ANNEX A

A small amount of information has been withheld under regulation 10(4)(e) (internal communications). This exception is subject to the 'public interest test'. Therefore, taking account of all the circumstances of this case, we have considered if the public interest in disclosing the information outweighs the public interest in applying the exception. We have found that, on balance, the public interest lies in favour of upholding the exception. We recognise that there is some public interest in releasing the information as part of an open, transparent and accountable government. However, there is a greater public interest in protecting the preparation process and provision of advice to Ministers in advance of engagements with third parties whilst also ensuring that the Scottish Government is able to conduct this aspect of its business effectively. In addition, disclosure of this information would also, or would be likely to potentially prejudice substantially the interests of said third parties who may share information with the Scottish Government in confidence in advance of engagements.

Additionally, a small amount of information has been redacted from the documents disclosed under Regulation 11 – Personal Data as it contains personal information and disclosing it would contravene the data protection principles in Article 5(1) of the General Data Protection Regulations (GDPR) and in Section 34(1) of the Data Protection Act 2018. This exception is not subject to the 'public interest test'.

ANNEX B

Note of meeting between SSE and Mr Matheson of 8 December 2022

From: Cabinet Secretary for Net Zero, Energy and Transport <CabSecNetZET@gov.scot>
Sent: Fri 16/12/2022 14:16
To: [REDACTED: REGULATION 11(2)] <[REDACTED: REGULATION 11(2)]@gov.scot>; Cabinet Secretary for Net Zero, Energy and Transport <CabSecNetZET@gov.scot>
Cc: [REDACTED: REGULATION 11(2)] <[REDACTED: REGULATION 11(2)]@gov.scot>
Subject: RE: meeting note for SSE meeting today - for clearance.

[REDACTED: REGULATION 11(2)],

Cab Sec has noted, grateful for the eRDM link for our records.

Thanks,
[REDACTED: REGULATION 11(2)]

[REDACTED: REGULATION 11(2)] I Assistant Private Secretary (Diary)
Private Office of Michael Matheson, Cabinet Secretary for Net Zero, Energy & Transport
2N.08 **I** St Andrew's House **I** Regent Road **I** Edinburgh **I** EH1 3DG **I**

From: [REDACTED: REGULATION 11(2)] <[REDACTED: REGULATION 11(2)]@gov.scot>
Sent: 08 December 2022 15:00
To: Cabinet Secretary for Net Zero, Energy and Transport <CabSecNetZET@gov.scot>
Cc: [REDACTED: REGULATION 11(2)] <[REDACTED: REGULATION 11(2)]@gov.scot>
Subject: meeting note for SSE meeting today - for clearance.

Hi [REDACTED: REGULATION 11(2)],

Please see below for a note of Mr Matheson's meeting with SSE today. Grateful if you could let me know if any amendments are needed and then I'll get this on eRDM and share a link with you,

Thanks

[REDACTED: REGULATION 11(2)]

Meeting with Alistair Phillip-Davies and co – SSE
8 December 2022
11:14-11:50 (on teams)
[REDACTED: REGULATION 10(4)(e)]

Attendees:

Cab Sec Matheson
SG Officials: [REDACTED: REGULATION 11(2)], [REDACTED: REGULATION 11(2)], [REDACTED: REGULATION 11(2)]
SSE: Alistair Phillip-Davies, Stephen Wheeler, Jamie Maxton.

Berwick Bank:

SSE advised Cab Sec that they are looking to submit the Berwick Bank planning application this week to Marine Scotland [REDACTED: REGULATION 10(4)(e)]

[REDACTED: REGULATION 10(4)(e)]. Cab Sec queried why this issue has DEFRA involvement given it is presumably for Marine Scotland

SSE advised that part of the area straddles the marine border and that there is a lack of clarity on the way ahead. While SSE has had good engagement from Marine Scotland it is concerned that the time line will slip on areas of DEFRA responsibility.

Officials informed Cab Sec that a note would shortly be submitted to him from Marine Scotland which would clarify the point in question.

[REDACTED: REGULATION 10(4)(e)]

[REDACTED: REGULATION 10(4)(e)]

SSE responded that it was very early days and that there is a lot to go through [REDACTED: REGULATION 10(4)(e)]

Corie Glas – *[REDACTED: REGULATION 10(4)(e)]*

[REDACTED: REGULATION 10(4)(e)]
[REDACTED: REGULATION 10(4)(e)]
[REDACTED: REGULATION 10(4)(e)]
[REDACTED: REGULATION 10(4)(e)]
[REDACTED: REGULATION 10(4)(e)]

UK Government Levy – **[REDACTED: REGULATION 11(2)]**

[REDACTED: REGULATION 10(4)(e)]
[REDACTED: REGULATION 10(4)(e)]

NPF4

SSE raised a point in relation to ancient woodland wording in the NPF4 arguing that sometimes the only place transmission infrastructure can be placed is across ancient woodland. Given the level of investment required in the networks this was a concern.

Mr Matheson responded that there was a significant amount of engagement to ensure NPF4 met our objectives. He advised SSE that in relation to peatland there was a plan to create an expert group for onshore wind to ensure that a good path is found.

[REDACTED: REGULATION 10(4)(e)]

[REDACTED: REGULATION 10(4)(e)]
[REDACTED: REGULATION 10(4)(e)]

Meeting ended with thanks.

[REDACTED: REGULATION 11(2)] | Head of Onshore Electricity Policy
Directorate of Energy and Climate Change | Scottish Government

Victoria Quay, Edinburgh, EH6 6QQ | [REDACTED: REGULATION 11(2)]@gov.scot| [REDACTED: REGULATION 11(2)]

Briefing – Cabinet Secretary Michael Matheson – Keynote Address at DeCarbScotland 2023 – 2 February 2023

What	Keynote Address – DeCarbScotland 2023
Where / When	2 February 2023, 10:15-10:30 **BT Murrayfield Stadium**, Roseburn Street, Edinburgh EH12 5PJ You will arrive at the conference between 09:45 and 10:00. • The conference is taking place in the President's Suite of Murrayfield. • The security team at the gatehouse will be expecting your car and they will give guidance on where to drive and park. • There is then signage to show the way into the President's Suite but if there are any problems whatsoever, the event team can be contacted by telephone (details below). • You will be met at registration by Ronnie Quinn, CEO of NECCUS. The conference will formally start at 10:00 and your speaking slot is from 10:15 to 10:30. • You will be introduced by James Alexander, Conference Chair & CEO of UK Sustainable Investment and Finance Association. • The audience is expected to comprise of around 100 delegates from the industry, government, academia and media sectors, representing areas including Energy, CCUS and hydrogen. • There is no Q&A planned afterwards. **Main event contact:** Ronnie Quinn, CEO of NECCUS - [REDACTED: REGULATION 11(2)] **Alternative event contact:** [REDACTED: REGULATION 11(2)], Event Director – [REDACTED: REGULATION 11(2)]
Why	You are delivering the keynote address at DeCarbScotland 2023, the inaugural in-person conference hosted by CCUS industry group NECCUS. The conference programme covers topics including: supply chain capability, the Scottish Cluster, carbon capture and hydrogen business models, Scotland's Net Zero Roadmap (SNZR) and research to accelerate industrial decarbonisation. The full programme is available in annex A. The conference is an important opportunity to: • reaffirm Scotland's commitment to CCUS and the Scottish Cluster and support for industrial decarbonisation • share information about recent policy developments and key publications (e.g. ESJTP, HAP)

	• highlight the importance of collective working for the national endeavour of net zero
Supporting officials	**[REDACTED: REGULATION 11(2)]**, Head of Carbon Capture, Utilisation and Storage and Industrial Decarbonisation – [REDACTED: REGULATION 11(2)] **[REDACTED: REGULATION 11(2)]**, CCUS Team Leader – [REDACTED: REGULATION 11(2)]
Sensitivities	Note that David Duguid, MP for Banff and Buchan will also be speaking at the conference, later in the morning.
Comms handling	Members of national and trade press will be present at the conference. They will be wearing delegate badges marked "PRESS". It should be expected that remarks made at the conference could appear in the media. Comms will provide a note of final confirmed media attendance and handling closer to the event.
Briefing contents	**Annex A:** Background to DeCarbScotland 2023, conference programme and speaker biographies - **p2** **Annex B**: Keynote Speech – **p7 (attached separately)** **Annex C:** Policy background and top lines – **p8**

ANNEX A

BACKGROUND – DeCarbScotland 2023

NECCUS

- Launched in November 2019, North East CCUS (NECCUS) is an industry-led alliance drawn from industry, academia, membership organisations and private sector bodies to promote CCUS in Scotland.
- The group has emerged out of a need to create a formal entity to coordinate and promote CCUS in Scotland at a Scottish, UK and European level. Other CCUS projects in the UK already benefit from similar entities.
- The objective of NECCUS is to articulate and promote the CCUS offering provided in Scotland; to attract funding for CCUS in Scotland; and to secure the first CCUS project in the UK to be in Scotland.
- The Scottish Government has provided £330,000 of start-up funding to NECCUS over the financial year 2019/20 and 2020/21. [REDACTED: REGULATION 10(4)(e)]
- NECCUS leads work on Scotland's Net Zero Roadmap (SNZR) and supports on Scotland's Net Zero Infrastructure (SNZI) Project.

DecarbScotland 2023

- DeCarbScotland 2023 is the inaugural in-person conference hosted by CCUS industry group NECCUS and is billed as "Scotland's decarbonisation event of the year".
- The conference is an important opportunity to:
    - reaffirm Scotland's commitment to CCUS and the Scottish Cluster and support for industrial decarbonisation
    - share information about recent policy developments and key publications (e.g. ESJTP, HAP)
    - highlight the importance of collective working for the national endeavour of net zero

- The conference programme covers topics including: supply chain capability, the Scottish Cluster, carbon capture and hydrogen business models, Scotland's Net Zero Roadmap (SNZR) and research to accelerate industrial decarbonisation.
- There are expected to be around 100 delegates from the industry, government, academia and media sectors, representing areas including Energy, CCUS and hydrogen.

Conference programme:

09:00-10:00	Registration, Exhibition & Refreshments
10:00-10:10	Welcome – James Alexander, Conference Chair & CEO of UK Sustainable Investment and Finance Association
10:10-10:15	Remarks – Ronnie Quinn, Chief Executive, NECCUS
10:15 - 10:30	**Keynote Address – Michael Matheson MSP, Cabinet Secretary for Net Zero, Energy & Transport, Scottish Government**
10:30 - 10:45	Headline Sponsor Address – Mark Wild, CEO of SGN
10:45 - 11:00	Remarks – David Duguid MP, Member for Banff and Buchan
11:00 - 11:45	Roundtable 1 – Supply Chain Capability and Gaps
11:45 - 12:00	Networking, Exhibition & Refreshments
12:00 - 13:00	SESSIONS – Business Introductions and Speed Networking
13:00 - 13:30	Research to Accelerate Industrial Decarbonisation – Prof Mercedes Maroto-Valer, Champion and Director, IDRIC
13:30 - 14:30	Networking, Exhibition & Lunch
14:30 - 15:00	Update from The Scottish Cluster – [REDACTED: REGULATION 11(2)], Senior Commercial Advisor, Storegga
15:00 - 15:45	Carbon Capture & Hydrogen Business Models
15:45 - 16:00	Networking, Exhibition & Refreshments
16:00 - 17:00	Roundtable 2 – Scotland's Net Zero Roadmap Findings
17:15 - 18:15	Drinks Reception
18:30 - 21:15	Dinner and Speeches
21:15 - 22:00	Networking

Speaker biographies:

James Alexander, Conference Chair & CEO of UK Sustainable Investment and Finance Association

James has a background in international climate finance and infrastructure finance as well as many years' experience in leadership roles in membership organisations. Most recently, James supported global megacities to overcome the substantial barriers to financing climate action as Director of the City Finance Programme at the C40 Cities Climate Leadership Group and Head of the C40 Cities Finance Facility – a project preparation facility he developed, now supporting cities across the world to structure nearly a billion dollars of sustainable infrastructure transactions. James has worked on international climate finance issues at the UN level and supported cities across the world to invest their pensions and reserves more sustainably. James is Treasurer of Eurosif, the European Sustainable Investment Forum, a member of the Green Technical Advisory Group (GTAG) providing advice to the UK Government on implementing a UK green taxonomy and a member of the Disclosures and Labels Advisory Group (DLAG) providing advice to the FCA on the UK's SDR and fund labelling regime. James Alexander joined UKSIF as Chief Executive in October 2020, with a strong vision and mandate to further enhance the organisation's key role in promoting and expanding sustainable investment and finance in the UK.

Ronnie Quinn, CEO of NECCUS

Ronnie is Chief Executive of NECCUS, the membership organisation supporting and representing members through the challenge and opportunity of industrial decarbonisation primarily through Carbon Capture and Hydrogen. He has over 30 years' experience in general management, with specific experience in the renewables and electricity industries. Ronnie's professional career

began as a solicitor where he worked both in private practice and in local government. He then moved into the electricity markets' sector where he was Managing Director of the company administering the market in Scotland. Ronnie has worked for The Crown Estate where he led the transfer of its functions in Scotland to Scottish Ministers, being Crown Estate Scotland's first Chief Executive. Ronnie also sits on the Board of Management of City of Glasgow College and is a Commissioner on Scotland's Just Transition Commission.

Mark Wild, CEO of SGN

Mark Wild has more than 30 years of experience leading complex and critical infrastructure. He's an engineer with Hons Bachelor's Degree in Electrical and Electronic Engineering and a Masters in Business Administration. Mark started his career in the electricity sector, but the majority of his experience has been in transportation. He has had a long career in operating and building major transportation infrastructure. Mark is the former Managing Director of Westinghouse Signals and was the CEO of Public Transport Victoria. Mark is the former Managing Director of London Underground and the former CEO of Crossrail, Europe's largest infrastructure programme. He took up the role of CEO for SGN, one of the UK's largest gas distribution networks, in August last year.

David Duguid, Member of UK Parliament, Banff and Buchan

David Duguid, 49, lives in Turriff with his wife, Rose and their two young children. David attended school in Macduff and Banff before going to university in Aberdeen. As well as 25 years experience in the oil and gas business, David brings a passion for the development of traditional industries in Banff and Buchan – particularly fishing and farming. Since being elected David has become involved in various local issues such as 22q11.2 Deletion Syndrome, Gardenstown landslip, Sandend windfarm development, rural broadband and town regeneration, the campaign to keep MIUs open, and the rebuilding of the King Edward bridges destroyed by storms in late 2019. David and his team have been helping constituents during the coronavirus pandemic to find the support they need or with physical assistance such as prescriptions and grocery shopping drop offs. in June 2020, David was appointed as Parliamentary Under-Secretary of State at the Scotland office and a Government whip.

Prof Mercedes Maroto-Valer, Champion and Director at IDRIC (the Industrial Decarbonisation Research and Innovation Centre)

As well as Champion and Director of IDRIC, Professor Mercedes Maroto-Valer (FRSE, FIChemE, FRSC, FRSA, FEI) is Deputy Principal (Global Sustainability) and Director of the Research Centre for Carbon Solutions (RCCS) at Heriot-Watt University. RCCS is a world leading multidisciplinary centre delivering innovation for the wider deployment of low-carbon energy systems required for meeting net zero targets.

ANNEX B

KEYNOTE SPEECH

ATTACHED SEPARATELY

ANNEX C

POLICY BACKGROUND AND TOP LINES

CCUS

- Scotland remains among the best placed nations in Europe to deploy CCUS due to our unrivalled access to vast CO2 storage potential in the North Sea and opportunities to repurpose existing oil and gas infrastructure for CO2 transport and storage.
- The Scottish Government supports the development of Carbon Capture Utilisation Storage (CCUS) as a common whole-system decarbonisation infrastructure with the flexibility to adapt over time to play a central role across the decarbonisation strategies of key sectors such as heat, industry and power.
- CCUS is vital for a just transition to net zero. Advice from the Climate Change Committee describes CCUS as a "necessity, not an option" to achieve net-zero emissions.
- The development of strategically located CCUS infrastructure in Scotland's industrial clusters in Grangemouth and the North East could protect and ensure the just transition for important domestic industries into a low-carbon future, protecting jobs and utilising existing skills.
- Scottish Government economic scenario analysis shows CCUS would have a positive impact on the Scottish economy. In 2045 Scottish GDP could be 1.3-2.3% (£3.8Bn-£6.7Bn) higher in scenarios with CCUS, than without.
- As set out in the Bute House Agreement, the Scottish Government agrees that any strategy for deployment of CCUS must enable decarbonisation at pace and cannot be used to justify unsustainable levels of fossil fuel extraction or impede Scotland's just transition to net zero.

Scottish Cluster

- The Scottish Cluster's Acorn project is estimated to unlock over 50% of the UK's total storage capacity.
- The Scottish Cluster is absolutely vital for a just transition to net zero - not just in Scotland, but across the UK.
- The UK Government's decision not to give the Scottish Cluster clear and definitive Track 1 status in its CCUS cluster sequencing process is illogical.
- We do not hold all the necessary legislative and regulatory levers needed to support the Scottish Cluster, as they are not devolved. UK Government support including access to BEIS business models is essential to providing the certainty and support required to accelerate the Scottish Cluster project.
- We are working constructively with the UK Government to ensure the Scottish Cluster has the certainty it needs to continue its development. To this end, we have continued to advocate for the cluster in our engagement, and have offered £80 million from our Emerging Energy Technologies Fund to accelerate its deployment. Due to delays with UK Government announcing the Scottish Cluster, we have re-profiled our offer of financial support into subsequent years.
- We have also continued to urge the UK Government to provide urgent clarity on the next stages of the cluster sequencing process. We note the UK Government's recently-announced intention to provide further details on Track 2 in Spring 2023. It is vitally important that this announcement sets out a clear and accelerated timeframe for Track 2, to give Scottish industry the certainty needed to progress CCUS deployment in Scotland, which is mission critical for our just transition to net zero.
- We remain committed to supporting the continued growth and development of the Scottish Cluster to ensure that Scotland reaches its net zero goals by 2045.

CCU and the CO2 Utilisation Challenge Fund

- Carbon Capture and Utilisation (CCU) refers to the opportunity to use captured CO2 as a feedstock for use in chemicals, fuels and materials production. CCU has the potential (depending on the specific application) to: create value in CO2, reduce emissions, play a role in sustainable manufacturing and the circular use of resources and develop new income streams for Scottish businesses.
- Our Programme for Government 2020/21 committed to consult stakeholders on the scope, operation and governance of a £5 million CO2 Utilisation Challenge Fund which will deliver

funding to projects from April 2022 for two years. This Fund launched in April 2022 and is currently open for expressions of interest.
    - The Fund aims to support the development and demonstration of technologies that can utilise carbon dioxide and transform into products that have market and commercial value.
    - We are working with Scottish Enterprise to administer this fund to boost early-stage work and explore technologies and innovations that can capture and create value in CO2, reduce emissions and develop new income streams for Scottish businesses in this emerging market.
    - Priming a utilisation market supports the acceleration of carbon capture in the industrial sector by supporting innovation and cost reduction as well as providing markets to sell into. The fund requires industry match funding which will leverage private investment into cost reduction.
    - We aim to fund projects that can demonstrate circular economy principles, innovation, economic impact, and also support our storage ambitions.

SNZR and SNZI

- In April 2020, UKRI announced funding for the first phases of the Deployment and Roadmap programme for decarbonisation strategies, run on behalf of the UK Government. The funded projects focus on helping the UK achieve net-zero emissions by 2050 as part of the Industrial Decarbonisation Challenge. Through this, UKG is committed to deploying technologies including CCUS and hydrogen in industrial clusters.
- A Scottish project has been successful in each competition:
    - Deployment – Scotland's Net Zero Infrastructure, led by Pale Blue Dot Energy.
    - Roadmaps – Scotland's Net Zero Roadmap, led by NECCUS.

Scottish Net Zero Roadmap (SNZR)

- The Scottish Net Zero Roadmap (SNZR) is one of six UK industrial cluster plans and is led by NECCUS. THE SNZR complements Scotland's Net Zero Infrastructure (SNZI) projects led by Pale Blue Dot Energy who are behind the Acorn project. The six cluster roadmaps are intended to aggregate to inform a UK wide Decarbonisation Plan that will help steer work across the UK.
- The Roadmap will build upon work by undertaken by research consortium SCCS and the University of Strathclyde's Centre for Energy Policy in identifying decarbonisation pathways that deliver economic prosperity, and apply them to a high-value industrial cluster. This will include the industrial decarbonisation of all large-scale emitters via CCUS and hydrogen in Scotland, including those in the Grangemouth industrial cluster, East Lothian's Tarmac, and emitters along the East Coast up to St Fergus.
- In January 2021, the UK Government confirmed that SNZR had been approved for £1.23m Phase 2 funding to look to develop pathways to net zero for 28 industrial sites along the East Coast of Scotland responsible for approx. 9.3 Mt/CO2 each year.
- SNZR is progressing across 11 work programs in three stages; (i) understanding the current status, (ii) modelling and (iii) identifying optimum pathways to net zero. As of August 2022, stages 1 and 2 are largely complete, but outcomes of modelling are yet to be shared with the Scottish Government.
- SNZR is scheduled to be completed in early 2023.

Scotland's Net Zero Infrastructure (SNZI) Project

- The SNZI project is led by Acorn CCS and Hydrogen developer Pale Blue Dot Energy and includes partnering organisations NECCUS, SSE, National Grid, Petrofac, LNG9 and the Centre for Energy Policy at the University of Strathclyde.
- On the 17 March 2021, the SNZI was awarded £31 million through the UK Government's Industrial Decarbonisation Challenge to support offshore and onshore engineering studies connecting industrial sites across East Scotland with access to carbon storage resources in the North Sea.

- The SNZI project will develop a major package of work designed to progress important national low carbon infrastructure that includes:
    - The detailed engineering required to move the Acorn CCS and Hydrogen projects to a final investment decision (FID).
    - Developing a new CCS-equipped power station at Peterhead which would become an early customer for the Acorn infrastructure .
    - An assessment of the potential to re-use onshore pipelines to transport CO2 from the central belt of Scotland to the Acorn Project.
    - An engineering design programme for a carbon capture project in Grangemouth
    - Development of a "fabrication yard ready" design of a new class of ship which can service the needs of coastal CO2 emitters around the UK for delivery at Peterhead port
- The project is being undertaken over two years. The SNZI will be crucial to enable the Acorn Project to be operational in the mid-2020s.

Industrial decarbonisation

Top lines

- Scottish industry has much to gain from being at the forefront of the transition to a low-carbon economy. Decarbonising our industrial sector in a just and fair way, that leaves no one behind, will help the sector grow and compete in the economy of the future.
- Energy-intensive industries (EII) face unique challenges to decarbonise their operations. In addition, the risk of carbon leakage may be particularly high for some sectors which are both emissions-intensive and trade-exposed.
- Many industrial decarbonisation policy levers lie with the UK Government therefore we work with them on policies including:
    - The Emissions Trading Scheme (UK ETS) that enables carbon markets to play a key role in driving a smooth decarbonisation for industry, on how the scheme operates and how it will adapt to stimulate more investment.
    - Securing infrastructure for deep decarbonisation such as the Acorn project for carbon capture and storage (CCS); and
    - Progressing investment in technology and infrastructure to enable switching to lower-carbon fuels such as electrification or green hydrogen.

Background on SG's emerging approach to industrial decarbonisation

- Whilst many ID levers remain reserved to UK Government (business models to incentivise fuel switching to hydrogen, or expanding the power network to facilitate greater electrification for example), I recognise that Scotland must rapidly explore what more it can do, and firm up commitments to delivery. At present we have three key themes:

1. Incentivising investment.

- The 2022 Programme for Government committed us to continue the £34 million Scottish Industrial Energy Transformation Fund (SIETF) where we co-invest with manufacturers to deliver energy efficiency improvements or interventions to decarbonise industrial processes. This successfully covers sites across Scotland's mainland and islands, for sites in clusters and those much more dispersed.
- Nevertheless, we need to explore how to build on this and consider expanded models of capital or operational finance to drive decarbonisation projects that encompass regional or sector-level infrastructure.
- Another area of investment that we are increasing our focus on is on capacity building and skills within industry. Within Scotland there is expertise and ingenuity to be harnessed and applied towards the businesses, places and technologies that would benefit during the transformation towards net-zero.

2. A focus on efficiency and demand-reduction

- A step-up in effort to reduce energy demand, via efficiency measures at a site or system level responds to cost-of-energy crisis for manufacturers.

- Boost market for Scottish-produced low-carbon industrial products and promote investment in efficient production, which is already happening across some sectors that are more consumer exposed. This is a prominent part of the UK ID Strategy but in Scotland we can use our powers in areas like public procurement.

3. Collaborate in Partnership

- Now, more than ever, there is a need for the Scottish Government to work collaboratively with manufacturing industries to support economic recovery and deliver a greener industrial future.
- Agencies, academia, business; together look at what can be done to create strategic conditions for investment in ID, taking in taxation and regulation.
- Transition will require a truly national effort. Industrial businesses will need to play their part, and make the changes needed to rapidly reduce emissions.
- We also need to see action and higher ambition from the UK Government on the solutions for net zero that are currently reserved to Westminster. Without UK-wide action, it is not possible to achieve all of Scotland's ambitious goals.
- We are also working with the Grangemouth Future Industry Board and the Industrial Decarbonisation Research and Innovation Centre (IDRIC), which is the focal point of the green transformation in the UK's industrial heartlands.

<u>Background on energy-intensive industries</u>

- Energy-intensive industries (EII) form a core part of Scotland's manufacturing base, and cover sites which tend to emit large volumes of greenhouse gases (GHG), predominantly from the combustion of fossil fuels for heating processes.
- In general, EII have the opportunity to reduce emissions to much lower levels by a combination of the three principal means: making industrial processes (energy and materials) more efficient; switching to lower carbon fuels, or capturing carbon emissions.
- These sites are often embedded within communities – urban or rural; by an industrial cluster or dispersed across the while mainland or islands. There are co-dependencies between industry and places that must be understood as we develop and deliver policy to decarbonise our industrial base whilst at the same time protecting jobs.

<u>Grangemouth</u>

- Grangemouth is recognised by the Grangemouth Future Industry Board Partners to be of strategic importance to Scotland and the wider UK economy. The industrial cluster, and the businesses contained therein, are a significant source of skilled employment and economic output and for Scotland. It comprises leading businesses in Scotland's oil and gas and chemical sector in addition to other industrial enterprises making the cluster Scotland's largest manufacturing complex.
- The Grangemouth cluster is responsible for approximately 30% of Scottish industrial emissions and, within this industrial quantification, 75% of emissions from Scotland's large industrial users are concentrated there. Consequently, the region is one of Scotland's geographical priorities for just and fair decarbonisation: all pathways to net-zero will rely to some extent, on the decarbonisation of the Grangemouth cluster. And, decarbonising industry in a just and fair way will help the cluster to grow and compete in the economy of the future, capturing new investment opportunities, sustaining and creating jobs, and wealth across Scotland.
- There is also substantial capacity and potential for the industries in this area to capitalise on their location, pooling their collective demand for low-carbon energy or working together to advance the early development of low-carbon infrastructure at scale. Grangemouth will be at the heart of CCUS and Hydrogen infrastructure development in Scotland and therefore be a key location in Scotland's transition to a net zero economy by 2045.
- However, the site is also responsible for c. 8-9% of Scotland's carbon emissions, and as such, must decarbonise in order to continue operating sustainably beyond 2045. Our ambition is to see the current function of the Grangemouth cluster sustained, but in a way that is climate compatible.

- Beyond this, we know that Grangemouth has strong potential to unlock decarbonisation in other parts of Scotland, and the world too - there is excellent capacity for transferability into bio-refining, hydrogen production and carbon capture or other new processes and products; these are assets that could support Scotland's Just Transition to Net Zero.
- Scotland wants to support this, and importantly it wants to do so in a way that helps achieve a Just Transition to Net Zero.
- This is an opportunity to put Grangemouth on the world stage, as an exemplar of how transition to net zero can be achieved in a sensible, sustainable way, that maximises socio-economic benefit.

Hydrogen

- Scotland is creating a hydrogen economy that will provide economic benefit and a renewable and low carbon source of energy to help meet our net zero ambitions.
- Hydrogen will be a key part of the net zero journey. Complementary alongside electricity, hydrogen will play a role in industrial decarbonisation, transport, and heating our homes and buildings.
- The development of a domestic hydrogen sector and hydrogen production for export, supported by a strong supply chain, will play an important role in supporting a just transition to net zero by 2045 and presents significant long-term economic opportunities.
- Geopolitical events have triggered an acceleration of efforts to reduce fossil fuel consumption and reduce reliance on Russian oil and gas. We are witnessing a rush to grow a European hydrogen market that we wish Scotland to be part of.

Hydrogen Action Plan

- The final Hydrogen Action Plan, published on 14 December 2022, sets out the strategic approach and actions required to support the development of the hydrogen economy in Scotland over the course of this Parliament.
- In the Action Plan, we refresh our commitment to providing the supportive policy and regulatory environment required to enable Scotland to take a pioneering role in a growing global industry and to support our vision for Scotland to become a leading hydrogen nation in the production of reliable, competitive, sustainable hydrogen.
- The Action Plan is supported by a £100m capital funding programme, designed to accelerate and maximise the production of renewable hydrogen in Scotland.
- The first tranche of this £100m, the £10m Hydrogen Innovation Scheme, opened in June and will support the production, storage and integration of renewable hydrogen in our energy system. The remaining £90m Green Hydrogen Fund will be launched early 2023.
- This investment is aimed at driving Scotland's hydrogen production capability to meet an ambition of at least 5GW of renewable and low carbon hydrogen by 2030 and 25GW by 2045.
- The unpredictable and uncertain outlook for global energy markets has only strengthened the case for accelerating our domestic hydrogen production. The Action Plan has been updated to reflect consultation feedback on the draft Action Plan and the energy developments throughout 2022.
- A new chapter dedicated to 'Scotland's Hydrogen Export Ambitions' seeks to highlight the scale of the export opportunity, Scotland's competitive advantage and the initial actions we will take at home and abroad to support Scottish companies to participate in and benefit from the development of the international hydrogen market.
- The opportunity for Scotland within the developing global hydrogen market is significant. This Hydrogen Action Plans sets out the steps we will take to support Scotland's growing hydrogen economy and sends a strong signal to the market for future hydrogen development.
- In September 2022, we published a Scottish Hydrogen Investment Proposition to promote the compelling case there is for investment in hydrogen in Scotland, including the potential for exporting surplus renewable hydrogen.

Energy Strategy and Just Transition Plan (ESJTP)

- The draft ESJTP sets out our vision that, by 2045, Scotland will have a flourishing, climate friendly energy system that delivers affordable, resilient and clean energy supplies for Scotland's households, communities and businesses
- This transition will deliver maximum benefit for Scotland, enabling us to achieve our wider climate and environmental ambitions, drive the development of a wellbeing economy and deliver a Just Transition for our workers, businesses, communities and regions.
- The draft ESJTP sets out a route map of ambitions, milestones and actions to deliver this vision and will guide decision making and policy support out to 2030.
- We are taking action to transform and expand Scotland's energy generation sector and accelerate decarbonisation of domestic industry, transport and heat
- Scotland's rich renewables endowment means we can not only generate enough cheap green electricity to power Scotland's economy, but also export electricity to our neighbours, supporting jobs here in Scotland and the decarbonisation ambitions of our partners.
- We must seize the huge opportunity that the energy transition presents and deliver maximum benefits to Scotland's people, communities and economy from our vast renewable energy resources.
- Investment in our infrastructure needs to be both sufficient and timely, to ensure we maximise the benefits of increasing renewable electricity and hydrogen supplies.
- We must continue to change the way we use energy – reducing demand across our heat and transport sectors and replacing fossil fuel demand with zero carbon technologies.

Just Transition Plan

- This is Scotland's first outline Just Transition Plan and details our response to the energy recommendations of the Just Transition Commission
- The energy transition offers significant opportunities for Scotland and is essential to delivering on our wider net zero ambitions, but we must also make sure that it is a just transition delivers for the people, communities and economy of Scotland.
- Our draft energy Just Transition Plan sets out a vision for a just energy transition that benefits communities across Scotland, provides high-quality jobs and economic benefit, delivers affordability, and protects our environment and our energy security.
- We are committed to delivering an energy transition that is fair for everyone. This means the people most likely to be impacted must have a voice in determining their future.
- Throughout 2022, we engaged with businesses, trade unions, workers, communities and places. In the coming months, we will continue to refine our draft through further engagement during the consultation period.

Consultation

- The consultation is open until 4 April.
- We will be engaging with stakeholders through various forums and events.
- Achieving our vision will be a national endeavour and will require a collective effort from government and agencies at local and national levels, industry, the research and innovation sector, our communities and civil society.
- We want to encourage responses form a wide range of stakeholders, from a variety of backgrounds, to help shape the final Strategy.

Manufacturing

- Manufacturing accounts for 178,000 jobs, over half Scotland's international exports, and 47% businesses expenditure on R&D.
- In 2020, manufacturing contributed £10.97 billion in GVA to Scotland's economy.
- We want a strong manufacturing sector to help drive Scotland's economic recovery and future prosperity. Our ambition is for Scotland to become the home of manufacturing innovation, to be seen as an inventor and producer, not just a consumer of goods - innovative, thriving and international looking

- The manufacturing sector will be central to the successful delivery of our ten-year National Strategy for Economic Transformation (NSET) by:
    - Strengthening Scotland's position by seizing the New Market Opportunities presented by the sector's transition to low carbon manufacturing and transition to net zero, and by the generation of new, well paid jobs resulting from this.
    - Seizing the opportunity to address regional inequalities through the wide reach of the new National Manufacturing Institute Scotland Group and Low Carbon Manufacturing Challenge Fund - helping to boost manufacturing research, development and innovation, and create Productive Business Regions throughout Scotland.
- Our significant investment of £75 million in the National Manufacturing Institute Scotland (NMIS) lies at the heart of our comprehensive programme called 'Making Scotland's Future', working with business, academia and our enterprise and skills agencies to deliver an integrated system of support for manufacturing across Scotland.

National Manufacturing Institute Scotland (NMIS)

- NMIS is a group of manufacturing research and development, innovation and skills facilities with a network of partners and collaborators working across the whole of Scotland. It represents a £75m investment by Scottish Government and its agencies.
- NMIS is working to transform manufacturing skills, productivity and innovation right across Scotland. It is accessible to firms of all sizes, sectors and location.

Making Scotland's Future

- The Making Scotland's Future Programme is our unified programme which seeks to address opportunities for growing Scotland's diverse manufacturing base through targeted objectives across eight work streams.
- The Programme brings together key partners of the Scottish manufacturing support landscape more coherently to boost productivity and drive innovation for the sector; as well as developing the skills of our current and future workforce to ensure Scotland is world-renowned for our manufacturing capabilities.

Advanced Manufacturing District Scotland (AMIDS)

- AMIDS will be an internationally recognised district for innovation, research and advanced manufacturing and is being developed, with support from Scottish Government, by Scottish Enterprise and Renfrewshire Council. It is supported by £39.1 million of City Deal funding.
- AMIDS will use NMIS and other nearby assets like the Advanced Forming Research Centre (AFRC) and the Medical Manufacturing Innovation Centre (MMIC) to attract high value investment and jobs to Scotland.

Advancing Manufacturing Challenge Fund (AMCF) Projects

- The AMCF sees a total investment of £15.8 million from SG and project partners.
- Now closed, the successful 12 projects, led by universities, colleges, local councils and third sector organisations across Scotland, are offering free services for manufacturing SMEs to advance their research, develop new processes or products, and make their systems more efficient and effective.

Low Carbon Manufacturing Challenge Fund

- To help drive low carbon transition in the Scottish manufacturing sector we have recently launched the Low Carbon Manufacturing Challenge Fund (LCMCF).
- Innovative proposals to reduce the carbon footprint of manufacturing will be supported with £26m of funding over five years.
- The Fund has been co-designed and developed with Scottish Enterprise, who are administering the Fund. Funding will be available from 19 May 2022 until 31 March 2026 and interested companies can start the application process by submitting an expression of interest via Scottish Enterprise's website.

- Once an amount of funding has been allocated, manufacturers will be required to fund the rest of the project independently. Grants with a minimum value of £150,000 are available to cover eligible costs.
- Eligible ideas can include, but are not limited to:
    - The development of a new product, service or technology that will reduce emissions, energy consumption, waste production and decrease the use of raw materials in the manufacture, and/or end use, of the existing alternative
    - The development of new business models based on the principles of a circular economy. Through circular supplies, resource recovery, product life extension or use of sharing platforms, for example.
- The challenge applies to companies based in Scotland. All companies must follow Fair Work practices.
- Since its launch in May 2022 the LCMCF has seen good levels of interest from Industry. As of December 2022 a total of 13 full applications have been submitted with 6 having been approved and in the process of having contracts drawn up. A total of 86 expressions of interest have been returned, providing a pipeline of further potential applications.
- The first project successfully funded through the LCMCF was announced shortly before Christmas. NorFrame – a timber frame manufacturer established in 2020 – are building a factory which will manufacture timber kit frames for homes, schools and commercial buildings. The factory will use power generated from an on-site Anaerobic Digestion plant fuelled by silage from a neighbouring farm – eliminating the need for fossil fuels to heat or power the facility and its processes. £750k funding is being provided through LCMCF towards the £4m factory which will initially create 11 new jobs and safeguard a further 14 in a rural area.
- The LCMCF is also delivering through funding for a CivTech 6.0 challenge, which targets a technological solution to help manufacturing businesses decarbonise while building resilience and strengthening competitive advantage
- A £605k pre-commercialisation agreement has been agreed through CivTech with start-up company, iSumio, that, if successful, will provide a software-as-service solution to help manufacturers calculate scope 1, 2 and 3 carbon emissions (direct and indirect emissions).
- Helping businesses to understand the carbon impact of their operations is a crucial first step to helping them to understand how to decarbonise
- There is also the potential for companies who can show the actions they're taking from an environmental perspective to benefit commercially, given increasing demands from customers for firms to demonstrate their sustainability credentials.
- iSumio have recently launched a beta-testing version of the product, which is currently being used by key stakeholders.

Note of meeting between SSE and Mr Lochhead of 16 March 2023

CBI Round Table - Meeting notes

Date & time: 16/03/2023 15:00-16:00pm

What: Mr Lochhead Chaired the meeting with CBI partners

Key points of discussion:

- There needs to be **deliberative change for a legacy of infrastructure** throughout the JT to Net Zero, ensuring that what is built benefits Scottish People, continues to attract investment and is competitive; today and in the long term.

- **Upskilling, reskilling and education** is an essential component of the Transition: we need those in Oil and Gas to be able to transfer their skills into the green energy sector. Currently there is difficulty procuring labour and this will be exacerbated as skills are in higher demand.
    - To achieve this, educational budget expenditure could better reflect the longevity of careers and opportunities to change career paths.
    - A clear directive of how skills provision will ramp up to meet the demands.
    - Concerns that green skills courses are often 'taster sessions' that don't provide necessary qualifications.
    - Working with business, and partnerships built for joint facilitation, so companies have workers with relevant training.
    - There is potentially an opportunity regarding Apprenticeship funding, Scottish model appears less effective than UK (can follow up on this)
    - CESAP is highly anticipated, and participants pointed to the desperate need for a National Skills Plan.

- **The Energy Network and National Grid** will need to be improved to help deliver Net Zero, to reduce surplus wastage and provide greater capacity. (happy to follow up on this) – There is also a SG Parliament inquiry on Tuesday: Decision on taking business in private, Scotland's electricity infrastructure: inhibitor or enabler of our energy ambitions?

Other areas of discussion included:

- David Cairns from Equinor highlighted the opportunity Scotland could have as a service for carbon storage on the continental shelf and help countries such as Germany meet their net Zero needs whilst maintaining former Oil and Gas workers skillsets within Scotland.
- We need an Ofgem mechanisms that rewards businesses for constrained energy usage and Ofgem could play a central role in helping to achieve this.
- Hydrogen; there was discussion on the clarity that SG's ambitious goals for the technology that was set out in the ESJTP. Questions over the timescale for blended hydrogen and gas within domestic supply.
- A note that Government contracting should build in greater certainty of timescales to support business confidence and encourage investment.

Briefing pack for meeting between SSE and Mr Lochhead of 16 March 2023

ENGAGEMENT TITLE: Roundtable discussion with CBI Scotland

Date and Time of Engagement	Thursday 16 March, 3.00 – 4.00 pm
Where	CMS LLP offices, Saltire Court, 20 Castle Terrace, Edinburgh, EH1 2EE
Who	Tracy Black, CBI Scotland Director, Allan Wernham, Managing Director CMS LLP and around 10 members of CBI Scotland, specifically invited to participate in discussion. **Annex I provides detailed attendee list.**
Key Purpose / Message	To chair a roundtable discussion on 'how best to make Scotland's energy surplus work for Scotland'. We propose that the discussion can cover the generation of energy surplus, and levers available to Scotland to harness the benefit in a more effective way (e/g through regulation, financial incentives etc)

Top Facts / Figures	Scotland has long been a net exporter of electricity. In 2021, Scotland exported 17.7 TWh, equivalent to powering every household in Scotland for over 2 years. This had an estimated wholesale value of almost £2.4 billion (Scottish Statistics Hub). The significant increase in installed capacity of renewable generation over the coming decade could mean Scotland's annual electricity generation is more than double Scotland's electricity demand by 2030, and more than treble by 2045. This will enable Scotland to meet a large proportion of our demand through renewables alone, while still creating an export opportunity for our surplus[1]
Sensitivities	[REDACTED: REGULATION 10(4)(e)] Tracy Black, Director, CBI Scotland has written to the Deputy First Minister with more information and providing assurance that CBI remain focused on "the task at hand". Lines to take are available at Annex C
Media Handling	No proactive media activity planned. Proposed tweet to consider: *Valuable and productive discussion today with members of CBI Scotland, exploring ways to harness the potential of Scotland's energy surplus.*
Case Studies	N/A
Official Support	[REDACTED: REGULATION 11(2)], Just Transition Unit. Mobile - [REDACTED: REGULATION 11(2)]
Dress code	Business
Greeting Party and specific meeting point on arrival	You will be met by Tracy Black, Director CBI Scotland and Allan Wernham, Managing Director CMS LLP at the front door to CMS offices at Castle Terrace. You will then be taken to the conference room
Specific entrance for Ministerial car/parking arrangements	TBC

Briefing Contents	Annex A – Proposed Running order and CBI / CMS Biographies Annex B – Suggested opening remarks and discussion prompts Annex C – Sensitivities to be aware of Annex D – ESJTP and Energy Supply Top Lines Annex E – Hydrogen Top Lines Annex F –ClimateXChange report Annex G – Offshore Supply Chain and Infrastructure Annex H - Community Energy, Community benefits and shared ownership

ANNEX A

[1] Scottish whole energy system scenarios (climatexchange.org.uk) – TEC scenario figures used for this example.

Proposed Running Order

2.30 – arrive at Castle Terrace, met by Tracey Black, Scotland Director, CBI. Taken to discussion room

2.35 – Minister, as Chair, invites brief introductions around the table

2.40 – Minister, as Chair, opens the discussion – says a few words by way of introduction and then move on to discussion prompts noted in annex B

3.20 – Minister hands over to Tracy Black, CBI Scotland Director for summing up

3.30 – Minister thanks all attendees and departs

Biographies

Tracy Black Scotland Director, CBI since January 2018. A recognised thought-leader within the Scottish business community, Tracy regularly appears on platforms alongside Scotland's foremost political and business leaders and has a growing reputation as an essential economic commentator. With a background in finance in the City of London, Tracy is also a SDS board member.

Allan Wernham, Managing Director, Scotland, CMS LLP. With over 25 years' experience, Allan specialises in major development and regeneration projects with a particular focus on prime retail and city centre assets, and in advising large energy and utility companies on their property needs. Allan's experience covers the whole range of development work, from initial acquisitions and development agreements through to letting, financing and disposals. He advises major players in the UK real estate market, including Landsec, Hammerson and Nuveen.

Suggested opening remarks

- Scotland's transition to Net Zero is one which presents us with many opportunities. Only by maximizing these opportunities, will we see Scotland realise it's true potential

- Through this transition we are taking action to transform and expand Scotland's energy generation sector. Scotland's rich renewables endowment means we can not only generate enough cheap green electricity to power Scotland's economy, but also export electricity to our neighbours, supporting jobs here in Scotland and the decarbonisation ambitions of our partners

- We must seize the huge opportunity that the energy transition presents and deliver maximum benefits to Scotland's people, communities and economy from our vast renewable energy resources.

- Scotland has long been a net exporter of electricity. In 2021, Scotland exported 17.7 TWh, equivalent to powering every household in Scotland for over 2 years. This had an estimated wholesale value of almost £2.4 billion

- The significant increase in installed capacity of renewable generation over the coming decade could mean Scotland's annual electricity generation is more than double Scotland's electricity

demand by 2030, and more than treble by 2045. This will enable Scotland to meet a large proportion of our demand through renewables alone, while still creating an export opportunity for our surplus

- Particularly keen to hear from all of you around the table today about Scotland's potential to generate an energy surplus and how we use that to maximum effect for Scotland. Really interested to hear your views on steps that both SG and also industry yourselves, can take to enable us to fully explore what we can do, collectively, for Scotland's future.

Potential discussion points to be used to prompt discussion:

1 Keen to ensure that, where possible, Scottish Government provides a supportive policy and regulatory environment required to maximise our potential as a net zero economy. What do you see as the existing barriers and potential opportunities to ensuring that we can make this happen? What levers can Scotland use effectively to support our ambitions?

2 We know that while there will be many new and emerging 'green jobs' throughout the transition, many jobs will remain the same but with new skills required. To what extent is the existing provision adapting to provide people with the skills they need for the net zero transition. What more to we need to do to ensure a Just Transition, leaving nobody behind?

3 What more could the Scottish Government do to maximize opportunities for communities from our energy transition? What support could CBI offer?

SENSITIVITIES TO BE AWARE OF:

[REDACTED: REGULATION 10(4)(e)]
[REDACTED: REGULATION 10(4)(e)]

2 Hydrogen – UK Government Asks

Many of the levers required to support the emergence of a flourishing hydrogen economy in the devolved nations are reserved to the UK Government. We continue to work closely with the UKG to ensure that our collective vision for the development of the hydrogen economy is aligned and the benefits are realised across all nations of the UK.

Lines to take

- The UK Government must take the action necessary at a UK-level to facilitate the smooth international trade of hydrogen, in line with Scottish export ambitions.

- The UK Government have committed to make decisions on amending regulations and legislation to support hydrogen blending in 2023 – this decision will provide much needed clarity for gas networks and hydrogen producers and must not be allowed to slip.

- We urge the UK Government to accelerate decisions on the role of 100% hydrogen in the gas grid currently committed to be reached in 2026 to enable our ambition to maximise volumes of renewable hydrogen in our energy system as quickly as possible.

- We urge the UK Government to include the supporting infrastructure development for the offshore transportation of green hydrogen from Scotland's ports and harbours in energy infrastructure considerations.

- We will work with the UK Government to plan and secure the delivery of the substantial infrastructure, as well as new energy generation and conversion assets, that need to be developed before industrial fuel switching (to renewable hydrogen and/or to electrification) and CCUS can be deployed on a large scale.

- The lack of clarity from the UK Government on the UK's potential to act as an exporter of hydrogen in the 2030s and beyond, impacts investor confidence, delays investment and may hinder our ability to capture this huge economic opportunity.

- It is critical that the UK Government provides clarity to the market, at the earliest possible opportunity, on the potential for the UK to be an exporter of low carbon hydrogen beyond the 2020s.

3 BEIS Consultation

The Department for Energy Security and Net Zero (formerly BEIS) plans to launch a consultation on community benefit options from network infrastructure in mid March. The aim of the work is to ensure that communities to host electricity transmission network infrastructure feel that they will positively benefit from hosting it.

We are working with DESNZ officials to consider these cross-impacts, including how their work might interact with ours – this will be referred to and acknowledged within the DESNZ consultation document.

Lines to take

- We continue to call on the UK Government to consider mechanisms for maximising community benefit from renewable energy developments and offers of shared ownership.
- We will consider the detail of this consultation and ensure that Scotland's interests are represented.

ANNEX D

Draft Energy Strategy and Just Transition Plan

The draft ESJTP sets out our vision that, by 2045, Scotland will have a flourishing, climate friendly energy system that delivers affordable, resilient and clean energy supplies for Scotland's households, communities and businesses.

- This transition will deliver maximum benefit for Scotland, enabling us to achieve our wider climate and environmental ambitions, drive the development of a wellbeing economy and deliver a Just Transition for our workers, businesses, communities and regions.
- The draft ESJTP sets out a route map of ambitions, milestones and actions to deliver this vision and will guide decision making and policy support out to 2030.
- We are taking action to transform and expand Scotland's energy generation sector. Scotland's rich renewables endowment means we can not only generate enough cheap green electricity to power Scotland's economy, but also export electricity to our neighbours, supporting jobs here in Scotland and the decarbonisation ambitions of our partners.

- We must seize the huge opportunity that the energy transition presents and deliver maximum benefits to Scotland's people, communities and economy from our vast renewable energy resources.
- Investment in our infrastructure needs to be both sufficient and timely, to ensure we maximise the benefits of increasing renewable electricity and hydrogen supplies.
- We must continue to change the way we use energy – reducing demand across our heat and transport sectors and replacing fossil fuel demand with zero carbon technologies.
- The consultation is open until 4 April and we welcome views to help shape the final Energy Strategy and Just Transition Plan.

Energy Supply:

- **We are scaling up renewable energy and taking action to transform and expand Scotland's energy generation sector.**
- By 2030, domestic production of renewable electricity and renewable hydrogen will have increased significantly, helping to address climate change by substantially reducing the emissions of our energy sector.
- **Offshore Wind:** We have set an ambition for 8-11 GW capacity by 2030 and are consulting on setting a further offshore deployment ambition.
- **Onshore Wind:** We will take action to deliver up to an additional 12 GW of installed onshore wind by 2030, as set out in our Onshore Wind Policy Statement, published in December 2022. This will take us to a total of over 20 GW capacity of onshore wind.
- **Tidal and wave:** We have set out a draft vision for Marine and are seeking views including options for setting a deployment ambition as part of the consultation.
- **Solar:** We have set out a draft vision for Solar and are seeking views on this, and options for setting a solar deployment ambition, as part of the consultation.
- **Hydro:** Hydro power, and in particular pumped hydro storage, has the potential to play a significantly greater role in the energy transition. We urge the UK Government to provide appropriate market mechanisms for hydro power to ensure the full potential of this sector is realised.
- **Hydrogen:** We wish to see as much renewable hydrogen in our energy system as quickly as possible. We are taking forward the actions set out in our Hydrogen Action Plan, including a renewable and low-carbon hydrogen production ambition of 5 GW by 2030 and 25 GW by 2045 and have set out plans to rapidly grow Scotland's hydrogen economy.
- **North Sea Oil and Gas:** We are calling on the UK Government to take forward a more rigorous package of tests than those recently introduced by the UK Government for the 33rd licensing round, to align with global climate goals.
- The Scottish Government is clear that unlimited extraction of fossil fuels is not consistent with our climate obligations and our focus must now be on achieving the fastest possible Just Transition. It is also clear that unlimited extraction, even if the North Sea was not a declining resource, is not the right solution to the energy price crisis or to meeting our energy security needs.
- In establishing a renewed policy position on oil and gas, and whilst licensing is reserved to the UK Government, the Scottish Government is consulting on whether, in order to support the fastest possible and most effective just transition, there should be a presumption against new exploration for oil and gas.
- **Nuclear:** We do not support the building of new nuclear power stations in Scotland under current technologies. New nuclear power will take years, if not decades, to become operational. The Scottish Government's position is clear: significant growth in renewables, energy storage, hydrogen and carbon capture provides the best pathway to a net zero energy system.
- **Export:** Scotland has the potential to be a powerhouse for renewable electricity and green hydrogen to meet our domestic needs and for Europe, exporting clean electricity as part of an

integrated system with the rest of Europe, and supporting decarbonisation of industry across the continent

- **Scotland has long been a net exporter of electricity. In 2021, Scotland exported 17.7 TWh, equivalent to powering every household in Scotland for over 2 years. This had an estimated wholesale value of almost £2.4 billion (Scottish Statistics Hub).**
- **The significant increase in installed capacity of renewable generation over the coming decade could mean Scotland's annual electricity generation is more than double Scotland's electricity demand by 2030, and more than treble by 2045. This will enable Scotland to meet a large proportion of our demand through renewables alone, while still creating an export opportunity for our surplus[1].**
- **Community benefits and shared ownership:** We are encouraging developers to offer community benefits and shared ownership opportunities as standard on all new renewable energy projects – including repowering and extensions to existing projects.
- We are taking forward research into ways of maximising the economic benefits to households, communities and regional economies from Scotland's anticipated electricity surplus.

This is Scotland's first outline Just Transition Plan and details our response to the energy recommendations of the Just Transition Commission.

- The energy transition offers significant opportunities for Scotland and is essential to delivering on our wider net zero ambitions, but we must also make sure that it is a just transition delivers for the people, communities and economy of Scotland.
- Our draft energy Just Transition Plan sets out a vision for a just energy transition that benefits communities across Scotland, provides high-quality jobs and economic benefit, delivers affordability, and protects our environment and our energy security.
- We are committed to delivering an energy transition that is fair for everyone. This means the people most likely to be impacted must have a voice in determining their future.
- Throughout 2022, we engaged with businesses, trade unions, workers, communities and places. In the coming months, we will continue to refine our draft through further engagement during the consultation period.

ANNEX E

Hydrogen – Top Lines

Actions

- Hydrogen Policy team are working with enterprise agencies to support development of Regional Hydrogen Hubs and hydrogen supply chain capability.
- Production of sector specific guidance is being developed (oil & gas, power sector, chemical industries sector) to define opportunities for the existing industry supply chains to transition to a hydrogen economy.
- The £90m Green Hydrogen Fund will be launched later this year to support accelerated development of hydrogen production projects and associated supply chain activity.

Scotland is creating a hydrogen economy that will provide economic benefit and a renewable and low carbon source of energy to help meet our net zero ambitions.

- The final Hydrogen Action Plan, published on 14 December 2022, sets out the strategic approach and actions required to support the development of the hydrogen economy in Scotland over the course of this Parliament.

[1] Scottish whole energy system scenarios (climatexchange.org.uk) – TEC scenario figures used for this example.

- Hydrogen will be a key part of the net zero journey. Complementary alongside electricity, hydrogen will play a role in industrial decarbonisation, transport, and heating our homes and buildings.
- The development of a domestic hydrogen sector and hydrogen production for export, supported by a strong supply chain, will play an important role in supporting a just transition to net zero by 2045 and presents significant long-term economic opportunities.
- In the Action Plan, we refresh our commitment to providing the supportive policy and regulatory environment required to enable Scotland to take a pioneering role in a growing global industry and to support our vision for Scotland to become a leading hydrogen nation in the production of reliable, competitive, sustainable hydrogen.
- The Action Plan is supported by a £100m capital funding programme, designed to accelerate and maximise the production of renewable hydrogen in Scotland.
- The first tranche of this £100m, the £10m Hydrogen Innovation Scheme, opened in June and will support the production, storage and integration of renewable hydrogen in our energy system. The remaining £90m Green Hydrogen Fund will be launched in 2023.
- This investment is aimed at driving Scotland's hydrogen production capability to meet an ambition of at least 5GW of installed renewable and low carbon hydrogen capacity by 2030 and 25GW by 2045.
- The unpredictable and uncertain outlook for global energy markets has only strengthened the case for accelerating our domestic hydrogen production. The Action Plan has been updated to reflect consultation feedback on the draft Action Plan and the energy developments throughout 2022.
- A new chapter dedicated to 'Scotland's Hydrogen Export Ambitions' seeks to highlight the scale of the export opportunity, Scotland's competitive advantage and the initial actions we will take at home and abroad to support Scottish companies to participate in and benefit from the development of the international hydrogen market.
- The opportunity for Scotland within the developing global hydrogen market is significant. This Hydrogen Action Plans sets out the steps we will take to support Scotland's growing hydrogen economy and sends a strong signal to the market for future hydrogen development.
- In September 2022, we also published a Scottish Hydrogen Investment Proposition to promote inward investment in hydrogen and the export of green hydrogen.

ANNEX F

ClimateXChange report on renewable hydrogen production addressing future electricity network challenges

- In Scotland, wind energy generation is at times significantly higher than the transmission network's capacity to transport the electricity. When this happens, curtailment payments are made to wind farm operators to compensate them for having to reduce their site's power output to the level the network can absorb. Electricity system balancing is normal for all sources of electricity, but in the case of renewables it means that zero-carbon renewable energy goes unused.

- To assess this opportunity, the Scottish Government commissioned last year through ClimateXChange an **assessment of the role that renewable hydrogen production could play in addressing future electricity network challenges** and as an energy store in future integrated energy grids.

- The report considers whether curtailed energy from large-scale renewables in Scotland could be used to produce hydrogen economically. **Key findings include:**

- The deployment of electrolysis will potentially lead to a significant decrease in curtailment of renewable energy due to increased electricity load behind network constraints. This will depend on the location of deployment and revenue mechanisms.
- Given that wind generation in Scotland is likely to grow faster than network reinforcement, there is likely to be a significant volume of curtailed energy in the late 2020s and possibly into the 2030s. Co-locating hydrogen production facilities with electricity generation may make the production of hydrogen from curtailed energy cost-competitive with other sources.
- However, these volumes of curtailed energy may be transitory in both timing and location due to expansion of the transmission network. As the transmission network is reinforced, there will be less network-related curtailment.
- The frequency of curtailed energy is generally higher in northern Scotland due to additional network constraints, so electrolysers used for hydrogen storage located further north will have potentially higher load factors and a lower cost of hydrogen production, at least in the near-term.
- If curtailed energy is used for other options and less for hydrogen production, hydrogen production might not be cost-competitive.
- Substantial hydrogen storage will be needed to buffer between production and demand. Near-term hydrogen electrolysis deployments are likely to be dependent on individual customers such as local networks or transport providers. In the absence of a wider hydrogen network, hydrogen will need to be stored either by the supplier or the customer.

- The report sets out the following **recommendations for industry and government**:

  - Market mechanisms, incentives and contracts for the deployment of electrolytic hydrogen capacity identified in the British Energy Security Strategy should be structured to consider the value of electrolyser location and its relation to curtailed renewable energy. The opportunity cost of curtailment mitigation should be part of any project assessment, including proposals around long-duration energy storage.
  - Hydrogen stakeholders should be kept informed on the progress of the time lag between new generation capacity and network expansion in the Scottish networks. Quantitative volumes of forecast curtailment, which are detailed, disaggregated by location and with appropriate uncertainty bounds, should be published by the National Grid Electricity System Operator and Distribution Network Operators to assist in the development of business cases.
  - Alternative mechanisms for mitigating the impact of delays in commissioning new networks should be explored, including investment in local curtailment mitigation technologies, which might include the ability to locally deploy temporary, mobile electrolysis capacity to absorb excess energy, particularly for island networks.
  - The potential for curtailed energy to accelerate near-term electrolysis deployment for hydrogen storage should be explored. For example, developers wanting to co-locate electrolysis capacity with new wind generation might be able to begin commissioning the electrolyser component before construction of the wind farm starts, with the facility using curtailed network energy prior to operating on wind turbine exports.

- This study also recommends that regulatory principles for low-carbon hydrogen to be produced from network-embedded or co-located electrolysis should be explored further. Electrolysis connected to electricity networks will require a robust accounting mechanism to correctly determine the carbon emissions from hydrogen production and to prevent double-counting of zero-carbon energy within the electricity system. This should be encapsulated within the Electricity System Operator's dispatch mechanisms and considered in how electrolysis is dispatched against renewable generators, storage systems and demand-side flexibility.

ANNEX G

Offshore Supply Chain and Infrastructure

Top Lines

- ScotWind is the first devolved leasing round for offshore wind development in Scottish Waters, and the first leasing round in Scotland in a decade. ScotWind is the world's largest commercial round for floating offshore wind and puts Scotland at the forefront of offshore wind development globally. It could deliver almost 28GW of offshore wind across 20 projects.
- As part of the ScotWind bidding round, applicants were required to submit a Supply Chain Development Statement (SCDS) to Crown Estate Scotland, outlining the supply chain activity they commit to undertaking within Scotland, the UK and overseas.
- These statements are not only an indication of what Scotland can achieve, they are our expectation of what the projects will deliver for Scotland.
- We welcome the commitment of developers to invest an average projection of £1.4 bn in Scotland per project, which equates to more than £28bn across the 20 ScotWind offshore wind projects.
- The Innovation and Targeted Oil and Gas Decarbonisation (INTOG) leasing round could deliver up to 5.7GW of projects that will specifically deliver green energy to oil and gas installations and a further 0.5GW of innovative offshore wind project, supporting the delivery of the North Sea Transition Deal.
- Subject to planning and consenting decisions and finding a route to market, we have a current reported potential pipeline (subject to change) of over 38 GW of offshore wind projects.
- When projects which are awaiting construction, under construction or already operational are added to this the total potential capacity reaches over 40GW.
- Recent growth in offshore wind capacity will enable Scotland to meet a large proportion of demand through renewables alone, while creating an export opportunity for our surplus.
- As set out in our draft Energy Strategy and Just Transition Plan, currently out for consultation, Scotland has the potential to be a powerhouse for renewable electricity and renewable hydrogen to meet our domestic needs and for Europe, exporting clean electricity as part of an integrated system with the rest of Europe, and supporting decarbonisation of industry across the continent.
- Many of the ScotWind developers successful in securing lease options have ambitions for renewable hydrogen, presenting a range of new energy and export opportunities for Scotland.
- Scotland's natural resources, which include strong and consistent wind resource, along with our established expertise in offshore oil and gas, skilled offshore workforce, excellent port structure and strong innovation hub, make Scotland one of the best places in the world to develop offshore wind and its supply chain.

Strategic Investment Model (SIM)

- The infrastructure and investment to enable ScotWind falls into three broad categories – i) the investment into projects themselves led by the developers (and entirely funded and delivered by developers), ii) upgrades to ports & harbours infrastructure to prepare for the scale of the structures necessary for ScotWind and; iii) infrastructure to enable manufacturing in Scotland such as site enabling works, lay down space and factories.
- We are working to realise our ambitions for the offshore wind supply chain in Scotland through The Scottish Offshore Wind Energy Council. The Offshore Wind Collaborative Framework Charter, announced in May 2022, will help forge effective partnerships to deliver on supply chain potential.
- Industry, development agencies, and SG are now working together to develop a Strategic Investment Model (SIM) which will facilitate delivery of the commitments agreed in the Collaborative Framework Charter in line with the 2021 Strategic Investment Assessment

recommendations. Co-designing this model is crucial to creating a sustainable and competitive supply chain in Scotland with the capacity and capability to support delivery of offshore wind projects in line with project business cases and SCDS ambitions.

- In February 2023, all original 17 ScotWind projects have committed to the next stage of SIM and have committed £20K each to fund development. Combined with Scottish Government investment and some legacy funding, this gives a pot of £400K for ongoing work. Crown Estates Scotland have tendered for a management service which will likely novate to "SIM Limited" once appointed.

ANNEX H

COMMUNITY ENERGY, COMMUNITY BENEFITS AND SHARED OWNERSHIP

COMMUNITY ENERGY

The Scottish Government is committed to supporting communities to participate in and benefit from Scotland's transition to net zero in a way that helps generate lasting social and economic impacts.

- Community energy encompasses community-led renewable energy, energy demand reduction and energy supply projects, whether wholly owned and/or controlled by communities, or through a partnership with commercial or public sector partners.
- In addition to supporting our national emissions reductions targets, improved energy security, and a more inclusive and democratic energy system, community energy projects have the potential to deliver transformational socioeconomic benefits. These include strengthened local economies and supply chains, education opportunities, and action on fuel poverty.
- We continue to invest in our flagship Community and Renewable Energy Scheme (CARES), which can support communities across Scotland to make the most of community energy, community benefit and shared ownership opportunities.

COMMUNITY BENEFITS

Community benefits are a well-established, integral part of renewable energy developments in Scotland, enabling communities to benefit from Scotland vast natural energy resources.

- Community benefit schemes are voluntary arrangements between the renewable energy developments and local communities, sitting outside of the planning and licensing processes and supply chain agreements.
- Our longstanding Good Practice Principles (GPPs) set out national standards to support community benefit and shared ownership opportunities as standard on all new renewable energy projects – including repowering and extensions to existing projects.
- The Scottish Government has no powers to mandate the provision of community benefits. Energy regulation is reserved to the UK Government.
- Our community benefit register indicates that almost £25 million in community benefits will have been paid out from renewable energy projects in Scotland over the past 12 months.
- We are in the process of reviewing our guidance for offshore renewable energy developments to ensure that the opportunities from our ScotWind and INTOG programmes are realised and that the benefits flowing to communities are maximised.
- It is vital that communities are strongly engaged and involved in agreeing the best approach for their area, one which fits their long term needs and aspirations.

SHARED OWNERSHIP

Shared ownership has an important role to play in helping the Scottish Government meet its target to deliver 2GW of community and locally owned renewable energy by 2030.

- Shared ownership projects support our ambition for increased levels of local ownership, where all stakeholders stand to benefit from greater partnership working and other additional benefits,

including creating a lasting legacy, building community capacity and strengthening corporate social responsibility.

- Scotland's target to achieve 0.5 GW of operational renewable energy capacity in community or local ownership by 2020 was exceeded in 2015 and the target was subsequently doubled.
- The latest confirmed figures from December 2021 show we are now nearly halfway towards our 2GW 2030 target.
- At the end of December 2021, there was an estimated 896 MW of community and locally owned renewable energy operational in Scotland, an increase of 5% from the 853 MW reported at the end of December 2020

ANNEX I

Attendees

[REDACTED: REGULATION 11(2)]
[REDACTED: REGULATION 11(2)]

Tracy Black, Director, CBI Scotland

Tracy Black was appointed Scotland Director on 1 January 2018. A recognised thought-leader within the Scottish business community, Tracy regularly appears on platforms alongside Scotland's foremost political and business leaders and has a growing reputation as an essential economic commentator.

Alongside a varied and distinguished career in the financial services sector, where she worked with top tier global financial institutions like Goldman Sachs International and UBS AG, Tracy has experience of working with a range of SMEs and entrepreneurial start-ups, particularly spin-outs from the higher education sector. Tracy has also provided advisory services to a range of start-ups and financial services companies and is currently co-owner of Carter Vintners Limited, a company producing high quality Australian wines.

In addition to professional roles, Tracy has been actively involved in leadership and mentoring programmes, in 2018 she set up the Scottish Leader's Mentoring Scheme in partnership with Scottish Power to support female professionals in Scotland aspiring to move into senior leadership positions. She also sits on the Boards of Skills Development Scotland, The University of Strathclyde Enterprise & Investment Committee and Chairs the ScotRail Alliance Stakeholder Panel.

David Cairns, Vice President Political and Public Affairs, Equinor UK Ltd

David Cairns joined Equinor in August 2019 as Vice President Policy and Public Affairs Global, and is responsible for UK Government relations. Before joining Equinor, from 2015-19 he was the British Ambassador to Sweden and the Foreign and Commonwealth Office's Director for the Nordic Baltic Network. In his career in the Foreign Office he also served in Japan as the Director for Trade and Investment and in Geneva as the Head of the UK's WTO delegation. He studied Japanese at Oxford, worked in investment banking in Tokyo and London before joining the FCO, and was Vice-Chairman of the Japan Society from 2011-15. He lives in Cambridge with his wife, two children, and pets.

Robin Cathcart, Senior Corporate Affairs Manager, ScottishPower

Robin works on policy and regulation in the Corporate Affairs team at ScottishPower, with a particular focus on Scottish policy. She led the development of the company's Just

Transition Strategy which was recently updated and launched in November 2022. After taking a 6-year career break, Robin returned to the workforce in 2019 through ScottishPower's Returner Programme, where she initially worked on carbon foot printing for the company. She has held various policy roles in ScottishPower, including working in our Renewables business on planning and environmental policy across the UK and Ireland.

Originally from California, where she trained as a geologist, Robin has applied her passion for the environment to all of her work experiences across government, academia and industry.

Billy McFadyen, Director of Finance & Development, SEC

Billy's career began when he left school for a trainee accountant role. On completing his accountancy qualifications, and having fulfilled various roles in public practice, he pursued a career in industry in 1990.

Billy joined the SEC in 2008. He has responsibility for Finance, Development, Commercial Partners and Hospitality. He is also our Company Secretary and maintains relationships with our legal advisors, banking partner and insurers. As well as being an SEC Board member, he sits on the QD Events Board. His role has extended to incorporate the SEC energy strategy.

Having joined SEC with extensive construction experience, Billy was an integral part of the SSE Hydro delivery team. He completed the relocation of the heliport, helped deliver the multi storey car park and recently secured a developer for the hotel sites adjacent to the car park.

Billy has previously overseen People and Technology, Live Entertainment and Ticketing within the SEC.

Prior to joining SEC, Billy was the Regional Managing Director for Robertson Homes and grew the business from £7m to £40m turnover. He joined Robertson Homes as the Finance Director in 2002 and was responsible for the major development of the management information systems as well as overseeing all financial functions.

Previous roles include Finance Director, George Wimpey West Scotland and Financial Accountant with Keyline Builders Merchants Ltd.

Margaret Simpson (known as Mags) – Deputy Director of Policy, CBI Scotland

Mags joined that CBI in September 2022 as Deputy Director for Policy in Scotland.

For the past 15 years she has worked at Logistics UK (formerly FTA), where her most recent role was Head of Policy Engagement. She led the team responsible for the delivery of policy engagement across the UK, representing Logistics UK's members' interests to outside audiences such as devolved government, combined authorities, local councils (both civil servants and politicians), as well as public audiences. All whilst continuing to brief members on policy and regulatory issues that could impact their business and encouraging their engagement with our work.

Before Logistics UK, Mags worked with various FMCG companies including Nestle, Kellogg's and BIC.

[REDACTED: REGULATION 11(2)]

[REDACTED: REGULATION 11(2)]

Allan Wernham, Managing Director, Scotland, CMS

Allan Wernham is Managing Director Scotland and is a partner in the Real Estate group based in Glasgow.

With over 25 years' experience, Allan specialises in major development and regeneration projects with a particular focus on prime retail and city centre assets, and in advising large energy and utility companies on their property needs. Allan's experience covers the whole range of development work, from initial acquisitions and development agreements through to letting, financing and disposals. He advises major players in the UK real estate market, including Landsec, Hammerson and Nuveen.

Roundtable with Minister for Energy and Scottish Cluster 13 April 2023
Attendees
Scottish Cluster

- Steve Murphy (SM), [REDACTED: REGULATION 11(2)] and [REDACTED: REGULATION 11(2)] - Storegga
- Padraig McCloskey (P Mc) and [REDACTED: REGULATION 11(2)] – Shell
- [REDACTED: REGULATION 11(2)] – Harbour Energy
- Laura Jarvie (LG) – North Sea Midstream Partners
- Colin Pritchard (CP) – Ineos.
- [REDACTED: REGULATION 11(2)] – National Gas Transmissions
- Ronnie Quinn (RQ) – NECCUS
- [REDACTED: REGULATION 11(2)] - SSE

Scottish Government

- Minister for Energy
- Andy Hogg (AH) – Deputy Director for Energy Industries
- [REDACTED: REGULATION 11(2)] – CCUS and Industrial Decarbonisation team
- [REDACTED: REGULATION 11(2)]– Hydrogen team
- [REDACTED: REGULATION 11(2)]– [REDACTED: REGULATION 11(2)]Private Office

Welcome and introductions
Minister – thanks for agreeing to meet at short notice. Reiterated Scottish Government support for the Scottish Cluster and that Minister was committed to turning Track-2 into a reality. Pointed out Scottish Government does not have the powers required to award Track-2 but will work with UKG to do everything possible to influence the process and timeline.

Minute
Update from Scottish Cluster
SM – update on Scottish Cluster including the origins and thanked Scottish Government for their continued support. He then invited attendees to provide a short update.

P Mc – have made good progress on the fundamentals and highlighted that storage at [REDACTED: REGULATION 10(4)(e)]. More appraisals required for further sites and to add additional emitters. Claimed there had been a focus on costs for Track-2.

Minister – asked about feedback from UKG on Track-1 bid. **PMc** – confirmed the key points were on cost and volumes of CO2.

Minister – where do you see Scottish Government and me helping you?

SM – using soft power with UKG. Also, effectively utilising the £80m from EEFT with a focus on bringing more emitters into the Scottish Cluster 'family'.
Action: ([REDACTED: REGULATION 11(2)]) set up follow-up discussion with Scottish Cluster to explore options to utilise the EEFT to accelerate and scale the development of CCUS

[REDACTED: REGULATION 11(2)] – [REDACTED: REGULATION 10(4)(e)]

Minister – [REDACTED: REGULATION 10(4)(e)]

[REDACTED: REGULATION 11(2)]- [REDACTED: REGULATION 10(4)(e)]

Action ([REDACTED: REGULATION 11(2)]) – arrange follow-up meeting between Minister and NGT [REDACTED: REGULATION 10(4)(e)].

SM – [REDACTED: REGULATION 10(4)(e)]

Action ([REDACTED: REGULATION 11(2)]): Scottish Government to liaise with [REDACTED: REGULATION 11(2)] on impact assessment and to arrange follow-up conversation with [REDACTED: REGULATION 11(2)] (Transport and Storage Lead DESNZ).

[REDACTED: REGULATION 11(2)] – highlighted that Peterhead is on 3rd iteration of proposition which is currently in the planning phase and they are just waiting on the green light on Track-2. Emphasised that Peterhead, as a dispatchable power station, is central to the energy transition.

Minister – outlined her understanding of the skills challenges that must be addressed to unlock the jobs and economic potential of CCUS.

[REDACTED: REGULATION 11(2)] – confirmed that the Shell, as lead technical partner, are currently undertaking a renewed economic assessment that will be shared with Scottish Government.

Action ([REDACTED: REGULATION 11(2)]) to work with CCUS economic analysts in Office of Chief Economic Adviser to review the economic assessment and provide advice to Minister.

RQ – Outlined the recent publication of Scottish Net Zero Roadmap (SNZR) with provides a roadmap to net zero by 2045 for 28 industrial emitters who collectively account for 75% of Scotland's industrial CO2 emissions.

Action ([REDACTED: REGULATION 11(2)]) – to arrange meeting between Minister and NECCUS for a more substantive discussion on SNZR

[REDACTED: REGULATION 11(2)] – outlined that Scottish Cluster will soon be launching their 'We're Ready' campaign which will promote their Track-2 proposition. This will build on their previous 'Support the Scottish Cluster' campaign with a renewed focus on skills, just transition and enhanced engagement with unions.

Action ([REDACTED: REGULATION 11(2)]) – to liaise with Scottish Cluster and Scottish Government Comms to ensure all relevant channels are utilised to support and amplify 'We're Ready'.

Minister – thanked everyone for their attendance and the significant amount of work they continue to do to further enhance the Scottish Cluster. Reinforced that Minister is absolutely committed, as

are her officials, to working with the cluster to deliver Track-2 and to developing Scotland as a centre of excellence for CCUS.

Actions;

1. Arrange follow-up meeting between Minister and NGT [REDACTED: REGULATION 10(4)(e)]. **([REDACTED: REGULATION 11(2)])**
2. Scottish Government to liaise with [REDACTED: REGULATION 11(2)] on impact assessment and to arrange follow-up conversation with [REDACTED: REGULATION 11(2)](Transport and Storage Lead DESNZ). **([REDACTED: REGULATION 11(2)])**
3. Work with CCUS economic analysts in Office of Chief Economic Adviser to review the economic assessment and provide advice to Minister. **([REDACTED: REGULATION 11(2)])**
4. Set up follow-up discussion with Scottish Cluster to explore options to utilise the EEFT to accelerate and scale the development of CCUS **([REDACTED: REGULATION 11(2)])**
5. Arrange meeting between Minister and NECCUS for a more substantive discussion on SNZR **([REDACTED: REGULATION 11(2)])**
6. Liaise with Scottish Cluster and Scottish Government Comms to ensure all relevant channels are utilised to support and amplify 'We're Ready'. **([REDACTED: REGULATION 11(2)])**

Extract from briefing pack for meeting between NECCUS and Ms Martin of 13 April 2023

ENERGY MINISTER ABERDEEN HYDROGEN AND CCUS VISIT – BRIEFING PACK

What	1. Hydrogen Stakeholder/Site Visit and Scottish Cluster Roundtable - Aberdeen
Where	**ACHES (Aberdeen City Hydrogen Energy Station)**, Langdykes Rd, Cove Bay, Aberdeen AB12 3FU **Storegga Offices** First Floor, Arnhall Business Park, Crown House, Prospect Rd, Westhill AB32 6FE *NB: Please note that ACHES appears on Google Maps as 'Aberdeen Hydrogen Centre'* There will be parking available at both locations.
When	**Date**: Thursday 13 April 2023 **Time**: 09:30 – 12:30 *09:30 – 10:05 – ACHES hydrogen refueling site* *10:05 – 10:40 – Meeting with Aberdeen Hydrogen Hub* *10:45 – 11:10 – Travel time* *11:15 – 11:25 – Meeting with Storegga* *11:30 – 12:30 – Scottish Cluster Roundtable*
Key Message(s)	**<u>Hydrogen</u>** As a government, we are convinced that hydrogen, alongside renewable electricity, will play an extremely important part in our energy system going forward. Our ambition is for Scotland to be a leading producer and exporter of hydrogen and hydrogen derivatives for use in the UK and in Europe, with the first hydrogen delivered from Scotland to mainland Europe in the mid-2020s. Our Hydrogen Action Plan sets out our ambitions to have at least 5 GW installed renewable and low-carbon hydrogen production capacity by 2030 and 25 GW by 2045.

	CCUS As a government, we support the development of Carbon Capture Utilisation Storage (CCUS) as it is vital for a just transition to net zero by 2045. We are committed to supporting the development and deployment of the Scottish Cluster and will do all we can to urge the UK Government to progress the Track 2 sequencing process expediently.
Who	You will be touring ACHES, a hydrogen refueling station, followed by a discussion at the same location with Aberdeen Hydrogen Hub joint venture partners bp and Aberdeen City Council (ACC). You will be joined at the ACHES site by several ACC officials, as well as Oliver Taylor from bp, see **Annex B** for further details. You will then travel to Storegga's offices, where you will have a short virtual meeting with Sarah Potts, Storegga Head of Hydrogen, to discuss the Cromarty Hydrogen Project. An hour-long roundtable discussion will then take place at Storegga's offices with members of the Scottish Cluster, including: • Steve Murphy (Storegga) • [REDACTED: REGULATION 11(2)](Storegga) • [REDACTED: REGULATION 11(2)](Storegga) • [REDACTED: REGULATION 11(2)] (Shell) • Padraig McCloskey (Shell) • [REDACTED: REGULATION 11(2)] (Harbour Energy) • Laura Jarvie (NSMP) • Ronnie Quinn (NECCUS) • [REDACTED: REGULATION 11(2)] (SSE) • Colin Pritchard (INEOS) • [REDACTED: REGULATION 11(2)] (National Gas Transmission)
Why	This visit will provide a hands-on exposure to the developing hydrogen economy in Scotland, as well as introductory meetings with stakeholders for two developing regional hydrogen hubs, supported through our Hydrogen Action Plan's regional approach. The roundtable discussion on Carbon Capture, Utilisation and Storage (CCUS) will provide the chance to meet and build relationships with members of the Scottish Cluster and discuss next steps on the back of the UK Government 'Powering Up Britain' announcements, which included details of the next stage of the CCUS cluster sequencing process (Track 2).
Supporting official (incl. mobile no.)	**Andy Hogg,** Deputy Director for Energy Industries, **[REDACTED: REGULATION 11(2)]** **[REDACTED: REGULATION 11(2)]**, Head of Hydrogen Policy, **[REDACTED: REGULATION 11(2)]** **[REDACTED: REGULATION 11(2)]**, Head of Carbon Capture, Utilisation and Storage and Industrial Decarbonisation,

	[REDACTED: REGULATION 11(2)]	
Points to note	[REDACTED: REGULATION 10(4)(e)][REDACTED: REGULATION 10(4)(e)]	
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Annex A – Summary & Agenda

Summary
The visit has been designed to give you hands on experience of long-standing hydrogen infrastructure in Aberdeen, through a visit to ACHES hydrogen refuelling station, which has been in operation since 2017.

This will be followed by meetings with key hydrogen stakeholders, in line with our commitments to support a regional hub approach to hydrogen production:

- Aberdeen City Council (ACC) and bp, joint venture partners in the Aberdeen Hydrogen Hub to be updated on the hub work to date as well as wider hydrogen work within ACC; and
- Storegga to discuss the company's hydrogen ambitions, including its work in partnership with Scottish Power on the Cromarty Hydrogen Project.

You will then attend the Scottish Cluster roundtable discussion to build relationships and discuss next steps on the CCUS cluster sequencing process (Track 2).

Agenda

Time	**Item**
09:30 – 10:45	*Langdykes Rd, Cove Bay, Aberdeen AB12 3F* **ACHES – Hydrogen Refuelling Site** **09:30 – 10:05** – Welcomes, tour of facility, opportunity to refuel hydrogen car Meeting with – Aberdeen City Council officials, technical experts **Aberdeen Hydrogen Hub (AHH)** **10:05 – 10:45** – Stakeholder meeting with Aberdeen City Council and bp, joint venture partners in AHH. Updates on AHH work to date. Meeting with – Aberdeen City Council officials, bp
10:45 – 11:10	Depart ACHES site and travel to Storegga offices
11:15 – 12:30	*First Floor, Arnhall Business Park, Crown House, Prospect Rd, Westhill AB32 6FE* **Storegga** **11:15 – 11:25** – Side room discussion with Storegga on their hydrogen plans and recent shortlisting for Hydrogen Production

	Business Model funding Meeting with – [REDACTED: REGULATION 11(2)], Head of Hydrogen, Storegga **Scottish Cluster Roundtable** **11:30 – 12:30** – Welcomes, introductions, opening remarks, background on the cluster, reflections on Track-2 announcements, next steps **Meeting with** – Steve Murphy (Storegga), [REDACTED: REGULATION 11(2)](Storegga), [REDACTED: REGULATION 11(2)](Storegga), [REDACTED: REGULATION 11(2)](Shell), Padraig McCloskey (Shell), [REDACTED: REGULATION 11(2)](Harbour Energy[REDACTED: REGULATION 11(2)](NSMP), Ronnie Quinn (NECCUS), [REDACTED: REGULATION 11(2)](SSE), Colin Pritchard (INEOS), [REDACTED: REGULATION 11(2)](National Gas Transmission)
12:30 – 12:45	Depart

Annex E - Scottish Cluster Roundtable

Scottish Cluster Round Table – 11:30 – 12:30
You will be meeting with members of the Scottish Cluster and NECCUS (North East CCUS, pronounced Nexus) in a roundtable format where you will hear from Storegga about the Scottish Cluster and discuss the impact of the UK Government's 'Powering Up Britain' announcements for CCUS and the Track 2 cluster process, what this means for the Scottish Cluster and the next steps.

[REDACTED: REGULATION 11(2)]	• [REDACTED: REGULATION 11(2)] • [REDACTED: REGULATION 11(2)] • [REDACTED: REGULATION 11(2)] • [REDACTED: REGULATION 11(2)]
Pádraig McCloskey	**Shell** • Pádraig is Corporate Relations Manager for Shell's Upstream business in the UK. • Pádraig has worked for Shell in the Netherlands, Ireland, USA, Canada and has been Aberdeen based since 2012.
Steve Murphy	**Storegga** • Steve is Chief Commercial Officer at Storegga, with responsibility for strategic activity across the Group. He has 35 years' broad energy industry experience covering business start-ups, financial stewardship and commercial management of energy projects around the world. Previous experience includes roles with Chevron, ENI, Baker Hughes, Helix

	Energy Solutions & Petrofac. • Established CO2DeepStore in 2007 – the UKs first company focussed on developing carbon capture and storage as a business. • Steve is a founding Director of Pale Blue Dot Energy – the pioneering Scottish CCS business leading the Acorn CCS project and Scottish Cluster. Responsible for growing the business from 4 people in 2013 to over 95 people today. • A Founding Director of Storegga (owner of Pale Blue Dot Energy) and instrumental in securing inward investment from multiple blue-chip companies as shareholders. • Non-Executive Director with Peterhead Port Authority since 2017
[REDACTED: REGULATION 11(2)]	• [REDACTED: REGULATION 11(2)] • [REDACTED: REGULATION 11(2)] • [REDACTED: REGULATION 11(2)]
[REDACTED: REGULATION 11(2)]	• [REDACTED: REGULATION 11(2)] • [REDACTED: REGULATION 11(2)] • [REDACTED: REGULATION 11(2)] • [REDACTED: REGULATION 11(2)] • [REDACTED: REGULATION 11(2)] • [REDACTED: REGULATION 11(2)]
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Laura Jarvie	**North Sea Midstream Partners (NSMP)** • Laura Jarvie joined NSMP in 2021 with 23 years of experience in the energy industry across investment banking, drilling, midstream and upstream. • Prior to joining NSMP as Commercial Director, Laura has held various roles primarily in corporate finance, M&A, commercial and business development having worked for; Simmons and Company International, Shell, KCA Deutag, Dana Petroleum and EnQuest. • Laura holds a first-class honours degree in Accounting and Finance and is a member of the Institute of

	Chartered Accountants Scotland (ICAS).
Colin Pritchard	**INEOS** Colin Pritchard is a chemical engineer by training, who has worked for over 30 years in the refining, petrochemical, oil & gas and energy sectors in a variety of roles covering technical, operational, environmental and commercial responsibilities. For the last 15 years, Colin has been in a commercial role covering delivery of energy and utilities to the INEOS & Petroineos businesses at Grangemouth, including responsibility for emissions trading for these activities and consideration of plans to reduce. This led to his involvement in creation of the Net Zero Roadmap for INEOS at Grangemouth during 2021, and subsequently his appointment as Sustainability Director at the beginning of 2022. Colin is also a Visiting Professor at the Centre for Energy Policy at the University of Strathclyde, where he contributes his experience from working in the Energy Intensive Industries sector to support the valuable research of the Centre.
Ronnie Quinn	**NECCUS** • Ronnie is Chief Executive of NECCUS, the membership organisation supporting and representing members through the challenge and opportunity of industrial decarbonisation primarily through Carbon Capture and Hydrogen. • He has over 30 years' experience in general management, with specific experience in the renewables and electricity industries. • Ronnie's professional career began as a solicitor where he worked both in private practice and in local government. • He then moved into the electricity markets' sector where he was Managing Director of the company administering the market in Scotland. • Ronnie has worked for The Crown Estate where he led the transfer of its functions in Scotland to Scottish Ministers, being Crown Estate

	Scotland's first Chief Executive. • Ronnie also sits on the Board of Management of City of Glasgow College and is a Commissioner on Scotland's Just Transition Commission.
[REDACTED: REGULATION 11(2)][REDACTED: REGULATION 11(2)]	• **[REDACTED: REGULATION 11(2)]** • [REDACTED: REGULATION 11(2)]
[REDACTED: REGULATION 11(2)]	• **[REDACTED: REGULATION 11(2)]** • [REDACTED: REGULATION 11(2)] • [REDACTED: REGULATION 11(2)]

11:30	Welcome/Introductions
11:35	Round-table discussion covering: • Opening remarks (Minister for Energy) • Background on the Scottish Cluster (Storegga) • Reflections Track-2 announcements (all) • Next steps for the Scottish Cluster and securing Track-2 (all)
12:30	Meeting close

Opening remarks (led by Minister for Energy)

- The Scottish Government supports the development of Carbon Capture Utilisation Storage (CCUS) and is committed to supporting the development and deployment of the Scottish Cluster.

- CCUS is "mission critical" to achieve our net zero goals and I will do everything I can to support you, unfortunately Scotland doesn't have all the levers required but I will be urging UK Government to provide the clarity you need.

- I am pleased that Acorn is one of the 2 projects that are "best able" to meet Track 2 eligibility, which is confirmation of the strength of the original proposition.

- Congratulations to everyone involved in the bid – if only the quality of it had been fully appreciated about 18 months ago.

- Despite that welcome recognition, we are bitterly disappointed that there is still no timetabled solution for Track-2 from UK Government. Stating that they "intend to provide an update in the summer" is not acceptable.

- I want to reassure you that Scottish Government fully supports the development and deployment of CCUS and we stand ready to provide up to £80 million investment from our Emerging Energy Technologies Fund.

Background on Scottish Cluster (led by Storegga)

[Info to be provided]

Questions you may wish to ask:

- I'm acutely aware that this has been going on for a long time and it will have tested your resilience and patience. What impact do the recent announcements have on your organisation and on the collective?

- What are the key risks to being successful with Track-2 and how can we work together to help mitigate those?

- I'm interested to hear about [REDACTED: REGULATION 10(4)(e)]. What are the benefits to this and where are UK Government with it?

- What can we do to expand the cluster to increase the emitter base in order to capture and store more CO2?

- I'm also interested in unlocking the storage potential of Scotland, how do you think we are positioned compared with other UK clusters and internationally, and what more do we need to do to convert geological advantage into competitive advantage.

CCUS BACKGROUND NOTES

- CCUS is vital for a just transition to net zero. Advice from the Climate Change Committee describes CCUS as a "necessity, not an option" to achieve net-zero emissions.

- The development of strategically located CCUS infrastructure in Scotland's industrial clusters in Grangemouth and the North-East could protect and ensure the just transition for important domestic industries into a low-carbon future, protecting jobs and utilising existing skills. There is no technological alternative currently available for key strategic and economically significant industries.

- As set out in the Bute House Agreement, the Scottish Government agrees that any strategy for deployment of CCUS must enable decarbonisation at pace and cannot be used to justify unsustainable levels of fossil fuel extraction or impede Scotland's just transition to net zero.

- Scottish Government economic scenario analysis shows CCUS would have a positive impact on the Scottish economy. In 2045 Scottish GDP could be 1.3-2.3% (£3.8Bn-£6.7Bn) higher in scenarios with CCUS, than without.

- Economic modelling by the Scottish Cluster estimates that by deploying CCUS, hydrogen and direct air capture technologies in Scotland, could support an average of 15,100 jobs between 2022-2050, with a peak of 20,600 jobs in 2031.

<u>The Scottish Cluster</u>

- The Scottish Cluster is a group of Industrial Emitters which will be linked to the Acorn Transport and Storage (T&S) system by pipeline to take advantage of Oil and Gas legacy infrastructure, with the aim of capturing and permanently storing 5 Mega Tonnes of CO_2 emissions per year by 2030. These include:
  - St Fergus – CO_2 extraction from St Fergus Gas at SAGE terminal, Acorn Carbon Capture and Acorn Hydrogen
  - Peterhead – Storegga Direct Air Capture, Peterhead CCS Power station (SSE)
  - Central Belt – The Grangemouth Project, Fife Hydrogen Hub

- In October 2021, UKG announced the Scottish Cluster (led by the Acorn Project at St Fergus) was unsuccessful in the Track-1 competition, however it was confirmed as a Track-1 "reserve".

- In March 2023 Budget, the UK Government announced £20 billion funding for CCUS projects (Track 1 projects in East and North West England, and North Wales), however none of this money was allocated to Scotland.

- Also in March 2023, the UKG published "Powering Up Britain" which also confirmed the Track 2 sequencing process to establish 2 further clusters by 2030, the UK government considers Acorn and Viking T&S systems as "best placed" to meet Track 2 eligibility (subject to due diligence and value for money assessments).

- The UK Government, whilst confirming that Acorn meets the Track 2 criteria, have, inexplicably decided to open up the Track 2 process by inviting other clusters to submit an expression of interest (EOI). Should any EOI be received by the end of April, that will necessitate a selection and assessment stage (competitive procurement). The expectation is that other clusters will submit an EOI.

NECCUS (pronounced NEXUS)

- North East CCUS (NECCUS) is an industry-led alliance drawn from industry, academia, membership organisations and private sector bodies to promote CCUS in Scotland.

- The group emerged out of a need to create a formal entity to coordinate and promote CCUS in Scotland at a Scottish, UK and European level. Other CCUS projects in the UK already benefit from similar entities.

- The objective of NECCUS is to articulate and promote the CCUS offering provided in Scotland; to attract funding for CCUS in Scotland; and to secure the first CCUS project in the UK to be in Scotland.

- The Scottish Government provided £300K start-up funding and support to NECCUS over the financial years 2019/20 and 2020/21. [REDACTED: REGULATION 10(4)(e)].

Un-bundling Transport and Storage of CO2 (sensitive)

- [REDACTED: REGULATION 10(4)(e)]
- [REDACTED: REGULATION 10(4)(e)]
- [REDACTED: REGULATION 10(4)(e)]
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- [REDACTED: REGULATION 10(4)(e)]

Scotland's advantages

- Scotland remains among the best placed nations in Europe to deploy CCUS due to our unrivalled access to vast CO_2 storage potential in the North Sea and opportunities to repurpose existing oil and gas infrastructure for CO_2 transport and storage.

- Scotland's significant CO_2 storage potential and the presence of the Scottish Cluster provides an economic opportunity for Scotland to be at the centre of a European hub for the importation and storage, via shipping, of CO_2 from Europe.

- The Carbon Capture and Storage Association (CCSA) predicts the global CCUS supply chain in 2050 will be £181 billion per year for industry CCUS and £54 billion per year CO_2 transport and storage; the UK Government predicts CCUS will *"deliver £4-5 billion in Gross Value Added by 2050 through exports*". This offers Scottish businesses a huge international market to be a part of in the future and will deliver significant economic opportunities

Annex F – CCUS Top Lines

The Scottish Government supports Carbon Capture Utilisation and Storage – as a common whole-system decarbonisation infrastructure with the flexibility to adapt over time to play a central role across the decarbonisation strategies of key sectors such as heat, industry and power.

- CCUS can play a pivotal role in achieving a just transition for our workforces, capitalising on existing skills and expertise to create many good, green jobs in the coming years.
- Scotland can be considered among the best placed nations in Europe to deploy CCS, with our unrivalled access to a vast CO2 storage potential of up to 46 gigatonnes and our opportunities to repurpose existing oil and gas infrastructure. This presents us with an economic opportunity in future to be at the centre of a European hub for the importation and storage of CO2 from Europe.

While we welcome the UK Government's confirmation that the Scottish Cluster is eligible for Track 2, there is still no certainty around when funding will be awarded.

- The Scottish Cluster is absolutely vital for a just transition to net zero - not just in Scotland, but across the UK.
- The UK Government's decision not to give the Scottish Cluster clear and definitive Track-1 status in its CCUS cluster sequencing process is illogical.
- We do not hold all the necessary legislative and regulatory levers needed to support the Scottish Cluster, as they are not devolved. We continue to call on the UK Government to work with us, and provide the certainty and support required to accelerate the Scottish Cluster project.
- In March 2023 Budget, the UK Government announced £20 billion funding for CCUS projects (Track 1 projects in East and North West England, and North Wales), however none of this money was allocated to Scotland.
- Also in March 2023, the UKG published "Powering Up Britain" which also confirmed the Track 2 sequencing process to establish 2 further clusters by 2030, the UK government considers Acorn and Viking T&S systems as "best placed" to meet Track 2 eligibility (subject to due diligence and value for money assessments).
- The UK Government, whilst confirming that Acorn meets the Track 2 criteria, have, inexplicably decided to open up the Track 2 process by inviting other clusters to submit an expression of interest (EOI). Should any EOI be received by the end of April, that will necessitate a selection and assessment stage (competitive procurement). The expectation is that other clusters will submit an EOI.

We are committed to supporting the continued growth and development of the Scottish Cluster to ensure that Scotland reaches its net zero goals by 2045.

- We have provided funding and policy support since 2017 to the Scottish Cluster's Acorn CCS project at St. Fergus through its feasibility and development phases.
- We have offered on several occasions to assist the UK Government with the affordability of delivering the Scottish Cluster. This includes our offer to His Majesty's Treasury to deploy £80m funding from our EETF. We stand ready to deliver on this commitment.
- Due to delays with UK Government announcing the Scottish Cluster, we have re-profiled our offer of financial support into subsequent years.

Advice from the Climate Change Committee describes CCUS as a *"necessity, not an option"* to achieve net-zero emissions.

- All credible evidence advice and analysis has demonstrated that CCUS is critical for meeting statutory emissions targets – not just in Scotland, but across the UK.

- Our ambition to reach net zero by 2045 is based on the Climate Change Committee's advice, which noted Scotland can achieve this in part due to "the excellent opportunities to remove CO2 from the atmosphere through carbon capture and storage in Scotland".
- Without the swift deployment of CCUS in Scotland our pathway to net-zero emissions, set out in the Climate Change Act, becomes extremely challenging.
- Scotland's commitment to a just transition includes supporting industries whose only realistic route to decarbonise is via CCUS.
- The Aug 2021 agreement between the Scottish Government and the Scottish Green Party recognises that *"CCUS technologies will play a part in a just transition"*.
- The agreement also states that *"(t)he Scottish Government remains supportive of these technologies as part of the energy transition and in particular it remains committed to supporting the delivery of the Acorn project"*.

The Global CCS Institute's (GCCSI) latest Global Status Report 2022 identified a total of 30 successful CCS projects in operation, a further 11 under construction and 153 in development.

- The oldest operational project, Sleipner in Norway, has operated for over 25 years and is estimated to have reduced emissions by 1MT/year over its lifespan.
- There are also many more CCS facilities already operating on a pilot or demonstrator basis, or that are at advanced stages of development.
- CCS projects, like any new industrial scale technologies, may experience challenges in construction and operation. This is normal and to be anticipated, will be project specific, often relating to engineering, and expected to decrease as more projects are built and knowledge and experience shared. The global experience so far has demonstrated that such challenges can be managed. This is not a reason not to deploy CCS, nor to consider the technology 'not proven'.
- A recent study shows that the probability of CO2 leaks from a regional CCS industry is low. If they do occur, the spatial scale of impact will be small, and the potential environmental impacts will be minimal.

Document 9: Note of meeting between SSE and Mr Yousaf of 22 May 2023

VISIT TO SLOY POWER STATION	
Minister	First Minister
Type of engagement	Ministerial visit
Date	22 May 2023
Who	In attendance: • Finlay McCutcheon, Director of Onshore Renewables (Europe), SSE Renewables. • Jamie Maxton, Head of External Relations (Scotland), SSE Renewables • SSE Renewables personnel
Key Points	• FM was greeted by SSE Renewables and they discussed the role of hydro-electric generation in Scotland as well as the legacy of the 1943 Hydro-Electric Development (Scotland) Act, which kickstarted Scotland's journey with hydro. • Mr McCutcheon provided FM with an overview of SSE and the operation of the site as they travelled together from the power station to Sloy Dam. • FM was shown around the

	dam's operations area and heard from engineers about Sloy's electricity generating capacity and role in increasing the resilience of our electricity system. • Following the party's return to the power station, FM met with SSE apprentices and heard about the different parts of their training programme. • FM did a series of bids to camera, including STV and SSE Renewables own media team. FM outlined Scottish Government actions to support the development of hydroelectric power in Scotland, including a letter to Rt Hon Rishi Sunak MP calling for a market support mechanism for long-duration energy storage such as pumped hydro storage; published alongside this visit.
Attending Officials	[REDACTED: REGULATION 11(2)], Head of Onshore Electricity Policy [REDACTED: REGULATION 11(2)], Energy Policy Officer [REDACTED: REGULATION 11(2)], Deputey Private Secretary [REDACTED: REGULATION 11(2)], Media Manager [REDACTED: REGULATION 11(2)], Visits and Events Manager
Comment **Actions**	The First Minister was well received by SSE Renewables with positive engagement on the benefits of hydro-electric power and pumped hydro storage. • Scottish Government officials to organise a round table discussion between FM, Cabinet Secretary for Net Zero and Just Transitions, Cabinet Secretary for Wellbeing Economy, Fair Work and Energy, SSE Renewables and other external stakeholders to discuss how Scottish Government can further support hydroelectric developments in Scotland and develop a market mechanism to support long-duration energy storage, including pumped hydro storage. • Scottish Government officials to engage with SSE Renewables further on a market support mechanism for long-duration energy storage such as pumped hydro storage.
Copy list	First Minister DG Economy DG Net Zero Kersti Berge Ragne Low Frances Pacitti [REDACTED: REGULATION 11(2)] [REDACTED: REGULATION 11(2)] [REDACTED: REGULATION 11(2)] [REDACTED: REGULATION 11(2)] [REDACTED: REGULATION 11(2)] [REDACTED: REGULATION 11(2)] [REDACTED: REGULATION 11(2)] [REDACTED: REGULATION 11(2)]

Visit to SSE Sloy Power Station
22 May 2023

Key messages	• The Scottish Government is calling for a suitable market support mechanism for large-scale, long-duration energy storage such as hydro. This was reiterated in your letter to the Rt Hon Rishi Sunak MP, that will be published alongside this visit. • **<u>Sensitivities – [REDACTED: REGULATION 10(4)(e)]</u>** o [REDACTED: REGULATION 10(4)(e)] o [REDACTED: REGULATION 10(4)(e)]
What	FM Ops will advise.
Why	The visit forms part of a year of celebrations to commemorate the 80th anniversary of the Hydro Electric Development (Scotland) Act 1943, which supported the expansion of hydro-electric power across Scotland.
Who	• Alistair Phillips-Davies, Chief Executive, SSE plc. • Finlay McCutcheon, Director of Onshore Renewables (Europe), SSE Renewables • Stephen Wheeler, Managing Director of Renewables, SSE Renewables • **Jamie Maxton, Head of External Relations, Scotland, SSE Renewables** • **Niall Murphy, Public Affairs Manager, SSE Renewables** o Contact [REDACTED: REGULATION 11(2)]
Where	Sloy Power Station, Alexandria, G83 7DP
When	22 May 2023, 10:30-12:15
Likely themes	• Hydro-electric power in Scotland • Importance of long-duration energy storage including pumped hydro storage to net zero • Letter to PM – Scottish Government's call for a Market Support Mechanism for long-duration energy storage such as pumped hydro storage • Grid consenting regime in Scotland
Media	FM Communications will advise.
Supporting officials	[REDACTED: REGULATION 11(2)]Head of Onshore Electricity Policy Contact: [REDACTED: REGULATION 11(2)] [REDACTED: REGULATION 11(2)]Energy Policy Officer
Briefing contents	**Annex A: Sensitivities – [REDACTED: REGULATION 10(4)(e)]** – p. 8 **Annex B:** Hydro Power in Scotland – p. 12 **Annex C:** Importance of Hydro Power to Net Zero - Large-scale, Long-Duration Energy Storage (LLES) – p. 15 **Annex D:** Market Support Mechanism – p. 16 **Annex E:** Grid consenting regime in Scotland – p. 17

	Annex F: Small scale hydro – p. 19 **Annex G:** Scottish Government Apprenticeship Policy – p.20

Agenda and Summary

Agenda

10:30 - First Minister arrives and is met by Anne (V&E) and introduced to Finlay McCutcheon, Director of Onshore Renewables at SSE Renewables, who will introduce some staff members on site on the day.
10:40 - Finlay and First Minister are to be transported up the dam in First Minister car. Finlay will provide First Minister with an outline of SSE on the way to the dam
10:55 - First Minister arrives at the top of the dam for a tour (photographs will be taken throughout)
11:25 - Return to Sloy Power Station by car.
11:40 - First Minister will undertake media bids in the foyer of SSE.
12:00 - First Minister will be able to meet with some of the SSE apprentices.
12:10 - First Minister departs

Summary

- This visit has been proposed to kick off a year of 80th anniversary celebrations planned across Scotland for the Hydro-Electric Development (Scotland) Act of 1943, that kickstarted Scotland's journey with hydro – the country's original source of renewable energy.
- It is also an opportunity to repeat Scottish Government and industry's call for an appropriate market support mechanism for large-scale, long-duration energy storage, such as pumped storage hydro, through the First Minister's letter to the Prime Minister.
- The FM will meet the people that operate and maintain the network of tunnels, dams and stations, as well as the SSE apprentices.
- SSE have recently announced an investment of over £100m to further prepare for a final investment decision on their Coire Glas project: a proposed 1.5 GW new pumped hydro storage project that received planning consent from the Scottish Government in 2020. Once fully operational, it will be capable of powering 3 million homes for 24 hours non-stop (SSE).
    - An expected capital investment of £1.2-2bn would be required to deliver the project. SSE hopes to make a final investment decision on Coire Glas in 2024 and to fully construct and commission the pumped storage scheme by 2031.

Briefing

Stakeholder profile

- **SSE** - Headquartered in Perth, SSE plc. is one of the UK and Ireland's biggest developers of low carbon energy infrastructure. SSE's core focus is on renewables and regulated electricity networks (grid) – including the transmission and distribution networks in the north of Scotland. SSE has 6GW of renewables capacity either live or in construction and also operates assets such as the 1.1GW Peterhead Power Station, a gas-fired plant in Aberdeenshire.
- **SSE Renewables**, part of SSE plc., plan to double its installed renewable energy capacity to 8GW by 2026 and to treble capacity to over 13GW by 2031, increasing output fivefold to over 50TWh annually – enough to be able to power around 20 million homes each year.

Ministerial Engagement

- See letter to PM you approved on 18 May 2023 (to be published 22 May 2023)

Lines to take on hydro power in Scotland and importance of long duration energy storage such as pumped hydro storage – **See Annex B & C for more information**

- Hydro power has the potential to play a significantly greater role in the energy transition – both at small-scale in co-operation with local communities as part of a diverse energy supply, and at larger scale, for example through pumped hydro storage projects that can provide flexibility

services to the grid and help to ensure a continued, resilient and secure electricity supply (and balancing intermittent renewables).

- Our draft National Planning Framework 4 identified pumped hydro storage as being of national importance and should support delivery of our sustainable places objective.

Lines to take on market support mechanism – **See Annex D for more information**

- The Scottish Government is calling for a suitable market support mechanism for large-scale, long-duration energy storage such as pumped hydro storage. This was reiterated in your letter to the Rt Hon Rishi Sunak MP, that will be published alongside this visit.
- The case for reviewing incentives for pumped hydro storage, which has always been strong, is now greater than ever. With an appropriate market support mechanism in place, several 'shovel ready' pumped hydro storage projects across Scotland, that have already secured planning permission, can begin construction immediately.

Lines to take on grid consenting in Scotland – **See Annex E for more information**

- We are aware that a regular feature of industry feedback is the consenting process.
- We are engaging extensively with the UK Government at Ministerial and official level, to request further legislative powers to be granted to create an efficient consenting system in Scotland.
- In recent years the Scottish Government's Energy Consents Unit has made a number of efficiencies and improvements within the current regime which have already achieved reductions in the time taken for a decision to be made.
- We recognise these timescales can be improved further and we are continuing to work closely with stakeholders, including SSEN, on ways to do that.

Lines to take on small scale hydro – **See Annex F for more information**

- The Scottish Government recognises the value of small-scale hydro generation in its ability to make a contribution to the smooth running of the smart, decentralised and local energy markets which we expect to see develop more over the coming years, and provide a new business model.
- The Scottish Government's Community and Renewable Energy Scheme (CARES) supports local or community ownership of renewable energy generation, including hydropower. As of 31 January 2022, CARES has provided over £8.5 million in support to more than 120 hydro projects, either through feasibility studies or capital funding.

Lines to take on Scottish Government Apprenticeship Policy – **See Annex G for more information**

- Investing in skills across people's lifetimes is critical to our future productivity and success as the economy and labour market continues to evolve over the coming decades. This is underlined by our commitment to a skilled workforce set out within the National Strategy for Economic Transformation.
- Apprenticeships are a key tool for employers to invest in their workforce, providing the skills the economy needs both now and in the future.

Biographies of attendees

- Finlay McCutcheon, Director of Onshore Renewables (Europe), SSE Renewables
    - Finlay is Director of Onshore Renewables (Europe) at SSE Renewables, where he has end-to-end accountability for the development, construction, and operation of all of SSE's Onshore Wind, Hydro and pumped storage investments across Europe.
- Alistair Phillips-Davies, Chief Executive, SSE plc.
    - Alistair

became Chief Executive in 2013 and has held senior roles across multiple business areas within SSE

- Stephen Wheeler, Managing Director of Renewables, SSE Renewables
    - Stephen has been Managing Director, SSE Renewables since January 2022 having previously held the roles of MD, SSE Thermal and MD, SSE Ireland. Prior to SSE, he was part of the management team that grew the Airtricity renewable energy platform before SSE acquired it in 2008. Before joining Airtricity, he spent over 10 years working with ABB and Siemens internationally.
- **Jamie Maxton, Head of External Relations, Scotland, SSE Renewables**
    - **Jamie Maxton** joined SSE **Renewables** in December 2019 as Head of External Relations (Scotland). He has over 20 years' experience working at a senior level in public affairs and communications having began his career as a researcher for the Scottish Labour Party during the 1997 General Election and Devolution Referendum.
- **Niall Murphy, Public Affairs Manager, SSE Renewables**
    - Contact [REDACTED: REGULATION 11(2)]

Annex A

Sensitivities - [REDACTED: REGULATION 10(4)(e)]

[REDACTED: REGULATION 10(4)(e)]

- [REDACTED: REGULATION 10(4)(e)]
- [REDACTED: REGULATION 10(4)(e)]

Background - [REDACTED: REGULATION 10(4)(e)]

- [REDACTED: REGULATION 10(4)(e)]
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- [REDACTED: REGULATION 10(4)(e)]

Background – [REDACTED: REGULATION 10(4)(e)]

- [REDACTED: REGULATION 10(4)(e)]
- [REDACTED: REGULATION 10(4)(e)]

- [REDACTED: REGULATION 10(4)(e)]

Sensitivities - Proposed expansion of Sloy Power Station

Lines to take

- [REDACTED: REGULATION 10(4)(e)]

Background – Proposed expansion of Sloy Power Station

- An initial meeting has been held between SSE and Scottish Government Energy Consents Unit officials ahead of a proposed application under the Electricity Act to extend the Sloy Power Station. The application would propose conversion of the current conventional hydro station to pumped hydro storage.
- [REDACTED: REGULATION 10(4)(e)] A previous consent was granted by the Scottish Ministers for such an extension in 2010, but was not implemented and permission has now lapsed.
- Any application made to the Scottish Ministers would need a full Environmental Impact Assessment, and the application for any proposed expansion would be subject to public consultation and consultation with statutory and local bodies.

Sensitivities - [REDACTED: REGULATION 10(4)(e)]

Lines to Take

- We are aware that discussions are ongoing in relation to siting of specific elements of the project with Forestry and Land Scotland (FLS). We need to work constructively together to reach the right outcome.

Background

- Ministerial briefing was provided on 6 Dec 2022. The following lines update on this issue.
- Following discussions between FLS, SSE Renewables and SSEN Transmission, the following issues remain outstanding:
    - **[REDACTED: REGULATION 10(4)(e)]**
    - **[REDACTED: REGULATION 10(4)(e)]**
- [REDACTED: REGULATION 10(4)(e)]
- [REDACTED: REGULATION 10(4)(e)]

Annex B

Hydro Power in Scotland

Background – Hydro Power in Scotland

- Hydro power has the potential to play a significantly greater role in the energy transition – both at small-scale in co-operation with local communities as part of a diverse resilient energy supply in remote parts of Scotland, and at larger scale, providing flexibility services to the grid and helping to ensure a continued resilient and secure electricity supply.
- There is currently 1.5 GW of pumped hydro storage projects awaiting construction in Scotland that could deliver vital flexibility for the grid and help balance out the intermittent nature of renewables. The lack of a dedicated support mechanism means these projects are taking much longer to deliver, if they are able to at all. [SSE's *Coire Glas in the Highlands, and Glenmuckloch in Dumfries and Galloway*].
- A recent report by Imperial College London found that long duration pumped hydro storage could save up to £690m per year in energy system costs by 2050. The Scottish Government is

urging the UK Government to put in place a supportive policy and market framework to provide confidence for investment.

Key Facts and Figures

- Scotland has a proud history of hydro power and currently has 1.67 GW operational, which accounts for around 88% of total UK hydro power capacity. There is an additional 3.5 GW of pumped hydro storage (PHS) in planning or awaiting construction. PHS accounts for 740 MW of Scotland's 864 MW of energy storage.
- 332MW of the total installed hydro capacity is small scale hydro. There is an additional 23MW of small scale hydro in the pipeline.
- Pumped hydro storage is a well-established technology with a long lifespan but the perceived barriers to further deployment are that it requires high upfront costs and long lead times, there is lack of revenue certainty and currently a lack of market signals.

Research from Scottish Renewables: The Economic Impact of Pumped Storage Hydro

- A recent report from Scottish Renewables indicates that six pumped hydro storage projects currently in development in Scotland could, if constructed, add 4.9 GW to the UK's pumped hydro storage capacity, currently 2.8 GW.
- The combined investment in these projects is expected to be around £6-8bn. During the development and construction phase, they are expected to provide significant economic benefits including,
    - £4.2-5.8bn in gross value added (GVA)
    - Between 10,700 and 14,800 jobs at peak.
    - With a significant proportion of this in the local, rural areas where the projects are based.
- Further developed of pumped hydro storage beyond these six projects could provide even greater economic benefits out to 2050.

History of hydro-electric power in Scotland

- Scotland's relationship with hydropower was forged over 100 years ago. And by the mid 1960's, hydro was essential in bringing power to the Highlands and Islands.
- The Hydro Electric Development (Scotland) Act 1943 nationalised the industry and supported the expansion of hydro-electric power across Scotland.
- Today, hydropower plays an important role in the renewables revolution.
- Without doubt, Scotland remains the UK's hydro capital – with over 88% of the total UK hydro capacity located here in Scotland.
- The Scottish Government's support for hydro goes way back - and we see that continuing as Scotland transitions to net zero.

Environmental Impacts of hydro-electric developments

- Hydropower developments in Scotland are regulated by the Water Environment (Controlled Activities) (Scotland) Regulations 2011 more commonly known as CAR regulations.[1]
- Excavations for hydro construction sites can potentially damage habitats and displace species. Without adequate mitigation measures, the water environment and surrounding habitats can become polluted as falling rain picks up and deposits silt.
- Avoiding areas of peatland in the design and construction of a hydro-electric scheme and its associated infrastructure will reduce disturbance to this sensitive habitat, lower carbon losses, and minimise soil and drainage management issues that could have an impact on development costs and timings.
- The use of Construction and Environmental Management Plans (CEMPs) to guide a development helps ensure consistency across a project and

[1] Guide to hydropower construction good practice (sepa.org.uk)

make everyone involved aware of their responsibilities and the sensitivities. It should prove that the risks to the environment from the construction of the scheme have been identified and appropriate mitigation put in place.

Annex C

Importance of Hydro Power to Net Zero - Large-scale, Long-Duration Energy Storage (LLES)

Background to top lines

- Pumped hydro storage (PHS) is identified as being of national importance in the National Planning Framework 4 and should support delivery of the sustainable places objective. This means that PHS will be a focus for delivery, as well as exemplar of the Place Principle, placemaking and a Community Wealth Building (CWB) approach to economic development. Regional spatial strategies and Local Development Plans (LDPs) should identify and support national developments which are relevant to their areas.
- Large-scale, long-duration energy storage (LLES), such as PHS, can help to make the most efficient use of renewable generation and encourage increased flexibility across the whole system. An increasing reliance on weather-driven generation will also create greater seasonal volatility which will require storage to balance prolonged periods of excess or shortfall in energy output.
- LLES can be considered to be for periods of over 12 hours and is required to maintain system stability, meet peak demand and manage locational congestion.
- The UK Government's British Energy Security Strategy contains an ambition to develop policy which will enable investment in LLES by 2024.

Annex D

Market Support Mechanism

Background to top lines

- Following a call for evidence on facilitating the deployment of large-scale, long-duration energy storage, the UK Government recognised that a cap-and-floor market support mechanism may be suitable in principle to incentivise response to varying price signals and to provide flexibility when it is needed.
- Industry has also called for a cap-and-floor mechanism.
- A cap-and-floor mechanism sets maximum and minimum limits on the revenues (or margins) that a development can generate. If revenues fall below the 'floor' then they are topped up and revenues above the maximum level are recouped. As a result, a minimum level of revenue is safeguarded.
    - A UK Government cap-and-floor regime is currently in operation to support interconnectors.
- Although the cap-and-floor mechanism has been identified as a potentially effective approach, the UK Government have stated that further consultation with stakeholders is required. We currently do not have any further details or timelines from the Department for Energy Security and Net Zero on the development of this policy work.
- A UK Government funded competition awarded over £32 million to projects that can store energy as heat, electricity or as a low carbon energy carrier like hydrogen. These technologies do not have the same impacts on landscape or wildlife that PSH may have. However, long-duration storage of hydrogen will require access to salt caverns as pressurised tanks are only viable for short periods.

Annex E

Grid Consenting regime in Scotland

Background to top lines

- Transmission and distribution of electricity is a reserved matter, but the functions of section 37 of the UK Electricity Act 1989, pertaining to the requirement for consent to install certain overhead electricity lines, are executively devolved to the Scottish Government. Land use planning itself is not a reserved matter.
- This means that the process for determining applications for consent to install relevant electric lines cannot be set by the Scottish Government. The current process by which applications are made, processed and determined by the Scottish Ministers is set in UK legislation which was given royal assent in 1990.
- The current lack of legislative competence means that the Scottish Government cannot modernise the process for accepting, processing and determining applications for consent, to provide for a more inclusive, efficient, and proportionate process, and one that aligns with the wider Scottish planning system, most recently reformed by the Planning (Scotland) Act 2019.
- As it stands, the Electricity Act provides that a planning authority must be consulted when an application is made under Section 37. If the planning authority objects to the application within the statutory timeframe or a time frame agreed in accordance with legislation, and that objection is not withdrawn or cannot be acceded to, then the Scottish Ministers must cause a public inquiry. This is a provision that cannot be considered for reform in Scotland.
- [REDACTED: REGULATION 10(4)(e)]
- [REDACTED: REGULATION 10(4)(e)]
    1. [REDACTED: REGULATION 10(4)(e)]
    2. [REDACTED: REGULATION 10(4)(e)]
    3. [REDACTED: REGULATION 10(4)(e)]
- [REDACTED: REGULATION 10(4)(e)]
- [REDACTED: REGULATION 10(4)(e)]
- In the absence of a legislative vehicle to amend the Electricity Act to provide these regulatory powers to Scotland, a significant barrier remains to enable the pace required for the delivery of vital grid connections.
- In recent years the Energy Consents Unit has also made a number of efficiencies and improvements within the current regime which have already achieved reductions in the time taken for a decision to be made. We recognise these timescales require further improvement and we are continuing to work closely with stakeholders to improve timescales further.

Annex F

Small Scale Hydro

Additional top lines on small scale hydro.

- In response to the findings of the Tretton Review of Small Scale Hydro Plant and Machinery, and to provide investor certainty, the Scottish Government has extended the current 60% hydro relief until 2032. This relief rate, in accordance with the UK-EU Trade and Cooperation Agreement, is capped at approximately £350,000 over three fiscal years starting from 1 April 2021.
- The Feed-in Tariff (FIT) scheme was designed by UK government to promote the uptake of renewable and low-carbon electricity generation. The scheme closed to new applicants on 1 April 2019.
- The Scottish Government also provides a non-domestic rates exemption for renewables with a capacity of up to 50kW, which supports microgeneration producers, and businesses that retrofit micro renewable schemes to reduce their carbon foot print. This exemption is not time-limited,

unlike other parts of the UK, making it the most generous exemption for renewable microgeneration in the UK.

Sensitivities - [REDACTED: REGULATION 10(4)(e)]

- [REDACTED: REGULATION 10(4)(e)]
- [REDACTED: REGULATION 10(4)(e)]

Annex G

Scottish Government Apprenticeship Policy

Additional top lines on apprenticeship policy

- Apprenticeships provide people of all ages with a great opportunity to upskill and reskill and help them to progress within their chosen career path.
- Our priority is to ensure that apprenticeships are of high quality and lead to sustainable employment opportunities.
- We are exploring how we can effectively integrate sustainability and green skills into apprenticeships in Scotland to ensure the system remains flexible and relevant as we transition to net zero.
- Our Foundation Apprenticeship programme offers work-based learning opportunities for individuals in the senior phase. Graduate Apprenticeships provide work-based learning opportunities to new or existing employees providing a qualification up to Master's degree level.
- The latest Graduate Apprenticeship Progress Report, published on 20 December 2022, shows 1,166 individuals started a Graduate Apprenticeship in 2021/22 compared to 277 in 2017/18, which demonstrates a steady improvement in starts from when the qualification was first introduced.

Note of meeting between SSE and Mr Yousaf of 27 July 2023 (Part of business leaders dinner event)

Date/ Time: 27 July 2023, 18:30 – 21:00
Location: Garden Room, Prestonfield House, Edinburgh

In attendance:

First Minister
Cabinet Secretary for Wellbeing Economy, Fair Work and Energy

Dr Poonam Malik	Head of Investments, Strathclyde University and Co-Chair NDBG
[REDACTED: REGULATION 11(2)]	Noble Grossart
Brian Souter	Stagecoach
Jim McColl	Clyde Blowers Capital
Sir Ian Wood	Wood Group and Opportunities North East (ONE)
Chris van der Kuyl	4J Studios
Calum Paterson	Scottish Equity Partners
Gregor Alexander	SSE
Gareth Williams	Skyscanner
Ellis Watson	SG, Business Special Advisor
Colin McAlister	SG, Chief Special Advisor
Aidan Grisewood	SG, Director for Economic Strategy & Fair Work

Note of Meeting:

FM set out his intention to listen and engage with business community and actions already taken to put that into effect, for example through the New Deal for Business Group. Engagement with business has already highlighted the need to involve business more effectively in policy and FM flagged the need for Government to review its risk appetite, particularly if we are to make investments to prosper. FM also emphasised the importance that the Government places on economic growth and the wider benefits that brings, as well as a willingness to engage with the UK Government at every opportunity where this promotes Scottish business interests.

FM then opened up the discussion to business leaders. The following issues were raised and discussed:

- The benefit NDBG would gain from having sufficient direct business expertise and the importance of creating a supportive business environment that goes wider than the scope of NDBG's work.
- The opportunity that current challenges, such as tackling NHS backlogs, presents to bring in locally developed innovation technologies and promote Scotland's life science industry, building on tech-scaler NHS testbeds.
- The need to learn lessons from previous missed opportunities to promote wider change in the culture and incentive mechanisms for the wider public sector to support innovation and measured risk taking.
- The "neutrality" of data and IT business and the risk of missing economic opportunities if Government support requires evidence of positive social outcomes.
- The role of enterprise agencies and ensuring that business support complements and reinforces markets rather than focussing on "picking winners".
- The importance of improving productivity and the need to properly incorporate the contribution that enterprise and business make to a Wellbeing Economy.
- Getting the balance right between momentum on climate change imperatives and the need for energy resilience and a just transition, particularly with respect to new oil and gas fields.
- The opportunity to build on Scotland's reputation for family-led and compassionately run businesses.
- The need for the civil service and public sector agencies to be "enablers" rather than "blockers", particularly on issues such as consents or landing investments where the process needs to be "smarter and slicker".
- The lack of computer science teachers in Scotland and the consequences for future tech-led enterprise in Scotland, as well as the opportunity to address the gender gap here.
- The importance of ensuring that the focus on narrowing the attainment gap is not to the detriment of raising standards and stretching talent that can compete internationally.
- The need to ensure that funding provided to Higher Education and civtech delivers economic results and the consequences of capping HiE places for Scots.
- The importance of ensuring that Scotland's fiscal regime is balanced and competitive relative to the rest of the UK and that tax differentials aren't counter-productive.
- The lessons to be learnt from the "Oxford model" of funding for new businesses spinning out of universities and opportunities as well as challenges in replicating this in Scotland.

Actions

- Cabinet Secretary to be put in touch with [REDACTED: REGULATION 11(2)] to discuss Scotland's competitiveness on investment.
- Cabinet Secretary for Education and Skills to speak to Chris Van de Kruyl about action to raise standards.
- [REDACTED: REGULATION 11(2)] (ex Bailie Gifford) keen to provide input.

- Invitation to all attendees to raise issues with FM and his wider ministerial team in the future.

Briefing pack for meeting between SSE and Mr Yousaf of 27 July 2023 (Part of business leaders dinner event

BUSINESS AND ECONOMY LEADERS DINNER

Key messages	• I recognise the importance of deepening our relationship with business, not only through engaging and communicating better, but by actively aligning our policy with business and working in partnership on common goals. • A high-quality functioning relationship between government, business and other partners is key to ensure we have an economy that is fair, green and growing. This is our vision for a Wellbeing Economy. • We continue work to deliver our National Strategy for Economic Transformation. We are acting to grow and change Scotland's economy as well as expand the tax base to fund public services and make people's lives better. Over the coming months work will take place to examine what more can be done to accelerate economic growth. This will build on the priorities set out in the recent policy prospectus. But as successful business leaders I am keen that we draw on your insight and expertise to raise our game.
What	You have agreed to host a dinner with senior Scottish business leaders to discuss the New Deal for Business, the New Deal for Business Group's recommendations and any other opportunities for business and government to strengthen their working relationship and deliver a Wellbeing Economy
Why	As part of a reset with business, it is important to nurture relations with senior business leaders to get their views on our approach and buy-in.
Who	Key economy and business stakeholders (full guest list at Annex C)
Where	Garden Room, Prestonfield House, Priestfield Road, Edinburgh EH16 5UT
When	Thursday 27 July 18:30 – 21:00 (FM free to leave at 21:00) Guests can remain in the room to network up until Midnight
Likely themes	• Resetting the relationship with business (New Deal for Business) • Improving investment opportunities • Entrepreneurship and ensuring Scotland is internationally recognised as a nation of entrepreneurs and innovators
Media	This event will be closed to media. The Scottish Government will not carry out any photography or filming at this event. Attendees have been asked in advance that if they capture any informal images from this event, to be mindful to do so in a way that all guests are comfortable with.
Supporting official	**Aidan Grisewood,** Interim Director for Economic Strategy T: [REDACTED: REGULATION 11(2)] **Colin McAlister**, Special Advisor to the FM T: [REDACTED: REGULATION 11(2)]
Annexes	**Annex A**: Purpose, menu, seating plan and prompt questions **Annex B**: lines to take **Annex C**: Guest biographies

ANNEX A

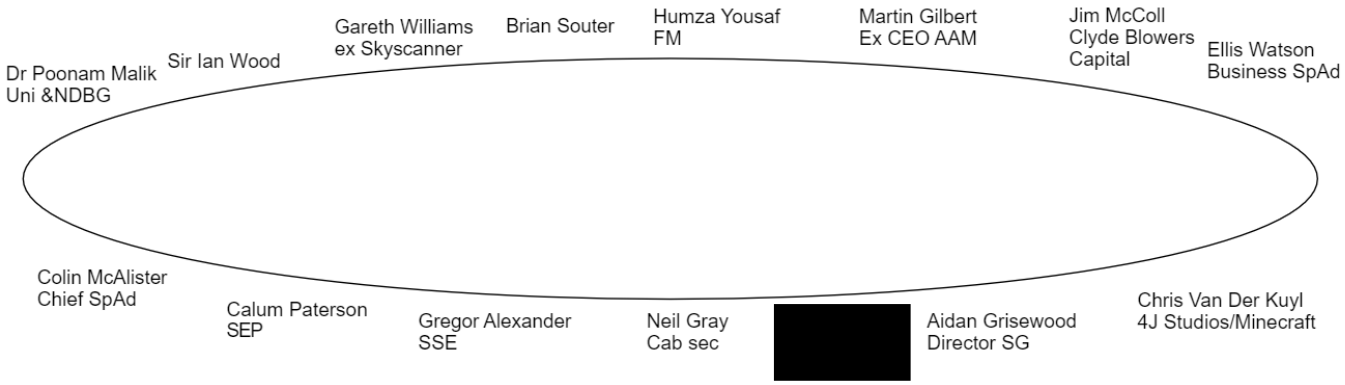
PURPOSE

The key economy stakeholders and Business Leaders Dinner was part of the FM's wider engagement programme. The purpose of the dinner is to strengthen the working relationship with business by seeking views on the New Deal for Business, the recommendations of the New Deal for Business Group, published on 29 June and accepted in full by you on 7 July. The discussion should also consider what other steps can be taken jointly with business, to achieve a high-growth Wellbeing Economy that prospers while caring for people and planet.

AGENDA

18:30-18:45 – Guests seated, welcome and introductory remarks by First Ministers
18:45-20:45 – Dinner service and discussion facilitated by First Minister
20:45-20:55 – First Minister summarise conversation, agrees final actions for all to take forward
20:55-21:00 – Closing remarks and thanks by First Minister
21:00 – First Minister is free to leave, guests can remain in the room to network and purchase any other drinks.

SEATING PLAN



LATEST GDP FIGURES DUE WEDNESDAY 26 JULY

ANNEX B

OPENING REMARKS AND LINES TO TAKE

- Welcome everyone and thank you for giving your valuable time to share with us your views tonight.

- In April, I announced my Policy Prospectus and central to that was a New Deal for Business. In response to that I asked my Cabinet colleague, Neil Gray, Secretary for Wellbeing Economy to take forward work at pace to consider how we could deliver on that. Neil co-chairs the New Deal for Business Group, along with Dr Poonam Malik, and I am delighted that they are both here with us this evening.
- The New Deal for Business Group published its recommendations at the end of June and I have accepted those recommendations in full.
- I want to talk to you tonight about how we build on those recommendations – what have we missed; what else is there to do – and specifically, how can business help to drive that change. As senior leaders with a track record of success, your insight is really valuable.
- All this is in the context of the current challenges that I know businesses are facing – impact of Brexit; soaring inflation; recovery from Covid pandemic; supply chain issues and significantly reduced consumer spending.
- Recovery is a national endeavour and I am keen that we can work together to deliver a thriving, fair, green and growing economy.

- A high-quality, functioning relationship between government, business and other key stakeholders is essential and that means deepening the relationships to work in genuine partnership on common goals for Scotland's economy.
- As you know, a Wellbeing Economy is a key part of my government's vision and is also key to recovery. It's an opportunity to build on our sustainable, inclusive growth approach. We think there are some great opportunities here: a healthier workforce is a bigger and more productive workforce; Scotland is uniquely positioned to benefit from opportunities presented by green energy; and higher growth and productivity can help boost household incomes.
- For government, implementing the recommendations will require some fundamental changes to how policymakers across Scottish Government consult business and make policy. This will be a cultural change that will require consistent application across Scottish Government and we have the commitment of the Permanent Secretary and senior officials to make this happen.
- Our ambition is to move away from conversations between business and Ministers or officials that focus on transmitting views and – instead – concentrate on ways that help us to **align policies between business and government,** where appropriate, to **co-design policy** and to **implement and deliver in partnership**.
- I'll open the floor for some round the table introductions and then we can begin the conversation once the starters have been served.

DISCUSSION QUESTIONS

1. How far do you think the New Deal for Business Group recommendations will go to achieving our overall ambition?

2. How do we use this platform (New deal for Business Group) to strengthen our relationship to achieve this. For example, do the recommendations listed go far enough for business? Are there areas we need to consider strengthening?

3. I've talked about the cultural shift for government; what changes do you think Business needs to adopt to support this transformation of relationship?

LINES TO TAKE FOR DISCUSSION IF REQUIRED

WELLBEING ECONOMY

- Establishing a wellbeing economy is a key focus of NSET. As we transition to a wellbeing economy, we will use the powers we currently have to build a fair, green and growing economy, which meets the needs and aspirations of people, and where businesses across Scotland thrive and prosper.
- A wellbeing economy is one that allows people to fulfil their potential. It goes beyond a traditional understanding of the economy that focuses on GDP in isolation. Wellbeing includes things like health, equality, fair work and the environment.
- A wellbeing economy transition requires us to think differently about the economy – it is not simply grow first, redistribute and clean up later, but a model that is equitable, sustainable and dynamic from the outset.
- We have published a Wellbeing Economy Monitor to track broader outcomes beyond GDP on issues including health, equality, fair work and the environment. It will be published at least once a year and help to assess Scotland's progress in building a wellbeing economy. Informed by our Wellbeing Economy Pilot in Clackmannanshire, we have published a Toolkit to help other local authorities embed a wellbeing economy approach.

INWARD INVESTMENT

- The IIP, launched in October 2020, articulates the important role inward investment plays in creating high-value jobs for the Scottish economy. It sets out how values are central to our offer,

with our ambitions for a wellbeing economy at the heart of attracting new investment opportunities.

- Inward investment is a key driver for economic growth, creating a more open and outward facing economy, which is why we have clear ambitions for increasing the amount of high-quality, values-led inward investment.
- Although only three per cent of businesses in Scotland are inward investors, these businesses account for over a third of jobs, around half of GVA, just under two thirds of Business Expenditure on Research and Development (BERD) and three quarters of exports.
- The IIP takes a strategic approach to identifying Scotland's strengths, aligning these with current and projected global investment flows, and sets out a series of actions to attract further inward investment to Scotland.
- The IIP identifies nine opportunity areas that have the greatest potential to maximise the delivery of spill-over impacts that benefit the wider Scottish economy. These are grouped into three overarching priority areas of: net zero, digital and high-value manufacturing.

NEW DEAL FOR BUSINESS GROUP (NDBG)

- The Group focused on 4 main areas: Economic conditions and performance; ensuring we have the best environment to do business; enhanced partnership working and transition to a Wellbeing Economy
- The Group's progress and recommendations report was published on 29 June and the recommendations accepted in full by the First Minister. Over the summer the Group is working on the development of an implementation and delivery plan.
- It is vital we make early progress and deliver on the critical recommendations set out. This is a longer shared journey, and the steps taken here will make us better able to evolve and adapt our plans together for the benefit of all.
- To have the greatest impact, the Group prioritised the recommendations that will make the most immediate difference, these include:
  - Setting up a new independent Regulatory Review Group (RRG) to work with industry and government on a renewed remit;
  - featuring non-domestic rates among the wider considerations of a new Tax Advisory Group;
  - ensuring the right voices are heard in engagement with business about policy;
  - working on labour market participation with a focus on supporting parents into employment and the skills businesses need for a transition to net zero; and
  - gathering data on the type of support businesses are searching for, to help government better understand their needs.
- This is the start of a process to ensure we can create the conditions together to support business, which in turn will drive economic growth that feeds into strong and sustainable finances to support public services and communities, as well as a just transition to net zero.
- For government implementing the recommendations will require some fundamental changes to how policymakers across Scottish Government consult business and make policy. This will be a cultural change that will require consistent application across Scottish Government and we have the commitment of the Permanent Secretary and senior officials to make this happen.
- Our ambition is to move away from conversations between business and Ministers or officials that focus on transmitting views and – instead – concentrate on ways that help us to align policies to business, to co-design policy and to implement and deliver in partnership.

ENTREPRENEURSHIP

- Entrepreneurship is at the heart of Scotland's economic strategy as set out in the National Strategy for Economic Transformation (NSET). NSET sets out a vision of Scotland being internationally recognised as a nation of entrepreneurs and innovators, who embrace the opportunities of new technologies and an entrepreneurial approach.

- Our approach will build on the foundations already in place in world-class universities, cutting edge research, and an active investment market and will embed a culture in which entrepreneurship is encouraged, supported and celebrated.
- This approach will ensure that the creativity, ingenuity and determination needed for a start-up nation will deliver high growth start-ups and scale-ups that can create skilled jobs, pay higher wages, drive increased productivity and radiate innovation across the wider economy.
- It will also ensure we have an entrepreneurship for all approach, that delivers across the whole of society and can drive social mobility, create fulfilling jobs and deliver the economic prosperity necessary to sustain thriving local, and rural communities.

ACCESS TO CAPITAL FOR HIGH POTENTIAL GROWTH BUSINESSES

- While the overall investment landscape in the UK is increasingly challenging, 2022 was a record year for equity investment in Scotland at £953m, placing us as the best performing market for investment and deals after London and the Golden Triangle.
- The current economic context has led to increasing investor caution. This has meant lower valuations, deals taking longer to complete, and less capital available to new to equity companies as investors focus on their existing portfolios.
- To create a world-leading investment ecosystem we need a continuum of growth capital able to meet the needs of companies and projects across all sectors and stages.
- Where we can meet these needs, companies will not only stay in Scotland, but we will be able to attract early-stage businesses from other ecosystems, increasing the density of our innovative clusters.
- The scale of ambition set out in the NSET means that we cannot directly meet the investment needs of all companies seeking investment from government-backed funds, and nor would we wish to.
- SG-backed investment funds are designed to fill gaps in the supply of capital available to businesses and at the same time to crowd in private capital to create a busier ecosystem of investors active in Scotland. These funds provide investment finance across different stages of company growth.
- This is a significant shift in policy direction, from business-level (micro) intervention into a market-level (macro) intervention to ensure the effective functioning of the equity market for all business investment.

NET ZERO ECONOMY

- Scotland's commitment to a just transition means planning and acting in a way that maximises and captures these opportunities – including better, secure jobs; growing, innovative businesses and supply chains; investment and trade and building our economic resilience to underpin a wellbeing economy.
- Scotland has strengths in renewable energy and our offshore natural assets – particularly offshore wind and potential for vast carbon storage; underpinning strengths and potential for hydrogen development and exports; expertise and skills in the decarbonisation of heat and leading innovations in zero emissions heavy duty vehicles as well as innovative, cross-cutting technologies such as data, sensors and software.
- Our draft Just Transition Plans, due to be published alongside the draft Climate Change Plan this Autumn (2023), will set out concrete actions and roadmaps of how we will capture these opportunities.
- Scotland's offshore assets are a key strength and area of potential: ScotWind will deliver over £750m in revenues for the public purse through the initial awards alone, and we welcome the commitment of developers to invest an average projection of £1.4 bn in Scotland per project, which equates to around £28bn across the 20 ScotWind offshore wind projects.
- The Scottish Government has committed to investing £100 million over this parliament to supporting the green hydrogen sector and this month (10 May) the First Minister announced

that £7 million is being invested in projects to drive innovation in the production, storage and distribution of renewable hydrogen. The investments will be made in 32 projects across Scotland.

ANNEX C

GUEST BIOGRAPHIES

Sir Ewan Brown, non-executive director Noble Grossart, merchant bankers and was formerly director for over 35 years. He is also non-executive director of Stagecoach Group, chair of James Walker (Leith), a board member of Entrepreneurial Scotland and a trustee of the Royal Scottish Academy Foundation. Past directorships include Scottish Financial Enterprise (chair), Lloyds TSB Scotland (chair), Lloyds TSB Group, Wood Group, Scottish Widows Bank, Pict Petroleum, Scottish Transport Group, Scottish Development Finance and chair of Creative Scotland (2009-2010). Sir Ewan was Master of the Edinburgh Merchant Company (1994-1995). Other previous appointments include the Council of ICAS, the Council of Assembly of the Church of Scotland and chair of the Court of Heriot-Watt University (1996-2002)

Dr Poonam Malik is Head of Investments at the University of Strathclyde, Glasgow, leading on the University's enhanced Investment function from entrepreneurial and commercialisation activities focused on startups, spinouts and spin in companies. She is a GlobalScot, a Climate Champion for Scottish Enterprise Board, Skills Development Scotland Board Member and cochair of the New Deal for Business Group.

Sir Brian Souter co-founded Stagecoach with his sister Ann in the 1980s**.** He was made a Knight Bachelor of the Order of the British Empire in 2011 for his services to Transport and to the Voluntary Sector.

Martin Gilbert was co-founder and CEO of Aberdeen Asset Management from 1983-2017. Martin holds number of chairman positions including with AssetCo, Revolut, the Net Zero Technology centre and Scottish Golf.

Jim McColl OBE is founder and CEO of Clyde Blowers Capital, an independent investment firm based in Glasgow. Over the past 16 years Clyde Blowers has grown significantly and has developed into a portfolio of global engineering companies.

Sir Ian Wood served as Wood Group's chief executive from 1967-2006, and as chairman until 2012. The Wood group is a North Sea Oil company, and Ian was largely responsible for transforming it from a modest size to a large corporation with operations in over 50 countries.

Chris van der Kuyl is Owner & Founder of 4J Studios, one of the UK's most successful videogame developers and responsible for Minecraft. Chris is a visiting professor at the University of Abertay, and sits on a number of boards including Scottish Institute for Enterprise. He is also the founding Chairman of Entrepreneurial Scotland which represents all Scotland's Entrepreneurial talent.

Calum Paterson is managing partner of Scottish Equity Partners (SEP) and has led the firm since it's inception. He chairs the SEP investment committee and was previously a member of the board of directors at Skyscanner.

Gregor Alexander has been Finance Director on the SSE Board since 2002, and worked for the company since 1990. Previously Gregor worked in senior finance roles and led specialist teams including as Group Treasurer and Tax Manager.

Gareth Williams, Co-Founder and Chair of Skyscanner established in 2001 and the Edinburgh-based company has grown to become the top flight search engine in Europe. Skyscanner now offers travel searches in more than 30 different languages. Skyscanner was sold to a Chinese company in 2016 and Gareth remained a member of the board until 2019.

Ellis Watson, Business Adviser to the First Minister and business leader whose wide-ranging career has spanned being CEO of Celador (the production company behind Who Wants to Be a Millionaire); Simon Cowell's entertainment company Syco; FirstGroup; John Menzies; The Sun, and the Mirror Group. Currently Executive Chairman (and former CEO) of DC Thomson, Ellis is known for his ability to turn around, re-brand and expand businesses in a variety of sectors. He was awarded an honorary doctorate from Robert Gordon University for services to business in 2018, appointed a Global Scot by the First Minister in 2015, and sat on the HM Treasury's Government Taskforce for Business in the Scotland Office. Ellis was also involved in the Tay Cities Deal.

ANNEX D

SUMMARY OF NEW DEAL FOR BUSINESS GROUP (NDBG) RECOMMENDATIONS

The NDBG worked on five key areas that business told us were important to them. Each area was taken forward via subgroups:

- The subgroups each provided reports on their work to the NDBG along with recommendations. These were considered collectively and agreed by the main NDBG and before sharing with the First Minister for agreement.
- In total there are 78 recommendations, although a number that overlap or complement each other. To ensure that the NDBG is able to follow through on its work, it agreed to develop an implementation and delivery plan covering the recommendations in full. The Implementation and Delivery plan will be completed for the Group's agreement by 31 August.
- In order to have the greatest impact the NDBG prioritised those key recommendations that will make the most immediate difference.
- This means – and we are committed to – this major cultural change for government.

Prioritised recommendations:

1. A new Business and Regulatory Impact Assessment and Toolkit, developed with business, that has a stronger focus on small business and consumers.
2. A return of the Independent Regulatory Review Group (chaired by Professor Russel Griggs) which will work with industry and government on a renewed remit to advise Ministers.
3. A full and deep dive into the Scottish Government policy development cycle to reinforce the need for and capability to undertake effective engagement at all stages wherever possible – including pre-policy – particularly when regulation is a potential outcome.
4. Systematic mapping of current engagement with business by policy areas across Scottish Government to properly capture a wide range of business voices in the development of particular policies.
5. Keep all Non-Domestic Rates policy reforms under review to ensure that the Non-Domestic Rates system delivers the most competitive environment to do business whilst also supporting our communities.
6. Review the design of the administrative and digital processes of the Non Domestic Rates system to ensure a more productive and efficient environment for all.
7. Early work should be taken forward between business and government on labour market participation, with a focus on supporting parents and carers into work, and on the skills and support businesses need to transition to Net Zero.

8. Scottish Government, businesses and others should work together to create a simple description of what the Wellbeing Economy is and how business can contribute. This should build on the work of the Business Purpose Commission and include metrics to measure the impact of business actions on the economy, workforce, community, society and environment.
9. Share and use data on the type of support businesses are searching for to help government understand business needs.
10. Review and share information on key sectors and market opportunities, building on the work in NSET on new market opportunities.

Note of meeting between Equinor and Mr Robertson of 8 August 2023

ENGAGEMENT REPORT	
Minister	Angus Robertson (**AR**) Cab Sec for Constitution, External Affairs and Culture
Date	09 August 2023
Who	Hannah Mary Goodlad (**HMG**) Head of Portfolio and Strategy, Asia Pacific, Equinor
Key Points	Following her participation in the Arctic Frontiers Abroad event in Aberdeen, **HMG** expressed interest in remaining sighted of the work that the Scottish Government is carrying out to increase connections and knowledge exchange with Arctic partners. **AR** and **HMG** discussed Scotland's renewable energy potential and agreed on the importance of raising international awareness of the key role that Scotland can play in assisting decarbonisation efforts in Europe. **AR** spoke about the Scottish Government's work on hydrogen and the potential for closer cooperation with other countries around the North Sea. **HMG** reflected on the role of Equinor as a vehicle to promote and deliver Norway's energy offer internationally. The memorandum of understanding that Equinor signed with RWE (Germany) earlier this year is evidence of Equinor's economic and diplomatic functions. **HMG** commented that Scotland's potential on carbon capture and storage, including its optimal geological features, are well known and understood internationally.
Attending Officials	• [REDACTED: REGULATION 11(2)]– Head of Nordic and Arctic Unit, DEXA • [REDACTED: REGULATION 11(2)]– Deputy Private Secretary

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Briefing for meeting between Equinor and Mr Robertson of 8 August 2023

CABINET SECRETARY FOR CONSTITUTION, EXTERNAL AFFAIRS AND CULTURE

What	Introductory meeting. You had a brief chat with Hannah Mary at the Arctic Frontiers Abroad event in Aberdeen (March 2023), where she joined a panel discussion on just transition in Scotland and the Arctic.
Where	Virtual meeting – **Click here to join the meeting**
When	Tuesday 8 August 2023, 10:00 – 10:30
Key Messages	• Thank you for contributing to the Arctic Frontiers Abroad event in Aberdeen last March. • SG's Arctic engagements create opportunities to promote Scotland's renewable energy potential internationally. Keen to hear your views on what additional avenues we should explore to increase Scotland's profile further. • Congratulations on your new role. Interested in hearing more about your responsibilities and the geography you cover. My officials would be happy to facilitate introductions to the SG hub in Beijing and SDI offices in the region, if helpful. • We are encouraging Shetland partners to work more closely with us on Artic opportunities and would value your support in mobilising relevant stakeholders.
Who	**Hannah Mary Goodlad – Head of Portfolio and Strategy Asia Pacific, Equinor** Originally from Shetland, she has worked for Equinor (and its predecessor Statoil) since 2014. Between 2020 and 2021, she also served as vice-chair of the Aberdeen and Highlands & Islands branch of the Energy Institute. She is currently based in Oslo. Her father, John Goodlad, is the Chair of Fisheries Innovation Scotland, a Board Member of UHI Shetland and former Honorary Consul for Norway (2011-2020).
Why	Following your short chat in Aberdeen, Hannah Mary requested a follow-up meeting to find out more about the Scottish Government's Arctic policy work and identify opportunities for her to help us promote it, including by mobilising her network of contacts in Shetland. Hannah Mary's responsibilities at Equinor have changed since the Aberdeen conference. At the time, she was responsible for the Baltic Sea area. She now manages the Asia-Pacific region. Nonetheless, she remains a well-connected and useful contact. While we don't expect this meeting to focus extensively on Equinor's operations in Scotland, we have included lines on oil & gas at Annex A.
Supporting official	[REDACTED: REGULATION 11(2)]– Head of Nordic and Arctic Unit [REDACTED: REGULATION 11(2)]
Briefing contents	Annex A – Oil & gas – Top lines / sensitivities Annex B – Arctic core brief

Introductory meeting with Hannah Mary Goodlad (Equinor)

OIL & GAS – TOP LINES **ANNEX A**

<u>We are committed to a just transition for Scotland's energy sector.</u>

- The unlimited extraction of fossil fuels is not consistent with Scotland's ambitious climate obligations but we also have to ensure a planned and fair transition that leaves no one behind.
- That means simply stopping all future activity overnight is wrong.
- It could threaten energy security while destroying the very skills we need to transition to the new low-carbon economy.
- Through our draft Energy Strategy and Just Transition Plan, we have set out a clear pathway to deliver on global commitments and capitalise on the enormous opportunities offered by becoming a net zero economy.
- Our focus must be meeting our energy security needs, reducing emissions and ensuring a just transition for our oil and gas workforce as North Sea resources decline.
- The Scottish government is absolutely committed to a just transition - and we are not waiting - we are already acting, for example, through our ten year £500 million just transition fund, taking workers with us on our journey to net zero and working alongside trade unions.

[REDACTED: REGULATION 10(4)(e)]

UK GOVERNMENT'S NORTH SEA LICENSING ANNOUNCEMENT

<u>The Scottish Government has set out a clear pathway to deliver on global commitments and capitalise on the enormous opportunities offered by becoming a net zero economy and unlocking our potential as a renewables powerhouse</u>.

- Our focus must be meeting our energy security needs, reducing emissions, delivering affordable energy supplies whilst ensuring a just transition for our oil and gas workforce as North Sea resources decline.
- In contrast, the UK Government – who have responsibility for oil and gas exploration and licensing – have shown a lack of focus on delivering a just transition for our energy sector, and still lack a clear and coherent decarbonisation plan that demonstrates delivery of net zero targets and recognises that the north sea is a mature resource.
- If it is serious about safeguarding our energy security, breaking our reliance on global market prices and ensuring a fair transition for our energy workforces, it must concentrate on taking the actions only it can take to enable our enormous renewables capabilities to accelerate.
- We have consistently called for the UK Government's Climate Compatibility Checkpoint to be strengthened. Without transparent and robust climate compatibility tests, we lack a transparent evidence base to form the basis of decision-making, but we do not believe that Scotland's future is in indefinite or unlimited extraction of oil and gas.
- The FM also tweeted *"For the PM to announce unlimited extraction of oil and gas, in the week the UN has confirmed July is set to be the hottest month in human history, shows the PM is willing to recklessly gamble the future of our planet for cheap political gain."*

<u>Decisions on oil and gas exploration and licensing remain reserved to the UK Government.</u>

- We called on the UK Government to hold a four nations' discussion to agree the Climate Compatibility Checkpoint process – a call which was ignored.
- It is disappointing that the Climate Compatibility Checkpoint introduced by the UK Government is not transparent and lacks teeth, demonstrating that the UK Government is not serious about the climate crisis.
- Instead of licensing for more fossil fuel extraction, the UK Government should be encouraging investment in renewables and supporting a just transition for our energy sector and for Scottish households and businesses.

SG POSITION – ROSEBANK

The unlimited extraction of fossil fuels is not consistent with Scotland's ambitious climate obligations but we also have to ensure a planned and fair transition that leaves no one behind.

- With so much at stake, it is vital that we take an evidence-based approach to the energy transition. That is why we are calling for a robust and transparent climate compatibility test to be applied to all new developments.
- The Scottish Government has made our position clear, we are committed to a just transition for Scotland's energy sector. Our focus, as outlined in the draft Strategy, must be meeting our energy security needs, reducing emissions and ensuring a just transition for our oil and gas workforce as North Sea resources decline.

ARCTIC CORE BRIEF **ANNEX B**

Key lines

- Scotland is the world's most northernly non-Arctic nation. We share longstanding cultural, social and economic ties.
- *Arctic Connections* is Scotland's first Arctic Policy Framework. It illustrates existing links, reflects on shared challenges (particularly those stemming from rurality and remoteness) and explores avenues for even closer cooperation. It was published in September 2019.
- The policy framework is not a geopolitical statement but a prospectus for cooperation and knowledge exchange on issues that are relevant to both Scotland and the Arctic.
- We want to work with like-minded partners to develop joint solutions to shared challenges and improve the resilience and wellbeing of our communities.
- From empowering rural areas to accelerating decarbonisation, from promoting Indigenous languages to developing sustainable tourism solutions, there is a lot Scotland and Arctic countries can work together on.
- Climate change is endangering the future of the Arctic and of our entire planet. In the policy framework, we reiterate our calls for global action and we set out the considerable knowledge that Scotland can offer on decarbonisation.
- In light of the deep and complex challenges that the Covid-19 pandemic brought to the fore, multilateral dialogue and knowledge-exchange is all the more important if we want to promote a fair and green recovery.

Policy framework – Content

The APF is cross-cutting, drawing together key issues and policies across SG. We have identified 6 main areas, each one corresponding to a chapter in the document:

1. *Scotland's global outlook and relationship with the Arctic region*
2. *Education, research and innovation*
3. *Cultural ties*
4. *Rural connections*
5. *Climate change, environment and clean energy*
6. *Sustainable economic development*

Key facts and figures

- Scotland has over 90 inhabited islands.
- 98% of our landmass is classified as rural but it contains only 17% of our population.
- The population density of the Highlands and Islands region of Scotland is among the lowest in Europe.
- The Shetland archipelago is closer to the Arctic circle than it is to London. It is located at a higher latitude than Cape Farewell (Greenland) and Juneau (Alaska, US).

- Since 2000, institutions in Scotland have contributed to more than 1,000 academic publications about the Arctic region.
- Scotland has 11 members in the University of the Arctic network. More than Denmark, Sweden and any other non-Arctic nation with the exception of China.
- 40% of the projects funded through the EU's Northern Periphery and Arctic programme 2016-2020 included a Scottish partner.

Key recent Arctic initiatives

- Delivering on one of the commitments made in the policy framework, in April 2021 we established an **Arctic Connections Fund** to help Scottish organisation and communities work with Arctic partners. Organisations based in Scotland are invited to apply for up to £10k. Applications for the third round closed on 12 May 2023, with 43 proposals received.
- Officials have worked with the academic sector to increase the Scottish contingent within the **University of the Arctic**, an international and multidisciplinary network promoting research in and about the High North. Scotland now has **eleven members** in UArctic, with other two universities expected to apply for membership in 2024. We have more members than Sweden, Denmark and any other non-Arctic nation with the exception of China.
- We have provided financial support towards the establishment of the Scottish Arctic Network (ScAN), **Scotland's first Arctic academic network**, to encourage cooperation and joint work between Scotland-based researchers whose expertise revolves around Arctic matters.
- Thanks to an MoU signed in March 2023, ScAN has become a **UArctic regional centre**. It is only the second such centre outside Arctic countries (the other is in China).
- On behalf of ScAN and with our support, the University of Edinburgh will host **Arctic Science Summit Week** in spring 2024, due to attract around 1,000 Arctic researchers from around the world.
- The Scottish Government partnered with Arctic Frontiers (a major Arctic conference held annually in Tromsø) to promote a one-day conference focused on Scottish-Arctic cooperation. **Arctic Frontiers Abroad – Scotland** took place at the Aberdeen Science Centre on 17 March 2023, with a focus on Just Transition and Blue Economy.
- A **debate on Scottish-Arctic collaboration held in the Scottish Parliament** on 2 March 2023 concluded with unanimous support for a motion encouraging even greater engagement and knowledge exchange between Scottish and Arctic partners.
- Scottish Ministers have addressed the **Arctic Circle Assembly** in Reykjavik every year it has been held since 2016. The former First Minister spoke at the conference three times (in 2016, 2017 and 2021).
- The Scottish Government co-sponsored the **Cryosphere Pavilion at COP26**, together with the Swiss Government and the Nordic Council of Ministers. The Pavilion promoted discussions between researchers, policy makers and leaders about the effect of climate change on the frozen regions of our planet. The Arctic was one of the key geographies.
- At COP26, Scotland became the first sub-national government to join the **50x30 coalition** – an alliance between emissions research institutions and governments that recognise the vital importance of cutting emissions by 50 per cent by 2030 to limit ice loss and sea level rise. Other members include German, Danish, Finnish, Swedish and UK Governments.
- In November 2020, we provided a contribution to the consultation on the EU's new Arctic policy, to set out relevant Scottish expertise and our desire to remain as closely involved in EU policy making as possible.

Note of meeting between Equinor and Gillian Martin of 6 September 2023

Note of short meeting between Minister for Energy and Environment, Gillian Martin, and Equinor on 6 September 2023

Attendees:
Gillian Martin, Minister for Energy and Environment
Arne Gürtner, Senior VP UK and Ireland
Susie Townend, Interim DD, Energy Industries Division, SG

[REDACTED: REGULATION 10(4)(e)]

[REDACTED: REGULATION 10(4)(e)]

Ms Martin emphasised the importance of a robust and transparent climate compatibility checkpoint and asked if Rosebank was compatible with climate change commitments. Mr Gürtner explained that emissions associated with production from Rosebank are already accounted for in UK carbon budgets. He also said that Equinor intends to become a carbon neutral company with respect to both production and use of their product. Ms Martin noted the benefits of peatland restoration in offsetting carbon emissions and the wider environmental benefits restoration of peatland could bring.

Ms Martin noted that Norway's approach to oil and gas had been different to the UK, it is well known that Scottish Government regrets that the UK Government did not establish a similar sovereign wealth fund. She asked how Equinor's ongoing role is currently perceived in Norway. Mr Gürtner explained that Norway's contribution to European energy security, in the last year, in the context of Russian invasion of Ukraine, had been appreciated by both the Government in Norway and the wider population.

Document 16: Extract from briefing pack for Offshore Europe 2023 which also included meeting between Equinor and Gillian Martin of 6 September 2023

What	You have been invited to give a keynote speech at Offshore Europe 23. The theme of the Offshore Europe Conference is "Securing sustainable and equitable energy for the next 50 years and beyond" and this year's conference marks the 50th anniversary of Offshore Europe. You have also been invited to visit the SE/SDI Scotland Pavilion.
Where	P&J Live, Bucksburn, Aberdeen AB21 9SB Speaking Venue: Conference Room 2A, 1st floor Scotland Pavilion: Hall 2
When	Wednesday 6 September, 9.30-10.30 Speaking Slot: 9.45-10.00 Visit to Scotland Pavilion: 10.00-10.30 Private Meet with Equinor CEO: 10.05-10.30
Key messages	• The offshore sector will play a key role in Scotland's journey to net zero. • I am keen to work closely with the sector to ensure we collectively deliver on the opportunities that the energy

	transition offers to Scotland's businesses, economy and people.
Who	The original invite was sent to FM by the President of the Society of Petroleum Engineers (SPE), Kamel Ben-Naceur, who is the 2023 Conference Chair.
Why	An opportunity to share the Scottish Government's clear commitment to a just transition for the sector, particularly in the North East to a large audience. Visitors and exhibitors attend from around the world with 119 countries represented at the 2019 event. [Micase Reference 202300366189]
Supporting official	Susie Townend, Interim Deputy Director for Energy Industries Mobile: [REDACTED: REGULATION 11(2)]
Briefing contents	**Annex A:** Event Programme **Annex B:** Guest List/Attendees **Annex C:** Background **Annex D:** Venue Maps, P&J Live **Annex E:** FMQ Brief: Oil & Gas **Annex F:** Speaking Note - Sent up separately
Media handling	OEUK intends to publish its annual Economic Outlook report ahead of the conference (00:01 Tuesday 6th September) and have approached SG for a supportive comment. Comms will progress this for your consideration. Your speech will be highlighted on @ScotGovEconomy.
Social media	@SPE_OE
Greeting party and specific meeting point on arrival (if event is at a non SG building)	You will be greeted by Jonathan Heastie of Reed Exhibitions (OE23 conference organisers) at the main entrance to P&J who will escort the Minister to the conference suite. His mobile number is **[REDACTED: REGULATION 11(2)]**. [REDACTED: REGULATION 11(2)]and [REDACTED: REGULATION 11(2)], SE, will collect the Minster from her keynote and escort her to the Scotland Pavilion at 10.00 The organisers have advised that speakers should be dropped off outside of the Hilton and can walk through the lobby and into P&J Live through the linked entrance.
Specific entrance for Ministerial car/parking arrangements	VIP Parking Space is available for government car and the pass has been sent up to PO separately.

Annex A: Event Programme

Arrive to Venue – Escort to Conference Suite	9.30 – 9.45
Keynote Speech	9.45 – 10.00
Visit to Scotland Pavilion, Hall 2 • Inc private meeting with Equinor CEO	10.00 – 10.30 10.00 – 10.05

Further Details on Scotland Pavilion

SE/SDI have a major presence at Offshore Europe in Aberdeen this year (5-8 Sept). This represents a significant investment for the organisation with 5 blocks of exhibition space including a Learning Zone. This is a dedicated area to be used for presentations and workshops focused on key domestic and international opportunities in geothermal, green heat, hydrogen, marine, offshore wind and zero emissions transport.

There are nearly 40 exhibitors confirmed, including: ETZ, MISP, ONE, Aberdeen & Grampian Chamber of Commerce & Invest Aberdeen (Aberdeen City Council), plus many Scottish energy transition companies exhibiting independently at the show.

Annex B: Attendees

Jonathan Heastie, Portfolio Director, Energy & Marine, Reed Exhibitions, will greet the Minister at the main entrance.

Scotland Pavilion

The Minister will meet and have an introductory chat with the SE/SDI Leadership team. This will include the following individuals:

Suzanne Sosna - Director of Economic Opportunities

David Rennie – International Sector Head of Oil & Gas

Lynn Grieve, SDI Global Head of Trade for Energy & Low Carbon Transition

[REDACTED: REGULATION 11(2)], SE Project Manager

Annex C: Background

<u>Talent and Attraction</u>

- The Scottish Government is taking action to attract people with the skills that Scotland needs
- An Industry Advisory Group for rest of UK Talent Attraction, has been formed to share talent attraction expertise to identify and develop effective approaches to attracting talent from rUK.
- The Industry Advisory Group is exploring how best to shape the talent attraction programme which can expand Scotland's talent pool at all levels, to help give employers the skills pipeline needed to take advantage of opportunities, and benefit our economy.
- The National Strategy for Economic Transformation sets out our approach to ensuring that employers have a pipeline of skilled workers and makes clear that employers must invest in the skilled employees they need to grow their businesses.
- We are taking forward a range of measures, including working with business organisations to promote Fair Work; providing a range of employability support to help people to enter the

labour market; and developing our Talent Attraction programme and Migration Service to attract workers with the skills that Scotland needs.

Green Skills

- We are committed to a Just Transition to Net Zero and skills are a critical part of that transition.
- The scale and pace of change needed across all sectors will demand a significant realignment of our investment in education, training and work-based learning towards green jobs.
- Government cannot act alone. Working with businesses, industry leaders, public sector employers and education and skill providers, listening to your needs, we can build on our strong foundations and enable the economy to pave the way to Net Zero.
- The Climate Emergency Skills Action Plan (CESAP) provides a framework for green skills planning across priority sectors directly affected in the transition to net zero.
- We are currently reviewing the approach and the priority actions within the original plan to reflect our economic strategy, to align with our Just Transition Plans and next Climate Change Plan, and to take on board relevant recommendations from the independent review of the Skills Delivery Landscape.

Just Transition and North Sea Jobs

- Independent analysis commissioned by the Scottish Government from EY shows that GVA and employment in oil and gas sector is forecast to decline in line with the North Sea basin decline. However, it also shows the considerable economic opportunity from renewable energy to Scotland's economy.
- We need to harness the skills, talent, and experience of the energy sector to support the buildout of low carbon technologies in Scotland. The Scottish Government is absolutely committed to a just transition, and ensuring we take workers with us on our journey to net zero.
- With research from Robert Gordon University (2021) highlighting that a majority of offshore workers could be delivering low carbon energy by 2030 and that more than 90% of the UK's oil and gas workforce have medium to high skills transferability – they are well positioned to work in adjacent energy sectors.
- Our £500m Just Transition Fund is providing financial support to help energy workers reskill and to build confidence in the potential for a just transition.
- Our National Strategy for Economic Transformation sets out our ambition that, by 2032, Scotland will be an international benchmark for how an economy can transform itself, de-carbonise and rebuild natural capital.

Offshore Wind

- ScotWind reflects very significant market ambition for offshore wind in Scottish waters – around 28 GW across 20 projects.
- We are committed to maximising the public benefits of our renewables revolution and we will explore all options open to us to do so.
- We are determined to maximise the economic opportunity for the Scottish supply chain from our offshore wind potential.
- We welcome the commitment of developers to invest an average projection of £1.5 bn in Scotland per project across the 20 ScotWind offshore wind projects.
- We will drive forward offshore wind skills development – working with stakeholders to focus on the opportunities for diversification and skills transfer from our oil and gas sector, in line with our commitment to a Just Transition.
- Scottish Offshore Wind Energy Council (SOWEC) developed a Collaborative Framework Charter which has helped to forge effective partnerships to deliver our supply chain potential. This has now led to the Strategic Investment Model (SIM), which is aimed at enabling a move

from project-led to sector level investment that better supports growth in port and supply chain capacity and capability.

INTOG – Innovation and Targeted Oil and Gas Decarbonisation

- The INTOG offshore wind leasing and planning exercise presents significant opportunities to decarbonise oil and gas production in Scotland while, crucially, enabling the offshore wind sector to expand, innovate and drive forward Scotland's ambition to be a renewables powerhouse.
- The INTOG leasing round is a 'first of its kind' and is the next step in realising another world leading opportunity for Scotland's energy transition.
- We welcome the Crown Estate Scotland announcement made on the 24 March 2023 of the successful 13 INTOG applicants, which will be offered exclusivity to develop offshore wind in Scotland's seas.
- Oil and gas continues to play an important role in our economy and it is therefore vital that the existing energy industry decarbonises as rapidly as possible. We must deliver a just transition in a way that takes our existing skilled workforce and supply chain with us.
- This is a huge opportunity for existing offshore oil and gas platforms to reduce their emissions by using electricity generated directly from local wind turbines and to meet the targets in the North Sea Transition Deal.

Wave and Tidal

- As part of a diverse renewable energy mix, wave and tidal energy have the potential to support the delivery of a secure and low carbon energy system while providing new industrial opportunities and being part of Scotland's response to the global climate emergency
- Scotland is the most advanced hub in Europe for marine energy, with some of the world's largest and most powerful operational tidal stream projects together with smaller-scale prototype wave energy projects.
- Scotland is home to almost all the approximately 10 megawatts of operational tidal stream energy capacity in the UK and more than half the total capacity installed globally, with pioneering projects being led by Scottish developers Simec Atlantis Energy, Orbital Marine Power and Nova Innovation.
- Our Wave Energy Scotland (WES) programme, in which the Scottish Government has invested more than £50 million since 2014, is supporting the development of wave energy. Two half-scale wave energy convertors from the WES programme have undergone real-sea trials in Orkney, Scotland over the past year. Deployment of these devices – developed by Scottish companies AWS Ocean Energy and Mocean Energy respectively - represent a significant step forward for the wave energy sector.

Hydrogen

- The Hydrogen Action Plan is supported by a programme of £100m capital funding, designed to accelerate and maximise the production of renewable hydrogen in Scotland.
- Funding to date includes over £7m grants offered via the Hydrogen Innovation Scheme to 32 projects that will drive innovation in renewable hydrogen production, storage, and distribution.
- The next tranche of the hydrogen investment programme, the Green Hydrogen Fund, will launch this year. This flagship fund will focus on supporting renewable hydrogen production from Scotland's abundant renewable energy resources, seeking to give Scotland first-mover advantage.

Annex E: [REDACTED: REGULATION 10(4)(e)]

[REDACTED: REGULATION 10(4)(e)

TOP LINES

We are committed to a just transition for Scotland's energy sector.

- The Scottish Government is absolutely committed to a just transition, and ensuring we take workers with us on our journey to net zero. [REDACTED: REGULATION 10(4)(e)]
- Our focus, as outlined in the draft Energy Strategy and Just Transition Plan, must be meeting our energy security needs, reducing emissions and ensuring a just transition for our oil and gas workforce as North Sea resources decline.
- Unlimited extraction of fossil fuels is not consistent with our climate obligations and is not the solution to the energy price crisis.
- We need a new plan for Scotland's energy system and the ESJTP seeks to provide this.

Decisions on oil and gas exploration and licensing remain reserved to the UK Government.

- We have consistently called on the UK Government for a four nations' discussion to agree on a final Climate Compatibility Checkpoint process – a call which has been ignored.
- It is extremely disappointing that the Climate Compatibility Test proposed by the UK Government is limited to new exploration, and that the bar has been set so low in terms of the Test itself.
- The lack of teeth in this Climate Compatibility Checkpoint demonstrates that the UK Government is not serious about the climate crisis.
- Instead of licensing for more fossil fuel extraction, the UK Government should be encouraging investment in renewables and supporting a just transition for our energy sector and for Scottish households and businesses.

That is why, as part of our draft Energy Strategy and Just Transition Plan published in January, we are consulting on what factors should be considered in assessing the impact of new oil and gas production.

- We are also consulting on whether this test should be applied to fields that are already consented but not yet in production as well as new exploration (if exploration continues) in the context of the global goals of the Paris Agreement.

This further illustrates the case for Scottish independence to manage offshore energy within Scotland's waters.

- The consultation is open until 9 May, and we will consider all consultation responses before developing a final policy position.

The Scottish Government has been clear about our intention to move away from a policy of unlimited extraction, even if the North Sea was not a declining resource.

- Independent research based on industry projections found that production in the North Sea will be around a third of 2019 levels by 2035 and below 3% of the 1999 peak by 2050. Independent analysis also suggests that existing sanctioned fields will contribute over 80% of Scotland's future production.
- Meanwhile, as of 2019, only 16% of the oil and gas coming into Scotland (including imports from Norway and beyond), is consumed in Scotland.
- Reducing our energy consumption while ramping up our energy generation capabilities through renewables and hydrogen will mean that, in a net zero Scotland, we will not only be less reliant on importing oil and gas, but a net exporter of cleaner and greener energy to the rest of the UK and beyond.

ROSEBANK

While licensing, exploration and production of the offshore oil and gas sector remains reserved to the UK Government, the Scottish Government is clear that unlimited extraction of fossil fuels is not consistent with our climate obligations and is not the solution to the energy price crisis, meeting our energy security needs or ensuring a just transition for our oil and gas workforce

- [REDACTED: REGULATION 10(4)(e)]. We are investing, through the Just Transition Fund over half a billion pounds to support a just transition for our energy sector and world-class supply chain and yet again call on UK Government to match that support.
- We need a new approach to Scotland's energy system – the draft Energy Strategy and Just Transition Plan seeks to do this. The Scottish Government is absolutely committed to a just transition, and ensuring we take workers with us on our journey to net zero.

JUST TRANSITION & NORTH SEA JOBS

Analysis published by EY shows that GVA and employment in the sector is forecast to decline in line with the North Sea basin decline. However, it also shows the considerable economic opportunity from renewable energy to Scotland's economy.

- We need to harness the skills, talent, and experience located in the North East to support the buildout of low carbon technologies in Scotland. The Scottish Government is absolutely committed to a just transition, and ensuring we take workers with us on our journey to net zero.
- With the right support, the number of low carbon jobs is modelled to rise from 19,000 in 2019 to 77,000 by 2050 as the result of a just energy transition, delivering a net gain in jobs across the energy production sector overall.
- In addition to energy production jobs, we expect significant potential for employment and economic benefits from the wider economy as we move to net zero – throughout transport, heat, and manufacturing sectors.

We must ensure a fair and just transition for our skilled offshore workers.

- We are working with the energy sector to plan for a multi-skilled workforce, one that can benefit from opportunities across the energy system.
- This includes transitioning skilled offshore workers into jobs in CCUS and decommissioning and diversifying oil and gas business models into renewable energy portfolios, including offshore wind, CCUS and hydrogen sectors.
- While we welcome the UK Government's confirmation that the Scottish Cluster is eligible for Track 2, they have failed to provide certainty around when funding will be awarded.

Our oil and gas workers, and their vital skills, will be essential to the transition.

- Workers, and trade unions, will be at heart of everything we do.
- With research from RGU (2021) highlighting that a majority of offshore workers could be delivering low carbon energy by 2030 and that more than 90% of the UK's oil and gas workforce have medium to high skills transferability – they are well positioned to work in adjacent energy sectors.
- RGU's Making the Switch report (2022) highlights the potential for the North East region to become a net zero global energy hub that supports existing oil & gas roles into the renewables and low carbon roles of the future.
- Our £500m Just Transition Fund is providing financial support to help energy workers reskill and to build confidence in the potential for a just transition.
- Indeed, the UK Government has refused to even match our £500m Just Transition Fund, despite the £300bn that has flown to the Treasury from North Sea oil since the 1970s.
- Our National Strategy for Economic Transformation sets out our ambition that, by 2032, Scotland will be an international benchmark for how an economy can transform itself, de-carbonise and rebuild natural capital.

Funding from the Just Transition Fund has already been allocated to support development of a skills passport.

- Up to £4.9m was awarded to OPITO for a digital offshore energy skills passport which will support the transferability of offshore workers' skills.
- The Scottish Government supports delivery of a skills passport that will work for the different offshore energy industry sectors.
- The Passport involves collaboration between the energy industry and its workers, and unions participate in the project's steering group.
- The Passport reached a key milestone with the development of a prototype in 2022-23.
- The Scottish Government will be working with representatives from across the offshore energy sectors to find a solution which works for all.
- Just Transition funding is also going towards creating an advanced manufacturing skills hub in Aberdeen and a pilot scheme with the National Energy Skills Accelerator to determine the skills required for an energy transition.

We have directly engaged with the energy workforce - 1,500 people helped shape the draft Energy Strategy and Just Transition Plan through a variety of methods.

- We have also provided the STUC with £100k of funding specifically to ensure workforce voices are heard directly.

North Sea Transition Deal and UK Government Funding

- Whilst the North Sea Transition Deal (NSTD) made a commitment to deliver investment of up to £16 billion by 2030 in new energy technologies.
- This investment is jointly between UK Government and the oil and gas sector – **and has not been committed by UK Government alone.**
- The Deal sets out a plan for how the UK's offshore oil and gas sector and the government will work together to deliver the skills, innovation and new infrastructure required to meet stretching greenhouse gas emissions reduction targets

SCOTTISH GOVERNMENT SUPPORT FOR NORTH EAST

The Scottish Government has committed to a number of measures to support economic recovery in the North East, including our £500m Just Transition Fund and £75m Energy Transition Fund. These complement more than £379m already committed via the City Region Deal.

- We are investing £125m over 10 years in the Aberdeen City Region Deal, matching the investment of the UK Government, delivering projects such as a new £40m Life Sciences Innovation Hub and the £20m Agri-Food Centre of Excellence.
- This is accompanied by a £254m 'side package' beyond the UK Government commitment, including £200m for Aberdeen to Central Belt rail improvements, £24m for the A90/A937 Laurencekirk junction improvement, and £49.5m to deliver improvements to the A92/A96 Haudagain Improvements project.
- In 2021, we allocated £14.3m to the North East Economic Recovery and Skills Fund, helping to support over 3,900 individuals and 850 businesses.
- We have allocated a net budget of £264.2m to Scottish Enterprise in 2023-24. This includes almost £13m to the Port of Aberdeen expansion, and £6m over a three-year period in new innovation facilities in the Aberdeen City Region.
- The annual Marine Fund Scotland for 2023/24 will open in April with £14m available to encourage the sustainable use of marine resources for economic growth.
- In the last 2 years, £7.7m was awarded to businesses in the North East via the Marine Fund Scotland, enabling over £25m of investment.

'WINDFALL' AND INVESTMENT ALLOWANCE TAX ANNOUNCEMENT

We have consistently called for targeted support for struggling households, and it is only right this is funded through taxing windfall gains rather than passing on the cost through higher borrowing and spending cuts.

- The European Commission's president Ursula von der Leyen said **[QUOTE]** *"In these times it is wrong to receive extraordinary record profits benefiting from war and on the back of consumers,"*
- The Chancellor's announcements in the Autumn Statement are a start, but he should have taken the opportunity to go further and revisit the poorly targeted investment allowance to encourage investment in renewables.
- Any tax break – if there should be one at all – should only encourage sustainable, renewable investment in the technologies that will help reduce reliance on fossil fuels and reach net-zero

The levy's investment allowance doesn't do enough to future-proof energy supplies and promote green energy.

- This still only serves to encourage short-term investment in fossil fuels, rather than promoting long-term, sustainable solutions. That is clearly contrary to our climate objectives, and the commitments made at COP26.
- Decarbonising existing oil and gas extraction is all well and good, but the allowance should really be targeted at investing in our future energy security.
- The Former First Minister welcomed investment - but any incentives must be balanced across sectors and encourage sustainable, long-term investment to secure our energy security.

LOBBYING BY FOSSIL FUEL COMPANIES

The Scottish Government is committed to a just transition and ensuring we take workers with us on our journey to net zero.

- It is vital that we work together to ensure a just transition that protects and creates good, green jobs and seizes the economic benefits our journey presents.
- Ministers undertake a wide range of stakeholder engagements relevant to their portfolio areas, and engage with businesses, owners and operators in our energy sector as a matter of course. Ministers have also met and continue to meet with the Just Transition Partnership and the Climate Change Plan Advisory Group. Both groups have Friends of the Earth represented.
- Decisions on oil and gas exploration and licensing remain reserved to the UK Government. But through our draft Energy Strategy and Just Transition Plan, we have set out a clear pathway to deliver on global commitments and capitalise on the enormous opportunities offered by becoming a net zero economy.
- Our focus must be meeting our energy security needs, reducing emissions and ensuring a just transition for our oil and gas workforce as North Sea resources decline. We have consistently called for the UK Government's Climate Compatibility Checkpoint to be strengthened and are consulting on our approach to energy transition.

Further Information – Energy Skills Passport

Mercedes Villalba MSP, Labour, has asked Ms Slater, the Minister for Green Skills an oral question on the Energy Skills Passport – this will be answered in the Chamber at 1pm on Wednesday 3rd May.

S6O-02164: To ask the Scottish Government what progress has been made on the Energy Skills Passport for offshore energy workers (word limit, 97 words)

Response

The Energy Skills Passport project – for which we have committed nearly £5 million from the Just Transition Fund - reached a key milestone at the end of in 2022 in the development of a prototype

which will be tested with workers and employees in the next phase. I am pleased that trade unions have been engaging their workforce in the design of the Passport solution, and unions are representing workers directly as part of the project review group for the Passport.

The Scottish Government supports delivery of a skills passport that will work for the different offshore energy industry sectors, recognising the cross-sector skills of workers, and supporting a fair and managed transition. The offshore industries, including wind, have also demonstrated clear support for a solution that works for all and promotes a fairer transition in offshore energy.

In total, up to £4.9m of the Just Transition Fund was awarded to OPITO over two years for a digital skills passport which empowers offshore energy workers to utilise their existing certification.

- Skills Passport Development and Testing is currently underway and is now entering the beta testing stage.
- **So far, the project has spent £1.872 million** on developing a prototype digital Passport and vital mapping of standards and qualifications.
- A key milestone, to develop a prototype of the digital passport, was met in December 2022. The prototype has been shared with Union members, the Passport's Project Review steering group and a wider set of stakeholders with positive feedback.

The Scottish Government supports the delivery of a skills passport that will work for the different offshore energy sectors, including the wind sector.

- The funding provided by the Scottish Government is for a passport which allows workers to move **between** offshore energy sectors.
- Scottish Government will continue to work with representatives from across the offshore energy sectors to find **a solution which works for all**
- Officials from the Scottish Government attended the last Project Review Group held in March, alongside other members including GWO, OPITO and representatives from the Unions.
- There has been positive trade union engagement throughout, with representatives from Unite sitting on the Project Review Group for the Passport, and have been proactive in engaging their workforce and involving them in the design of the solution.
- The passport involves the close collaboration between the energy industry; its workforce; governments and their agencies; trade unions; trade bodies; skills bodies; and education/training providers.
- There has also been strong commitment from North Sea Transition Authority & key organisations for the Skills Passport – with 11 major energy companies, supply chain providers and industry bodies signing a 'statement of commitment'.

Whilst the passport is UK wide - the proposed offshore energy digital skills passport is vital to support a simple, equitable and fair transition for the offshore energy workforce.

- By providing funding from the Just Transition Fund to support the full deployment of the passport solution, we are demonstrating unequivocal support for a just transition for the offshore workforce.
- The development of the passport is a practical and tangible mechanism that will support the offshore oil and gas workforce transition.
- A principle aim of the passport is to make the transfer process between sectors more efficient, whilst also reducing the repetition of training for the workforce when transitioning between sectors.
- This resource, which has strong support from across the offshore energy industry – including trade unions - will enable the workforce to understand the career opportunities and training requirements in a fast-moving transition.

- Ultimately it will allow skilled workers to move easily across sectors, creating a more mobile and flexible workforce for the offshore energy sector.

BACKGROUND: SKILLS PASSPORT

Key milestones:
- A proof of concept and digital prototype of the Skills Passport (completed end of 2022)
- Completion of mapping/alignment of standards to be displayed in the Skills Passport (Expected Q3, 2022)
- Full solution of Skills Passport ready for deployment (Expected Q3/ Q4, 2023)

The Skills Passport will:
- Focus on technical qualifications and training; safety and survival training; and specialist emergency response training to support the transition of the workforce between sectors.
- Contain functionality that can be scanned to access a worksite and confirm that the user has the recognised qualifications and training to attend the worksite.
- Display which qualifications and certificates are recognised by the different sectors and required for individual roles.
- Help the workforce identify future roles in different sectors and the training required to be qualified to fulfil those roles.
- Highlight future career pathways and help prevent employees repeating qualifications when transitioning between sectors (making the transfer more efficient).

Annex F: Speaking Note

Sent separately

Note of meeting between SSE and Mr Gray of 11 September 2023

Meeting with SSE plc
Monday 11 September 2023, 09:00 – 11.15
Inveralmond House, Perth

Attendees
Neil Gray, Cabinet Secretary for Wellbeing Economy, Fair Work and Energy
Gregor Alexander, Finance Director SSE
Rachel McEwan, Director of Sustainability SSE
Rob McDonald, Managing Director SSEN Transmission
Stephen Wheeler, Managing Director SSE Renewables
Niall Murphy, SSE Head of Public Affairs Scotland
Frances Pacitti, Offshore Wind Directorate
[REDACTED: REGULATION 11(2)], DECC
[REDACTED: REGULATION 11(2)], Ministerial Private Office

Matters Discussed

1. [REDACTED: REGULATION 10(4)(e)]The Cabinet Secretary was explicit that, while content to discuss issues of general policy, he would not discuss any live applications with Scottish Ministers for determination.
2. SSE called for a more balanced approach to consenting of energy infrastructure, with the need for proportionate mitigation of environmental impacts and a nature positive approach looking at net benefits of projects rather than focussing on individual species or receptors.

Viking windfarm peatland restoration was highlighted as a positive example, but not a standard which should be applied in all cases. Proportionality of assessment of landscape and visual impacts was discussed under reference to the example of Stronelairg extension and impacts on the Cairngorms National Park.

3. [REDACTED: REGULATION 10(4)(e)]Community benefits were discussed, with parties acknowledging examples of good practice by SSE and the opportunity to revisit principles in a more mature onshore wind market/ different characteristics of the offshore market. Parties discussed the merits of community wealth funds to deliver enduring benefits; feasibility challenges associated with delivery of benefits for individuals; and the balance to be struck benefits being secured locally for those communities who experience greatest impacts/ centralised to leverage other funding sources. Parties agreed to continue a constructive discussion.
4. Grid. An overview was provided of grid upgrades required in the SSEN region to facilitate the first phase of generation required to meet SG and UK targets. There was discussion on the approach to community engagement and the need for participation in decisions around corridor and route identification. The benefits of an improved narrative on the need for transmission upgrades were acknowledged, as part of a just transition and highlighting job creation and other economic benefits of the SSEN programme.
5. Industrial strategy. SSE called for workforce planning to be undertaken as part of the Green Industrial Strategy, and challenged the prevailing narrative that Scotland has failed to maximise the economic potential of onshore generation, citing examples of new Scottish suppliers. The economic benefits of a circular economy were also discussed, under reference to Rachel McGregor's role as a Just Transition Commissioner.
6. The Cabinet Secretary was offered the opportunity to meet with customer service representatives and hear about their roles. The Cabinet Secretary was also introduced to staff working in the grid distribution and transmission teams, to see how critical national infrastructure is monitored throughout the day.

Actions

1. SSE to share detail on specific priorities [REDACTED: REGULATION 10(4)(e)]
2. SSE and officials to continue to engage on community benefits for onshore and offshore generation projects.

Briefing for meeting between SSE and Mr Gray of 11 September 2023

What	This will be an opportunity to meet with the wider SSE Senior Leadership Team to learn about SSE's plans to invest £24bn in Scottish grid, wind, hydro, CCS and hydrogen. You will also have the opportunity to take a short tour of the operational control centres.
Where	Inveralmond House, 200 Dunkeld Rd, Perth PH1 3AQ.
When	Date: Monday 11 September 2023 Time: 09:00 - 11:00
Key message(s)	• Transforming our energy system is essential if we are to become a net zero nation by 2045. • Collaborating with partners in the energy sector is critical for achieving our vision for Scotland's energy system: affordable, resilient and clean energy supplies for Scotland's households, communities and businesses.

Who	Various members from SSE Group, SSE Renewables and SSEN Distribution and Transmission including; • Alistair Phillips-Davies, Chief Executive • Stephen Wheeler, Managing Director, SSE Renewables • Rob McDonald, Managing Director, SSEN Transmission • Andy Smith, Operations Director, SSEN Distribution • Christianna Logan, Director of Customers and Stakeholders, SSEN Transmission
Why	• SSE are a leading generator of renewable electricity and a key energy stakeholder. • SSE have invited you to their HQ in Perth to discuss the key issues impacting the energy sector at the moment and to discuss SSE's record investment plans.
Supporting official	• **Frances Pacitti**, Deputy Director, Offshore Wind. **Tel:** [REDACTED: REGULATION 11(2)] • **[REDACTED: REGULATION 11(2)]**, Unit Head, Energy Strategy and Markets. **Tel:** [REDACTED: REGULATION 11(2)]
Briefing contents	**Annex A:** Summary and Agenda **Annex B:** Biographies **Annex C:** Sensitivities **Annex D:** Top Lines **Annex E:** Background
Media handling	SSE have requested a short photo-op is undertaken in order to highlight the visit on its social media channels. Tweets will be cross-promoted by @ScotGovEconomy.
Social media	@SSE
Dress code	No PPE is required for this visit.
Greeting party	You will be greeted on arrival SSE HQ, Perth by Niall Murphy, Head of Public Affairs (Scotland). **Tel:** [REDACTED: REGULATION 11(2)].
Parking arrangements	**Important** - Please reverse park on arrival

Annex A

Summary and Agenda

Visit summary

Following a visit on 22 May 2023 to Sloy hydro-electric power station owned and operated by SSE, the First Minister discussed the possibility of SSE preparing a half day roundtable. A visit to SSE Headquarters in Perth has now been arranged to discuss the key issues impacting the energy sector at the moment, followed by tours of SSE operational control centres.

On 30 May 2023 you met with Alistair Phillips-Davies, SSE's Chief Executive to discuss Wind, Networks, Hydro, CCUS and Electricity Markets.

Stakeholder profile

SSE is one of the UK and Ireland's biggest developers of low carbon energy infrastructure. SSE's core focus is on renewables and regulated electricity networks (grid) – including the transmission and distribution networks in the north of Scotland. SSE has 6GW of renewables capacity either live or in construction and operates assets such as the 1.1GW Peterhead Power Station.

SSE Renewables, (part of SSE plc) plans to double its installed renewable energy capacity to 8GW by 2026 and to treble capacity to over 13GW by 2031, increasing output fivefold to over 50TWh annually.

Agenda

- **09.00 –** Arrive at reception

- **09.00 – 10.10 –** Meeting and briefing in the Board Room on the low-carbon energy sector and SSE's plans to invest £21bn in Scottish grid, wind, hydro, CCS and hydrogen, with:
  - Alistair Phillips-Davies, Chief Executive
  - Martin Pibworth, Chief Commercial Officer
  - Gregor Alexander, Finance Director
  - Rachel McEwen, Chief Sustainability Officer
  - Stephen Wheeler, Managing Director, SSE Renewables
  - Rob McDonald, Managing Director, SSEN Transmission.

- **10.10 – 11.00 –** Tour of office and operational networks control centres:

  - **Distribution**: Customer contact centre and North of Scotland control room led by Andy Smith, Operations Director, SSEN Distribution.

  - **Transmission**: New office space and control centre led by Chistianna Logan, Director of Customer and Stakeholders, SSEN Transmission.

- **11.00** – Depart

Annex B
Biographies

SSE Group:

Alistair Phillips-Davies has been CEO at SSE since 2013. He jointed the company in 1997 and has held multiple senior roles across the business including Energy Supply Director, Generation and Supply Director and Director of Corporate Finance and Buisness Development.

Martin Pibworth joined SSE in 1998 as an energy trader, which was followed by a series of commercial roles before becoming Chief Commercial Officer in March 2022.

Rachel McEwen, Chief Sustainability Officer joined SSE in 2007 and is responsible for sustainability strategy, climate change policy, community funds and corporate heritage. Rachel is a member of the Just Transition Commission.

You will also meet with other SSE members including **Gregor Alexander, Finance Director, Niall Murphy, Head of Public Affairs (Scotland) and [REDACTED: REGULATION 11(2)], Facilities Manager.**

SSE Renewables:

Stephen Wheeler has been Managing Director, SSE Renewables since January 2022 having previously held the roles of MD, SSE Thermal and MD, SSE Ireland.

SSEN Distribution:

Andrew Smith, Operations Director of north of Scotland distribution network.

You will also meet with other SSEN Distribution members including **Graeme Keddie, Director of Corporate Affairs and Stakeholder Engagement, Gemma Wilson, Head of Contact Centres and Brian Morrissey, Head of Control Centre.**

SSEN Transmission:
Rob McDonald has been Managing Director, SSEN Transmission since January 2019, having joined SSE in 1997 and holding a number of senior roles within the Group Regulation function
Christianna Logan, Director of Customers and Stakeholders
You will also meet with other members of SSEN Transmission; **Greg Clarke, Head of Corporate Affairs and [REDACTED: REGULATION 11(2)], Head of Control Room.**

Annex C
Sensitivities

[REDACTED: REGULATION 10(4)(e)]
- [REDACTED: REGULATION 10(4)(e)]
- [REDACTED: REGULATION 10(4)(e)]
- **[REDACTED: REGULATION 10(4)(e)]**

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- [REDACTED: REGULATION 10(4)(e)]
    - [REDACTED: REGULATION 10(4)(e)]
    - [REDACTED: REGULATION 10(4)(e)]
    - [REDACTED: REGULATION 10(4)(e)]

Annex D

Top Lines

- **We look forward to continuing to work with SSE as we accelerate our transition to net zero.**

SSE £24bn+ Scottish Investment Programme and Just Transition Strategy
- I was pleased to hear more about SSEN's significant 24bn+ investment. I very much welcome this investment which will play a huge role in the net zero transition and in ensuring we secure the benefits of that for the people of Scotland.

Onshore Wind
- The Onshore Wind Sector Deal will be a shared commitment between government and industry to deliver upon the Scottish Government's ambitions while growing a key sector in a way that aligns with the principles of a just transition to net zero.
- **I am very grateful to SSE for their input to the draft sector deal via their membership of the G12 industry group.**

Onshore Wind background
- Heather Donald of SSE sits on a subgroup of the sector deal Strategic Leadership Group called the G12. The G12 is made up of the 12 developers whose pipeline of projects will

contribute the lion's share of the ~12GW needed to deliver on the ambition for a total of 20 GW by 2030.

Offshore Wind

- I welcome the commitment of developers to invest an average projection of £1.5 bn in Scotland per project across the 20 ScotWind offshore wind projects.
- The introduction of a Supply Chain Development Statement by Crown Estate Scotland as part of the ScotWind leasing round will help to release economic benefits for the Scottish economy and we expect developers to honour their commitments.
- We will drive forward offshore wind skills development – working with stakeholders to focus on the opportunities for diversification and skills transfer from our oil and gas sector, in line with our commitment to a Just Transition.

Networks

- There is a clear need for significant new network investment to ensure that our infrastructure does not become a barrier to net zero.
- I welcome SSEN's £10bn network investment programme, which could amount to £2.6bn Gross Value added and over 9,000 jobs in Scotland.

Networks Background

- SSEN's Pathway to 2030 report, published on 13 June, highlights the significant opportunities that their investment in our grid infrastructure could bring for Scotland's workforce, supply chain and economy.
- SSEN released a statement in June confirming their intention to create a £10 million community benefit fund for networks projects. Officials are awaiting a proposed consultation to understand what this offer will entail (in particular how it will be funded).

Transmission Network Use of System Charges (TUNoS)

- We are very aware that TNUoS charges remain a key barrier to Net Zero in Scotland. Ofgem's own analysis suggests that by 2040 Scottish renewable & low carbon generators will be the only ones to pay a wider TNUoS charge, with all others (including gas generators) elsewhere in GB being paid credits.
- The Scottish Government has repeatedly called for change to current system of TNUoS charging.

Planning and grid consenting regime

- The planning system has a crucial role to play and that is why we have engaged extensively with the UK Government in seeking devolution of the necessary powers to Scotland to ensure we can modernise Scotland's consenting regime.
- The Scottish Government's Energy Consents Unit have made a number of efficiency improvements which have already achieved reductions in the time taken for determinations to be made. We will continue to work closely with stakeholders to reduce timescales.
- Whilst local authorities remain under financial pressure, planning authority performance has been improving.
- We are currently undertaking a suite of planning reforms in line with the Planning (Scotland) Act 2019. We continue to work closely with authorities to ensure continuous improvement.
- One of the proposed commitments for inclusion in the Onshore Wind Sector Deal is for the Scottish Government to explore setting up a central resourcing pool that can be called upon by Planning Authorities when responding to onshore wind applications. Initial indications are that the onshore wind industry would fund this resourcing pool.

Carbon Capture, Utilisation and Storage

- [REDACTED: REGULATION 10(4)(e)]

- The Scottish Government supports the development of Carbon Capture Utilisation Storage (CCUS) as a common whole-system decarbonisation infrastructure.
- We welcome the efforts being made by power companies to decarbonise the power sector in Scotland whilst maintaining a resilience, and that includes the use of CCUS technology. I am pleased that the UK Government acknowledges the maturity and strength I of Acorn Transport and Storage system which recognises that Scotland is one of the "best placed" nations to deploy CCUS.
- Despite this positive step, the UK Government have still not published details or timescales for the next stages for Acorn.
- It is vital that the UK Government move at pace and provide these specifics in order to provide clarity for industry, confidence for investors and opportunities for our workforce.
- The Scottish Cluster is absolutely vital for a just transition to net zero – not just in Scotland where the target of reaching Net Zero is 2045, but also for the UK's 2050 target.

Hydrogen

- Our Hydrogen Action Plan is supported by a programme of capital funding, designed to accelerate and maximise the production of renewable hydrogen in Scotland.
- Funding to date includes over £7m grants offered via the Hydrogen Innovation Scheme to 32 projects that will drive innovation in renewable hydrogen production, storage, and distribution.
- The next tranche of the hydrogen investment programme, the Green Hydrogen Fund, will launch this year.
- The development of a domestic hydrogen sector and hydrogen production for export, supported by a strong supply chain, will play an important role in supporting a just transition and presents significant long-term economic opportunities for Scotland and the UK.
- Scotland is strongly positioned to become a major exporter of hydrogen to Northern Europe and the UK. To realise this vision and as committed in our Hydrogen Action Plan, the Scottish Government is currently developing a Hydrogen Sector Export Plan.

Hydro and Long Duration Energy Storage

- I am very aware of the key role that the deployment of long duration energy storage technologies will play as we look to deploy more renewables onto our electricity system.
- We know that Pumped Storage Hydro is currently the only major low carbon electricity technology not supported by the UK Government through an appropriate market mechanism.
- In May 2022, the FM wrote to PM to call on the UK Government to support the development of long duration energy storage, including pumped hydro storage, through an appropriate market support mechanism.

Annex E
Background

Planning

- Local Authorities across the country are under financial pressure and planning departments have felt the effects on this with reductions in budgets and, ultimately, staff numbers.
- Planning authority performance has been improving. However, individual authorities' performance remains variable.
- The approval rate for applications consistently sits above 93% year on year (figure does not include applications submitted under the Electricity Act, which come to Scottish Ministers to determine).
- We continue to work closely with authorities to ensure continuous improvement. We are currently undertaking a suite of planning reforms in line with the Planning (Scotland) Act 2019.
- One of the proposed commitments for inclusion in the Onshore Wind Sector Deal is for the Scottish Government to explore setting up a central resourcing pool that can be called upon

by Planning Authorities when responding to onshore wind applications. Initial indications are that the onshore wind industry would fund this resourcing pool.

- The proposed commitment would operate in tandem with a wider commitment on skills and capacity building so as to maximise the numbers of those within Planning Authorities with the skills necessary to address onshore wind applications. Scottish Government will work with Heads of Planning Scotland and the Improvement Service to build skills relating to onshore wind within Planning Authorities to support increased resilience.
- [REDACTED: REGULATION 10(4)(e)]

CfD

- The Contracts for Difference (CfD) scheme is the UK Government's main mechanism for supporting low-carbon electricity generation. CfD supports renewable energy developers to invest in the UK energy market by guaranteeing future revenues, in spite of price uncertainty and volatility. CfD is administered by the Low Carbon Contracts Company (LCCC).
- UK Government provides a Contracts for Difference (CfD) for onshore wind and remote island wind (RIW) separately.
- Administrative Strike Prices (ASPs) represent the maximum strike price (the per megawatt hour price for generating electricity) that a project of a particular technology type can receive.
- [REDACTED: REGULATION 10(4)(e)]

Onshore Wind:

- The Scottish Government is committed to the continued development and deployment of onshore wind, which will support the rapid decarbonisation of our energy system, and the sectors which depend upon it, in line with a just transition to net zero.
- Delivering the ambition of 20GW of onshore wind by 2030 will create demands on our electricity infrastructure. Networks must be able to invest quickly and ahead of need in order to ensure swift and efficient connections for onshore wind developments.
- The National Planning Framework 4 (NPF4) signals a turning point for planning, placing climate and nature at the centre of our planning system and making clear our support for all forms of renewable, low-carbon and zero emission technologies, such as onshore wind, and including transmission and distribution infrastructure.
- The spatial framework that the NPF4 sets out for renewable energy developments, will protect National Parks, National Scenic Areas, and the sensitivity of other nationally important designated sites. All renewable energy projects over 50MW are designated as national developments in NPF4; alongside relevant supporting electricity grid transmission infrastructure.
- The Onshore Wind Policy Statement (OnWPS) sets an ambition for Scotland to have a total operational onshore wind installed capacity of 20 GW by 2030.
- We have formed an Onshore Wind Strategic Leadership Group in order to take forward the aspirations of the OnWPS and the development of an Onshore Wind Sector Deal.

Repowering, extending and decommissioning

- Repowering refers to applications for a new windfarm design on an existing site where it will require the existing turbines/infrastructure to be decommissioned first. Repowering applications are treated as new applications and their merits/impacts considered on a case by case basis.
- Where the existing infrastructure is being kept and no changes are being made, except the operating period for the windfarm, this would be considered as a life-extension. Life-extensions are treated as variations to the original consent. Applications for additional turbines to be built on an existing site are often referred to as wind farm extensions.

Hydro

- Hydro power has the potential to play a significantly greater role in the energy transition – both at small-scale in co-operation with local communities, and at larger scale, providing flexibility services to the grid and helping to ensure a continued resilient and secure electricity supply.

- While additional deployment of renewables will play an important role in lessening dependence on fossil fuels for electricity generation, large-scale, long-duration energy storage, such as pumped hydro storage, is also critical to achieving our collective goals. It can help to integrate and maximise our significant renewable electricity generating capacity, ensure security of supply and manage constraints across the grid.
- Pumped hydro storage is currently the only major low carbon electricity technology ineligible for UK Government support. UK Government inaction on this issue represents a significant obstacle to deployment, and risks failing to secure the economic benefits of pumped hydro storage projects.
- The Scottish Government's Community and Renewable Energy Scheme (CARES) supports local or community ownership of renewable energy generation, including hydropower.

Electricity Networks

Transmission Network Use of System Charges (*TUNoS)*

- Scotland is physically and economically integrated with Great Britain for both electricity and gas supply and demand (Northern Ireland is not part of the GB network and is instead part of a single network with the Republic of Ireland).
- Powers relating to the regulation and operation and electricity (and gas) network companies are fully reserved to the UK Government. This includes legislation, industry standards and licences. The Scottish Government has no powers in this area.

Electricity Transmission Investment

- Increased electrification will require significant investment in our electricity infrastructure to maintain resilience and increase the transfer capability between Scotland and the rest of the GB market.
- One of the key barriers to increased network investment is the time it can take Ofgem to make a decision on whether projects can proceed. Ofgem published its decision on the Accelerating Strategic Onshore Transmission Investment (ASTI) Framework in December 2022. The objective of this work was to provide greater certainty to a number of key projects that need to be taken forward quickly to ensure continued progress to net zero and release constraints.
- The outcome of this work will provide 26 transmission projects (worth £19.8bn) with earlier certainty of funding approval and exemption from competition. In addition Ofgem has included new measure to protect consumers from excessive risk. This includes rewards/penalties against target delivery dates.

Carbon Capture, Utilisation and Storage (CCUS)

- The Scottish Government supports the development of Carbon Capture Utilisation Storage (CCUS) as a common whole-system decarbonisation infrastructure with the flexibility to adapt over time to play a central role across the decarbonisation strategies of key sectors such as heat, industry and power.
- The Scottish Cluster is a group of Industrial Emitters (possibly including the Peterhead CCS power station if approved) which will be linked to the Acorn Transport and Storage (T&S) system by pipeline to take advantage of Oil and Gas legacy infrastructure, with the aim of capturing and permanently storing 5 Mega Tonnes of CO2 emissions per year by 2030.
- The Scottish Government has provided funding and policy support to the Acorn CCS project positioned at St. Fergus, Aberdeenshire, through its feasibility and development phases.
- The Acorn CCS project expects to be storing up to 5 million tonnes of CO2 per annum by 2030, providing a route for emissions to be safely stored in well-characterised sites deep below the North Sea.
- Scotland remains among the best placed nations in Europe to deploy CCUS due to our unrivalled access to vast CO2 storage potential in the North Sea and opportunities to repurpose existing oil and gas infrastructure for CO2 transport and storage.

- Scotland's significant CO2 storage potential and the presence of the Scottish Cluster provides an economic opportunity for Scotland to be at the centre of a European hub for the importation and storage, via shipping, of CO2 from Europe.
- As set out in the Bute House Agreement, the Scottish Government agrees that any strategy for deployment of CCUS must enable decarbonisation at pace and cannot be used to justify unsustainable levels of fossil fuel extraction or impede Scotland's just transition to net zero.
- Scottish Government economic scenario analysis shows CCUS would have a positive impact on the Scottish economy. In 2045 Scottish GDP could be 1.3-2.3% (£3.8Bn-£6.7Bn) higher in scenarios with CCUS, than without.

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