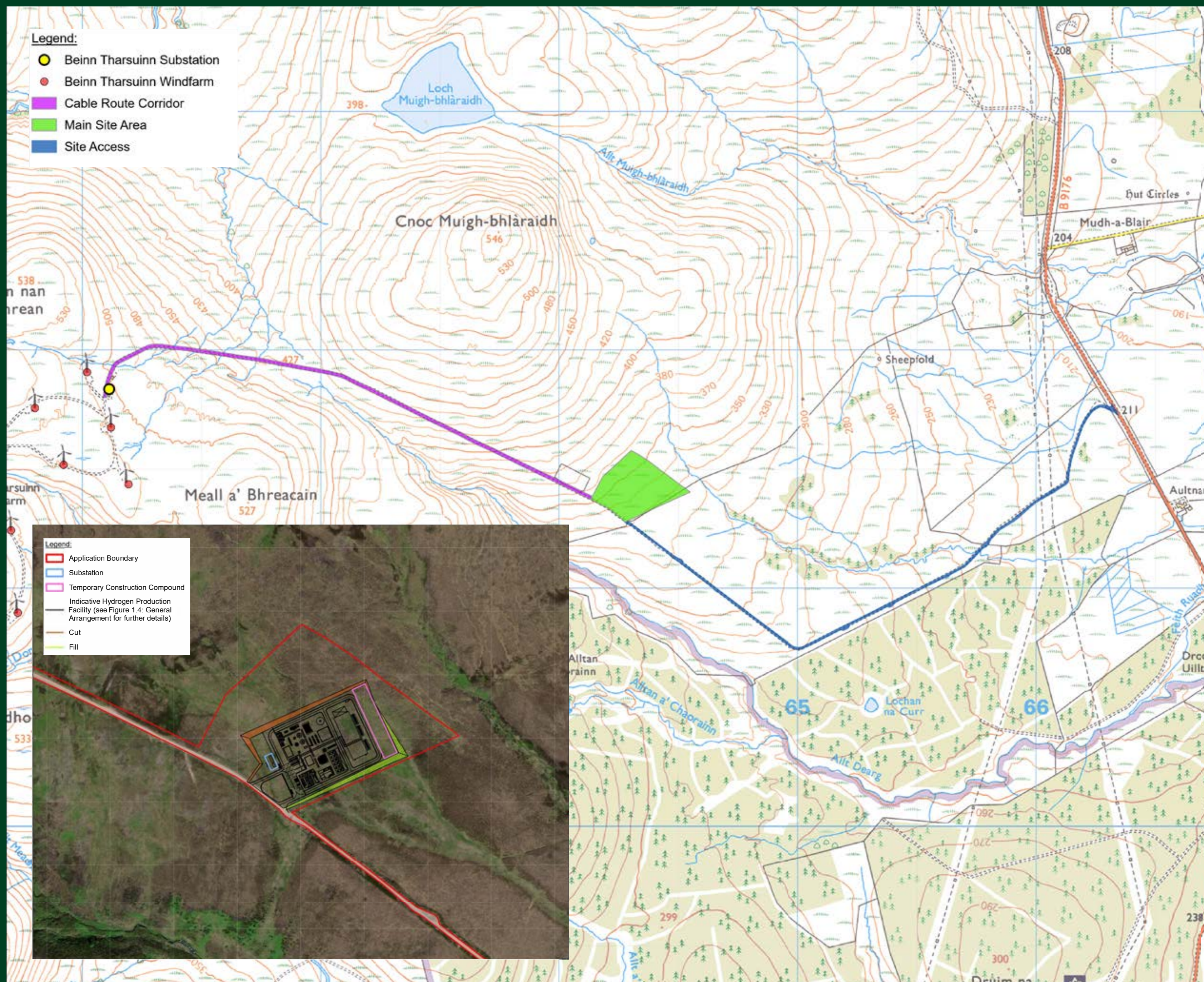


Project description



Site components with indicative site layout plan (inset)

The electrolyser plant would be connected to the grid network via the existing Beinn Tharsuinn Windfarm substation.

The Proposed Development would be powered by renewable energy, either directly from the existing Beinn Tharsuinn Wind Farm or grid electricity covered by contractual Power Purchase Agreements with Renewable Energy Guarantees of Origin to produce green hydrogen. The intention is to use locally sourced, raw water. The Proposed Development would use an electrolysis technique that uses electricity to break water down into hydrogen and oxygen. The hydrogen production facility has a predicted capacity for supply up to 6,480kg of green hydrogen per day.

The green hydrogen would be transferred into pressurised tubes, which would be picked up by specialised HGVs (known as tube trailers) and transported to local end users. Site access would be taken along the existing windfarm track, and it is our intention to use renewable fuel sources in the tube trailers.

The Proposed Development is modest in scale, with the majority of buildings and infrastructure at a height of 9.5m or lower, except for a vent stack up to 25m, and an electrolyser building up to 15m. The indicative footprint of the Hydrogen Production Facility would be 122m x 158m (c. 2ha).

The Proposed Development would be capable of operating continuously, although the actual operational routine would be determined by a range of factors, such as customer demand, availability of renewable electricity, available storage, and transportation schedules. The plant would be operational 24 hours per day and 7 days per week, with regular deliveries to and from the site. It is envisaged that the site would be operated through 5 shifts of 5 crew members and 10 Heavy Goods Vehicle (HGV) drivers on shift patterns.

Facilities on site would include car parking, office and welfare facilities.

There are no significant emissions to air or land associated with operation of any part of the Proposed Development.