

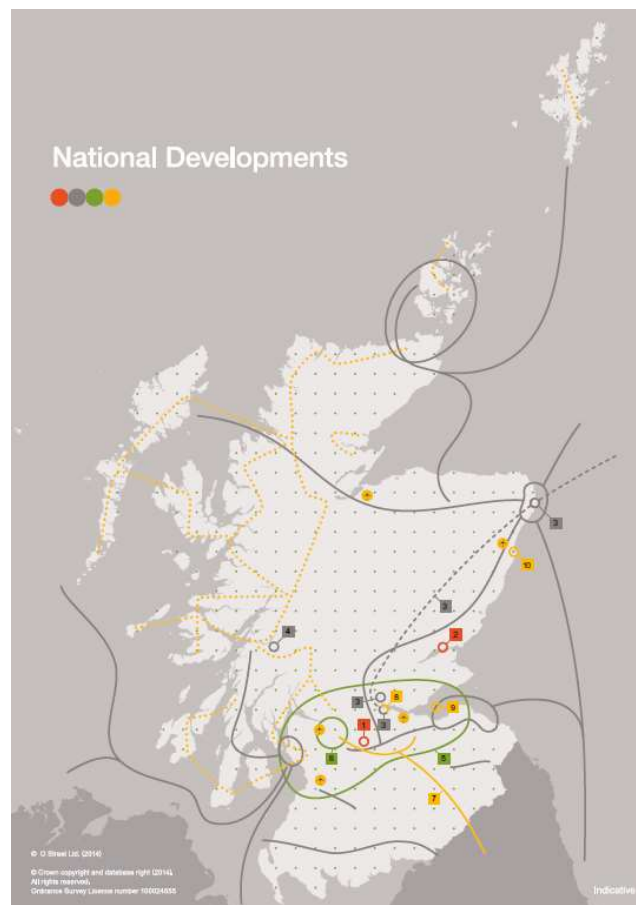


National Developments

Invitation to submit proposals for national developments in the new National Planning Framework

National Planning Framework 4 (NPF4) will be a plan for Scotland in 2050 that sets out where development and infrastructure is needed in the coming years.

The Scottish Ministers can identify national developments to include in NPF4. This could include single, large-scale projects or several smaller scale developments combined. Once designated, the question of whether a national development is needed does not have to be debated in later consenting processes. To benefit from this status, national developments have to be formally set out in a statement of need that is included in the National Planning Framework.



We are seeking views on national developments for inclusion in National Planning Framework 4 by 31 March 2020.

We can build on previous plans and consider ongoing programmes to identify new national developments. National Planning Framework 3 (2014) identified the following national developments:

1. **Ravenscraig** – Creating a sustainable settlement on one of the largest areas of vacant and derelict land in Europe.
2. **Dundee Waterfront** – Regenerating the waterfront with high quality placemaking and supporting the low carbon economy.
3. **Carbon Capture and Storage Network and Thermal Generation** – Linking carbon capture and storage (CCS) to electricity generation from key sites.
4. **High Voltage Electricity Transmission Network** – New infrastructure to facilitate renewable electricity generation onshore and offshore.
5. **Pumped Hydroelectric Storage** – New sites and further development at existing sites, including at Cruachan.
6. **Central Scotland Green Network** – Creating a step-change in environmental quality, addressing areas of disadvantage and attracting investment.
7. **Metropolitan Glasgow Strategic Drainage Partnership** – Water and drainage infrastructure investment to build climate change resilience and unlock potential development sites.
8. **National Long Distance Cycling and Walking Network** – Closing gaps in the current networks to enhance visitor experiences and provide better access to the outdoors for people.
9. **High Speed Rail** – Improving connections to the UK and Europe, strengthening links between cities.
10. **Strategic Airport Enhancements** – Supporting the main airports as gateways and recognising the importance of lifeline air links. Identified airports: Aberdeen, Edinburgh, Glasgow, Inverness and Prestwick. Wider investment zones supported at Edinburgh, Glasgow and Prestwick.
11. **Grangemouth Investment Zone** – Supporting improvement and investment in this nationally significant site for industry and freight.
12. **Freight Handling Capacity on the Forth** – Supporting additional sea freight capacity.
13. **Aberdeen Harbour** – New harbour to address existing capacity constraints.
14. **National Digital Fibre Network** – Supporting world-class connectivity in Scotland, focusing on connections to rural communities.

We will engage with the lead partners of these national developments to understand how they have changed and their continuing relevance to NPF4.

You can find further information on progress towards their delivery in the National Planning [Framework 3 Monitoring Report](#).

There are many other development projects that don't currently have national development status that the Scottish Government also supports. For example, Scotland has been promoting proposals at the [MIPIM](#) event, and through the [Scotland Capital Investment Portfolio](#). Through the course of 2020 further details on the National Transport Strategy, the Infrastructure Investment Plan and the investment portfolio for the New Green Deal will emerge, and the second Strategic Transport Projects Review is being prepared alongside NPF4. These, and other national plans and programmes, may include developments which are considered to be suitable candidates for national development status.

National Development Assessment Criteria

We will analyse all proposals for national development status in relation to the following criteria:

Climate change	People	Inclusive Growth	Place
The development will help to reduce emissions, contributing to Scotland's target of net zero emissions by 2045, will be emissions neutral, or emissions negative.	The development will support the health, wellbeing, sustainability, and quality of life of our current and future population.	The development will contribute to sustainable economic growth that helps to reduce poverty and inequality across Scotland.	The development will protect or enhance the quality of a place or improve biodiversity.

Ideally, proposals should contribute to all four criteria to be considered as candidates for national development status in the draft of NPF4.

Developments that only meet two or three criteria, may still be considered to be of national significance and potentially suitable for designation, for example where they will generate particularly significant benefits for one of the criteria.

It is unlikely that proposals that have a significant adverse impact on any of these criteria will be suitable for national development status. All proposals for national development status should be accompanied by an explanation of their contribution to each of the national development assessment criteria when submitted.

Send us your comments

Please use the table below to let us know about projects you think may be suitable for national development status. You can also tell us your views on the existing national developments, referencing their name and number, and providing reasons as to why they should maintain their status. Please use a separate table for each project or development.

Name of proposed national development	Carbon Capture Utilisation and Storage (CCUS) Network to support industrial decarbonisation, thermal generation, and the production and transmission of large scale low-carbon and renewable hydrogen.
Brief description of proposed national development	<p>Decarbonisation of the industrial and energy sectors is a key challenge for Scotland in our journey to net zero emissions by 2045, and 75% reduction in carbon emissions by 2030. The Committee on Climate Change has advised that large scale CCUS is essential to reach net zero across the UK. The decarbonisation of Scotland's industry and energy sectors is dependent on new carbon dioxide (CO₂) transportation infrastructure, both onshore and offshore, coupled with low-carbon hydrogen production and carbon capture and storage (CCS) being operational by the mid-2020s.</p> <p>CCUS will improve long-term investment conditions for some energy-intensive process industries and help to unlock new industrial growth through storage of CO₂ captured from Scottish, UK and even European industrial sites. Scotland has the potential to be an early mover in this key area.</p> <p>Hydrogen can play an important part in a low-carbon future and is featured strongly in the Scottish Government Energy Strategy as a possible way to assist the comprehensive decarbonisation of the Scottish heat, industrial and transport systems.</p> <p>The production of large-scale low-carbon hydrogen from methane feedstocks (natural gas) requires alignment with carbon capture and storage systems to capture and sequester the CO₂ that is generated as a by-product from that process.</p> <p>Once infrastructure is in place to safely capture and store CO₂, it will create huge opportunities to attract multi-national industrial businesses to invest in close proximity to key Scottish locations.</p> <p>This proposed national development covers the CCUS infrastructure network and proposals for a hydrogen infrastructure network that will be essential to support industrial</p>

	<p>decarbonisation and to contribute towards the decarbonisation of domestic and industrial heat and transport.</p> <p>This proposal includes:</p> <ul style="list-style-type: none"> • Carbon dioxide capture at St Fergus Gas Terminal and adjacent industries. • Carbon Capture from methane reformation for low-carbon hydrogen production at St Fergus. • Infrastructure for future CO₂ capture across a number of industrial users at the Grangemouth site. • Port and harbour infrastructure for domestic and international import and export of shipped CO₂, as well as export of hydrogen, at Peterhead Port and other Scottish locations including on the Firth of Forth. • Onshore Pipeline Infrastructure, including potential use of the Feeder 10 Pipeline, with proposed links to Peterhead Port and Grangemouth. The industries located within the Grangemouth industrial area represent considerable strategic importance to Scotland and Grangemouth provides a location capable of being readily linked to CCS infrastructure at St Fergus. • Repurposing of offshore pipelines and onshore interconnections for the storage of CO₂ and transportation and line-packing of hydrogen. • Pipeline access to major conurbations for bulk production and storage of hydrogen. • On and offshore pipelines for hydrogen transport and storage.
<p>Location of proposed national development (information in a GIS format is welcome if available)</p>	<p>The below maps on the Acorn CCS project lay out the locations of the project as it expands through the development phases. Further images are provided in Annex A.</p>

acorn: Overview

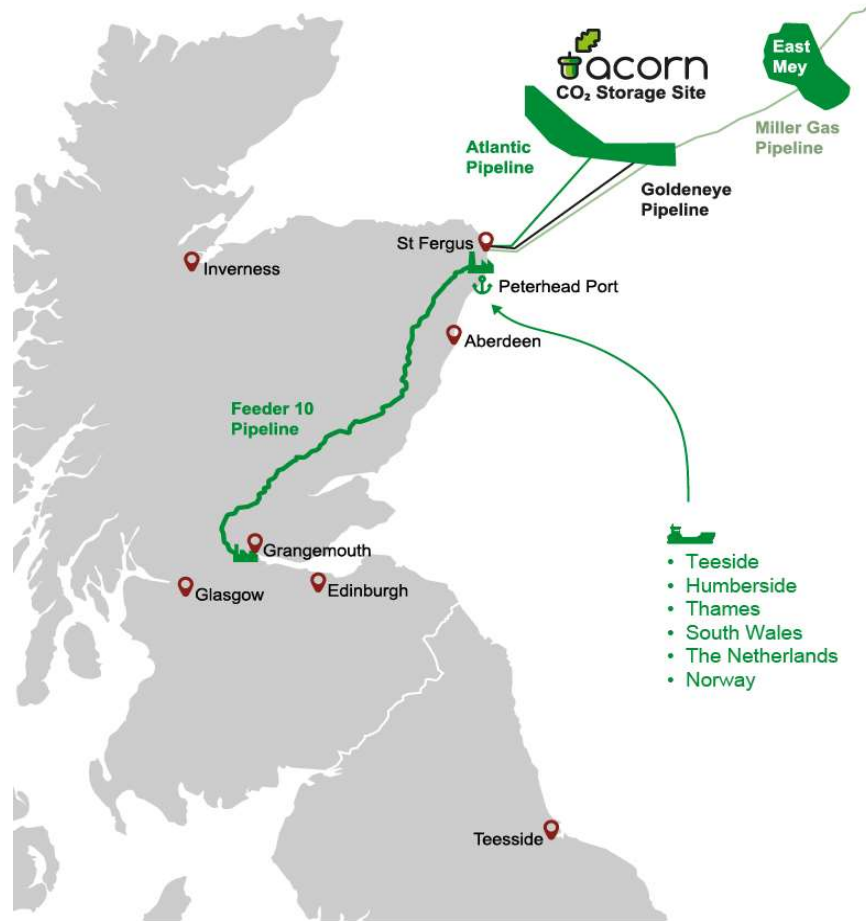


Image 1 – Overview of the Acorn CCS project highlighting the gas terminal at St Fergus and Goldeneye pipeline for reuse to transport CO₂ to the Miller Field storage site. The import potential of CO₂ import is represented via the Feeder 10 pipeline from the Grangemouth industrial area, and through shipping of CO₂ from other parts of the UK and Europe via Peterhead harbour.



Image 2 –Phase 2 of the Acorn Project. CCS supporting low-carbon hydrogen production at St Fergus gas terminal. The image shows how this can be blended into the current gas network at 2% and potentially at 100% percent to supply the Aberdeen Vision project.

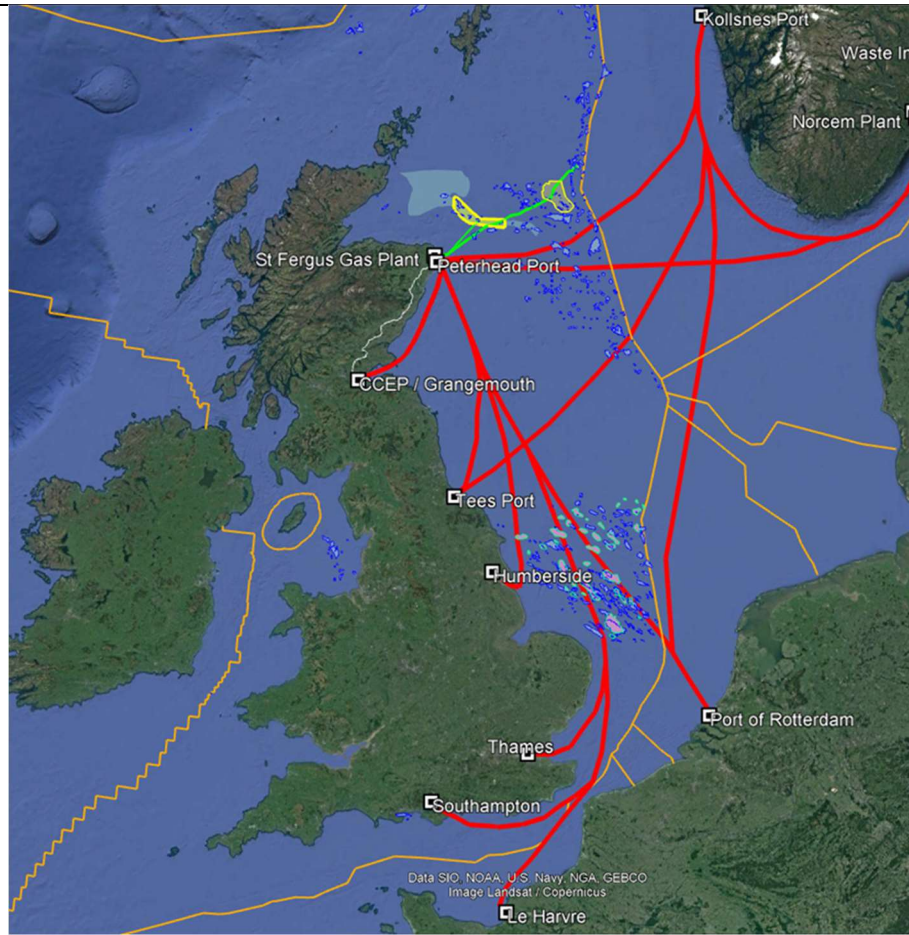


Image 3 – Examples of shipping routes that could be utilised to transport CO₂ from industrial clusters around the UK and Europe to Peterhead Port to be stored offshore via St Fergus.

What part or parts of the development requires planning permission or other consent?

Construction of new or refurbishment of existing pipeline(s) to provide for the transportation of captured carbon dioxide, including change of use from transporting existing substances.

Offshore CO₂ storage sites and refurbishment of existing offshore pipelines.

Construction of pumping and/or compression equipment required for a CO₂ transportation pipeline(s) and for shipping.

Construction of buildings or structures for carbon capture, transportation and/or storage plant and facilities.

Hydrogen production plant with carbon capture and construction of structures for bulk hydrogen storage and transportation, at St Fergus and potentially Grangemouth.

Construction of hydrogen transport and storage pipeline infrastructure. New or repurposed pipeline infrastructure both offshore and on shore to deliver Hydrogen for heat, industry and transport,

	<p>Port facilities at Peterhead and Grangemouth / Firth of Forth for the transportation of captured CO₂.</p> <p>Onshore/near-shore geological storage of bulk hydrogen.</p> <p>Above ground storage of compressed Hydrogen or Liquid Hydrogen carriers.</p> <p>Hydrogen refuelling infrastructure to support Hydrogen for transport, including vehicles of all sizes, rail and marine.</p>
<p>When would the development be complete or operational?</p>	<p>Industrial carbon capture at the St Fergus Gas terminal complex and storage offshore using the existing Goldeneye pipeline could be operational by 2024. Hydrogen production with CCS could commence at St Fergus by 2025 followed by shipping of CO₂ to Peterhead Port and via pipeline to St Fergus from 2026. Carbon capture and utilisation and hydrogen production at Grangemouth with transport by ship or pipeline by 2027 to the St Fergus CCS hub. Build-out including commissioning of additional offshore infrastructure and pipelines (e.g. Atlantic and Miller pipeline) would follow on from 2024 through to 2030 in response to demand.</p>
<p>Is the development already formally recognised – for example identified in a development plan, has planning permission, in receipt of funding etc.</p>	<p>This proposal provides an update to an existing NPF3 national development (ND3 - Carbon Capture and Storage Network and Thermal Generation). This proposed iteration places the development firmly in the context of delivery of Scotland’s net zero target and supporting economic growth and the just transition.</p> <p>Scotland’s National Marine Plan 2015 sets out objectives and marine planning policies for CCS; it describes Scotland being “at the forefront of the development and deployment of CCS technology, putting in place successful commercialisation projects, which promote the utilisation of existing infrastructure”. CCUS should be supported through an alignment of marine and terrestrial planning processes, particularly where proposals allow timely deployment of CCS to re-use suitable existing redundant oil and gas infrastructure.</p> <p>Regional marine plans should consider the potential for CCS commercialisation within their area, particularly in light of the expected future activity set out in the National Planning Framework.</p> <p>The Aberdeenshire Local Development Plan 2017 states “We support the development of carbon capture and storage developments..... we also support the development of carbon</p>

	<p>networks aimed at storing CO₂ in offshore oil and gas fields, especially around Peterhead and the gas fired power station.”</p> <p>We understand that the proposed pipeline network linking Grangemouth to the Feeder 10 pipeline (currently owned and operated by National Grid) remains a consideration within discussions regarding the emerging Falkirk growth deal.</p> <p>The Scottish Government has provided funding to the Acorn CCS project located at the St Fergus Terminal in Aberdeenshire. The Acorn project has benefited from financial and technical services support from international oil companies, Shell, Total and Chrysaor. The Scottish Government, Scottish Enterprise, and Opportunity North East have also provided funding to establish North East CCUS (NECCUS) which represents the Scottish Industrial Cluster and promotes CCUS and Hydrogen development in Scotland.</p>
<p>Contribution of proposed national development to the national development criteria (maximum 500 words)</p> <p>CCUS is essential for Scotland’s response to the climate change emergency. The Climate Change Plan requires CCS in all its scenarios and it is widely acknowledged that without CCUS technology, Scotland will not meet its ambitious new climate change targets. The Committee on Climate Change describes CCUS as a “necessity, not an option” to achieve net zero emissions¹.</p> <p>Scotland has the opportunity to be an early mover and a global leader in CCUS with enough world-class storage capacity not only for Scotland and the rest of UK but also potential scope for the storage of CO₂ from other European nations, helping to support their international targets.</p> <p>In addition to climate mitigation, a CCS network will provide opportunities for optionality in decarbonising the energy system. A network of CCS and Hydrogen infrastructure enables options to produce, use and export hydrogen for energy and heat, creating new opportunities for trade, investment and international relationships.</p> <p>CCUS infrastructure would also enable bioenergy with CCS (BECCS). This important emerging negative emissions technology features prominently within the Scottish Government’s Climate Change Plan and Bioenergy Action Plan. The Action Plan sets an ambition to commission a Front End Engineering Design (FEED) study for BECCS by 2021, which will provide further detail on the scope, scale and location for any future BECCS plant.</p> <p>CCUS infrastructure may also enable negative emissions through capture and storage of CO₂ from existing biogenic sources, such as fermentation, anaerobic</p>	

¹ Committee on Climate Change (2019) Net Zero – The UK’s contribution to stopping global warming <https://www.theccc.org.uk/publication/net-zero-the-uks-contribution-to-stopping-global-warming/>

digestion and landfill, as well as existing biomass combustion and waste-to-energy operations.

CCUS is central to our ability to respond to the global climate emergency and limit the scale of impact that **climate change** could have on our **people and planet**. Without it there will be very real implications for people's **health and wellbeing** and on the sustainability of Scotland's **places and biodiversity**.

The proposal also supports **people** and **place** more directly. CCUS can involve the reuse or repurposing of existing industrial infrastructure in the form of onshore and offshore pipelines and plant. It will enable existing skills in the Energy industry to be redeployed, and anchor new opportunities for shipping imports and exports, generating related jobs at key ports. It will also promote and sustain the economic potential of our existing industrial areas, preventing the need for significant new development elsewhere.

The proposed CCUS network infrastructure is located in some of Scotland's most disadvantaged areas such as Peterhead and Grangemouth, and its reuse will have important implications for the prosperity of those places; ensuring continued employment, economic activity and ensuring the continuation of the areas' cultural identity. This will help to protect the **sustainability of communities** and provide employment opportunities that would enhance **place** and contribute towards **economic stability** in those areas that most require certainty in a time of change.

CCUS Infrastructure will help to secure a sustainable future for industries that currently are key pillars of Scotland's economy and that are subject to the energy transition, as well as stimulate interest from international businesses, who will be looking to build carbon-neutral industrial sites in the vicinity of proven transport and storage options.

By anchoring communities, providing employment, and supporting the switching of employment and skills between industries, this proposal supports **inclusive growth**. It directly supports the need for Scotland's **just transition**, ensuring fair regional development in which **people and places** are not disproportionately affected by the change needed to secure a low carbon future.

Alternatively, you can simply set out brief comments in an e-mail to us or complete an on-line version of the form [here](#).

Please also complete the Respondent Information Form which you will find at the end of this document or in the [Get Involved](#) section of the [National Planning Framework](#) pages of the [Transforming Planning](#) web-site, so we know how to treat the information you have provided.

Please return your comments and Respondent Information Form to:

scotplan@gov.scot or

National Planning Framework 4 Team
Scottish Government
Area 2F South
Victoria Quay
Edinburgh
EH6 6QQ

National developments – further information

Can anything be a national development?

To ensure that their status adds value, national developments must have some aspect which requires permission or consent before construction begins.

Are national developments always big construction projects?

No. A national development could be a single large project that makes a significant contribution to national outcomes.

However, a number of smaller projects could work together to deliver benefits and also form a national development, and even a single small project could have a nationally significant impact that means it merits designation as a national development.

Are other consents needed before a national development can be constructed?

Yes. All relevant permissions and consents are needed before construction or operation can begin. A range of consents could be applicable - some projects will require planning permission, whilst others will receive permission through other legislation such as the Transport and Works (Scotland) Act, and the Electricity Act.

Do national developments get different treatment when coming forward as applications for development?

Yes. All planning applications are considered to be either national, major or local types of application. Different processes must be undertaken depending on which type of application is being considered.

National and major types of planning application must:

- go through pre-application consultation before the application is sent to the planning authority
- be prepared with a design and access statement
- have a pre-determination hearing before the application is decided
- display a notice about the development on the site during construction

The planning authority has four months to consider the planning application and approve or refuse it.

Will an application for consent or permission for a national development always be approved?

As a result of the Planning (Scotland) Act 2019, NPF4 will form part of the statutory development plan. Decisions on applications for planning permission must be taken in accordance with the plan, unless material considerations indicate otherwise.

National development status is not a guarantee of approval. Other relevant policies, regulations, plans and strategies will be considered in the approval process before construction and operation of a national development can happen. National developments are also still subject to statutory assessments, including Environmental Impact Assessments where applicable.

What if a national development is proposed in my area?

National developments aim to provide certainty upfront, for investors and businesses, but also communities, to know that a development is needed.

This can help communities to be aware of the likely changes that are planned for their area and to engage with the planning system to ensure it supports as far as possible their own objectives for their place. The key impacts of these developments can be considered from an early stage with improvements or mitigations necessary set out in the NPF.

Will communities be informed if there are proposals in their area?

Yes, where development proposals relate to a specific site we will ensure that community organisations are made aware of a proposal for their area at the draft NPF4 stage.

Views on the draft NPF4 will also be invited during the formal consultation period, commencing in autumn 2020.

Will all national developments suggested by consultees become national developments?

No. Currently there are 14 identified national developments. There is no legal limit to the number of national developments there can be, but in general only a small number of developments are likely, on their own or as a group, to be considered of sufficient significance to be designated as national developments.

We will consider how the national developments suggested by stakeholders fit with the national development criteria and emerging aims of the NPF, in particular in relation to where they are in the country and how that interacts with identified challenges and opportunities.

Where suggested national developments are not in the end thought suitable for identification as national developments, Ministers will clearly set out the reasons why and make that publically available.

Who decides what gets identified as national development in National Planning Framework 4?

The Scottish Ministers will identify national developments in the draft NPF4 to be laid in Parliament for up to 120 days consideration.

Parliament may recommend that the identified national developments be changed or national developments be removed from the draft or different national developments added.

A public consultation on the draft NPF4 will happen during the 120 day Parliamentary consideration period. The responses to that consultation may suggest that the identified national developments be changed or national developments be removed from the draft or different national developments added.

Ministers will consider the recommendations of Parliament and the suggestions made through the public consultation in revising the draft NPF 4.

Ministers will then lay a revised version, including a final proposed list of national developments, in the Scottish Parliament for approval.

Other assessments being undertaken

An assessment of the lifecycle greenhouse gas emissions is required by the Planning (Scotland) Act 2019. An assessment of the likely health effects of national developments is not required prior to designating national developments but is required at the development consent stage. However, likely health effects will be considered as part of the wider impact assessment which is being undertaken for NPF4.

This assessment will help to inform the selection of national developments for inclusion in the draft NPF 4. Impact assessments will be applied to any new national developments added as a result of the public consultation and Parliamentary scrutiny to take place later in 2020.

Further details are set out in our guide to Impact Assessments which can be found in the [resources](#) section of the [National Planning Framework](#) pages of the

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For more information and other resources



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