



**WWF Scotland/Friends of the Earth Scotland briefing:
“The Future of Renewables in Scotland’s Energy Policy”
Scottish Government Debate, 17th September 2015**

Scotland’s energy system is in the midst of a global transition to a renewables-focused energy future. Scotland’s energy policy should embrace this transition, and focus on securing the opportunities it provides. Current policy is too reliant on un-commercialised CCS and places too little emphasis on demand reduction. Greater progress is needed in Scotland on renewable heat technology. Various recent UK Government decisions have severely undermined confidence in Scotland’s renewable energy industry and risk the UK Government credibility at this year’s Paris climate conference.

Summary of Key Points:

- **Scotland’s energy policy should embrace our renewables future, put Scotland on course for almost entirely renewable electricity generation by 2030, and focus on maximising the opportunities**, in terms of jobs, more empowered communities and local economic renewal.
- The Scottish Government’s current Electricity Generation Policy Statement (EGPS) is too reliant on CCS technology. A strategy that relies so heavily on a commercially unproven technology is a risky strategy. **The Scottish Government should publish a revised EGPS.**
- The Scottish Government’s current energy policy is fragmented. Scotland’s energy policy should integrate electricity, heat and transport and place much greater emphasis on demand reduction, the cheapest route to a secure, decarbonised energy system. **The Scottish Government should produce a strategy that helps people and businesses reduce their demand for electricity.**
- There has been strong support for and progress on renewable electricity. However, **the Scottish Government needs to accelerate take-up of renewable heat technology.** More than 50% of Scotland’s energy use is for heating, but less than 3% of this comes from renewable sources. 40% renewable heat is needed by 2030 to meet Scotland’s climate targets at lowest cost.
- Recent decisions by the UK Government have severely undermined renewable energy industry confidence. **The UK Government must set out how it will support renewables and meet its climate targets to retain credibility at international climate talks in Paris** this year.
- The UK Government’s impact assessment of its plans to close the Renewables Obligation early conceded that the decision could increase UK climate emissions by up to 63million tonnes.

Scotland's future electricity generation

Independent research, undertaken by internationally-renowned engineering consultancy firm DNV-GL, has shown that **almost fully-renewable electricity generation in Scotland is technically feasible and achievable in 2030**¹, with Scotland playing to its strengths by continuing to export electricity to the rest of the shared and secure Great Britain grid.

This transition should be embraced by all political parties. **Embracing this ongoing energy transition enables focus on securing the opportunities provided**, in terms of jobs, community empowerment and local economic renewal. **A new Scottish electricity strategy is needed. It should put Scotland on course for almost entirely renewable electricity generation in 2030 and focus on securing the benefits of that transition.** A clear choice is emerging for the next Scottish Government to make: Embrace the transition to almost entirely renewable electricity generation and grasp its benefits, or battle significant challenges only to take Scotland backwards to expensive, unnecessary new fossil fuel power.

This transition is recognised within the energy industry:

“The idea of baseload power is already outdated. ... This is an industry that was based on meeting demand. An extraordinary amount of capital was tied up for an unusual set of circumstances: to ensure supply at any moment. This is now turned on its head. The future will be much more driven by availability of supply: by demand side response and management which will enable the market to balance price of supply and of demand.”

Steve Holliday, CEO of National Grid, interview, September 11th 2015²

Renewables are already producing roughly half of Scotland's electricity needs and were Scotland's single biggest source of power in the first half of 2014. Exports from Scotland's renewable electricity generation contribute significantly to the rest of GB's safe and secure grid.

Concerns about Current Scottish Government energy policy

The Scottish Government's current Electricity Policy Generation Statement (EGPS)³ relies on Carbon Capture and Storage for achieving Scotland's 2030 electricity decarbonisation target. Whilst we support the testing of CCS at Peterhead, this is a risky strategy when the technology is still unproven in a commercial setting. The analysis by DNV-GL shows a safer, more cost-effective route to electricity decarbonisation by 2030 would involve almost entirely renewable electricity generation.

Current Scottish energy policy is fragmented, with separate strategies for electricity generation, heat generation and energy efficiency. **Energy policy in Scotland needs to become more integrated between electricity, heat and transport; and place much more emphasis on demand reduction** as the cheapest route to a secure, decarbonised energy system.

Based on these concerns, WWF Scotland and Friends of the Earth Scotland believe the Scottish Electricity Generation Policy Statement needs to be revised.

Renewable Heat

55% of Scotland's energy consumption comes from demand for heating, yet just 3% of that currently comes from renewables, and just 1% from district heating⁴. This is an area where renewables needs much greater effort in Scotland's energy policy. Forthcoming independent research by

¹ [Pathways to Power](#), DNV-GL, commissioned by WWF Scotland, December 2015

² Interview, World Energy Focus #15, September 2015. Available here: http://worldenergyfocus.org/wp-content/uploads/2015/09/EP_WEF_2015_15_MR01.pdf

³ Scottish Government, Electricity Generation Policy Statement, <http://www.gov.scot/Topics/Business-Industry/Energy/EGPSMain>

⁴ Scottish Government, Heat Policy Statement, <http://www.gov.scot/Topics/Business-Industry/Energy/Energy-sources/19185/Heat>, June 2015

RICARDO-AEA⁵ suggests Scotland needs at least 40% renewable heat by 2030, to be consistent with the lowest cost pathway to achieving the ambitions of Scotland's climate change Act.

The Scottish Government's Heat Generation Policy Statement sets a target of achieving 11% of heat demand from renewable sources by 2020. A key contribution needs to be from district heating. New legislation and regulations are needed, to protect customers, create a framework to support the take-off of a new Scottish district heating industry and to provide a strategic approach to supporting the uptake of low carbon heat.

Demand side policy

Reducing energy demand represents the most cost-effective route to achieving security of supply, affordability for bill-payers and timely decarbonisation. Adopting demand reduction as the first fuel should be a key part of Scotland's transition to a flexible, renewables-centred energy system.

Greater effort is needed by both UK and Scottish Governments to support electricity demand reduction in their energy policies. The UK Government needs to adjust the electricity market regime in order to provide a level playing field for demand-side projects, including giving access to main capacity market auctions. The Scottish Government should produce an electricity demand reduction strategy.

The Scottish Government recently announced that it would make improving the energy efficiency of all buildings a National Infrastructure Project⁶. This welcome commitment should lead to a step-change in approach to making homes less draughty and cheaper to heat. However, a long-term objective for the project has not yet been set. WWF Scotland and Friends of the Earth Scotland are strongly of the view that **its goal should be to make all homes at least EPC standard C by 2025**, to allow our climate change targets to be met. Such a project outcome is a key part of the National Infrastructure Project designation.

UK Government changes

A number of recent UK Government policy changes have severely undermined confidence within the renewables industry. Early closure of the Renewables Obligation, a consultation on reducing the scope of the Feed-in-Tariff and continuing uncertainty about the future of the Levy Control Framework all risk undermining UK Government credibility at important climate change talks in Paris in December.

Onshore wind has been particularly affected, and this disproportionately impacts on Scotland. This is **despite onshore wind being publically popular and the cheapest form of renewable technology**.

The **UK Government recently admitted that its decision to close the Renewables Obligation earlier than expected could increase UK electricity sector emissions by up to 63million tonnes more CO₂⁷**, more than Scotland emits across its entire economy in a year. The UK Government must provide clarity to industry about how it will support renewables and meet its climate targets.

Lastly, increased electricity storage is an important system service to provide flexibility in Scotland's developing renewables-focussed energy system. The UK Government's Electricity Market regime currently fails to adequately support this important wider system service. The UK Government should work with the Scottish Government to **develop a new revenue stream to incentivise investment in pumped storage**.

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⁵ Ricardo AEA 'Renewable energy in Scotland in 2030', forthcoming, commissioned by WWF Scotland, Friends of the Earth Scotland and RSPB Scotland.

⁶ <http://news.scotland.gov.uk/News/Climate-change-action-heats-up-19c8.aspx>

⁷ <http://www.parliament.uk/documents/impact-assessments/IA15-007D.pdf>