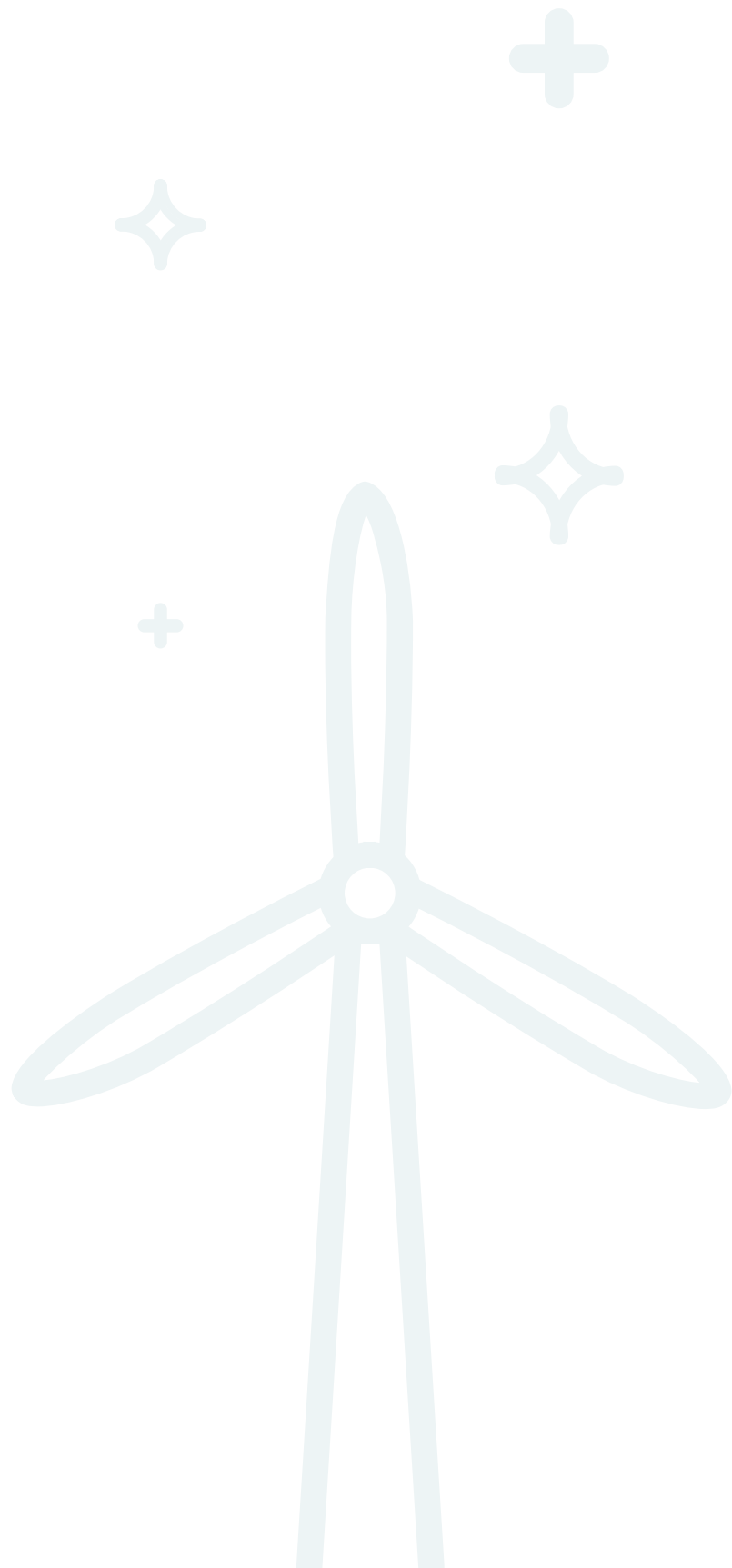


Annual Energy Statement 2019



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1. MINISTERIAL FOREWORD

MINISTERIAL FOREWORD



Paul Wheelhouse

Minister for Energy,
Connectivity and the Islands

Scotland's Energy Strategy, published in December 2017, marked an important milestone in our transition to a carbon neutral economy. Taking a whole system approach, it provided a comprehensive overview of Scottish Government energy policy for the first time – covering reserved as well as devolved matters, and fully consistent with our climate change ambitions.

Our Climate Change Plan, published early in 2018, underlined the need to transform the way we produce, generate and use energy in Scotland – and the importance of energy as one of the key sectors of our economy. That's why the latest advice from the Climate Change Commission (CCC), published earlier this month, is so important. We embrace the new report and all that it contains – we have acted immediately to amend our Climate Change Bill to set a net-zero target for 2045. This means we will have the most stringent statutory targets in the world; we have proposed these new targets in good faith that the UK Government will also act quickly to raise its ambition in line with the CCC's advice.

Our Energy Strategy was designed to be flexible, and able to respond to changes in the commercial, political and social environment within which we are operating. In this Statement, we highlight the key developments in the sector which will have an impact upon our ability to deliver the Strategy, our progress made to date, and our key plans for the coming year and beyond.

Although the challenges remain huge, we are determined to do all that we can, using the powers that we have, to steer a sustainable path towards a Just Transition. However, there are several key areas where the progress and changes we want to see will rely upon the decisions and actions of others.

We will continue to look to the private sector to bring forward solutions to some of the challenges facing us, in turn realising the enormous economic opportunity that this transition represents; but we will also need greater ambition and co-operative action from the UK Government.

This applies not only to support and market mechanisms for the renewables and low carbon industry in Scotland and across the UK, but also to the major decisions required about the future of the gas network, needed to accelerate the decarbonisation of heat.

There are areas where we plan to take further action to develop Scotland's knowledge and competitive position. One of these concerns the role of hydrogen, which has huge potential across the whole energy system – as a means of decarbonising heat and transport, providing storage to help balance Scotland's growing renewable electricity generation, and drawing on the enormous expertise embodied in Scotland's oil and gas sector. This will continue to be an important part of the energy landscape as we go through this transition.

The right decisions at the right times will provide the necessary certainty for people and businesses, unlocking investment, and helping deliver the transformational change in renewable and low carbon heat that we have already seen in electricity.

The Scottish Government, through Scotland's Energy Strategy, has an important part to play in leading these debates, and influencing the changes we want and need to see. We share a great deal of common ground with the UK and other devolved governments; we intend to work collaboratively and constructively on these matters, and to help deliver outcomes consistent with our ambitions and priorities.

We are also working with consumer, industry, regulatory and business stakeholders, and with UK, European and international counterparts, as we aim to meet these challenges collectively and in the most sustainable way.

I am delighted to publish this first Annual Energy Statement. It allows us to reflect not only on the significant progress that has been made, but also to review our priorities and plans in the face of the changes continuing to take place around us – including the Scottish Government's commitment to reach net zero greenhouse gas emissions by 2045, following updated technical advice from the UK Committee on Climate Change.

Paul Wheelhouse MSP,

Minister for Energy, Connectivity and the Islands



2. EXECUTIVE SUMMARY

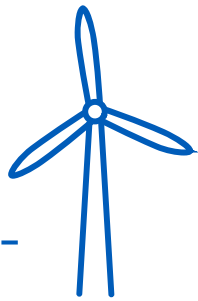
EXECUTIVE SUMMARY

This Annual Energy Statement contains:

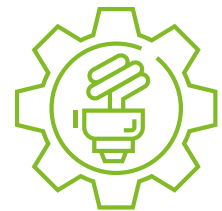
- a summary of the key statistics from the Annual Compendium of Scottish Energy Statistics (ACSES), and progress against our energy targets;
- an overview of key developments in the energy sector;
- a summary of key achievements and plans under each of the six Strategic Priorities; and
- an update on external monitoring and engagement activity.

TARGETS

50% of
all Energy
TO COME FROM
RENEWABLES BY 2030 –
20% IN 2017.



30%
increase
IN ENERGY
PRODUCTIVITY
BY 2030 –
0.3% INCREASE
2015-2017.



KEY MESSAGES

- We are putting **consumers' interests and needs** at the heart of Scotland's transition to a carbon neutral economy – our Energy Consumer Action Plan, published alongside this Statement, sets out the ways in which consumers can shape and benefit from the evolving energy system.
- By 2040, **Energy Efficient Scotland** will have transformed our buildings so that they are warmer, greener and more efficient – we are on track to deliver on our commitment to make £0.5 billion available over the 4 years to 2021 to tackle fuel poverty and improve energy efficiency.
- 2018 was another record year for **renewable electricity** in Scotland – with the equivalent of 74.6% of gross electricity consumption generated from renewable sources. The offshore wind industry in Scotland has made major steps forward, with the announcement of the Offshore Wind Sector Deal. We continue to work closely with all renewable technology developers on innovation and development challenges, route to market issues and the importance of local economic benefits across Scotland – the subject of a ministerial summit on 2 May, and a focus for the new **Scottish Offshore Wind Energy Council (SOWEC)**.
- The **Low Carbon Heat** sector continues to grow; the importance of this is highlighted by the current reliance on hydrocarbons for heating, and given that some 54% of Scotland's energy consumption relates to the provision of heating and cooling.

We are pursuing low-regrets solutions to the decarbonisation of heat, and have launched a Call for Evidence to inform our approach. Transformative change at the scale already seen in the electricity sector will require decisive action at a UK level about the future of the gas network.

- Scotland now has one of Europe's most comprehensive charge point networks, and 2018 saw 39% growth in the number of registrations of **ultra-low emission cars**; a faster growth rate than for the UK. We are considering the network implications of this acceleration in registrations, and of the evolution of Scotland's electricity and gas networks as a whole – building on our Electricity and Gas Networks Vision Statement, published in March 2019.
- We are working with **established industries** across the energy sector to ensure that the benefits of our transition to a carbon neutral economy are maximised – increasing the total economic value of the **North Sea**, capitalising on the economic opportunity that **decommissioning** represents, securing the establishment of **CCUS** systems in Scotland, and identifying the potential roles for **hydrogen** in the future energy system in Scotland.
- There has been a positive trend of increasing energy productivity and falling emissions intensity in the **Energy Intensive Industries** sector since 2005. We are working with stakeholders to increase investment in industrial decarbonisation and energy efficiency, recognising the substantial socio-economic benefits to be gained and potential contribution to emissions reduction across the economy.
- We are committed to ensuring that we capture the **long lasting value** that our transition to a carbon neutral economy can bring to the Scottish economy; creating the conditions for significant inward investment, maximising the total economic value of the generation and supply of clean energy in Scotland, and growing our export capability.
- Scotland's Energy Strategy is **ambitious about what we can achieve** in Scotland, but the social, environmental, economic and commercial benefits of our approach will depend on the involvement of all stakeholders in the transition.
- A **Just Transition to a carbon neutral future** will be one that creates jobs through new sustainable industries, is good for communities, and helps to tackle inequalities and poverty. Our ambition is for a balanced transition that enables leverage of resources and expertise in the Scottish energy sector, including oil and gas. The benefits of transitioning to a low carbon economy need to be shared widely – and we must be very mindful to not leave anyone behind.
- Achieving our aims will involve a variety of policy levers, and a **combination of reserved and devolved** powers. It will require us to collaborate across public, community and private sectors – building upon our existing partnership approach.
- We are focusing on those areas we are able to affect and support with the powers that we have. We will also continue to work collaboratively with, and encourage **greater ambition and co-operative action from, the UK Government**, vital if we are to collectively achieve our climate change targets, in line with the latest advice from the Committee on Climate Change, and realise our vision for the future of the energy system.
- The delivery of the Energy Strategy will almost certainly be influenced to some degree by the effects of **EU Exit**. We are working to manage the significant risks an EU Exit presents for the Scottish economy, energy sector and consumers as far as possible. The Scottish Government remains committed to international cooperation on energy, and to combined collective efforts with our European partners.

STRATEGIC PRIORITIES – ACHIEVEMENTS AND PLANS

We have published:

- Energy Consumer Action Plan.
- Networks Vision Statement.
- Energy Efficient Scotland Routemap.
- Energy Intensive Industries Discussion Paper.

We have consulted on:

- Energy Efficient Scotland, upon publication and again on impacts of potential acceleration.
- Low Carbon Heat in off-gas areas (Call for Evidence).
- Local Heat and Energy Efficiency Strategies.
- Review of Good Practice Principles for Community Benefits and Shared Ownership.

We have supported:

- Decommissioning Challenge Fund – £5.4 million in 2018/19.
- Low Carbon Innovation Fund – £13.5 million development and capital funding awarded.
- A number of world-leading hydrogen demonstration projects – £6.3 million for the Aberdeen Hydrogen Bus Project, and £1.3 million for Orkney's Surf N Turf Project.
- Oil and Gas Technology Centre (OGTC) – which has co-invested over £100 million in 188 industry led projects.
- Oil and Gas Innovation Centre (OGIC) – as part of £120 million committed by the Scottish Funding Council towards Scotland's eight Innovation Centres.
- Low Carbon Transport Loan scheme – increased budget of £20 million to support the take up of low carbon vehicles, and a new 'Switched on Towns and Cities Challenge Fund'.

- Saltire Tidal Energy Challenge Fund launched – a £10 million fund to drive innovation and incentivise investment in the Scottish tidal energy sector.
- Wave Energy Scotland – £7.7 million to two Scottish wave energy devices which will take to the sea in 2020, within annual funding of £10 million in 2019/20.

In the next year we plan to:

- Implement the **Energy Consumer Action plan** – ensuring that consumers' voices are heard.
- Finalise the Outline Business Case for a **Public Energy Company** for Scotland and consult on this.
- Introduce further regulation and minimum standards for **energy efficiency** as part of Energy Efficient Scotland.
- Work with **Energy Intensive Industries (EII) stakeholders** to increase investment in industrial decarbonisation and energy efficiency.
- Make £20 million through our **Energy Innovation Fund** to support the delivery of energy projects in Scotland that will facilitate, catalyse and accelerate Scotland's transition to a carbon neutral economy.
- Publish a **Local Energy Systems Policy Statement**, and a **Bioenergy Action Plan**.
- Progress low regret, **low carbon heat** solutions reflecting upon the results of our Call for Evidence, whilst engaging with the UK Government on the long-term future of the UK gas network, with a view to publishing a **Heat Decarbonisation Policy Statement** in summer 2020.
- Reiterate the strategic case for a route to market for **renewable technologies** in Scotland, and for network investments and regulatory outcomes which support our strategic priorities.

- Review our application process, identifying levers we can use to secure a sustainable future for our indigenous **supply chain across the energy sector.**
- Building upon investment to date, establish a comprehensive electric vehicle charging network across Scotland.
- Build on our **Networks Vision Statement** – hosting a Networks Summit, creating a Scottish Energy Networks Group, and engaging with Ofgem and the UK Government on key networks issues.
- Progress the establishment of an **ultra deep water port** in Scotland by developing the business case for investment.
- Press UK Government to maintain a stable economic framework for the **oil and gas industry's Vision 2035** ambitions.
- Work with stakeholders to identify the potential economic, social and strategic value of **hydrogen** to Scotland – building a strong evidence base on the potential roles for hydrogen in the energy transition.
- Work with UK Government on the policy framework necessary for delivery of the UK **CCUS** Deployment Action Plan and work with Scottish stakeholders, to develop the case for the establishment of a CCUS cluster in Scotland.

MONITORING AND ENGAGEMENT

- We have:
 - consulted with **SEAB** on our Energy Strategy progress and plan, and are working towards agreeing a new structure of expert advisory groups;
 - established a **Just Transition Commission**, to provide Scottish Ministers with independent advice on the opportunities and challenges of the transition to a carbon neutral economy;
 - committed to consulting widely and effectively **on Energy and on Climate Change** – taking a major step towards improving our approach to public engagement on Scotland's transition to a carbon neutral economy; and
 - developed new **international partnerships** and deepened existing relationships to support the global transition to a carbon neutral economy.



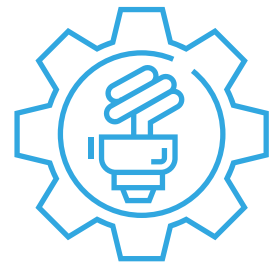
3. ENERGY TARGETS AND STATISTICS

ENERGY STRATEGY TARGETS – DASHBOARD

The Equivalent of
50% of the Energy for Scotland's heat, transport and electricity consumption to be supplied from **RENEWABLE SOURCES.**

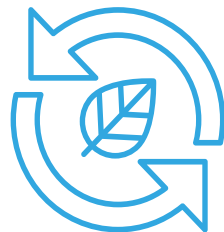


An increase by **30%** in the **PRODUCTIVITY OF ENERGY** use across the Scottish economy.



ENERGY STRATEGY TARGETS

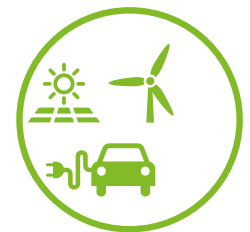
All Renewable Energy target – **50% by 2030:**



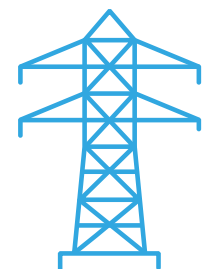
20% IN 2017 – an increase from **16.0% IN 2016.**

The equivalent of powering and heating approx. **1.8 MILLION** households in Scotland.

Energy productivity – **30% increase by 2030:**



Energy productivity has increased by **0.3% BETWEEN 2015 AND 2017.** This is an increase from **£0.954M GVA PER GWh** consumed in 2015 to **£0.957 PER GWh** consumed in 2017.



RENEWABLE ELECTRICITY

Equivalent of **100%** of Scotland's electricity demand to be generated from renewable sources **BY 2020:**



74.6% IN 2018 - another record year for renewable electricity in Scotland.

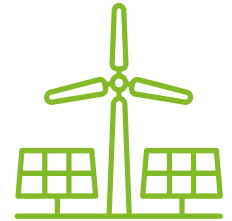
THE EQUIVALENT OF POWERING ALL HOUSEHOLDS IN SCOTLAND for more than two-and-a-half years.

Much of this increase has come from a **0.74 GW** rise in offshore and onshore **WIND CAPACITY** compared to 2017. Total installed capacity of all renewable electricity sources was **10.9 GW** by the end of 2018.

RENEWABLE HEAT

11% of non-electrical heat demand to come from **RENEWABLE SOURCES BY 2020:**

Scotland produced **5.9% OF ITS NON-ELECTRICAL HEAT** demand from renewable sources in 2017. This was an increase from **4.7% IN 2016.**



RENEWABLE TRANSPORT

9.75% share of renewable fuels in transport petrol and diesel consumption **BY 2020, AND 12.4% BY 2032:**



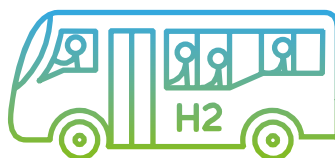
4.0% SHARE OF ROAD FUELS in the UK as a whole **IN 2018.**¹

ENERGY CONSUMPTION

12% reduction in the amount of energy consumed annually **by 2020**, from a baseline of **167,032 GWh** averaged across 2005-07



13.9% REDUCTION IN 2017.



¹ This is an ambition under the UK Renewable Transport Fuel Obligation (RTFO) – data is not available for Scotland separately, so the UK proportion is assumed.

ENERGY KEY STATISTICS

ECONOMIC ACTIVITY

- The energy sector generated **£41.9 BILLION IN TURNOVER** for Scotland in 2016.

RENEWABLES AND LOW CARBON



- **51.7% OF ELECTRICITY** generated in Scotland was generated by renewable technologies, compared to just **29.3% FOR THE UK** as a whole (or 25.6% for the rest of the UK, excluding Scotland).
- The vast majority of **SCOTLAND'S RENEWABLE GENERATION COMES FROM WIND** – 71.8% of all renewable electricity in 2018
- Scotland's installed capacity of renewable electricity has increased from **1.4 GW IN 2000 TO 10.9 GW IN 2018**, with a **FURTHER 12.6 GW** of capacity either under construction, awaiting construction or in planning.
- In 2017, approx. **4,800 GWh OF RENEWABLE HEAT** was generated in Scotland, equivalent of supplying over **350,000 SCOTTISH HOMES** with gas for the year.
- 11,349 Ultra Low Emission Vehicles (ULEVs) were licenced in Scotland in December 2018, **UP MORE THAN 3,800** from numbers seen in 2017.
- In 2017, the Scottish low carbon and renewable energy sector **SUPPORTED OVER 46,000 JOBS**, and generated over **£11 BILLION** in turnover.

INNOVATIVE LOCAL ENERGY SYSTEMS

- The Strategy set a target for community and locally-owned renewables – **1 GW OF CAPACITY BY 2020** (having been increased from the original target of 0.5 GW that was met five years early) and **2 GW BY 2030**. There was 0.7 GW of capacity operational in June 2018, with a further 0.6 GW in the pipeline.

ENERGY EFFICIENCY

- Compared to a 2005-07 baseline, energy consumption in Scotland in 2016 **DECREASED BY AN ESTIMATED 31.8%** in the industrial sector, 20.1% in the domestic sector, 2.7% in transport but has **INCREASED BY 17.7%** in the commercial sector.

ENERGY EFFICIENCY



- In 2017 electricity consumption **DECREASED IN SCOTLAND BY 17.6%** compared to 2005-07, the reduction being enough to **POWER 1.3 MILLION SCOTTISH HOUSEHOLDS FOR A YEAR.**
- Heat demand **DROPPED BY 18.6%** from 2005-07 to 2016, but has **RISEN BY 1.4%** in the last two years.
- Scottish households are becoming **MORE ENERGY EFFICIENT**; in 2017, **42% ACHIEVED AT LEAST A BAND C** in its energy performance certificate, **UP FROM 35% IN 2014.**

CONSUMER ENGAGEMENT AND PROTECTION



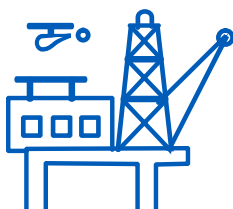
- Electricity prices have **RISEN BY MORE THAN 50%** in 'real terms'¹² for Scottish consumers compared to the early 2000s, with prices for standard credit customers increasing the most (**BY 78.2% SINCE 2003**).
- Gas prices have increased at a faster rate than electricity prices. Compared to 2001, average prices for prepayment customers have **INCREASED BY 66%** and direct debit and standard credit customers' bills have almost doubled. **PRICES FOR GAS HAVE, HOWEVER, DROPPED** in comparison with levels seen five years ago.
- One quarter (24.9%) of Scottish households in 2017 were estimated to be in fuel poverty, the lowest rate recorded since 2005/06. There are, however, differences across Scotland in terms of the proportion of homes in fuel poverty. In the period 2015-2017, the fuel poverty rate varied from 17% in City of Edinburgh to 57% in Orkney Islands.
- **ALMOST ONE IN FIVE (18.6%)** Scottish consumers switched their electricity supplier in 2018.

SYSTEM SECURITY



- Scotland had almost **9 GW OF NON-INTERMITTENT³ ELECTRICITY CAPACITY** (including 3 GW secure import capability) available in 2017/18 (excluding wind and solar) – **SUFFICIENT TO MEET SCOTLAND'S PEAK** demand, which was 5.3 GW in the winter of 2017/18.

OIL AND GAS



- The oil and gas sector was worth an **ESTIMATED £16.2 BILLION IN GROSS VALUE ADDED TO SCOTLAND'S ECONOMY** in 2018, representing **9.1% OF TOTAL SCOTTISH GDP** (including a geographical share of UK Extra Regional activity), and supporting approx. 110,000 jobs in Scotland.
- Oil and gas makes up **92.7% OF SCOTLAND'S PRIMARY ENERGY.** (which includes indigenous production and imports) Of this total, 82.3% of Scotland's oil and gas is exported – worth £17.4 billion in turnover in 2017.
- Oil and gas (i.e. hydrocarbons) makes up **78.0% OF ALL ENERGY CONSUMPTION**, and hydrocarbons meet **90.5% OF ALL HEAT DEMAND** and almost all energy consumption in transport. This hydrocarbon dependency is a characteristic of energy consumption in most European nations.

² This refers to figures that have been adjusted for inflation.

³ This excludes wind and solar generation as they are dependent on the weather.

4. KEY DEVELOPMENTS IN THE SECTOR

KEY DEVELOPMENTS IN THE SECTOR

INTRODUCTION

- On 20 December 2017, Scotland's first Energy Strategy set out the Scottish Government's vision for a flourishing, competitive energy sector, delivering secure, affordable, clean energy for Scotland's households, communities and businesses.
- It is ambitious about what we can achieve in Scotland; the social, environmental, economic and commercial benefits of our approach will depend on the involvement of all stakeholders in the transition.
- Achieving our aims will involve a variety of policy levers, and a combination of reserved and devolved powers. It will require us to collaborate across public, community and private sectors – building upon our existing partnership approach.
- The Strategy established six strategic priorities, along with a range of actions, which place a focus on the areas which we are able to affect. Our focus is on the near term, in preparation for the major medium and long-term decisions we will be required to make in the next decade.
- The Strategy committed the Scottish Government to publishing an Annual Energy Statement in order to monitor delivery of the Strategy and to report on the latest energy statistics and sector developments.
- Published alongside this Statement is an Annual Compendium of Scottish Energy Statistics (ACSES), which replaces the previous annual Scottish Government statistical publication: Energy in Scotland.
- ACSES summarises the key Scottish statistics under each of the Strategic Priorities of the Strategy to track progress, including a number of new data sources.⁴ A summary of the key aspects of this publication is included within this Statement.

CONTEXT

Climate Change Ambitions

- Scotland's emissions have almost halved since 1990, and we continue to outperform the UK. The Scottish Government will always strive for the most ambitious, credible, climate targets.
- The Climate Change Plan published in February 2018 set out our ambitious decarbonisation plans to 2032. The first annual monitoring report was published in October 2018 and set out the baseline against which future assessments of progress will be made.
- The Intergovernmental Panel on Climate Change (IPCC) Special Report on Global Warming of 1.5C, underlines the need to increase action to tackle climate change globally, highlighting that the world is not on track to meet the temperature goals of the Paris Agreement. The Scottish Government is committed to playing our part to limiting temperature rises in line with the Paris Agreement.
- We have acted quickly in response to the Paris Agreement, the IPCC Special Report and the latest advice from the Committee on Climate Change – immediately introducing amendments to our Bill to set a net-zero target for 2045 and increase our targets for 2030 and 2040. Scotland will have the most stringent statutory targets in the world.
- Our high ambition will be matched by delivery. We will update the Climate Change Plan within 6 months of the Bill receiving Royal Assent.
- Meeting Scotland's existing climate change targets will require the near complete decarbonisation of our energy system by 2050, with renewable energy meeting a significant share of our needs.

⁴ <https://www2.gov.scot/Topics/Statistics/Browse/Business/Energy/ACSES>

- The Energy Strategy's targets are compatible with our existing climate change targets, and give us flexibility to respond to changes in the energy sector in years to come, and to pursue all low or zero carbon options.
- We will review our existing energy targets upon the passing of the Climate Change Bill, alongside a wider review of targets and policies across each of the key sectors in the Climate Change Plan, to ensure consistency.

Offshore Wind Sector Deal

- The Offshore Wind Sector Deal, a partnership between industry and UK Government, was formally announced on 7 March 2019.
- The deal has the potential to transform the future of offshore wind in the UK, with industry commitments out to 2030 including the creation of 27,000 jobs, £48 billion investment in infrastructure and £250 million for a new Offshore Wind Growth Partnership to boost the UK supply chain.
- The Scottish sector has played a key role in the development of the deal, ensuring that Scotland is well placed to gain long term benefits as the delivery phase progresses.
- We have set up the new Scottish Offshore Wind Energy Council (SOWEC), with a clear focus on maximising the returns to Scotland from the Sector Deal.
- The Scottish Government recently convened an offshore wind supply chain summit with developers and Tier 1 contractors to improve Scottish and wider UK supply chain content.

Oil and Gas Vision 2035

- The oil and gas sector will remain an important element of Scotland's energy sector, helping maintain affordability and security of supply.
- The Industry has developed Vision 2035 to ensure Scotland meets its energy demands from domestic production while expanding the opportunities for the supply chain at home and abroad.
- This Vision is compatible with the energy transition. The oil and gas sector is a platform for developing technology and expertise which are transferable to alternative energy sectors, particularly CCUS and Hydrogen.

Economic Development Activity

- Our Enterprise agencies, Scottish Enterprise and Highlands and Islands Enterprise, are working alongside the Scottish Government to support the delivery of Scotland's Energy Strategy – putting in place the support needed to maximise the economic opportunities that our transition to a carbon neutral economy presents.
- There has also been very strong endorsement of the proposal that the new Scottish National Investment bank's mission should include a focus on supporting the transition to a carbon neutral economy.
- We are working together with partners in the public, private and academic sector to support innovation, develop expertise and infrastructure, and to facilitate international collaboration in developing renewable and low carbon solutions.
- The energy sector supply chain in Scotland has developed many strengths through its long history in oil and gas production, and in more recent years through the growth and maturation of the renewable and low carbon sector.

New clusters of expertise and supply chain capability, in offshore wind and in the marine energy sector, present valuable opportunities in the decades to come. There are also emerging industrial opportunities through the establishment of CCUS systems in Scotland, and the continuing development and use of Hydrogen in our energy system.

- We are committed to ensuring that we capture the long lasting value of this activity for the Scottish economy; creating the conditions for significant inward investment, maximising the total economic value of the generation and supply of clean energy in Scotland, and growing our export capability.
- On 2 May 2019, the Cabinet Secretary for Finance, Economy and Fair Work chaired an offshore wind supply chain summit, alongside the Minister for Energy, Connectivity and the Islands, looking at how our indigenous supply chain can secure larger contracts during the build-out phase. Ministers used the summit to make clear that the industry needs to make significant investments if it is to achieve its 60% UK content target as set out in the UK Offshore Wind Sector Deal. We are reviewing our application processes, and will be using every lever at our disposal to secure a sustainable future for our indigenous supply chain across the energy sector. Industry representatives agreed to take action which ensures that Scottish companies can compete for and secure offshore wind contracts.
- We are also using our own funding to support the Scottish supply chain and deliver socioeconomic benefits. In our £10 million Saltire Tidal Energy Challenge Fund, and our £60 million Low Carbon Innovation Funding Invitation, launched in January 2018, we made it a requirement for projects to demonstrate their potential to have a positive and significant social and economic impact on Scotland.

Islands Connection

- SSE Networks submitted three “Strategic Wider Works” applications (“needs cases”) to Ofgem during 2018, to build subsea cable links from Orkney, Shetland and the Western Isles to the mainland transmission network.
- Ofgem is minded to approve the proposed links to Orkney and Shetland, subject to certain conditions being fulfilled, including projects successful in securing Contracts for Difference, through the option process directed by the UK Government. However, Ofgem is minded to reject the proposed 600 MW link to the Western Isles in favour of a smaller 450 MW link. Scottish Ministers continue to support the construction of a 600 MW link, given the huge potential for the Western Isles to generate sustainable energy.
- The Scottish Government remains committed to unlocking this vast renewables potential, and to overseeing the export of clean, renewable energy from the islands in support of Energy Strategy and Climate Change Plan objectives.
- We continue to liaise closely with SSE Networks (the network operator for the north of Scotland), island energy developers and stakeholders, and with Ofgem to ensure the best outcomes for Scotland’s islands.

Energy Price Cap

- Energy prices are beyond the Scottish Government's control but we continue to call on the UK Government to deliver a fair market.
- In addition to the prepayment meter price cap, in place from April 2017, Ofgem introduced a cap in February 2018 on charges for customers on default tariffs who receive the Warm Home Discount. This has since been superseded by the default tariff cap which came into force on 1st January 2019 and aims to protect all consumers on Standard Variable and default tariffs. This is a temporary Ofgem measure which is due to come to an end in 2023.
- We support any measures which help to create a more equal energy market and protect vulnerable consumers from being overcharged. However, we see price caps as a short-term fix in a market that is failing consumers and we are concerned about the impact on competition and consumer engagement, with the price cap having been cited as having made access to finance more difficult for some smaller suppliers.
- Five of the big six suppliers announced price rises of 10% in response to Ofgem's announcement that the price cap would increase from 1 April 2019.

UK Government White Paper

- The UK Government has confirmed that it intends to publish an energy white paper during summer 2019, the scope and content of which is yet to be clearly and fully established.
- The Scottish Government will ensure that it engages fully with the UK Government and other key stakeholders as this process unfolds, and that Scotland's energy policies, priorities and ambitions are clearly recognised and acknowledged.

EU Exit

- The consequences of EU exit will be amplified in Scotland's energy sector because of the important role that energy plays in our economy, both as a significant employer and for the sourcing of affordable energy supplies.
- Legally-binding EU renewable energy and energy efficiency targets have played a defining role in stimulating the huge growth seen in Scottish renewable energy and in generating significant inward investment.
- Scotland's success to date in decarbonising its energy system has been supported by relevant EU Directives and Regulations. These include the 'Clean Energy for All Europeans' package (which incorporates the Renewable Energy Directive; the Energy Efficiency Directive; the Effort Sharing Regulation; the Emissions Trading System and the new Governance Regulation for the Energy Union and Climate Action).
- EU funding that encourages collaboration, supports energy infrastructure projects and furthers research and development has supported a range of low carbon technologies across Scotland, such as offshore wind, marine renewables, district heating and integrated hydrogen solutions.
- Over the last decade, the European Investment Bank has backed infrastructure investments in our gas networks, electricity networks and renewables projects. EU exit puts these investments and benefits at risk.
- Our energy sector, like many others within the Scottish economy, relies upon the contribution of skilled individuals from throughout the EU. Restricting this supply could result in higher cost operations, impeding our infrastructure development and progress.

- The Scottish Government continues to work within the devolved levers available to us to manage the significant risks EU exit presents for the Scottish economy, energy sector and consumers.
- That includes making the case for: continued access to the EU Emissions Trading System either through continued membership, or a linked UK ETS; continued membership of the EU internal energy market, including EU-wide collective effort to create an Energy Union, supported by the Renewable Energy and Energy Efficiency directives; and continued access to vital EU funding for collaborative research and innovation in the energy sector.
- In line with the overwhelming vote in Scotland to remain in the European Union, the Scottish Government has consistently been clear that the best option for the future wellbeing and prosperity of Scotland and the UK as a whole is to stay in the European Union. For more than two years now the Scottish Government has also put forward a compromise of Single Market and Customs Union membership, if it was not possible to remain as a full EU member.
- Our proposal to establish a Citizen's Assembly is driven in part by the need to consider how to overcome the challenges arising from EU exit, as well as others facing modern Scotland.
- Recognising the benefit and importance of collective international efforts in energy and climate change, Scotland will continue to work and cooperate with our EU partners, in spite of EU exit.
- The Scottish Government will also continue discussions with the UK Government and other devolved administrations to develop future governance frameworks for energy and climate change after EU exit – to ensure that we continue to cooperate both domestically within the UK, and internationally with our EU partners, whilst at the same time ensuring proper accountability for our collective progress to devolved governments and legislatures.



5. STRATEGIC PRIORITIES: ACHIEVEMENTS AND PLANS

STRATEGIC PRIORITIES: ACHIEVEMENTS AND PLANS

CONSUMER ENGAGEMENT AND PROTECTION

We will work hard to protect consumers from excessive or avoidable costs, and promote the benefits of smarter domestic energy applications and systems.

ACHIEVEMENTS

- We have published our **Energy Consumer Action Plan** alongside this Annual Energy Statement – putting consumers' interests and needs at the heart of Scotland's low carbon transition.
- The Action Plan builds on the outcomes of **Energy Summits** held in 2016 and 2018, as well as setting out new steps that must be taken to enable consumers to shape and benefit from the evolving energy system.
- We established an **expert consumer advisory group** to help inform the development of the Action Plan – and commissioned research to assess the impacts of emerging policy, regulatory and technological change in the energy sector on Scottish consumers.
- We have continued to champion the needs and interests of **Scottish consumers** in UK Government and Ofgem-led interventions such as the smart meter roll out, price caps and support for vulnerable consumers.
- We supported **Home Energy Scotland** to pilot a face to face advice and support service, Switch in the City - providing guidance to over 1,000 vulnerable and disengaged people in Glasgow on how to switch energy supplier or tariff. This was in addition to existing advice and support services.
- In February 2019, Ministers wrote to the Chief Executives of the big six energy companies, asking them to do more for vulnerable consumers and calling on them to engage with our work to deliver an inclusive transition to a carbon neutral economy.
- We continue to make progress towards establishing a **Public Energy Company** – a Strategic Outline Case was published in April 2018. We have commissioned an independent Outline Business Case, and work is now underway to develop a substantive proposal that could offer energy at a fair price and tackle issues such as fuel poverty, as well as potentially contributing to economic development.
- The Minister for Energy, Connectivity and the Islands wrote to **COSLA** to offer to work in partnership to deliver this ambition, supporting locally led solutions and building on local authorities' existing experience. COSLA and SOLACE agreed to join the steering group for the Outline Business Case. This reflects the principle of co-design, and ensures that the public energy company delivers for communities across Scotland.

PLANS

- Consumers remain at the heart of our future plans for the energy system, and the **Action Plan** sets out a collaborative approach to ensuring consumers are informed, engaged and empowered as the energy system evolves. Over the next two years, we will:
 - establish an independent **Energy Consumer Commission for Scotland** to give Scottish consumers a more powerful voice in Scottish and British energy policy;
 - tackle long-standing and detrimental consumer issues in the energy market in Scotland through our **Improving Consumer Outcomes Fund** and providing more holistic and interventionist support to vulnerable energy consumers, particularly those in debt;
 - encourage **lively debate**, and allow people to shape Scotland's energy future;

- o bring together energy supply and network companies, the energy regulator and consumer groups to collaboratively tackle the issues that matter to consumers through the development of the **Energy Consumer Charter for Scotland**;
 - o develop an **interactive data hub** to provide the most comprehensive picture possible of the experience of Scottish energy Consumer; and
 - o ensure that **Energy Efficient Scotland** keeps consumer interests at its heart as it builds confidence and understanding around the development of heat networks.
- We will consult on plans for delivering the ambition of a **Public Energy Company** this year.

ENERGY EFFICIENCY – BUILDINGS

We will continue to take direct and supporting actions to improve the use and management of energy in Scotland's Homes, Buildings, Industrial processes and manufacturing.

ACHIEVEMENTS

- We are on track to deliver our 2016 Programme for Government commitment to make £0.5 billion available over the 4 years to 2021 to tackle **fuel poverty and improve energy efficiency**.
- Our 2019-20 budget, published in December 2018, makes £145 million available through Energy Efficient Scotland to reduce energy costs and tackle fuel poverty. Since 2013/14, our remote and rural areas have received almost £64 million in investment through our Home Energy Efficiency Programmes (HEEPS) – to tackle fuel poverty.
- We launched the **Energy Efficient Scotland** Route Map in May 2018 with an aim of all Scottish homes having an EPC C⁵ by 2040, and to secure parallel improvements in Scotland's

non-domestic premises – with a consultation taking place on these proposals. It is estimated that the value to the whole economy will be in the region of £10 billion – £12 billion.

- Following a parliamentary debate in 2018 which favoured a faster timetable, we published a second consultation on 26 March 2019 on whether Energy Efficient Scotland can be accelerated, and how any risks associated with this can be overcome.
- We also published a call for evidence on **the future of low carbon heat for off gas buildings** to inform future policy, and a report from the Energy Efficient Scotland Skills and Supply Chain short life working group outlining recommendations on consumer protection, supply chain and quality assurance.
- We have consulted twice on introducing a statutory duty on local authorities to develop **Local Heat and Energy Efficiency Strategies (LHEES)**, and funded pilot projects in 23 local authorities to date, with pilots in the remaining 9 local authorities planned for the Transition Phase of the Programme. We have confirmed that support will be made available to all local authorities ahead of any statutory requirement.

PLANS

- We will introduce regulations for minimum **energy efficiency standards** in the Private Rented Sector to come into force from April 2020, and introduce further standards for energy efficiency in the Social Housing Sector.
- We will bring forward proposals and consult later in 2019 on how to improve energy efficiency and meet EPC targets in **owner occupied housing**.
- We will prepare legislation in 2019 to introduce regulation to the **district heating** sector.

⁵ Energy Performance Certificates (EPCs) provide information on how energy efficient a building is, and how it can be improved. Buildings are rated on a scale from A-G, with A being the most efficient and G the least efficient.

- We are also seeking views during the Call for Evidence on Low Carbon Heat on how the Scottish Government can help grow district heating.

- We have **connected leaders from EII**, as high-carbon emitting industries, **with the emerging Carbon Capture Utilisation and Storage (CCUS) Industry Group** to identify and join up investment opportunities in this new area.

ENERGY EFFICIENCY – INDUSTRIAL

We will continue to take direct and supporting actions to improve the use and management of energy in Scotland's Homes, Buildings, Industrial processes and manufacturing.

ACHIEVEMENTS

- We have established an **Energy Intensive Industries (EII) Roundtable** and facilitate regular stakeholder engagement and communication across all EII sectors, including trade association representatives and leaders of large industrial sites.
- We have improved our **evidence base of data** on EII and used this to a) analyse the scale and location of the Scottish industrial sector (and subsectors within), b) look at trends in energy productivity and emissions intensity, and c) monitor high-level targets.
- We used this evidence to develop a **discussion paper on decarbonisation and energy efficiency** in the industrial sector, published in April 2019. The paper presents the barriers and opportunities to investment in industrial energy efficiency and decarbonisation in Scotland and analyses the main issues that we propose to address.
- We presented this paper during a **workshop** with stakeholders at the end of April to develop a shared understanding of which activities to prioritise that will incentivise decarbonisation and/or energy efficiency measures across industry.
- We have also created an **Industrial Decarbonisation Agency group** to co-ordinate existing agency-led activity and to inform options in the design of adapted or new programmes of support.

PLANS

- We will **co-design our approach** with Scottish industry – holding further **EII stakeholder** engagement during 2019 to prioritise and develop our next steps.
- We will highlight the potential of **industrial decarbonisation as an economic investment opportunity** to grow our existing energy intensive sectors, and to attract new, advanced manufacturing industries of the future.
- We will demonstrate the knock-on **socio-economic benefits** across Scotland and emphasise the impact this kind of investment could have on wider emissions targets.
- We will also work with Scottish projects, sites, locations, and clusters to help them **consider support at a UK and international level**, in order to encourage investment.

RENEWABLES AND LOW CARBON SOLUTIONS

We will continue to champion and explore the potential of Scotland's huge renewable energy resource, and its ability to meet our local and national heat, transport and electricity needs – helping to achieve our ambitious emissions reduction targets.

ACHIEVEMENTS

- We launched our **Low Carbon Innovation Fund** invitation in January 2018 – with £13.4 million development and capital funding awards announced in March 2019. This will further develop Scotland's low carbon capabilities as we continue to attract, retain and advance low carbon innovations, and place Scotland at the forefront of this important sector.

- We are monitoring and responding to major **network investment proposals and charging reviews**, which will have a profound influence on the viability of renewables projects in Scotland.
- We have launched a **£10 million Saltire Tidal Energy Challenge Fund** to drive innovation and incentivise investment in the Scottish tidal energy sector, supporting a pathway to cost reduction and commercialisation.
- Our **Wave Energy Scotland** programme has awarded £7.7 million to two new Scottish wave energy devices which will take to the sea in 2020. We have allocated £10 million in 2019/20 for Wave Energy Scotland, building on £30 million in funding to date.
- We have been working with stakeholders to find solutions to onshore wind deployment barriers, and to help support commercially viable projects across Scotland. These efforts include steps to address **civil and military aviation radar** issues, and our **Eskdalemuir Working Group**.
- We have reviewed our **Good Practice Principles for Community Benefits and Shared Ownership** (for onshore renewables), and consulted upon the revised documents (November 2018 – January 2019), before launching at the CARES conference in May 2019.
- We have created the new **Scottish Offshore Wind Energy Council**, to specifically consider the part Scotland has to play in delivering the Offshore Wind Sector Deal.
- On 2 May 2019, Cabinet Secretary for Finance, Economy and Fair Work, alongside the Minister for Energy, Connectivity and the Islands, held an **offshore wind supply chain summit** looking at how our indigenous supply chain can secure larger contracts during procurement rounds. Ministers used the summit to set out their expectations for the industry, making clear that collective action is necessary if the industry is to achieve the 60% UK content target as set out in the Sector Deal.
- We have established a **Hydro Task and Finish Group (HTFG)** which brings together the Scottish Government, our agencies and industry to tackle current issues facing the sector.
- We have met with trade groups such as the **Solar Trade Association (STA)** on a regular basis to provide policy updates, and to gain an understanding of the issues facing small-scale solar projects in Scotland – such as grid constraints, permitted developments, and business rates.
- We are continuing to make **financial incentives available to accelerate the growth of low carbon heat**, through the Renewable Heat Incentive (RHI), District Heating Loan Fund, Home Renewables Loans and SME Loans. We are monitoring and streamlining these incentive schemes in line with the Energy Efficient Scotland programme route map to ensure maximum uptake and availability of assistance for Scottish based consumers and businesses.
- We also launched a Call for Evidence on **the future of low carbon heat for off gas buildings** in March 2019 in order to inform future policy.
- Scotland now has one of Europe's most comprehensive charge point networks and 2018 saw **39% growth in registrations of ultra-low emission vehicles in Scotland**, compared to UK growth of 20%. Our **Scottish Green Bus Fund** has helped purchase 475 low emission buses.
- We have increased funding for **low carbon vehicles** in 2018/19 to develop the charging network, as well as an increased budget (£8 million to £20 million) for our **Low Carbon Transport Loan scheme**.
- We have also established a new **'Switched on Towns and Cities Challenge Fund'**, and we are strengthening **ChargePlace Scotland** through new investment and collaboration with the network operators and other stakeholders, to ensure it can meet future demands.

PLANS

- We will consider the need for further targeted low carbon capital funding invitations through the **Low Carbon Infrastructure Transition Programme**.
- The **Energy Investment Fund** will continue to provide commercial investment for renewables and low carbon energy solutions, encouraging co-investment from the private sector. Up to £20 million is available this year (2019/20) to support the delivery of energy projects in Scotland that will facilitate, catalyse and accelerate Scotland's transition to a carbon neutral economy.
- We will continue to make the case for securing a route to market for **renewable and low carbon technologies** in Scotland, and for network investments/regulatory outcomes which support our strategic priorities.
- We will work closely with the **marine energy sector**, and the Scottish Marine Energy Industry Working Group, to develop a coordinated approach to future support requirements and further cost reduction.
- We will continue to support arguments for a market stabilisation mechanism for **onshore wind**, and to promote appropriate repowering of onshore wind farms as they approach the end of their operational lives.
- We are committed to ensuring that Scotland benefits from the support provided by the **Offshore Wind Sector Deal** to maximise offshore wind deployment, and the related economic benefits – building on the outcomes of our Offshore Wind Summit on May 2nd. We will continue to work with the industry to help ensure that Scottish developments can be as competitive and viable as possible.
- We expect to consult on our draft **Sectoral Marine Plan for Offshore Wind** this autumn. These options within the draft Plan will set the spatial framework for the ScotWind seabed leasing round, which Crown Estate Scotland expects to launch in October.
- We will continue to encourage and promote **hydro** in Scotland, creating a supportive environment for the sector. The Hydro Task and Finish Group will continue to meet on a regular basis. We will also continue to support the case for pumped storage hydro, and a policy approach from the UK Government which recognises its value to the system.
- We will continue to work constructively on the challenges facing the **small-scale solar** projects in Scotland, arising from the cancellation of the Feed in Tariff Scheme by the UK Government, and explore ways in which Scotland can maximise its solar potential through capitalising on the forthcoming Smart Export Guarantee scheme.
- We will consult on a draft **Bioenergy Action Plan** later this year, building on research we have commissioned to establish the potential role for bioenergy in Scotland.
- We will create a new stakeholder group to monitor (and prepare our networks for) the expected acceleration in **Ultra Low Emission Vehicles and charging infrastructure**.
- The Energy Efficient Scotland programme will include a focus on **low carbon heat** solutions – LHEES pilots are testing authority-wide heat decarbonisation and energy efficiency strategies, identifying priority zones for area-based delivery programmes from 2020.
- We are preparing legislation to introduce **regulation for district and communal heating in Scotland**, subject to Parliamentary time. Regulation will provide certainty to investors and stakeholders helping to make Scotland a more attractive place to invest in heat networks, supporting efforts to eradicate fuel poverty and reduce greenhouse gas emissions. We aim to transform the way that heat networks are developed in Scotland, taking a more strategic approach to identifying deployment opportunities and setting clear standards for all market participants.

- We will continue to collaborate with the UK Government, and to accelerate decisions on the **future of the gas network** (a reserved area).
- We will analyse the responses received to the call for evidence on low carbon heat in off-gas areas and continue to strengthen our approach to decarbonising the heat supply to Scotland's buildings with a view to publishing a **Heat Decarbonisation Policy Statement** in summer 2020.
- The recently established independent **Infrastructure Commission**, set up to advise the Scottish Government on managing the transition to a carbon neutral economy as part of its remit, will help inform the development of the Scottish Government's next Infrastructure Investment Plan.

INNOVATIVE LOCAL ENERGY SYSTEMS

We will empower our communities by supporting the development of innovative and integrated local energy systems and networks.

ACHIEVEMENTS

- We have consulted on introducing a statutory duty on local authorities to develop **Local Heat and Energy Efficiency Strategies (LHEES)**, and funded pilot projects in 23 local authorities to date, with pilots in the remaining 9 local authorities planned for the Transition Phase of the Programme.
- The **Community and Renewable Energy Scheme (CARES)** has supported **267** community and locally owned projects which have a capacity of **59 MW** – including a total of 41 individual solar and hydro projects since publication of the Strategy.
- By June 2018, an estimated 0.7 GW of **community and locally owned renewable energy capacity** was operational in Scotland.

- We established an **accelerated support package** through CARES to support community hydro projects (ahead of the closure of the UK Government Feed-in Tariffs Scheme (FITS) on 31 March 2019). This included the formation of a **hydro sub-team** at Local Energy Scotland, who were able to secure FITS for 7 out of 9 projects before its closure.

PLANS

- We will publish a **Local Energy Systems** policy statement in 2019, establishing a series of principles for local energy systems' development. We will formally consult on the statement in the second half of 2019.

SYSTEM SECURITY AND FLEXIBILITY

Scotland should have the capacity, the connections, the flexibility and the resilience necessary to maintain secure and reliable supplies of energy to all of our homes and businesses as our energy transition continues.

ACHIEVEMENTS

- We have published a **Networks Vision Statement⁶** (March 2019), describing the priorities needed to guide the evolution of Scotland's electricity and gas networks in the context of Scotland's Energy Strategy.
- We are monitoring and responding to major **network investment proposals and charging reviews**, identifying and raising key Scottish issues and priorities.
- **We continue to work and engage with key stakeholders** to support the delivery of transmission links to Scotland's island groups, unlocking the islands' vast renewable potential and associated economic benefits.

⁶ <https://www.gov.scot/publications/vision-scotlands-electricity-gas-networks-2030/>

PLANS

- We will build on our **Networks Vision Statement** – hosting a Networks Summit during 2019, engaging with Ofgem, and liaising with the UK Government on a number of key issues.
- We are proposing to establish a new **Networks Leadership Group** to monitor the Networks Vision, agree actions as necessary and report progress and issues to SEAB.
- We will continue to engage closely with Ofgem, Scotland's network owners, consumer groups and other key stakeholders across a series of important reviews, including the **network price controls** and reviews of **network access and charging**.
- We will build on our role as a leader in UK decarbonisation by leading the way in sustainably delivering technical system services, ensuring that we maintain a **resilient and secure electricity supply**.
- We will set out clearly our understanding and position on **security of electricity supply** and how we expect this to be delivered in a carbon neutral energy system – working with key stakeholders such as National Grid and Scotland's network owners, and developing metrics to help us benchmark and understand Scotland's electricity security of supply trends over time.

OIL AND GAS INDUSTRY STRENGTHS

We will support investment, innovation and diversification across our oil and gas sector, working with industry to advance key priorities such as maximising the recovery of remaining resources, subsea engineering, decommissioning and carbon capture and storage – collaboratively addressing the challenges of today and preparing the sector and its workforce for a positive role in Scotland's future energy system.

ACHIEVEMENTS

- Our **Decommissioning Challenge Fund** awarded grants of £5.4 million in 2018/19. We have also undertaken feasibility work looking at establishing an **ultra deep water port in Scotland**, compatible with the largest decommissioning vessels and highest value projects. A business case for the location is due to get underway in May 2019.
- We are participating in the **UK Government Ministerial-led Carbon Capture Utilisation Storage (CCUS) Council**, promoting Scottish CCUS opportunities. We have actively engaged in working groups and workshops set up to meet the commitments in the UK Government CCUS Deployment Action Plan, published November 2018.
- We have also established a **Scottish CCUS Interest Group** to help to coordinate efforts to raise awareness of CCUS and to help realise the deployment of CCUS systems in Scotland.
- We have supported the **Acorn CCS Project** at St Fergus with direct funding of £100,000 and an additional £175,000 alongside the UK Government and Total, match funded by EU funding, to drive the project forward.
- We are supporting a number of world-leading **hydrogen** demonstration projects – providing £6.3 million to date for the Aberdeen Hydrogen Bus Project, and £1.3 million for Orkney's Surf N Turf Project, the only project in the world producing hydrogen from tidal power.
- We have established the **Scottish Hydrogen Interest Group** to share information and help coordinate action on the development of hydrogen projects and activity in Scotland.
- The **Oil & Gas Industry** Leadership Group (ILG) membership and remit has been refreshed to increase its focus on supporting and developing the supply chain, and on skills.

- The **Transition Training Fund** has supported over 4000 people, playing an important role in retaining core skills for the supply chain in the years to come.
- The **Oil and Gas Technology Centre (OGTC)**, funded through the Aberdeen City Region Deal, has made substantial headway – co-investing over £100 million in 188 industry led projects.
- We have supported the **Oil and Gas Innovation Centre (OGIC)** as part of £120 million committed by the Scottish Funding Council
- We are entering the final stages of the policy making process in relation to **onshore unconventional oil and gas development** in Scotland. Our consultation on the SEA, partial BRIA, and preferred policy position on unconventional oil and gas ran from 23 October – 18 December 2018, with an eight-week consultation on an addendum to these consultation documents launched on 30th April – providing clarification on a number of points raised in response to the 2018 consultation. We will consider responses to the addendum in detail prior to any policy position being adopted.
- We will also explore the opportunities and challenges of further deployment of **hydrogen**, and build a strong evidence base on the potential roles for hydrogen in the energy transition. Hydrogen has huge potential across the whole energy system – as a means of decarbonising heat and transport, and providing storage solutions to help balance Scotland's growing renewable electricity generation.
- Following its success to date, the Scottish Government will remain involved with the **Hyseas hydrogen ferry project**, which is developing the world's first sea-going ro-ro vehicle ferry powered by hydrogen produced using locally generated renewable electricity.
- We will review the successes of the **Decommissioning Challenge Fund** and plan for its reopening.
- We will complete the **ultra deep water port** business case and continue to develop the evidence base to support a facility at Dales Voe, Shetland. We will support Highlands and Islands Enterprise to secure the necessary investment, including any public sector funding.
- We will continue to press the UK Government to support the **oil and gas** industry's ambitions to increase the total economic value of the North Sea, including a positive and stable framework consistent with the oil and gas sector's Vision 2035.
- We will work with the **Oil and Gas ILG Supply Chain Sub-Group** to develop or support projects or initiatives which will anchor the supply chain in Scotland and generate long term value for the Scottish economy.
- We will confirm and adopt our final policy on **unconventional oil and gas** as soon as possible after the consultation process is complete. We remain committed to transparency and public engagement on this important issue.

PLANS

- We will remain closely engaged with the UK Government on its **CCUS** Deployment Action Plan, and continue to work with Scottish stakeholders and our newly formed CCUS Interest Group to promote and work towards establishing CCUS systems in Scotland.
- We will work closely with stakeholders over the coming year on the potential economic, social and strategic value of **hydrogen** to Scotland – carrying out a detailed assessment which examines the achievements of hydrogen projects in Scotland to date, and the lessons to be learned from broader UK and international experience.

6. MONITORING AND ENGAGEMENT

MONITORING AND ENGAGEMENT

Scottish Energy Advisory Board (SEAB)

- SEAB **updated its remit** when Scotland's Energy Strategy was published to take account of the Strategy's themes and strategic priorities – giving the board a wider perspective.
- The Board received an **update on progress** in the delivery of Scotland's Energy Strategy when it met in November 2018, and again in correspondence shortly before publication.
- We are working with SEAB to agree a **proposal to realign the expert group structure** underneath SEAB – with a view to ensuring effective coverage of each of the Strategic Priorities of the Strategy. The new structure will be announced following the next meeting of SEAB in June, and the remits and membership of each group confirmed following summer recess.

A Just Transition

- A Just Transition to a carbon neutral future will be one that creates jobs through new sustainable industries, is good for communities, and helps to tackle inequalities and poverty. The benefits of transitioning to a carbon neutral economy need to be shared widely. And we must be very mindful to not leave anyone behind, and to leverage the existing strengths of the Scottish energy sector.
- We have established a Just Transition Commission to provide Ministers with practical advice on how to move to a carbon neutral economy that is fair for all. The Commission started work in January 2019 and is tasked with providing independent advice by early 2021.

- Membership includes representatives from business and industry, trade unions, environmental groups, academia, farming and the third sector. Collectively the Commission has expertise on Labour Markets and Skills, Social Inclusion and Regional Cohesion, as well as climate change.
- Dialogue and engagement will be crucial to the Commission's work; involving people from across Scotland to hear the views of those likely to be affected by, and contribute to, the transition.

Public Engagement Strategy

- The **Energy Consumer Action Plan**, published alongside this Statement, recognises that too many people feel disengaged and disempowered when it comes to energy. To address this, we will consult widely to encourage lively public debate that allows the people of Scotland to shape their energy future.
- We can deliver better outcomes for consumers, particularly those who are least engaged, by raising awareness and understanding of what are often complex issues, and making them more accessible. We will work with and challenge the industry to improve how it engages with and involves consumers.
- We will also be consulting widely over the summer to inform the development of the new climate change public engagement strategy. This work will drive future engagement with individuals on climate change within the context of increased ambition in the new Climate Change Bill.
- Together, these actions represent a major step towards improving our approach to public engagement on energy and climate.

International Outreach

- Scotland's Energy Strategy recognises the importance of working with international partners to better understand the transition to a carbon neutral economy.
- In the last 18 months we have developed new partnerships, and deepened existing relationships to support the global transition to a carbon neutral economy. This includes working with the Government of California to share experiences of off-shore wind; entering into an Memorandum of Understanding with New Jersey to help tackle climate change, recognising the importance of a decarbonised energy sector; and entering into a Memorandum of Understanding with Denmark to promote bilateral collaboration on decarbonisation of heat in buildings, district heating and increasing the energy efficiency of buildings.
- We will also enter into a partnership with the Solar Impulse Foundation to find innovative and profitable solutions to protect the environment including solutions which support Sustainable Development Goal 7 (Affordable and Clean Energy), backed by £1 million funding.
- Ministers attended international events, including the Global Climate Action Summit and the UN Climate Conference (COP 24), to share our experiences in transitioning to a carbon neutral economy in a just and inclusive way, and to learn from others. We have joined up with a number of operations to support our efforts, including the Zero Emission Vehicle Challenge, the Net Zero Carbon Building Challenge, the Industry Transition Platform, and the Powering Past Coal Alliance.
- We have recruited a dedicated resource to promote Scotland's Energy Strategy internationally and to work collaboratively on the transition to a carbon neutral economy. In January, the First Minister also announced the appointment of a new Renewables Specialist for the East Coast of North America, which Opportunity North East and Scottish Development International are co-funding.





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