PE2159/C: Halt the production of hydrogen from freshwater

Petitioner written submission, 3 September 2025

Innes Community Council (ICC) has considered the submission by the Government regarding our Petition. The response is the mandatory quote describing procedures and legislation for all developments. It demonstrates a lack of understanding/knowledge of the production requirements of that industry and the adverse impact it will have on any area/community. Communities in the ICC area express concerns about current procedures which do not reflect the impact that this industry will have on any community. Hydrogen production requires an extremely large volume of freshwater at the core of its function.

ICC does not believe that research has been commissioned by any Government Department/agency into the availability of freshwater nationally and its replenishment. Groundwater is replenished by rainfall and snowmelt. SEPA state that we are entering a period of long dry spells with less snowfall than historically, and the Meteorological Office confirms 2025 was one of the longest dry spells on record, evidenced by drought warnings across large areas of Scotland.

Large-scale Hydrogen production is a new industry using a natural resource, i.e., freshwater. Neither the Government nor the hydrogen industry has calculated the total volume of water required to produce the hydrogen required for domestic and export markets, nor how groundwater will be replenished. Freshwater comes from groundwater reserves. Groundwater is replenished by rain. There is no other source to replenish groundwater. Freshwater for hydrogen production is an additional demand. That has not been factored into Government policies and the industry's push to market. There has been a complete lack of understanding within the Government and its departments as to why hydrogen production from freshwater is totally unsustainable. It will have a massive and adverse impact on the ecology, the economy and the environment of Scotland. Ideology has overtaken research, reality, and public consultation, E.g., a scientific study of the Spey shows over 55% of the water from the catchment area, thus the river, is removed by abstraction, causing problems now and before extraction for hydrogen production is approved. Most Scottish rivers suffer this problem.

FOIs reveal SEPA, Marine Scotland Freshwater Division, Scottish Water, NatureScot and other agencies have done no research into groundwater levels and replenishment. International peer-reviewed/published papers explain the adverse impact of water abstraction through boreholes. SEPA does not believe water abstraction by borehole impacts river levels. No studies/research have been about the geological structures of Scotland, the ability of land to retain water, the mechanism of groundwater movements and replenishment. That should be part of every planning application.

The current consultation process was written before freshwater hydrogen production was considered. The current planning process ignores the environmental/ecological

problems hydrogen production from freshwater causes. Public consultation is poor. Developers advertise plans to develop a plant. Prior consultation is short on detail. Current study requirements are for traditional construction projects, not projects that will have long-lasting and serious impacts on communities and the landscape of Scotland.

The current system of Planning Applications is rushed, allowing little time for public concerns and observations to be explored. SEPA is only involved initially with potential flooding. The EIA, the impact of water abstraction and other matters are done by desktop studies and speculation. Many are out of date. They fail to give proper environmental information because research has never been done. The public is not given technical information until after the application has been lodged. Applications are regularly submitted immediately before or during holiday periods, when they are less likely to be noted. Current planning applications are submitted before an application to SEPA for water abstraction licensing. SEPA gives a view on flood risk, not on the impact of water abstraction. SEPA permits the water abstraction after the planning application has been approved. There is no public consultation on water abstraction. The SEPA abstraction application should be processed before a planning application is submitted. That would save manhours and money should the abstraction is refused.

The public gets four weeks from the date of the lodging of an application to read, digest, and submit a comment. The public does not have access to the plans until the day after they have been lodged. Applications contain over 200 long technical documents (many desktop studies) that require close scrutiny and research. The public do it in their own time. It can take more than four weeks to receive, digest, research, and comment on these applications. As a result, a very high number do not respond. With no response from the public, it is assumed that there are no objections.

ICC is of the opinion that this subject is of such importance to the national economy, environment, ecology and communities that further discussion should be held in face-to-face meetings with the Committee and Government planning advisors and policymakers rather than more paper processing. We would be willing to take part in those discussions.