

Overview of the proposals

Scotland to England Green Link 1 (SEGL1)
June 2021

nationalgrid



PRINCIPAL PARTNER
**UN CLIMATE
CHANGE
CONFERENCE
UK 2021**

IN PARTNERSHIP WITH ITALY

Moving towards net zero

The UK has a world-leading target to tackle climate change, which is to achieve **net zero by 2050**.

We are already making progress towards this goal - 2020 was the greenest year on record for our electricity system.

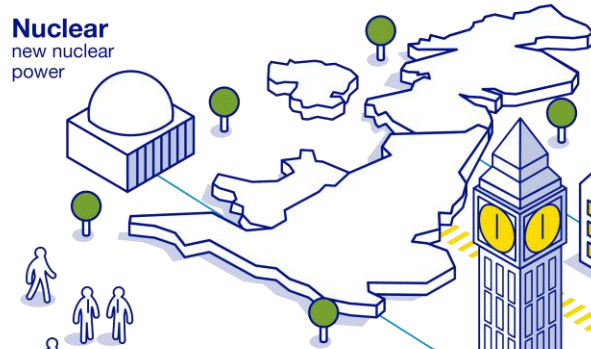
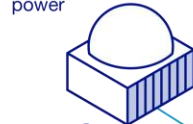
But more needs to be done.



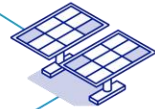
World
Net Zero by 2050

Jobs
400,000 jobs to build the net zero energy workforce

Nuclear
new nuclear power



Offshore wind
with 40GW by 2030



Solar Power
recording record energy generation



Electricity
coming ashore to people's homes



Interconnectors
transporting and sharing low carbon energy between the UK and the continent



Meeting the UK's green energy ambitions

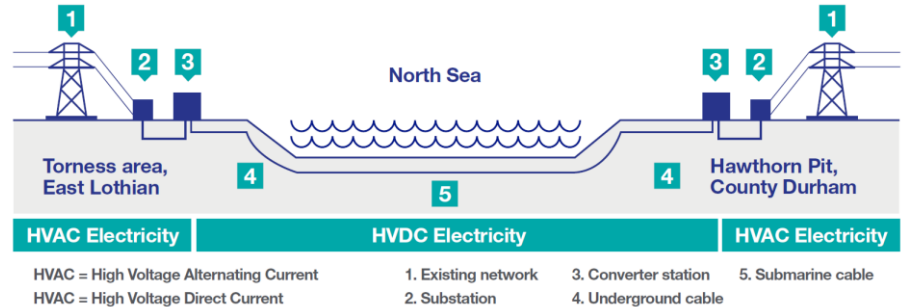
- The Government has a net-zero in all greenhouse gases target in place for 2045 in Scotland and 2050 in England and Wales.
- By 2030 the Government's target is for 40GW of offshore wind to be delivered – enough to power every home in the UK.
- To help deliver green energy to homes and businesses across the UK, we need to increase the capability of our network between Scotland and England
- To do this, we are proposing the construction of two new High Voltage Direct Current (HVDC) links which will operate as electricity superhighways from Scotland to England.
- These links will be called the Scotland to England Green Links or SEGL1 and SEGL2.



Our proposal

- We are proposing the construction of a 2GW HVDC link called SEGL1, which will run from the Torness area in East Lothian to Hawthorn Pit (between Murton and South Hetton) in County Durham.
- This link will carry enough power for two million homes.
- We are also proposing to build a new converter station and substation, and install underground cables from our landfall point just north of Seaham to Hawthorn Pit.
- The proposed locations for the new converter station and cable route have been selected after extensive research and planning.

How SEGL1 will work

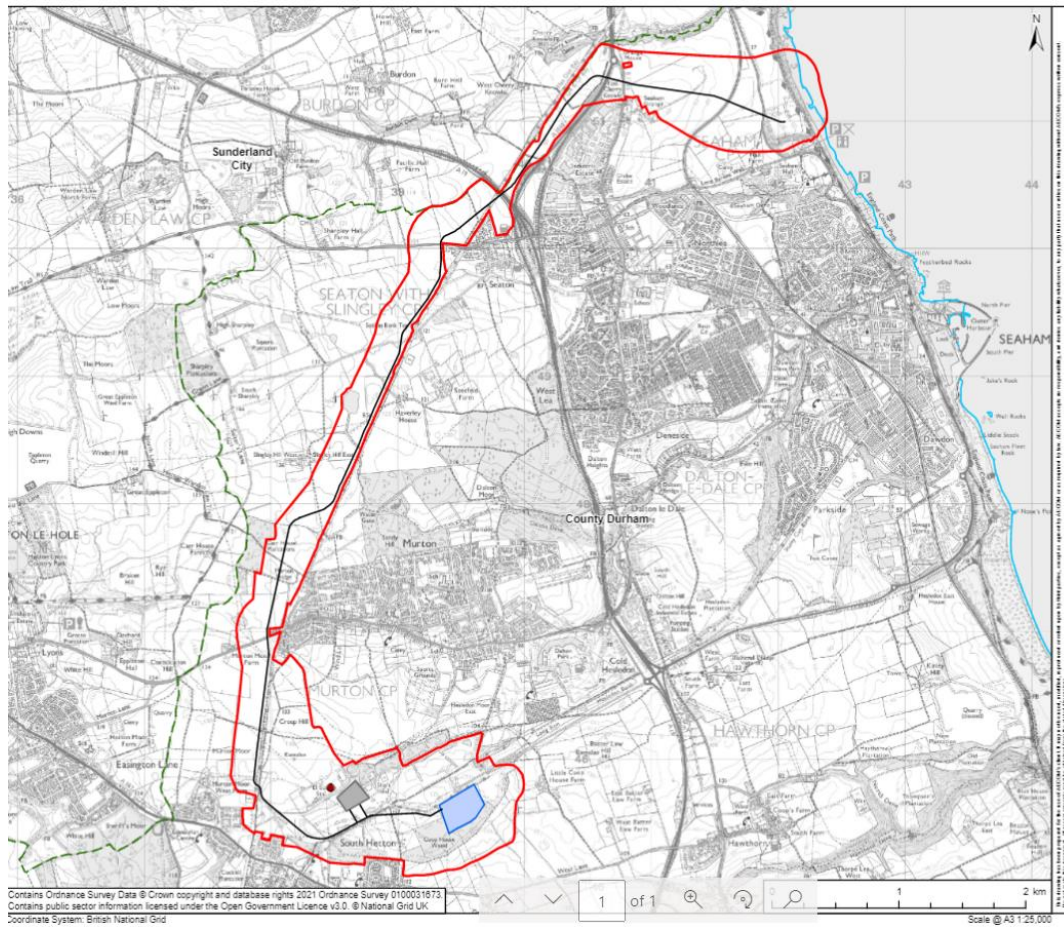




An indicative image of our Hawthorn Pit converter station and substation

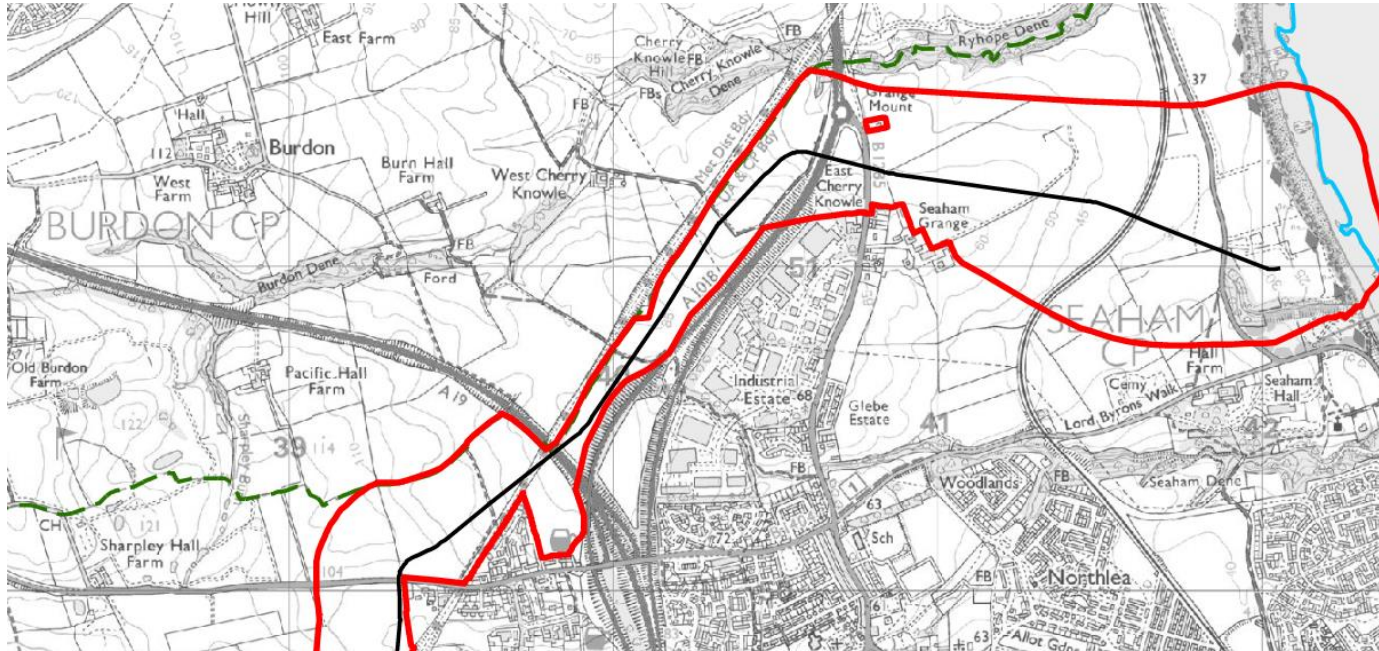
Subsea offshore and onshore cable laying





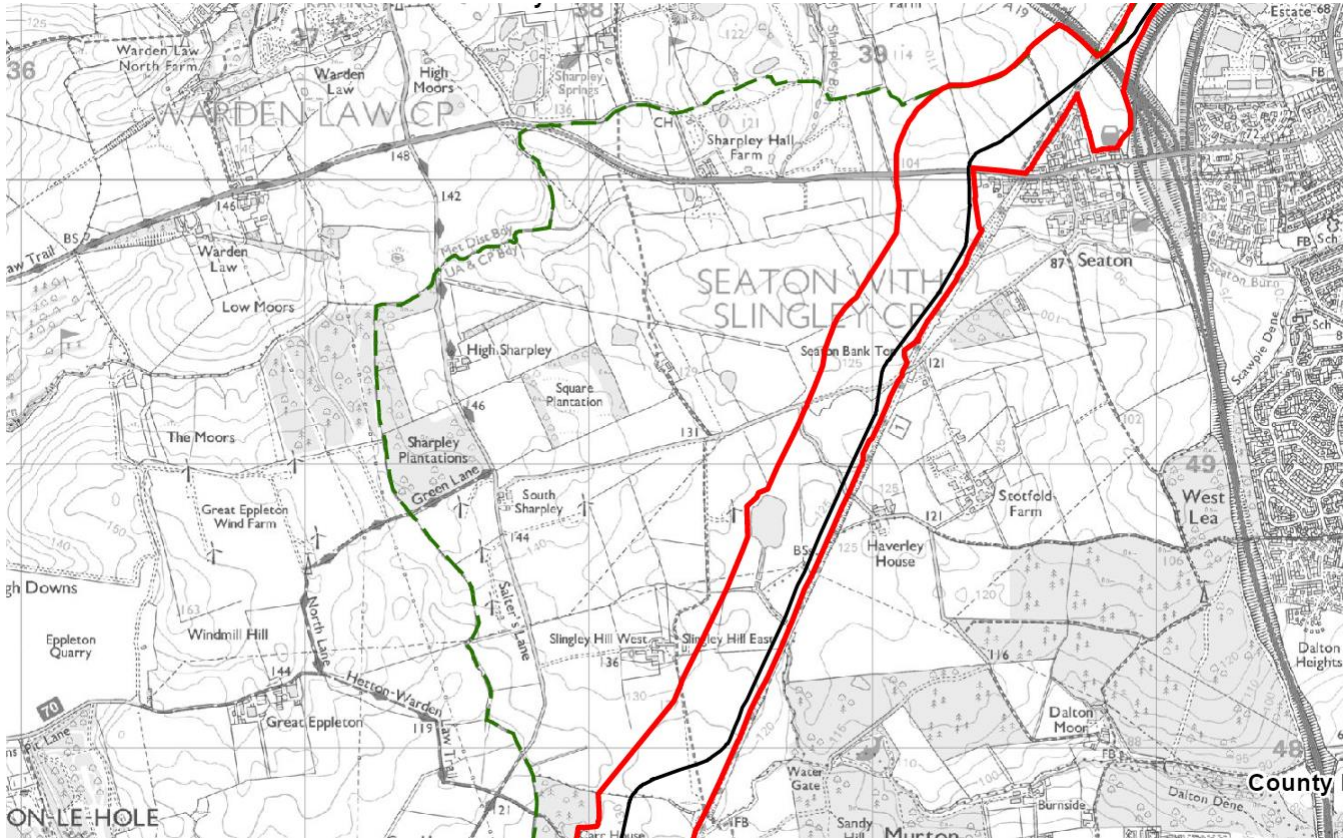
PROJECT
Scotland England Green Link 1

- KEY**
- English Onshore Scheme Scoping Boundary
 - Existing Hawthorn Pit 400kV Substation
 - Proposed DC Cable Route Alignment
 - Proposed Converter Station Location
 - Proposed Substation Location
 - Mean Low Water Springs
 - District Borough Unitary Boundary



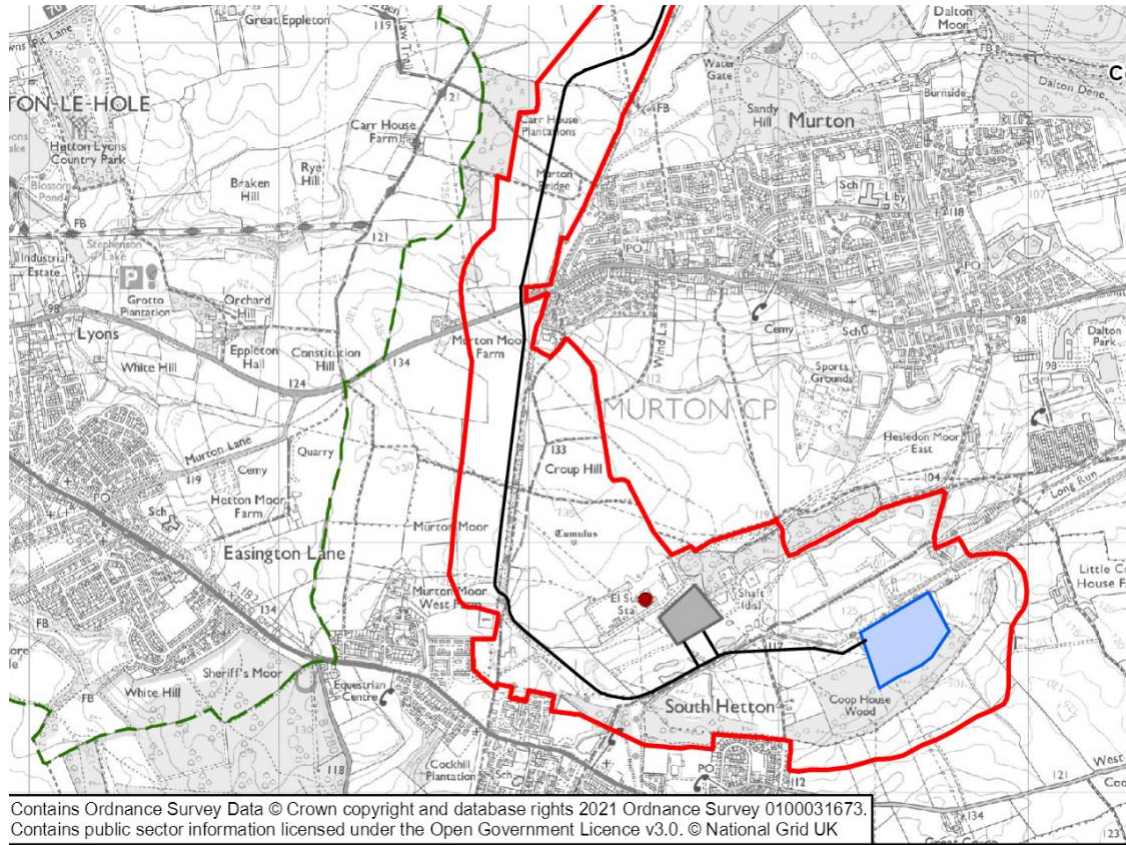
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