Mandate for Process21 phase 2 (2023–2026)

Background

The process industry is an important industry for Norway, with high export value and businesses located in large parts of the country. In a global context, many of the companies are at the forefront in terms of their low climate footprint, high resource efficiency and product characteristics.

Norway has codified the target of becoming a low-carbon society by 2050. As an interim target on the path towards net zero emissions and a low-emission society, the Government has set a 2030 transition target for the entire economy. In the Government's political platform, this is expressed as a goal of cutting Norwegian emissions by 55 per cent compared with 1990. This means that the Government has a national transition goal for both sectors covered and not covered by the EU Emissions Trading System (EU ETS). The objective is for all Norwegian business and industry to transition towards a low-emission society. The Government's climate targets require the process industry and its value chains to incorporate sustainability and have low or no greenhouse gas (GHG) emissions. At the same time, the industry must improve its efforts to create 'building blocks' that enable green transition and low-emission solutions for a wide range of international markets. The green transition will not be possible without materials from the process industry.

Norway is Europe's biggest producer of aluminium, silicon, ferro-alloys and certain refined metals including nickel and zinc. Many Norwegian companies are global leaders in terms of their low climate footprint, high resource efficiency and product characteristics. These positions give the process industry a number of market opportunities in green value chains going forward. Access to sustainably produced biomass forms the basis for the bio-based process industry in Norway, but also represents opportunities for reducing GHG emissions in the metallurgical industry.

Emissions from the Norwegian process industry have been reduced by around 40 per cent since 1990, largely through optimisation of mature technology, but have remained more or less unchanged since the industry became subject to the EU ETS in 2008. Despite historical emission reductions, the process industry accounts for around 23 per cent of Norway's total GHG emissions. Stronger efforts are therefore required throughout the entire breadth of the process industry to cut emissions to a far greater extent in the years ahead. The means to this end include implementing new low- and zero-emission technology relating to process transformation, the use of alternative resource inputs and carbon capture and storage (CCS). In order to simultaneously increase value creation, the process industry could, for example, focus on increased specialisation and the production of more complex products.

Process21 was established in 2018 as a long-term strategic initiative tasked with providing advice and recommendations on how Norway can *most effectively* move towards minimal emissions from the process industry by 2050, while also facilitating sustainable growth for industry enterprises during the period in question. Its work has been focused on emissions from the Norwegian process industry and how the industry indirectly contributes to reducing

emissions from other activities and sectors in Norway and globally. A key principle for Process21 has been that reducing emissions in the Norwegian process industry should not be achieved by moving emissions to countries with less ambitious climate policies (carbon leakage).

The first phase of Process21 took place from 2018 to 2021. The Government decided to continue Process21, and the appropriation for a new three-year period (2022–2024) was incorporated into the 2022 national budget. This has been followed up in the letter of allocation to the Research Council of Norway.

The work carried out by Process21 has formed a key basis for the Government's Green Industrial Initiative. The Roadmap for the Green Industrial Initiative states that, with its established industrial networks, Prosess21 is assisting the Ministry of Trade, Industry and Fisheries in implementing the Green Industrial Initiative. The goal of the Green Industrial Initiative is to make Norway a green industrial and energy nation based on our natural resources, knowledge environments, industrial expertise and historical advantages. The Green Industrial Initiative is designed to accelerate the transition, create jobs across the country, strengthen mainland investments, increase exports and cut GHG emissions. The initiative emphasises the importance of adopting comprehensive and vigorous policies for industry, energy, climate and the environment that are effective, results-oriented and pull in the same direction. To do so, it highlights the need for well-coordinated efforts at government level, a closer interaction between industry and government, as well as strengthened partnerships with other countries and the EU of mutual interest and benefit.

To increase the pace of emission cuts and the transformation of business and industry, the Government has established climate partnerships with various industries as a new cooperation model and policy instrument. As part of the memorandum of understanding that the Government entered into with the social partners in January 2023, the Government initiated a dialogue on climate partnerships with the process industry. The memorandum of understanding states that the climate partnerships must include the objectives and ambitions the industries themselves have set for cutting GHG emissions. The objectives must, as far as possible, be quantified and scheduled with a view to achieving the goals.

Mandate

The objective of Process21 is to be a long-term strategy forum, whose main task is to provide strategic advice and recommendations to the authorities and industry on how GHG emissions from the process industry can most effectively be reduced in line with the trend towards a low-emission society by 2050, with the target of reducing total emissions by 90–95%, while also facilitating sustainable transition, growth and value creation.

In addition to directly reducing emissions, the contribution towards the low-emission society must be seen in a comprehensive value chain perspective. This means emphasising sustainable production throughout the value chain and opportunities for realising new emission-free green activities in Norway.

The starting point assumes that emission reductions in the Norwegian process industry should not be achieved by shifting emissions to countries with less ambitious climate policies (carbon leakage).

Process21 must contribute to building a common understanding between industry and the authorities on how to reduce emissions and increase the pace of the transition, an effort that forms part of the Government's climate partnership with the process industry.

Process21 must prioritise the following activities and areas:

- Update and strengthen the knowledge base from the first phase of Process21
 - particularly relating to basic prerequisites such as competencies, technology, energy, land use, market, capital and access to raw materials, but also more cross-cutting topics such as digitalisation, EU cooperation, international partnerships and work methods, including assessing how developments in international trade and cooperation affect framework conditions for land-based industry.
 - Specify measures that industry players can implement to put emission reductions on a trajectory towards the low-emission society by 2050, as well as what the authorities can do to facilitate this. The analysis must include assessments of barriers in the short, medium and long term.
 - The work should devote attention to the opportunities that new activities, product development and new business models represent.
- Contribute knowledge, input and advice in connection with the follow-up of the Green Industrial Initiative, the climate partnership with the process industry and other relevant processes.

In addition, Process21 will work on, and highlight, key strategic topics, such as research and development efforts on climate-neutral processes, circular economy and digitalisation. Process21 will also assess the overall framework conditions and policy instruments for the process industry in Norway against conditions in the EU, USA and China, including assessing the attractiveness of Norway as a host country for further establishment of new industrial activities.

Process21 aims to contribute to the authorities making good priorities within the limited financial leeway in future national budgets. Any proposals must be thoroughly assessed, including the advantages and disadvantages for the stakeholders concerned and the consequences for energy and land use.

Organisation of the work

A broadly composed steering committee for Process21 has been appointed, consisting of key personnel with relevant knowledge, experience, integrity and decision-making authority.

It is crucial that the forum is strongly embedded in Norwegian industry, and that the industrial companies themselves have a strong sense of ownership to the work. This must be reflected in the steering committee. The steering committee should also reflect both the changes that

the process industry is facing, including key factors for realising this, and the roles the process industry plays, and may play, in relation to other green value chains in Norway and internationally.

The secretariat is chaired by the project manager, who is employed in a full-time position by the Research Council of Norway. The project manager is continuously supported by selected key resources from Innovation Norway (InvestIN function) and SIVA.

A reference group is affiliated to the steering committee, comprising representatives of the policy instrument system and relevant underlying agencies. These include the Research Council of Norway, Gassnova, Innovation Norway, Nysnø, Enova, Eksfin and the Norwegian Environment Agency.

The strategy work will be carried out as an inclusive process and contribute to public interest in and transparency about the work of Process21. The forum may consider holding seminars, submitting interim reports, appointing working groups or similar to this end. Process21 may engage industrial clusters on an assignment basis to perform tasks related to events, arenas etc.

The Process21 steering committee must ensure good delimitation relative to other relevant initiatives and cooperate with these where relevant.

Reporting and evaluation

Process21 is required to submit an annual brief report on activity and resource use (annual reporting).

In addition, Process21 must, after two or three years, submit a new main report responding to the mandate. If the steering committee deems it more appropriate, the main report can be submitted in the form of smaller interim reports.