Seismic surveys use extremely loud underwater sound sources, so-called airguns, with sound levels above 170 dB. According to One-Dyas, the disturbance area for harbour porpoise resulting from their seismic activities may exceed 1,560 km² with noise levels exceeding 140 dB. For harbour porpoises, harbour seals and grey seals, this can cause severe disturbance, displacement and potentially

²⁰ Neff, J. M. (2002). Produced Water. Bioaccumulation in Marine Organisms, 1–35. <https://doi.org/10.1016/b978-008043716-3/50002-6>

hearing damage. Separate authorisation of seismic activities does not remove them from the cumulative impact assessment required in an EIA.

Furthermore, the EIA must assess the cumulative effects of pile driving, conductor driving, drilling, shipping, helicopter noise, noise emissions from pipeline and cable installation, seismic surveys, N05-related activities and other existing pressures. It must also consider seasonal sensitivity, calf presence, prey availability, avoidance behaviour and delayed return after disturbance. DUH has previously pointed out that Borkum Riffgrund is an important feeding and residence area for harbour porpoises and that disturbance may negatively affect reproduction.

The draft NRD does not yet identify concrete noise-mitigation measures. It merely acknowledges that the selected location N04-A lies closer to the German Natura 2000 area Borkum Riffgrund and would therefore expose a larger part of that protected area to underwater noise. It then assumes that additional noise-reduction and even compensatory measures will be taken in order to comply with legal requirements, including the requirement that less than 10 % of the German Natura 2000 areas may be disturbed. **This shows that the actual noise levels without adding compensatory measures would exceed the legal limits, which is unacceptable as it contravenes the prohibition on deliberate killing, injury and significant disturbance of protected species under Article 12 of the Habitats Directive. Furthermore, different alternatives must be considered, especially those in greater distance to protected areas.**

Moreover, pointing out the existence of mitigation measures is insufficient. Those measures must be identified, their feasibility assessed, their effectiveness quantified, and the residual impacts evaluated. Even if mitigation measures are later applied, underwater noise remains a source of disturbance. Harbour porpoises, harbour seals and grey seals are highly sensitive to impulsive and continuous underwater noise and may be displaced from feeding, resting or breeding areas even where injury thresholds are not exceeded.

In addition to the physical habitat loss caused by the platform, pipelines and seabed works, the project may therefore cause functionally and physiologically driven habitat loss: areas that remain physically present may become unusable because of noise, stress, masking, avoidance and repeated disturbance. The EIA must therefore identify all relevant noise-emitting activities and all proposed mitigation measures and assess their effectiveness cumulatively and site-specifically. It must demonstrate with the required level of certainty that the remaining disturbance will not adversely affect harbour porpoises, harbour seals, grey seals or the conservation objectives of Borkum Riffgrund, Borkum Riff and Borkumse Stenen. It must also ensure compliance with the strict protection regime under the Habitats Directive, including the prohibition of deterioration under Article 6, as well as the prohibitions on killing, injury and significant disturbance of protected species under Article 12.

d. Reef disturbance and route selection

The draft NRD itself states that the chosen pipeline and integrated cable route runs through the KRM/MSFD area Borkumse Stenen and that this area had to be considered when selecting the route. It further acknowledges that the seabed in the project area contains stones and fields of larger stones and that a direct route between N04-A and N05-A would cross such stone reefs, with potential impacts on nature. Nevertheless, the selected “hockey-stick” route still cannot avoid areas with larger stones entirely; the draft NRD expressly states that the route “cannot completely pass through an area without larger stones” and only keeps “as much distance as possible” from stone fields.

This is highly problematic because Borkumse Stenen is not merely an ordinary seabed area. It has been designated under Article 13(4) of the Marine Strategy Framework Directive for the restoration of the seabed ecosystem, and DUH has already argued in the N05 proceedings that impacts on the protected seabed, including reefs and reef-like structures, had not been sufficiently excluded. Moreover, the legal status of the area is currently unresolved in a way that requires particular precaution: the Gelderland District

Court annulled the State Secretary's refusal to designate Borkumse Stenen as a Natura 2000 area and ordered a new decision. The court held that the State Secretary had wrongly failed to classify biogenic reefs as habitat type H1170 and had insufficiently investigated whether and to what extent biogenic reefs occur in Borkumse Stenen.

The EIA must therefore proceed on the basis that Borkumse Stenen may contain protected reef habitat H1170 and sandbank habitat H1110, including biogenic reef structures, and that the area may still be designated as Natura 2000. The plaintiffs' court submission shows that Borkumse Stenen borders ecologically connected German protected areas, that H1170 reefs extend across the Dutch-German border, and that the area fulfils an important network function for the Natura 2000 system. It also emphasises that the area contains both geogenic reefs and biogenic reefs formed by species such as *Lanice conchilega* and that the combination of sand, stones and biogenic structures creates particularly high biodiversity.

The ecological consequences of disturbing or destroying stone reefs and biogenic reefs are substantial and cannot be reduced to the mere footprint of the pipeline or cable corridor. Reefs are among the most species-rich marine habitats. In temperate waters, they host numerous benthic and long-lived species and provide hard substrate for epifauna, thereby increasing habitat heterogeneity, structural complexity and predator-prey functions. Where reefs occur within sandy soft-bottom environments, they may more than double local biodiversity and increase local biomass by up to a factor of one hundred.²¹

The loss or disturbance of such habitats therefore affects not only individual stones or reef patches, but the ecological functioning of the wider seabed system. Stone reefs, mixed coarse-substrate habitats and biogenic reef structures provide settlement surfaces, shelter, nursery and feeding habitat for benthic invertebrates, fish and prey species of marine mammals. They also function as stepping-stone biotopes within a wider marine ecological network. Their fragmentation reduces ecological connectivity, impairs genetic exchange and species dispersal, and weakens the resilience of marine ecosystems.

Moreover, the damage will in large parts be permanent. Mechanical seabed interventions such as pre-lay grapnel runs, trenching, cable or pipeline installation and rock placement can directly destroy sessile organisms, displace mobile fauna, alter sediment structure and cause long-term habitat degradation. Reef and coarse-substrate habitats are difficult to regenerate, with recovery periods potentially ranging from decades to 150 years, especially for slowly growing species such as sponges, sea anemones and lobsters. The NRD states that the turbidity dispersion study for the pipeline installation showed that no significant sedimentation would occur leading them to conclude that the environmental impact would be minimal. This derivation is insufficient. In this area, H1110 is the pre-dominant habitat type with soft sediment leading to big turbidity effects when disturbing the sediment. The EIA must present the full results of the study that led to the route selection presented here.

The mapping of the seafloor seems insufficient as well. The applied method is inadequate to investigate the whole area and map every stone of a certain size. The EIA must provide a detailed and comprehensive map of the seabed, based on the methodology of Bos et al. (2025), to ensure that reefs are not overlooked, as was the case with N05-A.

The route-selection reasoning in the draft NRD is therefore insufficient. The draft NRD appears to treat the preferred route as acceptable because it is shorter, technically easier, less costly and avoids the densest visible stone fields. However, the fact that a route is shorter does not necessarily mean that it is the environmentally least harmful route. A study by the Belgian Grid Operator Elia Group shows that when "nature first" is used as a planning priority, cable corridors may become longer for individual projects, but

²¹ Reaka-Kudla, M. L. (1997). The global biodiversity of coral reefs: a comparison with rain forests. Biodiversity II: Understanding and protecting our biological resources, 2, 551.

the spatial footprint in protected areas can be substantially reduced. In Elia's GIS analysis, a "nature first" scenario reduced the total distance of cable crossings through nature conservation areas by 50%, while the overall corridor length across the Baltic and North Sea region increased only marginally, by around 1,000 km, equivalent to about 2% of the total corridor length of more than 50,000 km. The study therefore confirms that distance and cost cannot be used as proxies for environmental performance. A longer route may be environmentally preferable if it avoids sensitive habitats and protected areas. **Therefore, the EIA needs to investigate further alternative cable routes prioritizing environmental protection.**²²

e. Proximity to Borkum Riffgrund

The project area is exceptionally sensitive. The draft NRD states that both gas fields partly extend under the German Natura 2000 site Borkum Riffgrund, and the project lies in a border area close to Borkum Riff and Borkumse Stenen. The draft NRD's framing that the site is "approximately 30 kilometres north of the Wadden island Schiermonnikoog" risks understating the proximity to German protected nature and to ecologically valuable reef structures.

Borkum Riffgrund inhabits several sensitive species such as the protected harbour porpoise and habitat types such as reefs (H1170). As stated above, these organisms and habitat types are particularly vulnerable to disturbances evolving from gas drilling activities such as noise emissions, hazardous substances in the water column, loss and fragmentation of habitats, vessel traffic, air pollution etc.

The EIA must therefore be fully transboundary. It must assess effects on German and Dutch Natura 2000 and MSFD sites and on areas that qualify or may qualify for protection, including Borkum Riffgrund, Borkum Riff, Noordzeekustzone, Wadden Sea areas, Schiermonnikoog, and Borkumse Stenen. It must assess impacts on conservation objectives and on species moving across national boundaries, including harbour porpoise, seals, seabirds and migratory birds. The analysis must not stop at administrative borders.

f. Risk of accident and safety hazard posed by an unmanned platform on a major shipping route

The draft NRD does not sufficiently address the accident and safety risks arising from the operation of an unmanned, remotely controlled satellite platform. N04-A is intended to be normally unmanned and visited only periodically for maintenance and inspection, while the wells, pressure regulation and production processes are operated remotely. This requires a much more detailed risk assessment than only a platform collision risk study and a risk analysis from the preliminary draft report which is currently planned according to p. 37 of the draft-NRD (German version). Especially risk analysis, prevention and crisis plans with regard to environmental impacts of delayed emergency response, loss of remote control, fire, explosion, blowout, uncontrolled discharges, collision events and failure of safety systems have to be addressed and assessed in the EIA. The risk is particularly serious because the NRD itself acknowledges that the area is only around 25 metres deep and that infrastructure in the separation zone of a shipping route would create risks both for the installation and for shipping. However, what is not adequately addressed is that the proposed N04-A platform itself appears to be located inside the median strip on the edge of the very route of the major shipping lane.

²² Elia Group (2024). Going like the wind – The virtuous circle of offshore wind benefits in Europe. https://issuu.com/eliagroup/docs/5387_241015_elia_book_uk_bd_double_page?fr=sY2lxZTc4ODEzNzg



Source: Draft-NRD p. 6 (German version)

Firstly – in contrary to the plans of the draft-NRD, an alternative location of the platform closer to the middle of the median strip, further away from the major lane, is to be considered by the EIA. Secondly, the risks resulting from the platform locations considered must be assessed explicitly in the EIA. A collision involving a vessel and an unmanned gas platform could lead not only to human safety risks for shipping, but also to major environmental damage through gas release, fire, condensate spills or production-water discharge. The EIA must therefore include a worst-case accident assessment, a full nautical safety assessment, collision-frequency modelling, emergency-response scenarios for an unmanned installation, and cumulative risks with nearby shipping, pipelines, cables, offshore platforms and protected marine areas. The fact that the platform is unmanned must not be treated as reducing risk; it may instead increase the consequences of delayed detection and intervention.

g. Subsidence, earthquakes and seabed morphology

The EIA must assess subsidence and induced seismicity, as well as the resulting changes to sediment transport and reef integrity. Even modest seabed subsidence can have significant consequences where protected reef structures, sandbanks and benthic communities are present. Subsidence can alter hydrodynamic processes, increasing sediment deposition and burying reef structures. It can also fracture hard substrates and affect restored oyster reefs and other recovery measures. Additionally, subsidence and earthquakes may damage nearby infrastructure, such as the wind farms mentioned on p. 20 of the German version of the draft NRD. The environmental impacts resulting from these possible damages must also be assessed.

The EIA must not rely on general assurances that the effects are 'negligible'. It must model the maximum subsidence bowl for the combined N05-N04 project, including all sidetracks and potential future prospects. It must also consider uncertainty in reservoir geometry, evaluate earthquake risks, and assess how subsidence interacts with sea-level rise, storms, sediment plumes, and existing morphological dynamics. The experiences in Groningen and Ameland show that predictions of subsidence and seismicity in contexts of gas extraction must be treated with caution, and that post-operational effects cannot simply be dismissed. Therefore, the most conservative calculation method and assumptions must be applied.

h. Decommissioning

The draft NRD's treatment of decommissioning is inadequate. It states that the abandonment of the wells, removal of N04-A and treatment of the pipeline and cable will only be described "in general terms", because the applicable legal requirements and techniques at the time of decommissioning are not yet known. This is unacceptable. The project must be assessed under the legal framework applicable today, and the EIA must contain a complete decommissioning concept, including the environmental impacts of well plugging, platform removal, pipeline and cable removal or abandonment in place, seabed clearance and post-closure monitoring. The North Sea must not be treated as a disposal site for obsolete fossil infrastructure. If the pipeline or cable is to remain in the seabed, the EIA must assess the long-term impacts on seabed habitats, sediment dynamics, contamination risks, fisheries, safety, future restoration measures and cumulative marine litter. The draft NRD's own statement that decommissioning impacts will broadly resemble construction impacts is highly significant: it implies a second major disturbance event, potentially doubling key seabed, noise, turbidity, shipping and species-disturbance impacts over the project lifecycle. The EIA must also assess the risks associated with closing the wells themselves. A study by Böttner et al (2020) on abandoned oil and gas wells shows that methane leakage can continue after wells have been plugged or abandoned, and that gas migration and surface casing vent flow are recognised leakage pathways²³. The EIA must therefore specify how the wells will be permanently sealed, how well integrity will be verified, how methane leakage will be monitored and for how long, and who will remain financially and legally responsible for failures after closure. Without a full decommissioning and post-closure liability assessment, the environmental impacts of N04-A are systematically underestimated.

7. Conclusion

We request that, taking the above points into account, you amend the draft NRD, the Proposal and the Participation Plan, and have the EIA carried out accordingly.

²³ Böttner, C., Haeckel, M., Schmidt, M., Berndt, C., Vielstädte, L., Kutsch, J. A., Karstens, J., & Weiß, T. (2020). Greenhouse gas emissions from marine decommissioned hydrocarbon wells: leakage detection, monitoring and mitigation strategies. *International Journal of Greenhouse Gas Control*, 100, 103119. <https://doi.org/10.1016/j.ijggc.2020.103119>