

Renewable energy

Impact report



Prepared by Audit Scotland
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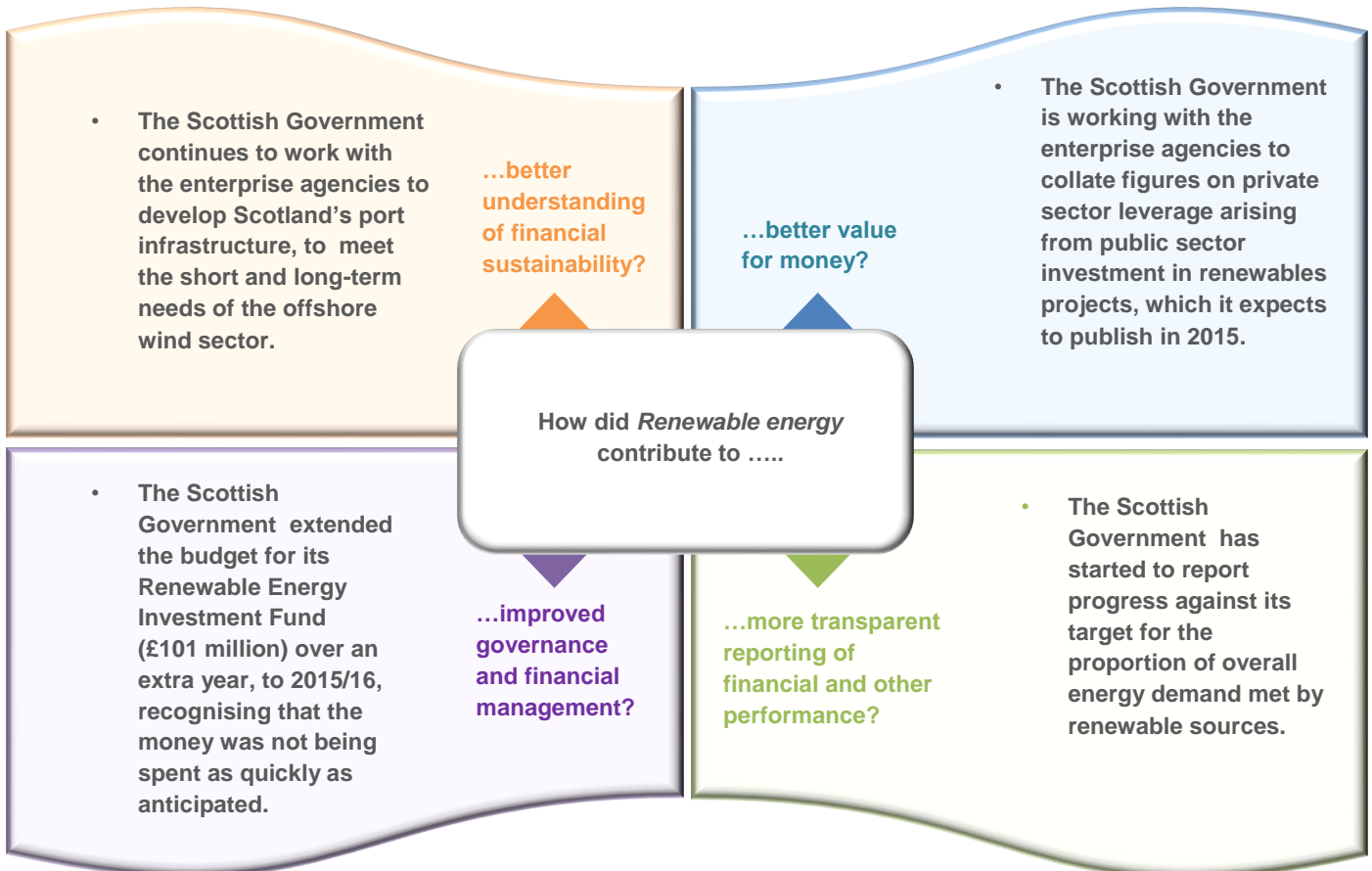
Audit Scotland is a statutory body set up in April 2000 under the Public Finance and Accountability (Scotland) Act 2000. It provides services to the Auditor General for Scotland and the Accounts Commission. Together they ensure that the Scottish Government and public sector bodies in Scotland are held to account for the proper, efficient and effective use of public funds.

Contents

| | |
|--|----|
| Summary of overall progress..... | 4 |
| Introduction | 5 |
| Raising awareness and communication of key messages | 5 |
| Parliamentary consideration | 6 |
| Contribution to national policy developments..... | 7 |
| Progress on implementing recommendations..... | 9 |
| Appendix 1. Progress on implementing the recommendations in <i>Renewable energy</i> | 10 |

Summary of overall progress

Contribution to key aspects of public sector audit



Introduction

1. This report summarises the impact made by the Auditor General for Scotland performance audit report *Renewable energy*, published on 12 September 2013.
2. The report examined what the Scottish Government, Scottish Enterprise and Highlands and Islands Enterprise have done and what investment they have made to develop renewable energy, and evaluated what has been delivered.
3. The key messages from the report were:
 - The Scottish Government has a clear strategic vision for developing renewable energy, which is reflected across other policy areas. It has targets and plans to deliver this vision, although it needs to do more to raise the profile of renewable heat.
 - The Scottish Government has made steady progress towards its renewable energy targets for 2020. However, achieving these targets will be challenging. We estimate that to meet the renewable electricity target alone, average annual increases in installed capacity need to double.
 - The public sector spent over £209 million on developing the renewable energy sector in the 11 years to 2012/13, and funding is increasing. The total combined budget for 2013/14 and 2014/15 will be £264 million. However, renewable energy projects are progressing more slowly than anticipated due to factors such as the current economic climate and changes in UK energy policy. As a result, public bodies are experiencing delays in spending the money available to develop the sector.
 - The Scottish Government estimates that renewable energy could deliver up to £30 billion investment and 40,000 jobs by 2020. The total amount of private sector investment resulting from public funding is not collated at a national level. It is difficult to identify the number of jobs in the renewable energy sector and projections of future employment are optimistic.
4. The report made recommendations to the Scottish Government, Scottish Enterprise and Highlands and Islands Enterprise. We recommended that the Scottish Government should set out how it aims to develop renewable energy beyond 2020, and estimate the range of public sector funding that may be needed to attract private sector investment. We also recommended that the Scottish Government, Scottish Enterprise and Highlands and Islands Enterprise should identify what additional steps they can take to accelerate the development of infrastructure to support the offshore wind industry. A complete list of the recommendations, along with an update of progress against each one, is included in Appendix 1.

Raising awareness and communication of key messages

Media coverage

5. Media coverage following publication was higher than expected and above average. The report was covered in the national and local press, and had television and radio coverage. It continued to be referred to in the media in the months following publication, when there were

relevant national developments. For example, an article in the Daily Mail in January 2014 referred to our report, following publication of Scottish Renewables' report on employment in the renewable energy sector. Media coverage and report downloads are summarised below:

| Media items / downloads | Number of items: Twelve months following publication |
|-----------------------------------|---|
| National press | 17 |
| Local press | 14 |
| Television | 9 |
| Radio | 16 |
| Specialist press and online press | 19 |
| TOTAL MEDIA ITEMS | 75 |
| Report downloads | 2,973 |
| Podcast downloads | 688 |
| TOTAL DOWNLOADS | 3,661 |

Presentations by the audit team

6. Following publication of the report, the audit team were invited to present and discuss the findings and recommendations at the Highlands and Islands Enterprise risk and assurance committee and the Forestry Commission Scotland audit committee.
7. In September 2014, the Project Manager delivered a presentation on the audit to a visiting delegation from the Azerbaijan Chamber of Accounts, who had expressed an interest in the subject matter.

Parliamentary consideration

8. The report was considered by the Public Audit Committee on 2 October 2013. Members asked questions on a range of issues, including:
 - The number and type of jobs in renewable energy
 - Public and private sector investment in ports and harbours
 - Community renewable energy projects
 - Scottish Government targets for renewable energy
9. The Committee agreed to write to the Scottish Government, requesting further information on:
 - how it would act on the report's recommendations
 - the outcomes of those areas of Scottish Government activity due for completion by the end of 2013

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- the outcome of the review of the CARES scheme, and the extent to which it will act on the findings.
10. The Scottish Government response was received on 30 January 2014, and a further update was provided on 16 May 2014. Both responses were considered by the Public Audit Committee at its meeting on 28 May 2014, and the Committee agreed to note the correspondence.
 11. The report was also mentioned in other Parliamentary business:
 - In a debate in the Chamber on Scotland's future on 18 September 2013, Rob Gibson highlighted the key message from our report that the Scottish Government has a clear strategic vision for renewable energy, but that projects are progressing more slowly than anticipated.
 - During the Economy, Energy and Tourism Committee's scrutiny of the draft budget for 2014/15 (18 September 2013), the Convenor asked a question in response to the message in our report on the lack of progress towards meeting the renewable heat target.

Contribution to national policy developments

12. The Scottish Government reported national developments that reflected some of the findings and recommendations in our report. In particular:
 - The day before our report was published, the Finance Secretary presented his draft budget for 2014/15 to Parliament. Recognising that "the spending of public sector funding has not happened as quickly as we would have hoped", he proposed that the remaining budget for the Renewable Energy Investment Fund (£101 million) should be extended over an extra year, to 2015/16.
 - The Scottish Government published its draft heat generation policy statement for consultation on 4 March 2014. This refers to our report, specifically to our recommendation that the Scottish Government should set an interim milestone to help measure progress towards its renewable heat target.

Other national developments

13. We reported that renewable energy projects are progressing more slowly than anticipated, and that achieving the Scottish Government's targets by 2020 will be challenging. Since publication of our report, there have been further indications that the development of the offshore wind sector in particular is slowing:
 - Scottish Renewables found that investment in Scottish companies by offshore wind developers working in Scottish waters more than halved between 2012 and 2013, from £64 million to £29 million.^{1,2} It noted that uncertainty among investors is growing, as

¹ Scottish Renewables is a representative body for organisations involved in the renewable energy sector.

² *Offshore wind: investing in Scotland*, Scottish Renewables, January 2014.

none of the offshore projects planned for Scottish waters had received planning consent, and there is a lack of clarity around financial incentives for generating renewable electricity.

- In December 2013, Scottish Power Renewables announced that it was not proceeding with one of the largest proposed offshore wind projects in Scotland (the Argyll Array), as it is not financially viable. The proposed project had the potential to power up to one million homes.
 - In early 2014, SSE carried out a wide ranging review of its offshore wind development portfolio. In March 2014, it announced that it would be narrowing significantly the focus of its development plans for offshore wind projects. It decided not to invest any further in the near future in one of its three projects in Scotland (the Islay Array).
14. In the draft budget for 2015/16, the Scottish Government noted that “Scottish renewable development and investment plans have been affected by uncertainty arising from the reform of UK wide support schemes” and that this has “slowed the rate at which projects are being developed in Scotland.”³
 15. During 2014, the Scottish Government granted planning consent for the development of six offshore wind farms.⁴ In total, they will consist of up to 661 wind turbines and be capable of generating enough electricity to power over 2.4 million homes. One of these projects (Nearth na Gaoithe) has been awarded one of the UK Government’s Contracts for Difference. This is a 15 year contract to supply electricity to the National Grid for a guaranteed price. However, two other Scottish offshore wind projects that bid for a contract were unsuccessful (Moray Offshore Renewables Limited and Inch Cape).
 16. In July 2014, the Scottish Government announced £2.2 million funding for the Carbon Trust’s Offshore Wind Accelerator programme (£200,000 in 2014/15 and £2 million in 2015/16). This is a joint industry and government scheme, which aims to cut the cost of offshore wind technologies by at least ten per cent.
 17. In November 2014, one of Scotland’s largest marine energy developers went into administration after it was unable to secure the funding required to further develop its technology. Highlands and Islands Enterprise have since bought the assets of the company on behalf of Wave Energy Scotland. This is a new body that the Scottish Government has established as part of Highlands and Islands Enterprise to accelerate the development of wave energy technology in Scotland. In February 2015, the Scottish Government announced £14.3 million funding for Wave Energy Scotland (£1.3 million for 2014/15 and £13 million for 2015/16).

³ *Draft budget 2015/16*, Scottish Government, October 2014.

⁴ The six offshore wind farms to receive planning consent in 2014 are Moray Offshore Renewables Limited (MORL) and Beatrice Offshore Windfarm Limited (BOWL) in the Outer Moray Firth, Alpha Seagreen, Bravo Seagreen and Inch Cape off the Angus coastline, and Nearth na Gaoithe off the Fife coastline.

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18. In January 2014, Scottish Renewables published updated figures on employment in the renewable energy sector.⁵ It found that employment increased by five per cent between 2012 and 2013, from 11,136 full-time equivalent posts to 11,695. More than half of the companies surveyed (54 per cent) said they plan to employ more people in the next year, and 42 per cent said employment levels would stay the same. However, employers recognised that growth in the workforce may be affected by a number of factors, including uncertainty over electricity market reform, planning consent and grid connections, and difficulties sourcing finance.

Progress on implementing recommendations

19. The Scottish Government reported to the Public Audit Committee that it is planning to take action against all of the recommendations in our report. Progress against each recommendation is outlined in Appendix 1.

⁵ *Employment in renewable energy in Scotland 2013*, Scottish Renewables, January 2014.

Appendix 1. Progress on implementing the recommendations in *Renewable energy*

| Audit Scotland recommendation | Progress / impact |
|--|---|
| <p>The Scottish Government should: set out how it aims to develop renewable energy beyond 2020 and develop targets to reflect this.</p> | <p>In an update to the Public Audit Committee in January 2014, the Scottish Government noted that it would consider EU climate and energy targets for 2030 when developing its own targets beyond 2020. The EU agreed headline targets in October 2014, including one to increase the share of renewable energy to at least 27 per cent of the EU's energy consumption by 2030. The Scottish Government's existing target is for 30 per cent of its overall energy demand to be met from renewable sources by 2020.</p> <p>As we reported in 2013, the Scottish Government has a target to cut carbon emissions from electricity generation by 85 per cent by 2030. In its <i>Draft Heat Generation Policy Statement</i> (see below), the Scottish Government set out its ambition that by 2050 Scotland will have a largely decarbonised heat sector, with significant progress by 2030. The Scottish Government is considering the scope for new National Performance Framework indicators measuring progress towards the decarbonisation of Scotland's energy system as a whole.</p> |
| <p>The Scottish Government should: clarify the role of renewable heat within its wider vision for Scotland's future energy mix in its heat-generation policy statement, due to be published by the end of 2013.</p> | <p>The Scottish Government published its Draft Heat Generation Policy Statement for consultation on 4 March 2014. This notes that a mix of heat sources will be required in future, with a growing proportion of low carbon and renewable generation. The policy statement sets out the role of renewable heat within the Scottish Government's 'heat hierarchy', which is as follows:</p> <ol style="list-style-type: none"> 1. Reduce the need for heat 2. Supply heat efficiently (e.g. through district heating networks) 3. Use renewable and low carbon heat resources to deliver low carbon heat efficiently. |

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| | It includes a chapter on renewable heat, which outlines the policy and financial measures the Scottish Government is taking to support the development of renewable heat technologies. |
| <p>The Scottish Government should:</p> <p>use its revised methodology for measuring progress towards the renewable heat target to set a realistic interim milestone for 2017.</p> | <p>The Scottish Government's <i>Draft Heat Generation Policy Statement</i> refers to our recommendation to set an interim milestone for renewable heat for 2017. It notes that: "A simple linear projection suggests that to stay on course to meet the 2020 target, renewable heat generation should be approximately eight per cent of non-electric heat demand in 2017. However, based on recent deployment and the current potential capacity in the pipeline, the potential variability of when renewable heat projects would come online make it difficult to set interim renewable heat milestones which would provide any meaningful assessment of progress towards the 11 per cent 2020 target."</p> |
| <p>The Scottish Government should:</p> <p>agree a methodology to monitor its target for overall energy demand and start reporting progress against it by the end of 2014.</p> | <p>The Scottish Government publication <i>Energy in Scotland</i> provides an overview of energy statistics for Scotland. The latest version, published in January 2015, reports for the first time on progress against the Scottish Government's target for overall energy demand from renewable sources. It refers to our recommendation and includes a link to our report.</p> |
| <p>The Scottish Government should:</p> <p>estimate the range of public sector funding that may be needed beyond 2014/15 to attract private sector investment and meet its objectives for renewable energy by 2020.</p> | <p>The day before our report was published (11 September), the Finance Secretary presented his draft budget for 2014/15 to Parliament. Recognising that "the spending of public sector funding has not happened as quickly as we would have hoped", he proposed that the remaining budget for REIF (£101 million) should be extended over an extra year, to 2015/16.</p> <p>In the draft budget for 2015/16 (published October 2014), the Scottish Government maintains its commitment to renewable energy, but notes that "Scottish renewable development and investment plans have been affected by uncertainty arising from the reform of UK wide support schemes. Developers' concerns about the design of these mechanisms, and the budget available to support them, have slowed the rate at which projects are being developed in Scotland." As a result, the Scottish Government reduced</p> |

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| | <p>the resource available for renewable energy by £2 million in 2015/16 and re-profiled £20 million capital funding from 2015/16 into 2016/17.</p> |
| <p>The Scottish Government should:</p> <p>work with Scottish Enterprise and Highlands and Islands Enterprise to collate and report at a national level the total amount of private sector investment in renewable energy projects that have received public funding.</p> | <p>The Scottish Government is working with the enterprise agencies to collate figures on private sector leverage arising from future loans and other investment in renewables projects. It plans to publish these figures in its annual update of the <i>Routemap for Renewable Energy in Scotland</i>, which is due to be published in 2015.</p> <p>Scottish Enterprise’s annual report and accounts for 2013/14 included a performance indicator that by 2016 it will achieve leverage of £300 million to £350 million of additional private investment in offshore renewables, including £130 million to £150 million through the National Renewables Infrastructure Fund (NRIF). Scottish Enterprise reported cumulative totals of £106 million and £10 million respectively against these indicators to 31 March 2014. It noted that “commercial investment prospects in offshore renewables were constrained by continued market and regulatory uncertainties”.</p> |
| <p>The Scottish Government, Scottish Enterprise and Highlands and Islands Enterprise should:</p> <p>identify what additional steps they can take to accelerate the development of infrastructure to support the offshore wind industry.</p> | <p>In the draft budget for 2015/16, the Scottish Government reiterated its commitment to “continue to stimulate the offshore renewables supply chain”. The enterprise agencies continue to work together, and with the Scottish Government, to ensure that Scotland’s test and demonstration and port infrastructure is sufficient to meet the short and long-term needs of the offshore wind sector. Work has progressed at various port locations, with the aim of ensuring that they are able to respond quickly to forecast demand for port services, land and buildings. To support potential energy sector users of port infrastructure, the enterprise agencies are preparing an Energy Ports Capability Statement, which will set out the facilities available at a range of locations that can service the needs of offshore wind and other energy sector users.</p> |
| <p>The Scottish Government, Scottish Enterprise and Highlands and Islands Enterprise should:</p> <p>work with Skills Development Scotland and the Scottish Energy Advisory Board’s industry leadership</p> | <p>The publication of the Energy Skills Investment Plan was delayed by over one year. In an update to the Public Audit Committee in May 2014, the Scottish Government noted that this was to allow Skills Development Scotland sufficient time to work with industry to gather information to ensure the plan accurately reflects the skills needs of the sector.</p> |

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| <p>groups to ensure employment projections in the revised energy skills investment plan, due by the end of 2013, are realistic.</p> | <p>Skills Development Scotland published the updated Energy Skills Investment Plan in March 2015. The plan does not include any projections of employment levels in the energy sector. It notes that, due to uncertainty in the sector, “it is difficult to predict future employment and skills requirements with any degree of certainty”. The refreshed plan identifies the skills that are likely to be needed in the renewables sector in future, and reinforces the need for long-term skills planning and sustained investment in skills and workforce development.</p> |
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