

Draft Hydrogen Action Plan

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To what extent do you agree with the roles that hydrogen may play in our future energy mix and the pace of hydrogen uptake as set out in the Hydrogen Economy: route map to 2030 and 2045?

Scottish Water recognises the key role that hydrogen will have in transforming greenhouse gas emissions by assisting the decarbonisation of industrial heat, transport and domestic heating and that the steps set out in the route map cover the activities needed to deliver the planned transition.

As water is a vital resource to produce hydrogen, Scottish Water is keen to understand the water resource impacts of producing hydrogen and to balance hydrogen demand with the need to maintain water resource for potable and other users in a climate change future. Through shared dialogue Scottish Water is confident that demands for water resource can be met from a range of sources.

What are your views on the actions themes and key actions identified to support the development of the hydrogen economy over the next 5 years?

Scottish Water is supportive of the development of the renewable hydrogen development fund as this will support the early projects and infrastructure needed to manage the transition to hydrogen. (Action 1)

Scottish Water is supportive of ensuring the regulatory, planning and consenting framework supports the development of the hydrogen economy and that this should be built into NPF4. (Action 2, 5)

Scottish Water is already engaged with the ACORN project on the provision of water supply for the Scottish Cluster (Action 6)

Scottish Water supports Action 9 which will ensure that hydrogen development in Scotland is planned where it can be best supported by available water resources. The availability of water resource is very location specific and Scottish Water will make information available as to water resource availability from its assets. Scottish Water would also suggest the involvement of SEPA in this activity as there are many water resources that are not in Scottish Water's control. Scottish Water is keen that all possible water resource options are reviewed when developing hydrogen production facilities – potable water, raw water, recovered treated wastewater effluent and sea water. This will ensure that resource is protected for potable and other users whilst not impacting hydrogen development.

An important facet to be explored is the impact that climate change will have on water resource availability in Scotland.

Scottish Water Horizons is already working with developers on investigating provision of water supplies from a range of sources for hydrogen production.

For Action 9, Scottish Water will work with the sector on supporting the development of GIS information, working within Scottish Government guidelines on information security.

On Action 14, development of infrastructure, Scottish Water envisages its heavy transport fleet- approx. 800 vehicles will transition to hydrogen fuel and would like to be engaged in the development of refuelling infrastructure in Scotland and to be an early adopter of hydrogen vehicles as they become available. There are potential efficiency savings from large fleet users coming together to develop the national refuelling infrastructure.



On Action 18, the decarbonisation of the SGN transmission system. Scottish Water is already engaged with SGN on this topic, specifically to understand the impacts on water resource.



Scottish Water would support that some of the renewable hydrogen development funds are allocated to organisations seeking to be early adopters of hydrogen technology. This will support early steps in decarbonisation.

Scottish Water also wants to ensure that water resource impacts from hydrogen production at a location are understood to ensure no long-term negative impact on water resource for other users.



Are there further actions that could be taken by government or industry that you think would drive a reduction in the cost of hydrogen? Please provide evidence to support any suggestions.

Scottish Water would support the exploration of alternative water resources to produce hydrogen. This should include understanding the full cost to the developer and Scottish Water of water supply and treatment to ensure the lowest cost overall to the Scottish economy.



What are your views on the funding principles and scope of the Emerging Energy Technologies Fund? In your view, are there any eligibility and project assessment criteria we should consider as part of the Emerging Energy Technologies Fund?

Scottish Water supports the establishment of the Emerging Energy Technologies Fund and that the scope of the fund spans the process from hydrogen production to point of use.

In your view, what should be the priority areas of focus for the 6 Hydrogen Innovation Fund over the next 5 years?

Scottish Water would suggest that support for projects that will enable early adoption of hydrogen as an alternative fuel should be prioritised - this covers hydrogen production, storage and infrastructure as needed.

What are your views on how we can use Scottish Government funding to leverage and encourage private sector and other forms of investment?

No comment

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