Ministerie van Economische Zaken
en Klimaat

Intention and Proposal for Public Participation

in the construction of new nuclear power stations

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Contents

1 Introduction

The Ministry of Economic Affairs and Climate Policy (EZK) is initiating a planning procedure for the construction of two new nuclear power stations.
The first phase of this procedure involves a scoping exercise on land use.

The Netherlands aims to be climate neutral by 2050. As a milestone along the way, the government wants all electricity produced in the Netherlands to be carbon neutral by 2035. Nuclear energy can make an important contribution to this goal. The government has therefore decided to go ahead with preparations for two new nuclear power plants[1].

Questions for the reader:

About the project (Section 2):
- What locations might be suitable for new nuclear power stations?
- What impacts would you like investigated?

About the proposal for participation (Section 3):
- What do you think of the proposal for participation?

The Ministry of Economic Affairs and Climate Policy believes it is important to give everyone the opportunity to make suggestions about the plans for these new nuclear power stations, in order to arrive at a better decision. That's why we are asking citizens, businesses, social organisations and government bodies to contribute their suggestions. You are invited to participate by responding to this intention document. Other ways of joining the discussion and making suggestions can be found in Section 3 on participation.

Reading guide
Section 2 outlines the purpose of the project. Section 3 describes the proposal for participation. Here we outline the grounds for participation and how we are involving citizens, businesses, social organisations and government bodies in the project. Finally, Section 4 provides information about how to submit a response, how to make suggestions and how to respond to the proposal for participation. You will also find our contact information here.

1 Letter to Parliament about actions undertaken in the field of nuclear energy | Parliamentary Papers | Rijksoverheid.nl.

2 The intended purpose

2.1 Why do we need new nuclear power stations?

The Netherlands aims to be climate neutral by 2050. This has consequences for our future energy system. Generating, transporting, storing and using energy will have to change. One of the most important steps in making our energy use more sustainable is electrification, also known as the energy transition from fossil fuels to electricity. This transition is one of the main reasons why the demand for carbon neutral electricity will rise considerably in future, something that is evident from the results of the Climate and Energy Report (KEV[2]). In addition, the government's Climate Memorandum made the commitment to terminate CO_2 emissions from the production of electricity by 2035. That means our challenge going forward is to generate more electric power while at the same time making it carbon neutral.

The National Energy System Plan (NPE) lays out a well-defined roadmap for development of the energy system up to 2050. In the NPE, the government makes important decisions that lay the foundations for our future energy system. Ministers are committed to the use of as many different sources of energy as possible, along with the construction of the required infrastructure. Two important priorities linked to this goal are generating sufficient energy (domestic and imported), and ensuring adequate energy infrastructure is available in good time. The government will thus facilitate the shift to sustainability for sectors that are heavy users of energy (built environment, mobility, industry and agriculture). The government is taking this opportunity to get a good overview of the entire energy system. Nuclear energy is part of the energy mix, with a projected increase from the current 0.5 GW (produced by the Borssele power plant) to approximately 3.5 GW by 2035, plus potential growth to 7 GW by 2050.

Advantages of nuclear energy

There are a number of reasons for choosing to produce more nuclear energy. Investment in nuclear energy helps make our electricity supply more stable by diversifying our sources of energy. This will make the Netherlands less dependent on importing energy from other countries. No CO_2 is emitted when energy is generated by nuclear power. This is important if we want to reduce greenhouse gases and combat climate change. Another factor is that nuclear power stations take up relatively little space in comparison with other forms of power generation.

Moreover, proofs have shown that nuclear power stations are a technology that can supply electricity 24 hours a day. Nuclear power is a reliable source of energy that can deliver constant, stable electricity regardless of the weather conditions. At times when the sun isn't shining and the wind isn't blowing, nuclear energy can be counted on to deliver its share of the country's energy needs. This will help ensure that the Netherlands has a reliable energy supply, even in times when many consumers, companies and organisations need energy at the same time.

Nuclear energy has been part of our energy mix since the Borssele nuclear power plant opened in 1973. With a capacity of 485 MW, Borsele produced just over 3% of the total energy generated in the Netherlands in 2021. This is enough electricity to power a good-sized city, including trams, trains and a large airport. Two new nuclear power stations with a joint capacity

of 2000 to 3300 MW would be able to generate 4 to 7 times as much energy. The expansion would enable them to cover 9 to 13% of our expected energy demands by 2035 (Letter to Parliament of 9 December 2022).

Disadvantages of nuclear energy

Along with the advantages mentioned above, there are also disadvantages to nuclear energy, particularly concerns about the safety of nuclear installations. Safety is an absolute precondition for the operation of a nuclear power station. Therefore, Dutch nuclear reactors must meet strict national and international safety requirements. This makes the chance of a nuclear or radiation accident or incident quite small. Should an accident or incident nonetheless occur, there are a significant number of technical measures that can limit the impact of radioactive contamination.

Nuclear power generation produces radioactive waste. This contaminated waste has to be stored above ground for at least 100 years; our nuclear waste storage is currently managed by the Central Organisation for Radioactive Waste (COVRA) in the city Borssele in the province of Zeeland. Ultimately, the radioactive waste will have to be stored underground, in a deep geological repository. Experts agree such disposal will ensure radioactive waste remains isolated from the human living environment for thousands of years. COVRA is currently studying how the Netherlands will be able to handle radioactive waste disposal in 2130. Safe storage of radioactive waste is also a responsibility that future generations will have to bear.

Secondly, the building of nuclear power stations requires a long permission and planning process. This process carries with it a range of technical challenges and financial risks. Any estimates about the construction costs and production time are therefore as yet uncertain. Nuclear and radiation accidents and incidents elsewhere in the world can also have a considerable impact on this project. On the one hand, they could lead to additional requirements being set for the design of the reactor, possibly with significant financial knock-on effects, as after the Fukushima disaster. On the other hand, they could have a tremendous effect on the public image of nuclear reactors and the ability to create broad public support for nuclear energy.

Conclusion

Weighing all these things together, the Dutch government sees a valuable role for nuclear energy in our future energy mix. That's why ministers are pursuing the construction of two new nuclear power stations in the Netherlands.

2.2 Objective and purpose

As part of a future reliable, climate neutral energy supply, the government of the Netherlands envisages the construction of two new nuclear power stations. We are initiating the project procedure 'New nuclear power station construction' with this intention and proposal.

The objective and hence the purpose of this project is:

'The spatial integration in the Netherlands of two new nuclear reactors with a proven design (Generation III+), each with the capacity to deliver more than 1000 megawatts (MW).'

2.3 Background

In 2010 there were two plans from commercial parties to build new nuclear reactors. These plans did not go ahead, however, primarily because it was then considered to cost too much. At the time, the Dutch government was not prepared to help fund these nuclear reactors and left it up to market parties. The commercial plans to build two nuclear reactors derailed due to overabundant available supply of electricity, uncertainty about the costs and revenues, and an economic downturn caused by the credit crisis. Finally, the disastrous effects of the tsunami in March of 2011 on the nuclear facility at Fukushima, Japan, caused even greater uncertainty.

In order to meet our climate targets, and to create an energy system that is affordable, reliable, safe, sustainable and fair, the national government is now taking the initiative itself for the construction of two new nuclear power stations. The outgoing government Rutte IV set down in the coalition agreement of late 2021 that the existing nuclear power station would remain in use for longer than previously planned, and to prepare for the arrival of two new nuclear facilities. This decision was partly based on studies carried out for previous governments, such as the market consultation on nuclear energy (Market consultation on nuclear energy | Report | Rijksoverheid.nl).

In a Letter to Parliament dated 9 December 2022, the minister outlines the preparations the government is making for new nuclear reactors, and lays out a number of strategic choices based on scoping studies. Realising the nuclear power stations as quickly as possible is a major priority. This letter also contains a plan, based on recommendations from the Boston Consulting Group (BCG) and others, to limit uncertainties and arrive at a faster approach[2].

Relationship to other studies

The project procedure makes a choice about the spatial integration of the two facilities, including a decision on location. In addition to this project procedure, other studies were carried out in preparation for the construction of the nuclear plants. One of these was a market consultation. As part of this, discussions were held with technology suppliers, financial institutions and the Ministry of Finance about the commercial preconditions and possible funding models for the new construction project. The aim of this procedure is to draft a proposal on how the construction of the two new nuclear facilities should be financed. This will then be incorporated into the political decision making about the two new nuclear plants.

The technology suppliers were also asked to investigate whether their designs are suitable for the Borssele location and meet Dutch regulatory requirements. This can be found in the technical feasibility studies (THS)[3]. The purpose of these studies is to get a better overall picture of the technical possibilities, the impact of building on the area, the timeline and the costs.

In the Letter to Parliament dated 9 December 2022, the minister expressed his preference that these studies be carried out on a location near Borssele as the point of departure. If during the project procedure another location is designated, some of the technical feasibility studies

2 See 'Results of the BCG planning analysis' appended to Letter to parliament developing agreements about nuclear energy contained in the coalition agreement | Parliamentary Papers | Rijksoverheid.nl

3 Technical feasibility studies | Government planning | Nuclear energy in the Netherlands (overkernenergie.nl)

will have to be carried out again. With this we are taking a conscious but limited risk, because large parts of the technical feasibility studies will also be representative of other locations that will be taken along in the project procedure, including Maasvlakte I.
The information supplied by these studies will be used as much as possible in the environmental impact assessment reports and the integrated impact analysis in the project procedure (see Section 2.7). This procedure has now started with the publication of this Intention and Proposal for Public Participation.

2.4 Grounds

The Environment and Planning Act states that everyone is permitted to suggest a 'solution' for the objective and purpose (as defined in Section 2.2). 'Solution' is understood to mean indicating a location for the spatial integration of new nuclear power plants. These alternative locations must meet the basic principles given below. Solutions are also sought for the spatial integration of construction work, for example temporary storage sites. The draft Memorandum on Scope and Level of Detail (see Section 2.7) will lay out in greater detail what effects are expected and how they will be measured. Other types of solutions, such as alternative forms of power generation, do not form part of this scoping exercise.

Grounds for nuclear reactor sites

If all the safety requirements can be met and the land use/zoning plan allows, it is possible to build nuclear power stations anywhere in the Netherlands. However, there are several areas of the Netherlands that have been designated for the construction of large-scale nuclear power stations (with a capacity of at least 500 MW), which are thought to be the most suitable. Urban and regional development in these locations and their surrounding areas cannot prevent the possibility of constructing a nuclear power station. These are the locations for nuclear power stations listed in the Safeguarding Nuclear Energy Policy. Until 1 January 2024, the concrete details of this policy were outlined in the Physical Planning (General Rules) Decree (Barro), and following entry into force of the Environment and Planning Act were incorporated into the Living Environment (Quality) Decree (BKL). Urban and regional land use and zoning plans are not permitted to allow the development of new objects of a vulnerable nature – such as hospitals and schools, or housing for more than 5,000 residents – within a radius of one kilometre.

The safeguarding policy for nuclear facilities was first laid down in 1986 in a key planning decision (PKB[4]). For this 1986 planning decision, 32 potential locations that were deemed suitable for large-scale energy production were assessed. A range of criteria were then used that are still relevant today. After several rounds of deliberations, five possible locations for building nuclear reactors emerged. These were Eemshaven, Borssele, Moerdijk, the Maasvlakte and the Westelijke Noordoostpolderdijk.
The most recent review of suitable locations was carried out in 2008, partly based on a planning-environmental impact assessment. After this study, three possible locations remained. The National Energy Network Programme (PEH)[5] of 2023 reaffirmed two of these locations. The authors announced their intention to scrap the third location, the Eemshaven area of the province of Groningen. A more extended discussion can be found in Appendix 1.

4 Parliamentary Papers II, 1985–1986 session, 18 830, Nos 46-47
5 A draft of the National Energy Network Programme was published on 3 July; The final PEH is expected at the beginning of 2024.

Based on previous studies, existing policy and the policy intention to scrap the Eemshaven site, this scoping exercise takes the other two locations as its starting point. These two sites are:

1. The 'Borssele' location (also known as the Sloegebied or 'Borssele/Vlissingen')
2. The 'Maasvlakte I' location (in the Port of Rotterdam area).

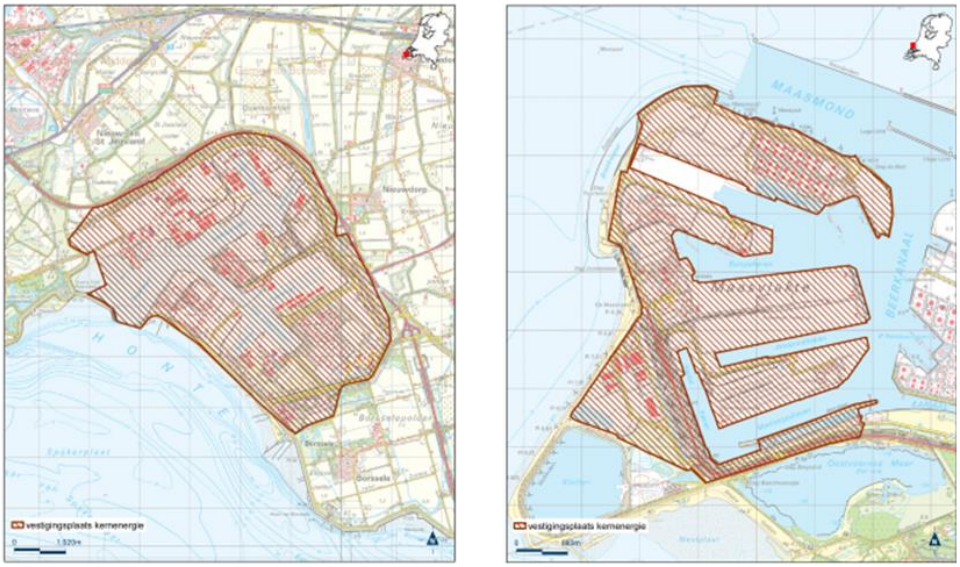

Figure 1 The assured locations of Borssele and Maasvlakte I (Barro); Maasvlakte II is not given.

In the study that is now being launched, the considerations that led to these locations will be updated. This means that we will look at the grounds and conclusions of the prior decision through the lens of current knowledge and policy. This may reveal new insights about the two selected areas and potential additional areas.

In searching for alternatives for the study, we will look first at which of the suggested areas are the most promising. Secondly, within these areas we will look in more detail at which locations are most promising. Finally, these locations will be subjected to further planning-environmental impact assessment and an integrated impact analysis (planning-EIA and IEA; see Section 2.7).

Grounds for the location decision

A number of aspects contribute to making a location more or less suitable for building a nuclear power plant. Safety is a key area of concern. The safety criteria relevant to nuclear facility locations are outlined in the international documents of the International Atomic Energy Agency (IAEA). The Specific Safety Guideline 35 (SSG-35[6]) will be used in this scoping exercise to weigh decisions about locations. This guideline describes the safety criteria governing:

- Volcanism, earthquake risk and soil conditions
- Flood risk
- External safety risks from human actions, such as the presence of potentially high-risk industry, aircraft dumping or acts of war

6 IAEA SSG-35 Site survey and site selection for nuclear installations (iaea.org)

- Extreme meteorological events, such as drought, hurricanes, tornadoes, etc.

In cases where locations score lower for these criteria, adjustments to the design of nuclear installations will be necessary in order to meet the high safety requirements, or certain measures will have to be taken to improve the suitability of the location. Such adjustments and measures may affect the costs and production time of the project.

In addition to the aspects mentioned above, the following factors also weigh heavily when searching for suitable locations for nuclear facilities:

- The configuration in relation to highly populated urban centres and the possibility of meeting the requirements for the safety of local residents.
- Accessibility, in particular for emergency services, delivery and pick-up of material;
- The presence of sufficient and suitable water for cooling;
- The suitability of the electric infrastructure and future possibilities for the investment in changes;
- The presence of potential users/purchasers of the energy generated (and possibly the waste products);
- The potential for spatial integration, including the corresponding measures, such as earthmoving or changes to infrastructure;

In weighing up the location, to the extent possible at this stage, consideration will be given to the impact of construction work, such as temporary work sites. Additional work sites in the surrounding area of the building location are necessary for the storage and use of materials, equipment, machines, installations, apparatus and their maintenance. The work sites can also be used for preparatory activities. The temporary accommodation of construction workers is also expected to have a range of effects.

Furthermore, the above-mentioned factors will be examined in conjunction with other matters, such as the scale of the reactors and the chosen technical concept. A decision about the final location will take into consideration more than the sum of the aspects listed above. For instance, it is conceivable that construction could get underway more quickly in some locations than in others. How fast the project can be realised is also an important consideration in the decision about location. The draft Memorandum on Scope and Level of Detail (see Section 2.7) will provide greater insight into the range of information that has to be factored into a decision on the location, including what kind of prior studies will be required.

Grounds of the technical concept

In developing its plans for the two new nuclear installations, the Dutch government has chosen the proven Generation III+ reactor technology. Several reactors using this type of technology, which incorporate proven safety features, have recently been built in other countries. This option is expected to lead to better estimates of construction costs and timelines.

The first talks with a range of suppliers about the possibilities and integration of different designs are currently taking place. Each supplier will also be asked to conduct a technical feasibility study (see also Section 2.3). With that information, we will draft a procurement document aimed at selecting a supplier and design, with any additional conditions. We also

have yet to decide which energy provider will operate and exploit the installation. The final decisions on these issues will be taken at a later stage.

It is expected, however, that the decision on the location, based on the scoping exercise contained in this project procedure, will come earlier. This is why assumptions have been made about certain components of the proposed facilities in the studies that are now being launched, as is customary in this type of situation. The table below provides an overview of the suppliers, type and capacity of nuclear power stations.

Supplier	***Type***	***Capacity (approximate)***
Westinghouse	AP 1000	1100 MW
Korea Hydro & Nuclear Pow (KHNP)	APR 1400	1400 MW
Électricité de France (EDF)	EPR 1650	1650 MW

Information from the feasibility studies may become available in the interim, including information about the scale of the nuclear reactors. Such information may provide grounds which will be used as much as possible in the studies for this procedure.

From the perspective of affordability, the assumption is that realisation of the two nuclear plants will be most cost effective if they can be built at a single location and in sequence. In which case, construction of the second nuclear reactor will start somewhat later than the first. The extent to which having two reactors at one location is desirable or feasible is yet to be proven by a several different studies.

2.5 Who is involved in the project?

The nuclear power stations fall into the category of energy infrastructure in the national interest. This means that the Minister for Climate and Energy Policy jointly with the Minister of the Interior and Kingdom Relations together act as the approval authority. The approval authority will ultimately hand down a preferred solution about the desired location after the scoping phase has been concluded. After conclusion of the plan development phase, the approval authority will hand down a final decision on the project.

The preferred solution will be taken on the basis of the environmental impact assessment for the plan, among other things. A plan-EIA maps out the general environmental impacts for each location, so that they can be weighed up in the location decision. In the next phase, plan development, a project decision will be taken. This will be made based on the project-EIA, among other things. The project-EIA sets out the environmental impact on the preferred location and the corresponding measures in more detail. During both phases, therefore, the Environmental Impact Assessment Committee (EIA Committee) will be involved. The EIA Committee is an independent body that advises on the substance and quality of the environmental impact assessment. Other legal advisors will also be involved in advising on the environmental impact assessment procedure.

The Netherlands Enterprise Agency (RVO), an implementation agency for the Ministry of Economic Affairs and Climate Policy, supports the Ministry through its Energy Projects Office

by granting permissions during the Plan Development Phase, along with providing information and communication concerning the procedure.

For this project, the Minister for Climate and Energy Policy is the initiator for the first phase (scoping exercise). After the scoping exercise, the initiative will likely be transferred to an as yet unknown party. This party will apply for building permits, according to the requirements set by the approval authorities. This will also cover planning permissions under the Nuclear Energy Act granted by the Authority for Nuclear Safety and Radiation Protection (ANVS).

In order to ensure due diligence, the roles within the Ministry of EZK will be kept separate.
For this project, the Nuclear Power Programme Directorate will act as initiator of the intention during the scoping exercise.
The Energy Transition Directorate will act as the approval authority on behalf of the Minister for Climate and Energy Policy over the entire course of the project, thus both during the scoping exercise and the subsequent Plan Development Phase. The project procedure will terminate as soon as the decisions have become irrevocable. At this point, the Realisation Phase will commence.

How the public and local parties will be involved in the project, such as citizens, businesses, social organisations and government bodies, can be found in the proposal for participation (Section 3).

2.6 Linkage with other projects

The project links up with other initiatives and projects in the field of nuclear energy. This applies to the following:

- Operating life extension of Borssele nuclear power plant

The government has announced its intention that the Borssele nuclear power plant remain open after 2033, provided this can be done safely. The first step to making that possible is to change the Nuclear Energy Act. The Nuclear Energy Act currently states that the Borssele nuclear power plant may not release any nuclear energy after 31 December 2033. In order to enact the required amendments to the law, the effects on the environment and other studies are being conducted. An Environmental Impact Assessment report (EIA) will first be drawn up to inventory these effects.

- National Radioactive Waste Programme (NPRA)

When the two new nuclear power stations are brought online, the amount of radioactive waste will increase. The government is aware that handling of radioactive waste entails safety hazards and may give rise to concerns among the general public. This is why the government is working to update the National Radioactive Waste Programme, as well as to further develop safe waste management solutions, including through multinational partnerships. An important principle of the Dutch radiation protection policy, which includes the handling of radioactive waste, stipulates that radioactivity may only be used if the economic, social and other advantages outweigh the damage it may bring to human health, safety and the environment.

The project intersects with diverse other energy projects and programmes in the provinces of Zeeland and Zuid-Holland. Linkages can be found in both provinces between this programme and the Programme for the Investigation of Cable Landing Points for Offshore Wind (VAWOZ) 2031-2040.
Through 2030, approximately 21 gigawatts (GW) of offshore wind energy will be realised. This equates to around 75% of our country's current electricity consumption. In order to make the Netherlands more sustainable, the government has the ambition of generating additional offshore wind energy after the year 2030. Between 2031 and 2040 an interim target of approximately 29 GW in additional offshore wind energy should be taken into account (50 GW in total), on the road to a total of around 70 GW by 2050. Under the VAWOZ 2031-2040 programme, new landfall sites may potentially be scoped out.

Borssele location
Development of this project may form a part of the energy infrastructure that is being realised within the province of Zeeland at this time. The project thus also has points of intersection or linkages with other energy projects.

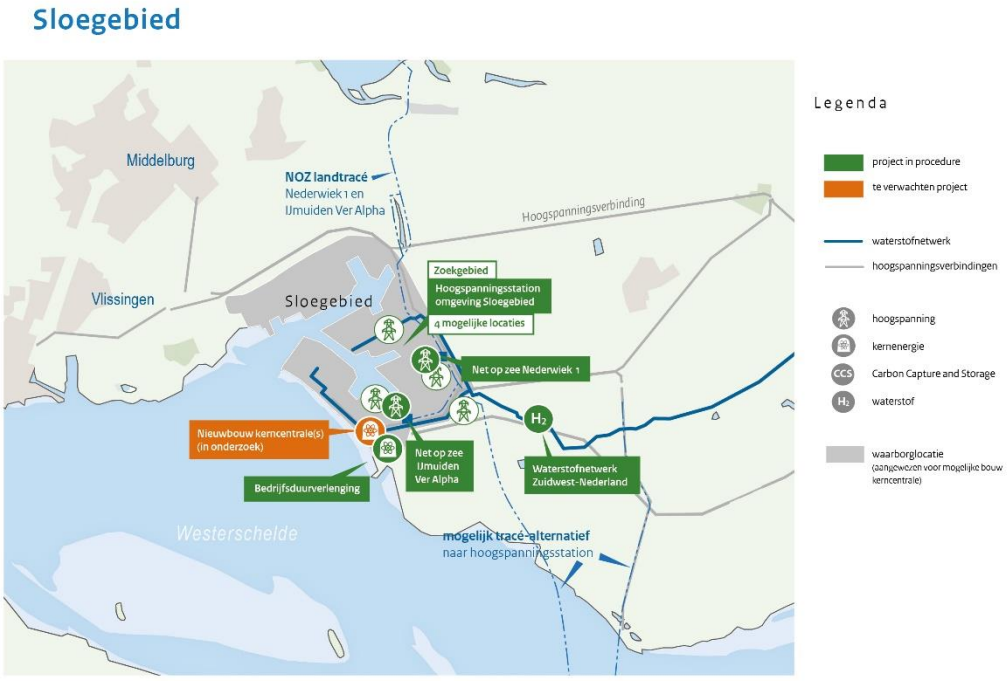

Figure 2: Overview of procedures for energy projects in Zeeland

- Zeeuws-Vlaanderen 380 kV high-voltage power line

The demand for electric capacity in the Zeeuws-Vlaanderen area of the province is set to grow in the coming years. This demand is expected to increase from 945 MW in 2025 to around 1,900 MW by 2030, and possibly even to 4,600 MW by 2050. In the long term, therefore, demand for electricity is forecast to be nearly five times as great as now. The current 150 kV grid cannot handle such voltage levels. Therefore, connection to the national 380 kV high-

voltage grid is required. The additional demand for electrical power is primarily concentrated in the area of Terneuzen, where the larger industrial sites are located. This is why we have been searching for a suitable location in the vicinity of Terneuzen for a new 380/150 kV high-voltage station. This station with a 380 kV high-voltage connection will be linked up with the new 380 kV high-voltage connection Borssele-Rilland on the island of Zuid-Beveland.

- IJmuiden Ver Alpha Offshore Grid and Nederwiek 1 Offshore Grid

In order to achieve the objectives of the Climate Agreement, the Netherlands needs to install additional offshore wind farms. Energy generated by wind then has to be brought onshore. Two landfall sites for the delivery of North Sea wind are anticipated for Borssele: the IJmuiden Ver Alpha Offshore Grid and the Nederwiek 1 Offshore Grid. Both transmission lines run in large part parallel to the Sloegebied, where the wind energy will be transmitted to the high-voltage grid via converter stations and alternating current power lines (by way of a linkup with a high-voltage station).

- High-voltage substation in the Sloegebied seaport and industrial area

After the offshore grid project IJmuiden Ver Alpha is brought online, the existing 380 kV station in Borssele will not have any capacity left to connect new transmission lines. New connection capacity will be needed for future initiatives, such as hydrogen production or industrial sustainability projects. But connection capacity is also needed for the offshore grid project Nederwiek 1 (an additional 2 GW offshore wind power line to the Sloegebied area). That’s why a new 380 kV high-voltage station is necessary in or around the Sloegebied seaport and industrial area.

- Southwest Netherlands Hydrogen Network

Hynetwork Services (HNS) will be building a national hydrogen network to facilitate the energy transition. This pipeline carrying carbon neutral hydrogen will connect the industrial clusters with each other, with other countries and with hydrogen storage and import sites. The network will be rolled out in phases. The Southwest Netherlands Hydrogen Network is part of this national network. This refers to an underground pipeline for the transportation of hydrogen between industrial clusters in Zeeland and Rotterdam, with border crossings to Belgium and links to the industrial cluster in the North Sea Canal Area and the national network. The network will partly consist of existing natural gas pipelines repurposed to transport hydrogen, and partly from laying new pipelines.

Maasvlakte I location

Development of this project may form a part of the energy infrastructure that is currently being realised in the vicinity of the Maasvlakte I location. The project thus also has points of intersection or linkages with other energy projects.

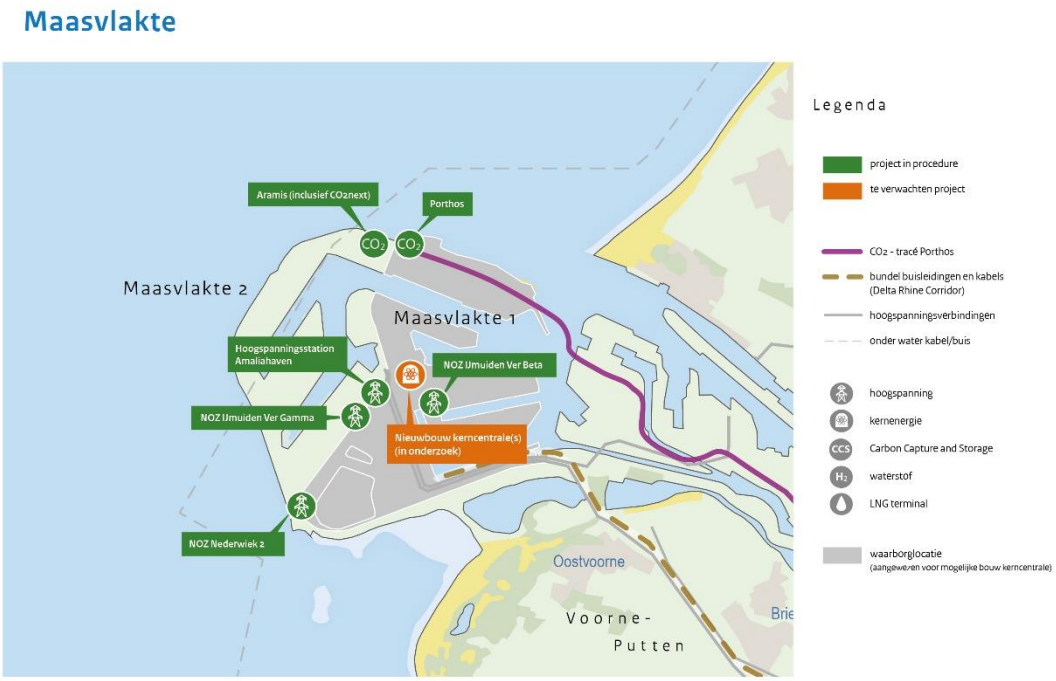

Figure 3: Overview of procedures for energy projects in Zuid-Holland

- Delta Rhine Corridor

The Delta Rhine Corridor is a cluster of initiatives aiming to lay several underground pipelines and direct current transmission lines at the same time between Rotterdam and the German border, passing through Moerdijk and Geleen. Based on draft SCBAs and with the support of project partners, the decision has been taken to incorporate the pipelines for hydrogen, CO2, ammonia and cables for 6 GW of direct current in one joint planning procedure (the National Coordination Scheme). The preparations are currently underway for the implementation of these pipelines and cables, with the exception of the ammonia pipeline.

- Aramis

Aramis is a CCS project CCS stands for carbon capture and storage. The Aramis project focuses on the realisation of new infrastructure for the transportation of CO2 from onshore collection

points to offshore platforms. There the CO2 will be stored in empty gas fields, deep under the earth. The infrastructure can be expanded in future to accommodate new CO2 suppliers (industries where CO2 is collected) and transport it to other empty offshore gas fields.

- Porthos

The Porthos carbon capture project is devoted to the construction, management and exploitation of CO2 transport infrastructure in the Port of Rotterdam area in combination with storage deep underground in the sea.

- IJmuiden Ver Beta, IJmuiden Ver Gamma and Nederwiek 2 Offshore Grids

In order to achieve the objectives of the Climate Agreement, the Netherlands needs to install additional offshore wind farms. Energy generated by wind then has to be brought onshore. Three landfall sites for the delivery of North Sea wind are anticipated for the Maasvlakte: the offshore grids IJmuiden Ver Beta, IJmuiden Ver Gamma and Nederwiek 2. These transmission lines run to the Maasvlakte, where the wind energy will be transmitted to the high-voltage grid via converter stations and alternating current power lines (by way of a linkup with a high-voltage station).

- Rotterdam Hydrogen Network

Hynetwork Services (HNS) will be building a national hydrogen network to facilitate the energy transition. This pipeline carrying carbon neutral hydrogen will connect the industrial clusters with each other, with other countries and with hydrogen storage and import sites. The network will be rolled out in phases. The Rotterdam Hydrogen Network is part of this national network. HNS will be developing the hydrogen network in Rotterdam in phases. HNS will start with the pipeline from Maasvlakte II to Pernis. This underground pipeline is 32 kilometres long. During phase two, HNS will link up the pipeline to the national hydrogen network.

2.7 Project procedure

This project falls under the regulations of the Environment and Planning Act, which entered into force on 1 January 2024. A fixed project procedure will be followed for this project.

This project procedure consists of the following steps:

1. Publication of the Intention and Proposal for Public Participation;
2. Scoping exercise;
3. Preferred solution;
4. Plan development[7];
5. Project decision.

7 The plan development phase is not a formal step in the project procedure, but is only used to indicate the phase after the preferred solution during which the project decision will be drafted.

During the project procedure we will be working from general to specific: At the start of the procedure several locations will be under consideration; during the procedure we will work step by step towards a final location decision. This preference will be incorporated into the preferred solution. After more detailed studies, a project decision will then follow. The project decision will amend the environmental plan with rules required for implementing, bringing into operation or maintaining the project.

Figure 3: Schematic representation of the project procedure

1. Publication of the Intention and Proposal for Public Participation

The project procedure has been started with the publication of the Intention and Proposal for Public Participation (this document). We invite responses from everyone.

2. Scoping exercise: from possible locations within the search area to a preferred solution

The scoping exercise begins with 'updating'. In this updating, we will look at the previous grounds and conclusions drawn under the safeguarding policy through the lens of current knowledge and policy. This may reveal some new insights about the two selected areas and potential additional areas.

In the search for alternative locations for the study, we will look first at which of the suggested areas are the most promising. Afterwards, the promising locations will be determined for these areas based on the boundaries for individual plots of land.

These results will be incorporated in the Memorandum on Scope and Level of Detail (Memorandum). The Memorandum describes which locations will be studied during the next phase of the project, how this will be undertaken and what points and subjects will be incorporated into the study. Everyone is invited to respond to the draft Memorandum. The responses will be incorporated in the final Memorandum.

The locations will then be compared on the basis of environmental impact, using the plan-EIA. But other aspects are also of significance, such as technology, costs, future security and the surrounding area (an integrated impact analysis).

3. Preferred solution

Based on the integrated impact analysis and the plan-EIA, a draft of the preferred solution will be made available to the general public for review. Anyone can submit an opinion on the points in the draft decision. During the decision making process regarding the final preferred solution, ministers will take into account the opinions and recommendations received from government bodies, the EIA Committee and the legal advisors. The preferred solution will also contain the preferred alternative site. No objections can be brought against the preferred solution decision, but it is not immediately binding. A decision on the preferred solution is due in mid-2025.

4. Plan development: from preferred solution to final location

During the plan development phase, the preferred solution will be expanded in more detail. This phase is expected to start as soon as a design has been chosen for the nuclear plant based on the market strategy. The project-EIA will explore variants of the preferred alternative location, if needed. The statutory planning requirements of the final location will be laid down in the project decision.

5. Project decision (and required permissions)

In the project decision, the approval authority will outline how the new nuclear power stations will be designed. The approval authority will also reveal the measures to be taken and the provisions to be made for the physical living environment in order to realise the project. This may be permanent or temporary measures and provisions. The draft project decision (and the required permissions) will be made available for review by the general public, along with the project-EIA and an integrated impact analysis. Everyone is invited to submit an opinion on the draft project decision (and the design permissions). These opinions will be taken into consideration when making the final project decision. The final project decision (and the permissions) is a decision in the legal sense, against which no objections may be brought.

2.8 Formal public consultation on the procedure

We will be conducting an open dialogue with local residents and businesses during the entire plan preparation process. We would like to lay the groundwork for our decision in joint consultation with everyone who lives in the vicinity of the new nuclear power stations. Section 3 describes the approach we will be taking to involve local people in the project procedure. In

addition, there will be five formal points in the procedure when any member of the public can participate by submitting either a response or opinion of the decision, or by bringing an objection before the Administrative Law Department of the Council of State, as itemised below:

1. Publication of the Intention and Proposal for Public Participation: response submission;
2. Draft Memorandum: response submission;
3. Draft preferred solution, including the plan-EIA/integrated impact analysis: opinion of the decision;
4. Draft project decision (and permissions and/or exemptions), including the project-EIA and optional integrated impact analysis: opinion of the decision;
5. Final project decision (and permission and/or exemptions): objection.

Objections may only be brought against the final project decision, where the location and the applicable conditions are set down in legal terms. An opinion is a formal term for a point by point response to the documents made available for review.

3 Proposal for participation

With the term participation, we mean involving and communicating with different levels of government, government agencies, citizens, businesses and institutions in the local area. This proposal for participation lays out how we would like to involve local interested parties, and how communications will be handled. The proposal was devised in consultation and alignment with local authorities and provinces in the region.

The Environment and Planning Act recognises four categories of interested parties: citizens, businesses, social organisations and government agencies.

In the proposal, we list a number of grounds that apply to participation over the course of the entire project (Sections 3.1 and 3.2). Thereafter, we give specifics about communication and participation we propose to follow from the present time up until the draft Memorandum on Scope and Level of Detail (draft Memorandum) is made available to the general public for review (Sections 3.3 through 3.5).

3.1 Why include participation?

The construction of new nuclear power stations will impact the local area, both during the construction phase as well as when the reactors are operating. For these reasons it is important for the government to weigh things up carefully, including taking account of local interests. In order to do this effectively, we need to know at an early stage what local interests and developments exist. We invite local residents and interested parties to suggest ideas and contribute information about the vicinity for consideration.

In May 2023 an overarching communication and participation plan was published for the three decision making procedures targeting nuclear energy, for which we solicited public input. Additionally, we launched the website www.overkernenergie.nl, held informational sessions and made other visits to the region, organised webinars and created information videos.
At the present time, we are sharpening the focus of our current communication and participation plan. This plan covers the regions Borssele and Maasvlakte I, as well as national communication and participation. This overarching plan will also incorporate submitted responses to this proposal.

A variety of contacts have already been made in the region around Borssele, due to the existing nuclear power station and the studies currently underway. Moreover, a large number of energy projects are being rolled out in this region at the same time. That is why participation has been intensified in the region, and the local municipality of Borsele and province of Zeeland have launched their own participation procedures. In order to streamline their efforts with those of the national government, the Ministry is also currently drawing up an implementation plan. Two of the elements proposed in this implementation plan are an area manager and information point. An area manager will help us take account of the interests and wishes of local residents and other interested parties. The information point, whose task is to provide information to local residents and businesses, should be starting up soon.

We will include the interests in the project procedure; for the regions Borssele and Maasvlakte I, we will ask our contacts, in addition to local government agencies, including among others port operators (North Sea Port and Port of Rotterdam Authority), local residents and interest groups, public health agencies and environmental regulators for input in order to make well informed choices.

3.2 Guiding principles

Information, knowledge and understanding form the basis for all participation and input. In order to participate, it is important that enough information is made available, that this information is easily readable and that this generates sufficient understanding to form an opinion and join the participation process. Information and communication are intended for everyone, and therefore must be written clearly.

Participation rounds follow the steps of the project procedure (see Section 2.7). Section 2.8 outlines the points during the procedure when the general public is invited to submit a response or opinion on the decision. This first kind of participation accompanying the different steps in the project procedure is called 'formal participation'. Formal (written) participation is based on a document created within the project procedure and will be widely publicised. At those same points in the procedure information evenings will be organised, at which it will also be possible to submit a response or opinion on the decision. A more accessible and clearly worded summary will be made for documents that are long and technical.

Secondly, there will be 'informal participation' of various parties in order to prepare the different steps in the project procedure or to solicit information from the local area. Both forms of participation are important; for steps one and two of the procedure they are detailed in Section 3.4.

We have devised four guiding principles of how we will use participation in this project:

1. *We want to explore all the interests and find out what people think*
   By contacting local businesses, social organisations, provincial governments and civic authorities within the radius of the proposed sites at an early stage we will be made aware of different interests. We will be spending time on exploring each other's interests, ideas and plans. This will enable us to expose the most important issues and identify opportunities early on, and to discuss them with local parties.

2. *We include everyone by being transparent about our decisions and how we arrived at them*
   We are actively sharing information about the project and how we will be choosing a location for the new nuclear power stations. We will be making decisions based on careful weighing up of the options. We will reveal how we have included local interests in our deliberations and what the impact of our choices will be. This will allow us to make clear what is possible and what isn't and why.

3. *We have a clear story with defined roles and responsibilities*

Our ambition is that everyone in the local area understand clearly who we are, what we are doing and why we are doing it. We are accessible and approachable, so that anyone with a question, concern or suggestion can get in touch with us.
As initiator of the scoping phase, the Nuclear Power Programme Directorate of the Ministry of EZK is the contact point for questions about the technical aspects of the project. The initiator of the plan development phase is not yet known. As the approval authority, the Energy Transition Directorate of the Ministry of EZK is the contact point for questions about the procedure and decision making process of the project.

4. *Participation that links up with each phase of the procedure*
   Participation requires a tailored approach, because every project and every region is unique. The degree of participation links up to the phase in the procedure and the participation needs of local and regional parties. The role and interests of a local authority are different from those of a local resident. This demands a fitting form of involvement. A tailored approach also means that we take account of the preferences of local parties about how and when they want to be informed, and about what.

Provinces and municipalities will be involved in the publication of the Intention and Proposal for Public Participation, and communication with residents will be of an informative nature. Interest groups and citizens will be more actively involved regarding the drafting of the Memorandum.

In the process, the issues affecting local parties, and their needs, will change. For that reason, we will be updating participation for each phase of the project.

3.3 Communication

We will be informing everyone at the beginning of the procedure in the following ways:

- Publication of the public notice in the Government Gazette and various local and regional news outlets. The public notice is a formal announcement about the start of the project and procedure.
- The public notice will also be published on the website of the Energy Projects Office www.rvo.nl/kernenergie. This website also has all the information about the formal procedure and the accompanying decision making process, including the documents that will be published. This includes the draft and final Memorandum, the draft and final preferred solution, design decisions, environmental impact assessments, recommendations from the Environmental Impact Assessment Committee, updates about participation, and so forth.
- The website www.overkernenergie.nl has more information about nuclear energy, the projected developments and the participation process. We also use animations to help explain the new nuclear installations: what is involved, why they are needed, and how the procedure will unfold. Added to that, the website also contains webinars offering further explanations about various themes related to nuclear energy. This will help make the information about nuclear energy more accessible, so that residents and other interested parties can form a better understanding so that they can join the participation process.
- The contacts of local interested parties known to use will receive a message about the start of the project and procedure shortly after the public notice is published.

- Wherever possible, we will also make use of third-party communications, such as free local newspapers, websites and social media of municipalities, provinces and interest groups.
- During the period when the Intention and Proposal for Public Participation document is available for review by the general public, we will be organising four information sessions. These information sessions will be held in both the Borssele region and the Maasvlakte I region. The purpose of these sessions is to further explain the Intention and Proposal for Public Participation and answer questions.

The regional communications working group will discuss the topic of information provision and project communication.

3.4 Participation

How the public can participate and the extent to which they can participate is different for each step in the procedure. This section explains the participation activities for steps 1 and 2. For step 3, the participation plan will be revised.

Step 1: Publication of the Intention and Proposal for Public Participation

At this step we will make public that we have the intention to perform a scoping exercise into the construction of two new nuclear power stations.

Purpose of participation:

- To inform the general public about the process, the objective, grounds and guiding principles of the government's Intention and Proposal for Public Participation.
- To coordinate with others and solicit input about our Intention and Proposal for Public Participation.

Participation activities:

Type of activity	Explanation	Who is invited
Consultations with appointed officials and civil servants	Informative consultations about the objective, the subjects of the policy intention and who, when, what will be included.	Consultations with the relevant provinces and local authorities
Intention and Proposal for Public Participation deposited for review by the public	Possibility to submit a response, suggest ideas and offer solutions. This will be announced in good time through various channels and different means of communication (see also Section 3.3).	Everyone
Information sessions and webinar	During the period when the Intention and Proposal for Public Participation document is available for review by the public, we will be organising information sessions and a webinar. The purpose of these sessions is to further explain the Intention and Proposal	Everyone

	for Public Participation and answer questions.	
Personal interviews and presentations	In addition to discussions and interviews, there may be a need for other information. We will coordinate what these needs are together, and then come by to give a presentation, for example.	Relevant local and regional governments and other local parties
Working sessions	We will be organising working sessions in the Borssele and Maasvlakte I regions in order to look together the scope of the impact analyses and potential other locations for studies.	Local and regional governments, grid operators social organisations and professional resident and interest groups
Response paper	Report on the responses submitted to the Intention and Proposal for Public Participation. We would like to incorporate these responses into the composition of the draft Memorandum on Scope and Level of Detail (Memorandum). The responses to the proposal for participation will be used to further develop the participation process.	Everyone

Step 2: Scoping exercise

At step 2 we will determine the scope and structure of the studies, and which locations will be assessed. During this phase we will be dealing with several potential locations and a variety of parties. We will be coordinating participation accordingly.

Purpose of participation:

- To seek the active participation of relevant local and regional governments, grid operators and professional interest groups in determining the scope of the impact analyses and possible locations.
- To solicit information and knowledge from local parties as input for decision making.
- To inform everyone about the objective and process.

Participation activities (dates subject to change):

Type of activity	Explanation	Who is invited	Date
Consultations with appointed officials and civil servants	Consultations with appointed officials and civil servants about draft versions and during procedural milestones.	Relevant provinces and local authorities	During the entire planning process

Personal interviews and presentations	In addition to discussions and interviews, there may be a need for other information. We will coordinate what these needs are together, and then come by to give a presentation, for example.	Relevant local and regional governments and other local parties	During the entire planning process, on appointment
Draft Memorandum made available for review by the general public	Possibility to respond to the plan-EIA for the locations to be studied and the study design (scope and level of detail). This will be announced in good time through various channels and by different means of communication (see also Section 3.3).	Everyone	Q2 2024
Information sessions	Around the time the draft Memorandum is made available for review we will be organising information sessions. The purpose of these sessions is to present the locations and methods used for studies and answer questions.	Everyone	Q2 2024
Agency's Reply Paper	Report summarising the opinions on the decision received on the draft Memorandum and the participation plan, with the Ministry's reply.	Everyone	Q3 2024

3.5 Follow-up: for each phase an updated participation plan

As soon as we have processed the responses to this proposal, the first version of the participation plan will be ready. This version will guide participation in drafting the Memorandum on Scope and Level of Detail.

The participation plan will be updated twice hereafter.

1. First as part of the Memorandum, about participation in the plan-EIA (step 3): the exploration of different alternatives.
2. Second as part of the preferred solution. Participation is central here in the plan development accompanying the project decision (steps 4 and 5): the detailed development of the chosen preferred alternative.

4 Join the conversation – we welcome your response

Sections 2 and 3 explain the Intention and Proposal for Public Participation We are keen to find out what you think of the Intention and Proposal for Public Participation.

Do you have suggestions or ideas for solutions? You can submit these from 23 February 2024 through 4 April 2024 in the form a written response. Suggestions and ideas for solutions can be submitted up until the draft Memorandum on Scope and Level of Detail. Information about when and how a response can be submitted may be found on the website of the Energy Projects Office at www.rvo.nl/kernenergie.

4.1 What do we want input on?

You can suggest ideas and solutions. In particular, please consider the following questions:

- What locations might be suitable for new nuclear power stations?
- What impacts would you like investigated?
- What do you think of the proposal for participation?

4.2 What will happen with your input?

The project team will draw up a list of all the suggested ideas and solutions, and evaluate them on the basis of the preconditions outlined in the policy intention (Section 2.4). The responses will be incorporated into the composition of the participation plan for this phase, as well as the Memorandum on Scope and Level of Detail.

Would you like to ask a question without submitting a response?
Please contact the Ministry of Economic Affairs and Climate Policy in one of the following ways.

For more information about nuclear energy:

- www.overkernenergie.nl

For information about the content and participation from the project:

- Nuclear Power Programme Directorate, Ministry of Economic Affairs and Climate Policy
  - Ronald Kolk (Borssele/Vlissingen region), r.s.kolk@minezk.nl
  - Lennert Goemans (Maasvlakte I region), l.goemans@minezk.nl
- For general questions: contact.kernenergie@minezk.nl

For information about the project procedure and documents:

- Energy Projects Office
- 070 - 379 89 79
- www.rvo.nl/nieuwbouw-kerncentrales
- bureauenergieprojecten@minezk.nl