

From: [redacted]
SG Germany Hub, Berlin

[redacted]
Hydrogen Policy

1 June 2022

Cabinet Secretary for Net Zero, Energy and Transport
Cabinet Secretary for the Constitution, External Affairs & Culture
Minister for Business, Trade, Tourism and Enterprise

PROPOSAL TO SIGN A HYDROGEN LETTER OF INTENT WITH BAVARIA

Purpose

1. To ask Ministers to approve the proposal to sign a Letter of Intent (LoI) on hydrogen technologies with the German state of Bavaria when Economy Minister Aiwanger visits Scotland on 15 June 2022.

Priority

2. Routine.

Background

3. Hubert Aiwanger, Deputy Minister-President of Bavaria, will be leading a Bavarian delegation on a visit to Scotland between 14-16 June 2022. The delegation will begin their visit in Glasgow, where Minister Aiwanger will meet with Mr McKee and hopes to hold a signing ceremony both for this LoI between Scotland and Bavaria and the LoI between the Scottish Hydrogen and Fuel Cell Association (SHFCA) and H2 Bayern which would sit under it. Minister Aiwanger and the delegation will then visit the Scottish Enterprise Technology Park in East Kilbride before departing for Aberdeen to visit the new hydrogen refuelling station and the TECA energy centre.

4. Scotland has a Joint Declaration and Statement of Intent (JDol) with the Bavarian Ministry of Economic Affairs and Media, Energy and Technology, signed by the First Minister and Aiwanger's predecessor in March 2017. This covers business, enterprise, trade and investment, and innovation and research.

5. Activity under this JDol has included joint business delegations in both directions, and engagement on future mobility, entrepreneurship, space and biodiversity. The SG Germany Hub held its last Burns supper before COVID in Munich, and has engaged extensively with the Bavarian hydrogen cluster organisation, H2 Bavaria, over the past two years, including speaking at both of its annual conferences to date. The First Minister had a call with the CEO of Siemens earlier this year, and the Fraunhofer research institute, based at the University of Strathclyde and part-funded by the SG and SE, is headquartered in Munich. Around 85% of Scottish twinning arrangements are with Bavarian towns and cities. In 2021, the Bavarian parliament passed a motion calling for narrower cooperation with Scotland.

6. Hydrogen is our most substantial area of engagement with Bavaria and is likely to remain a key focus. Minister Aiwanger previously visited Scotland in March 2019 and met with Ms Hyslop, before visiting Logan Energy and the Levenmouth hydrogen facility in Fife. H2Bavaria has been very proactive, involving us in its annual conference, engaging in online conferences, and partnering with SHFCA for an online event during COP26. GlobalScot David Scrimgeour is based in Munich and has been engaged with SHFCA and the Scot2Ger project in particular. H2 Bavaria representatives joined a Nuremberg visit to their twin city of Glasgow and attended All Energy in early May. Professor Veronika Grimm, Chair of H2 Bavaria and energy adviser to the German federal government, will accompany Minister Aiwanger to Scotland.

Proposal

7. Against this background, Minister Aiwanger is very keen to sign a further declaration of Intent with Scotland on hydrogen in particular. This would provide scope for more specific collaboration in the field of hydrogen that could add value to both Scotland and Bavaria. This could include engagement on policy (for example, just transition, environment, sustainable investment), by industry (e.g. technology development or the transfer of oil/gas expertise into hydrogen), and across academia (one of the projects funded by the Scotland-Germany Hydrogen Research scheme is between the University of St Andrews and the Technical University of Munich).

8. The hydrogen-specific agreement would fall within the framework of the existing economic agreement, and in turn provide a framework for a Letter of Intent to be signed by our respective cluster organisations, i.e. SHFCA and H2 Bavaria. A draft text is attached at Annex A.

9. We consider that we can engage on hydrogen within the remit of the existing agreement with Bavaria and will seek to ensure that any new agreement is taken forward within that framework. Colleagues from SDI Germany are keen to pursue this hydrogen-specific agreement and propose to use it as a focus for follow-up events and to encourage supply chain companies who could export to Bavaria. We are already engaged with the likes of Siemens Energy and BayWa.Re who are involved in ScotWind, and we would seek to use the agreement to involve Bavaria as an offtaker in the Scot2Ger project as it develops further. We are also in the process of exploring further links.

10. In addition, SHFCA is keen for us to expand the scope of the existing JDoI in order to provide a policy framework for the cluster-to-cluster agreement that they plan to sign whilst Minister Aiwanger is in Scotland with Professor Grimm. At present, about a dozen SHFCA members are actively engaged with Scotland-Bavaria hydrogen activities. The SHFCA agreement will focus on: promoting cooperation between members to promote joint projects for the production, storage, transportation and usage of hydrogen; exchanging relevant information and experience in order to promote skills development; exchanging relevant information and experience regarding the planning and implementation of national and regional hydrogen strategies and policies; sharing experience on accelerating the ramp-up of the hydrogen economy; and organising joint events to facilitate implementation and to promote public outreach.

Further engagement

11. We will draw up a shared plan of hydrogen activity with Bavaria which will include engagement by both ourselves and our enterprise agency partners, as well as industry and academia. At a government level, this may include Scotland being partner country at the annual Bavarian Hydrogen Dialogue in September this year, though we will need to be mindful of resource constraints given parallel engagement at federal level and with Hamburg and Lower Saxony.

Other Hydrogen MOUs with Germany

12. The Scottish Government already has general economic and hydrogen-specific agreements with three of Germany's 16 federal states: the Joint Declaration and Statement of Intent with Bavaria, signed by the First Minister in 2017; an economic agreement with North Rhine Westfalia that includes a particular hydrogen focus, from May 2022; and a hydrogen-specific agreement with Hamburg from November 2021. The latter was followed by an agreement between SHFCA and the Hamburg Renewable Energy Cluster, EEHH, in April this year. An agreement focussed on climate, green energy and innovation, including green hydrogen, is ready to be signed by the First Minister with Baden-Württemberg, and we are looking to organise a joint conference with Lower Saxony in the late summer / early autumn, following their visit to Scotland in March this year. We further have an agreement with Rhineland Palatinate across Education, Culture, Higher Education and Research, signed in March 2021.

Conclusion and recommendation

13. The Scottish Government's Hydrogen Action Plan signals the importance, over the next 5 years, of building international trade relationships and driving international collaboration on research and innovation. This further agreement with Bavaria as a key future off-taker, following that with Hamburg and NRW, will send an important signal to the sector about Scotland's commitment to work in partnership to develop the sector, and our credibility as a partner in international hydrogen innovation, research, demonstration and the development of shared hydrogen economies.

14. The proposed Letter of Intent takes forward a number of our collective priorities, and both the Germany Hub and Hydrogen Policy team are keen to support it.

15. We recommend that you:

- i) **agree to sign a Declaration of Intent on hydrogen with Bavaria whilst Minister Aiwanger is in Scotland;** and
- ii) **agree that we work with Comms to consider the communications opportunities.**

[redacted]

DEXA: European Relations: Scotland Hub Germany

[redacted]

Copy List:	For Action	For Comments	For Information		
			Portfolio Interest	Constit Interest	General Awareness
First Minister					X
Cabinet Secretary for Finance and Economy					X
Minister for Business, Trade, Tourism and Enterprise					X
Minister for Just transition, Employment and Fair Work					X
Minister for Transport					
Minister for Culture, Europe and International Development					X
					X

Scott Wightman Kersti Berge Martin Johnson Andy Hogg Frank Strang [rest of names redacted] Comms Econ Comms Net Zero & Rural Affairs

Annex A – Draft text of Letter of Intent – to be finalised

Joint Letter of Intent
between
the Scottish Government
and
the Bavarian State Ministry of Economic Affairs, Regional Development and Energy

Under the umbrella of the Joint declaration of Intent signed on 24 March 2017 between the Scottish Government and the Bavarian State Ministry of Economic Affairs and Media, Energy and Technology, the Cabinet Secretary for Net Zero, Energy and Transport of the Scottish Government and the State Ministry of Economic Affairs, Regional Development and Energy of the Free State of Bavaria (hereinafter referred to as the Parties) are committed to extending further their cooperation across business, enterprise, trade and innovation and research in the field of green hydrogen in particular. Accordingly, they have come to the following understanding:

1. Specific areas of cooperation may include among others:

- Green hydrogen trade, with Scotland as a green energy export market and Bavaria as a green energy import market (exploration of export and import potential and suitable hydrogen logistics routes including the associated infrastructure, certification, identification and support of joint B2B pilot and demonstration projects – this may include engagement with further German partners as appropriate);
- Green hydrogen technologies along the entire hydrogen value chain with reciprocal technology export markets (market development through scale-ups and corresponding economies of scale, identification and support of joint B2B pilot and demonstration projects on an industrial scale);
- Collaboration in Innovation, Research & Development (identifying research priorities in the fields of hydrogen production, storage, transport, conversion and use).

2. Cooperation under this Joint Letter of Intent shall take the following forms:

- Investigating opportunities to promote trade relations, including by means of industry missions and two-way investment opportunities.
- Exploring, supporting and promoting business-led relations and exchange opportunities, particularly to promote innovation and scale-up and to support the energy transition through utilisation of hydrogen technologies, including those facilitated by our respective chambers of commerce, industry associations and networking organisations (such as the Scottish Hydrogen and Fuel Association and the Hydrogen.Bavaria Center (H2.B));

- Supporting scientific collaboration between Scottish and Bavarian research institutions;
- Promoting and highlighting the importance of the energy transition, including the development of a green hydrogen economy through appropriate PR activities, conferences and other formats.

3. To coordinate and develop proposals for the implementation of this Joint Letter of Intent the Parties will establish a roadmap to identify joint priorities and to explore ways to realise the results of this Declaration of Intent.

4. Both Parties acknowledge that this Letter of Intent is not exclusive and does not create any rights and obligations that are binding under international law. Any disputes shall be settled by way of consultation.

5. Each Party shall bear its own costs incurred in the implementation of this Joint Declaration of Intent.

6. This Joint Letter of Intent may be amended or terminated by mutual agreement of the Parties in writing.

7. The Joint Letter of Intent shall enter into force on the date of its signing.

This Joint Letter of Intent is signed in two original copies in the English language, all copies being equivalent.

Signed on 13 June 2022 in Glasgow

For the Scottish Government

For the Bavarian State Ministry of
Economic Affairs, Regional Development
and Energy

Michael Matheson
Cabinet Secretary for Net Zero, Energy and
Transport

Hubert Aiwanger
Bavarian State Minister of Economic
Affairs, Regional Development and Energy
and Deputy Minister-President