

Community Council Briefing: Cromarty Green Hydrogen Facility: FAQ & Shared Commitments

As the new owner-operator of the proposed green hydrogen facility, we recognise and value the vital role the Community Council plays in representing local interests. We are committed to building a relationship rooted in transparency, open communication, and shared economic and environmental goals.

This FAQ document has been prepared specifically to address your initial questions and provide clear information regarding the project's safety standards, environmental footprint, local benefits, and delivery timelines. Our goal is to ensure you feel fully informed and supported as we work together to bring clean green energy investment to the region.

1. Site Selection & Rationale

Q: Why was the Beinn Tharsuinn (Cromarty) site chosen for this facility, how many other locations were considered, and how do the costs compare?

A: The Beinn Tharsuinn site was not chosen in isolation. Prior to Protium's ownership of the facility, a rigorous feasibility study evaluated approximately 10 different locations, including several brownfield (previously developed) sites.

The initial screening evaluated these sites based on five key criteria:

- **Proximity & Logistics:** Closeness to hydrogen users engaged at the time, and the ease of supplying them via road and pipeline.
- **Resources & Securitisation:** Immediate availability, capacity, and ease of securing land, power, and water.
- **Future Expansion:** Long-term availability of land and resources to allow for subsequent growth.

Ultimately, the Beinn Tharsuinn site was selected as the optimal location due to three critical operational advantages:

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1. Wind Curtailment: It allows the project to capture and utilise clean, renewable energy that would otherwise be wasted ("curtailed") when the local grid is oversupplied.

2. Grid Connection: Its direct proximity to existing high-capacity electrical infrastructure (Beinn Tharsuinn Wind Farm) ensures the electrolyzers can be powered efficiently.

3. Operational Efficiency: It provides the most effective balance between a reliable renewable power supply and the logistics of delivering hydrogen to local industrial customers, including regional distilleries and other local sectors. Regarding financial comparisons: A detailed cost assessment was not part of the initial 10-site screening process. Because site selection was heavily driven by these vital technical and logistical requirements, the majority of the detailed cost assessment took place after the Beinn Tharsuinn location was selected.

2. Traffic, Infrastructure & Road Safety

Q: How will the facility manage community concerns regarding traffic, road conditions, winter hazards, and safety on the B9176 (Struie Road)?

A: We recognise that the B9176 is a vital but challenging route for the local community. We take concerns regarding cumulative traffic, road wear, and winter safety very seriously. Our specific responses and commitments to managing these impacts include:

- **Vehicle Movements and Cumulative Impact:** We acknowledge the existing pressure on the B9176 from forestry, wind turbine, and fish lorry traffic. Our current transport statement explicitly accounts for a peak estimate of 102 two-way movements (51 total). This total includes staff light goods vehicles (LGVs) and driver cars, with specifically 24 two-way tube trailer movements (hydrogen transport) factored into the daily operational flow.
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- **Driver Behaviour and Accountability:** To prevent unsafe overtaking and ensure professional driving standards, all project-associated vehicles will be clearly branded and fitted with GPS tracking systems. If residents observe poor driving or safety issues, they can report them directly to us. We will use the tracking data to immediately investigate and take accountability.
- **Road Conditions and Structural Integrity:** As part of our wider planning commitments, comprehensive structural and traffic assessments are being utilised to ensure transport does not compromise vulnerable sections of the road or older bridges.

To provide further assurance to the community, Protium is actively preparing the following targeted documentation which we hope to have available soon:

- **Winter Resilience Plan:** A formal transport plan detailing alternative logistics, safety protocols, and operational adjustments for when the B9176 is frozen, impassable, or closed due to severe winter weather.
 - **Hydrogen Transport Safety Briefing:** A comprehensive guide detailing the structural integrity of our hydrogen transport containers, crash-impact protocols, and emergency response procedures in the event of a collision.
 - **Community Benefits:** We included local road infrastructure enhancement and transport concerns as a dedicated agenda topic during our Community Benefits Workshops. This allowed community council representatives and the Protium team to directly collaborate on practical solutions, exploring how the project can actively support regional road safety initiatives and assist with winter resilience measures, such as localised hydrogen powered snow-ploughing and gritting support.
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3. Water Resources & Environmental Impact

Q: How will the facility impact the local water table, and how will wastewater from the site be treated and discharged?

A: We understand that water scarcity and borehole safety are critical concerns for the local community, especially during the dry summer months. Our approach to water usage and environmental protection is rooted in rigorous regulatory compliance and scientific assessment. We are committed to ensuring that any water extraction does not negatively impact existing domestic boreholes or agricultural water supplies. Domestic water supply will be put above production needs.

- **Wastewater and Pollution:** The process of green hydrogen production does not create chemical or fossil-fuel-related pollutants. The "wastewater" generated by the facility is simply a more concentrated form of the water extracted, produced by purifying the raw borehole water.

Envireau Water did a review of all the work and data to date and below is a summary of their results:

- **Water Table Impact and Scarcity:** Water abstraction during the operational phase is unlikely to impact the supply at Aultnamain as the boreholes for abstraction are located more than 2 km west of the Private Water Supply.
- **Water Monitoring and Regulatory Compliance:** Monitoring in relation to abstraction from boreholes would be undertaken in accordance with the CAR License. To ensure there are no impacts to water quality or quantity during operation of the Proposed Development, the following monitoring would apply. If permitted by the property owner, water level and water chemistry monitoring would be carried out for up to one year prior to commencement of water abstractions from boreholes BH1, BH2, BH3 and BH6 to establish a baseline. Monitoring would continue monthly throughout the operational stage of the Proposed Development.

- **Response Actions for Borehole Water Supply Concerns:** Should any concerns relating to water quality or quantity be raised by site staff or occupants at Aultnamain, pumping from the boreholes would be stopped immediately until an alternative supply is provided, such as a water bowser. Investigations into the source of the incident would be undertaken to identify and resolve the issue. Reconnection of the water supply would only be undertaken once water quality testing demonstrated that the supply was suitable for drinking.

Protium has committed to a number of actions as part of the planning application, planning application reference: 23/05242/FUL. To provide full transparency regarding local water resources, Protium has also committed to the below:

- **Data Sharing:** Release the full hydrological surveys and borehole impact assessments directly to the Community Council for public review.
- **Feasibility Study:** Formally investigate the technical feasibility of re-injecting the treated water, back into boreholes rather than discharging it into watercourses, and consult with the Scottish Environment Protection Agency (SEPA) regarding its permissibility.

4. Operational Impact: Noise, Odour & Light

Q: Will the facility cause industrial noise, unpleasant odours, or light pollution in our rural area?

A: We understand that preserving the quiet, dark-sky character of our rural environment is a priority for local residents. The green hydrogen production process is inherently clean, low-impact, and designed to minimise sensory disruption:

- **Odour:** The facility will be completely odourless. Because green hydrogen is produced by splitting water using electricity, there is no combustion involved, nor do we add chemical odorants like mercaptan (the distinct "gas smell" associated with commercial natural gas).
- **Noise:** The hydrogen production process is low noise. Sounds generated by support infrastructure—such as compressors or cooling units—will be mitigated through acoustic engineering and strategic site design to ensure it meets strict local planning guidelines.
- **Light Pollution:** We are fully committed to protecting the local dark-sky environment. The site will utilise sensitive, low-level, and downward-directional lighting rather than high-intensity floodlights to prevent any unwanted night-time "glow" or light spill into the surrounding area.

5. Local Economy, Housing & Education

Q: How will the project impact local house prices, and what concrete plans are in place to provide local employment, training, and apprenticeships for young people?

A: We are fully committed to ensuring that this facility acts as a catalyst for long-term economic growth, direct local employment, and community investment:

- **Property Values:** Market evidence and independent studies on green energy hubs (such as research from the London School of Economics) suggest that green technology developments do not negatively impact property values. Instead, they often bring economic stability to rural areas. By introducing high-skill, long-term employment hubs, these projects frequently support local housing demand and strengthen the regional economy.
- **Local Employment and Youth Opportunities:** We hear the community's demand for tangible, localised economic benefits. We are developing a comprehensive employment and upskilling strategy designed to keep young people and skilled workers in the region. This includes structured apprenticeship pathways specifically tailored for

16-year-olds to provide them with a direct entry point into the green energy sector.

- **Partnerships:** To deliver on our training promises, we will look to partner with public organisations and academic institutions including the Social Value Charter and the University of the Highlands and Islands (UHI). These collaborations will focus on targeted upskilling programs, specialised technical training, and creating academic-to-industry pipelines that benefit local students and workers.

Community Benefits Scheme

To ensure the local area directly shapes the advantages of this project, we will be establishing a dedicated Community Benefits Scheme.

We have invited representatives from the local community to collaborate directly with us to design a benefits package that truly works for socio-economic and environmental needs of the local Highland area.

Our existing community benefits scheme in Wales stands as an excellent example of this collaborative model in action, demonstrating how local input successfully drives regional investment and skills development. As a core part of this initiative, we will co-develop and publish a detailed, transparent approach to our apprenticeships, jobs plan, and regional upskilling strategy. Additionally, we will formally engage with The Highland Council's (THC) Community Wealth Building team to ensure our initiatives align perfectly with regional economic goals and support wealth retention within the local community.



6. Communications Strategy & Next Steps

Q: What are the next steps for the project's communication strategy, and how can the local community stay informed and help shape the project's benefits?

A: We are committed to an open, transparent, and continuous dialogue as the project advances. Our upcoming communications and engagement strategy focuses on collaborative planning, digital updates, and consultation phases:

- **Community Benefits Workshop:** To ensure the project delivers meaningful socio-economic and environmental value, we held a dedicated Community Benefits Workshop on the 22nd June, inviting local representatives from each Community Council (Ardross CC, Edderton CC and Kilmuir & Logie Easter CC) to collaborate directly with us. The goal of this workshop is to co-design a tailored delivery plan that directly addresses the specific needs, priorities, and long-term aspirations of the local area. We commit to continue engaging with the community councils to ensure the benefits remain relevant.

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