



# Scottish Energy Strategy:

## The future of energy in Scotland

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## 1. A vision for 2050

## 2. The future of energy in Scotland

- The three themes
  - Transforming energy use
  - Meeting our energy supply needs
  - Smart, local energy systems
  - Delivery, monitoring and engagement



***A modern, integrated, clean Energy system, delivering reliable energy supplies at an affordable price in a market that treats all consumers fairly.***

***A strong low carbon economy - sharing the benefits across our communities, reducing social inequalities, and creating a vibrant climate for innovation, investment and high value jobs.***



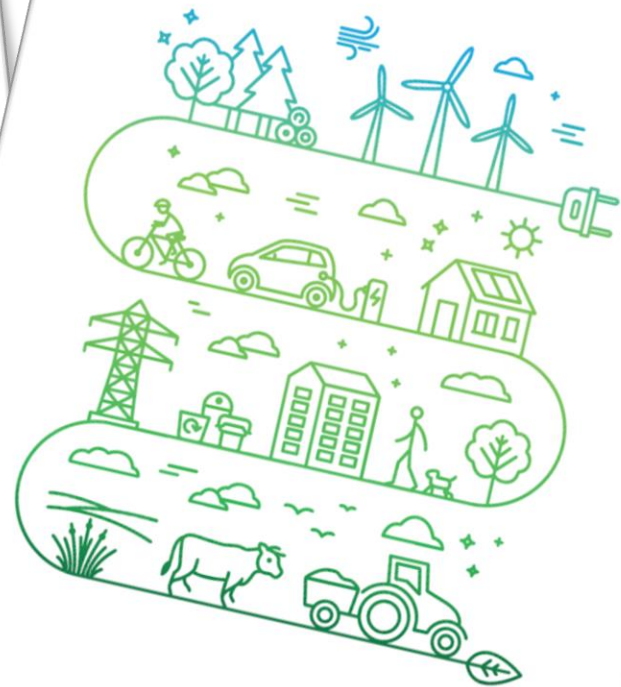
## Climate Change (Scotland) Act 2009 2009 asp 12

### CONTENTS

#### PART 1 EMISSIONS REDUCTION TARGETS *The 2050 target*

## DRAFT CLIMATE CHANGE PLAN

The draft third report on policies  
and proposals 2017-2032  
January 2017



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## **‘Whole-system’ view**

- Examining where our energy comes from and how we use it – for power (electricity), heat and transport: recognising the interactions and effects that the different elements of the energy system have on each other.



## **Stable, managed energy transition**

- Through strong leadership in the transition to a low carbon economy, Scotland’s approach to energy policy can boost our economy while working in harmony with the natural environment, and tackle social inequalities.



## **A smarter model of local energy provision**

- Scottish companies and communities are at the forefront of the development of innovative local energy systems – as part of a varied and proportionate response to the transformation of the global energy system.



## 2050 Vision

- Scotland's domestic and non-domestic buildings have undergone a low carbon transformation – substantially reducing greenhouse gas emissions and delivering a host of economic, social, health and regeneration benefits
- Scotland has an energy market that delivers fair outcomes for all consumers – and especially those on low incomes and at risk of fuel poverty
- Scotland has successfully managed a widespread shift to a low carbon transport system – by 2032 over 40% of all new cars sold each year are Ultra Low Emission Vehicles
- Scotland has achieved a significant improvement in the efficient use of energy – with substantially improved energy efficiency in our manufacturing and industrial sectors, as a means to improve competitiveness





**Addressing the need to reduce demand and increase energy efficiency through the development of Scotland's energy efficiency programme**



**Helping energy consumers to manage their bills, harnessing smart technology in the home and supporting new business models in the retail energy market**



**Supporting the introduction of viable, lower carbon alternatives across all modes of transport**



**Delivering enhanced competitiveness and improved energy efficiency in Scotland's manufacturing and industrial sectors**





## 2050 Vision

- Scotland has achieved almost complete decarbonisation of the energy system – in line with domestic and international climate change targets
- The equivalent of 50% of all energy consumed in Scotland from renewable sources by 2030
- Scotland is a world-leader in renewable and low carbon technologies and services – and continues to offer technology solutions in oil and gas, and excellence in subsea engineering. This knowledge and expertise is exported internationally
- Urban communities benefit extensively from low carbon heat networks
- Carbon capture and storage is operational at large scale and plays a crucial role in decarbonising Scotland's energy system and industrial processes
- New forms of flexible generation and demand management services are widespread
- Shared ownership of renewables and of local energy systems maximise benefits to Scotland's communities



# Meeting our energy supply needs – Priorities



**Increasing the generation of renewable and low carbon energy**



**Increasing the flexibility, efficiency and resilience of the energy system**



**Exploring the role of new energy sources**



**Continuing to support the recovery of north sea oil and gas as a highly-regulated source of energy**



**Supporting the generation and commercialisation of Carbon Capture and Storage (CCS) and CO<sub>2</sub> Utilisation (CCU)**



## 2050 Vision

- Scotland is a leader in the development of local energy systems, providing local solutions to local needs with improved consumer benefit
- Expertise in the management of local energy systems, coordinating the supply, storage and use of many devices, has developed to become a significant export industry
- Local communities play an active part in the delivery of innovative, low carbon energy systems, have the opportunity to influence energy planning from the outset, and receive community benefit (in various forms) from energy generation
- Local energy plans, drawing on best data on energy supply and use, are drawn-up in collaboration with local authorities in every region of Scotland, acting as a commercial investment prospectus and coordinating an area-based approach to public investment





## Supporting the demonstration and growth of innovative projects

- Under the Community and Renewable Energy Scheme (CARES), provide advisory and technical support for community and local renewable energy schemes
- Financial support for demonstration:
  - Low Carbon Infrastructure Transition Programme
  - CARES Local Energy Challenge Fund
  - CARES Infrastructure and Innovation Fund
  - Renewable Energy Investment Fund
  - District Heating Loan Fund



## Partnership between communities, private and public sectors

- Develop strategic approaches to local energy systems, drawing on Scotland's heat map and the Energy Masterplanning approach.
- An enhanced role for local authorities and city regions to deliver new local energy system investment
- Explore the potential for a Government Owned Energy Company
- Explore the creation of a Scottish renewable energy bond
- Consult on the development of a regulatory framework for local heat and energy efficiency strategies

**[LHEES consultation ends 18 April]**



## 2050 Vision

- Scotland has a thriving energy sector, with public and private sectors working together to deliver the 2050 vision
- Scotland continues to work at the leading edge, adapting and taking advantage of new energy technology and systems
- The Scottish public are informed, helping them shape Scotland's energy future



**Working in partnership to sustain a thriving energy sector**



**Monitoring Scotland's Energy Strategy**



**Deepening public engagement**



[Consultation on a Scottish Energy Strategy: The future of energy in Scotland - Scottish Government - Citizen Space \(Closing 30 May\)](#)

[National Infrastructure Priority for Energy Efficiency - Scotland's Energy Efficiency Programme \(Closing 30 May\)](#)

[Consultation on Heat and Energy Efficiency Strategies, and Regulation of District Heating - Scottish Government - Citizen Space \(Closing 18 April\)](#)

[Consultation on a Draft Onshore Wind Policy Statement - Scottish Government - Citizen Space \(Closing 30 May\)](#)

[Strategic Environmental Assessment Environmental Report on the Draft Climate Change Plan and Draft Scottish Energy Strategy](#)

[Talking "Fracking": A Consultation on Unconventional Oil and Gas - Scottish Government - Citizen Space \(Closing 31 May\)](#)



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