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SSE's Economic Contribution to the UK, Scotland, and the Republic of Ireland

FINAL REPORT

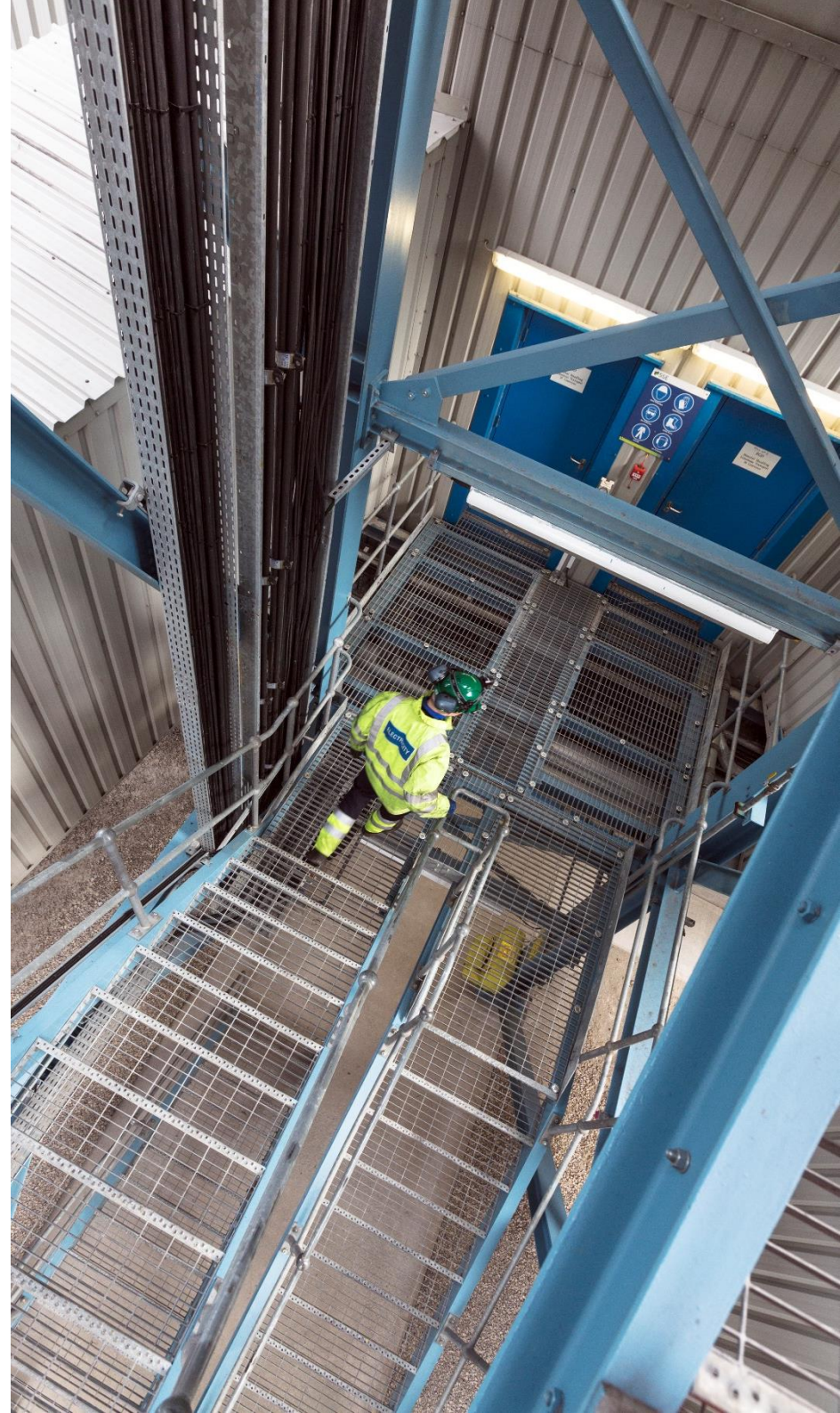
May 2015



pwc

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Introduction

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Section 1 – Introduction

Purpose and scope of this study

This is a PwC study commissioned by SSE plc, a major energy company operating in the UK and the Republic of Ireland (“Ireland”). The report estimates SSE’s gross contribution to the UK’s, Scotland’s and Ireland’s Gross Domestic Product (GDP) and employment – directly, indirectly in its supply chain, and via employees spending their wages in the wider economy. SSE has commissioned this report to continue building awareness within SSE and amongst its stakeholders of the contribution it makes to the economy.

This report updates previous reports we have produced for SSE, which covered its contribution to the UK, Scottish, and Irish economies in FY12, FY13 and FY14. These covered SSE’s contribution to GDP, employment, tax revenue and capital expenditure. For the purpose of this current report, we have focused on SSE’s contribution to UK GDP and employment (see table 1.1).

The analysis covers SSE’s three business segments: Networks, Retail and Wholesale. It excludes jointly controlled entities in which SSE does not have a majority share. As a result, the figures presented may underestimate the total size of SSE’s economic footprint.

We present the results for the UK as a whole, results for Ireland, along with a breakdown for Scotland.

This report presents the results for FY15 and, in places, includes those from the previous reports to show how SSE’s total contribution to the economy has changed over the past four years.

Limitations

This study of SSE’s contribution to GDP and employment represents a gross analysis and does not take into account the extent to which any part of this contribution might have happened anyway in the absence of SSE. The current report does not look at any other economic, social and environmental impacts created by SSE’s direct operations or value chains. Indirect and induced contributions are estimated using Input-Output models. Data used for this analysis were provided to us by SSE and gathered from statistics authorities such as the ONS, and have not been audited by PwC. Further information on our methodology and data sources is available in the Appendix of this report.

Note: This report has been prepared solely for the benefit of SSE in accordance with the terms of our contract and we accept no liability to any other user. The information contained in this report should not be relied on by anyone else. For a full disclaimer, please refer to the back cover of this report.

Table 1.1: Indicators assessed for this report

Indicator covered in the study	Measured as	Methodology
Contribution to GDP	Gross Value Added (GVA), which is the company-level equivalent of GDP	Analysis of financial statements, Input-Output modelling
Employment supported	Headcount	Analysis of headcount data, Input-Output modelling Details of the methodologies can be found in the appendix

SSE’s and PwC’s role in this project

SSE provided PwC (“we” or “us”) with the input data for our calculations – on profits, wages, expenditure and employment headcount. SSE also provided the geographical location and sector of the economy of the companies that they spent their money with using their professional judgement and published guidance from statistics authorities. We used these data, as well as data from statistics authorities (such as the ONS), as inputs to estimate SSE’s economic contribution, using economic models built by us. A list of data sources used is available in the Appendix of this report.

We have not tested or audited any of the data provided by SSE, or obtained from statistics authorities, that have been used within the models, and we provide no assurance over that data or any outputs based on that data.



Section 1 – Introduction

Key findings: SSE's contribution to UK and RoI GDP and employment

Contribution to the Scottish economy

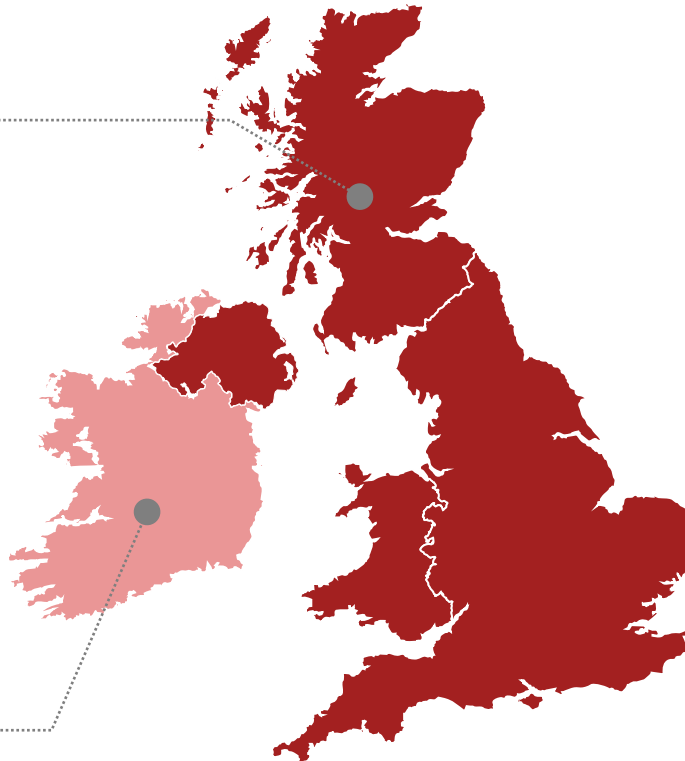
In FY15, SSE contributed **£1,465m** to Scottish GDP and supported **17,730** jobs.

Over the last four years, SSE contributed **£5,497m** to the Scottish economy (in FY15 prices).

Contribution to the Irish economy

We estimate that, in FY15, SSE's total contribution to Irish GDP was **€954m** and supported **6,460** jobs.

Over the last four years, SSE contributed **€3,497m** to the Irish economy (in FY15 prices).



Contribution to the UK economy

In FY15, SSE contributed **£8.78bn** to UK GDP and supported **106,320** jobs in the UK.

Over the last four years, SSE contributed **£36.35bn** to UK economy (in FY15 prices).

For every person employed by SSE directly, SSE supported **4.6** jobs elsewhere in the UK economy in FY15, which is higher than the UK average of 2.1.

At **£139,870** in FY15, SSE's average output per employee was **2.6** times the UK national average.

*SSE's contribution to UK GDP and
employment*

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Section 2 – SSE’s contribution to UK GDP and employment

Direct contribution to the UK economy



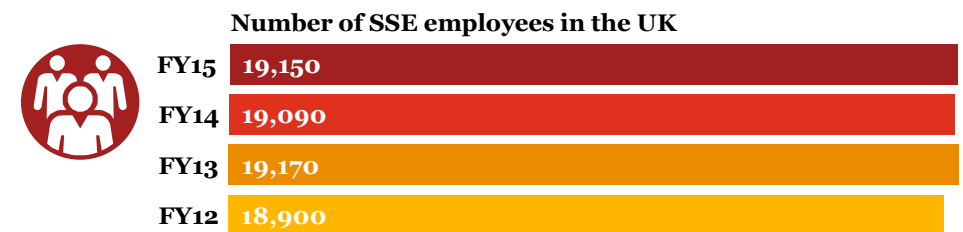
In FY15, SSE employed 19,150 people in the UK.

SSE employed staff with a wide range of skill sets, including engineers, technicians, business administration staff and customer support personnel. These staff are employed across the SSE Group, in SSE’s Retail, Networks and Wholesale businesses.

SSE’s direct contribution to GDP in FY15 amounted to £2.68bn¹.

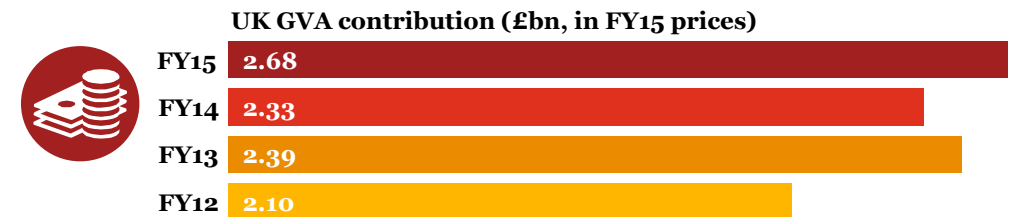
Combining SSE’s direct contribution to GDP and the size of its workforce implies that SSE’s average output per worker was £139,870 in FY15. This compares to just under £53,400 (in FY15 prices) for the UK national average in 2013. This implies that SSE’s average productivity is 2.6 times the national average².

Figure 2.1: Direct contribution to UK employment



Source: SSE, PwC analysis. Rounded to the nearest 10 jobs.

Figure 2.2: Direct contribution to UK GDP



Source: SSE, PwC analysis. Please note that direct GVA in FY14 has been restated since the previous report to correct for a small error in the data. Therefore the UK and Scotland FY14 figures have increased by 1% and 2% respectively compared to the results initially stated. We have also inflated results from the FY14 report using the GDP deflator to make them directly comparable with our FY15 results. As a result, the values are expressed in FY15 prices rather than current prices, so appear slightly higher still than reported in our FY14 report.

At £139,870, SSE’s average output per employee in FY15 was 2.6 times the UK national average of £53,400

¹ SSE’s direct contribution to GDP is estimated from data contained in its financial accounts, which are prepared on an accruals basis for the financial year. For a more detailed description of the approach used in this section, please refer to the Appendix of this report.
² Source: ONS. Average output per employee is defined as Gross Value Added per employee. The latest consistent UK national data available are for calendar year 2013. We converted these to FY15 prices using the GDP deflator, a measure of price inflation in the economy.



Section 2 – SSE’s contribution to UK GDP and employment

Total contribution to UK GDP and employment



We estimate that SSE supported 106,320 jobs in the UK in FY15. Given SSE’s direct payroll of 19,150 employees, this implies that for every member of staff that SSE directly employs, it also supports another 4.6 jobs elsewhere in the UK – a total employment multiplier of 5.6. This is higher than the UK average multiplier of 3.1³. Over the last four years, SSE has supported an annual average of 111,730 jobs in the UK.

The total contribution of £8.78bn to UK GDP in FY15 is equivalent to approximately 0.6% of the GDP of the UK in 2014.

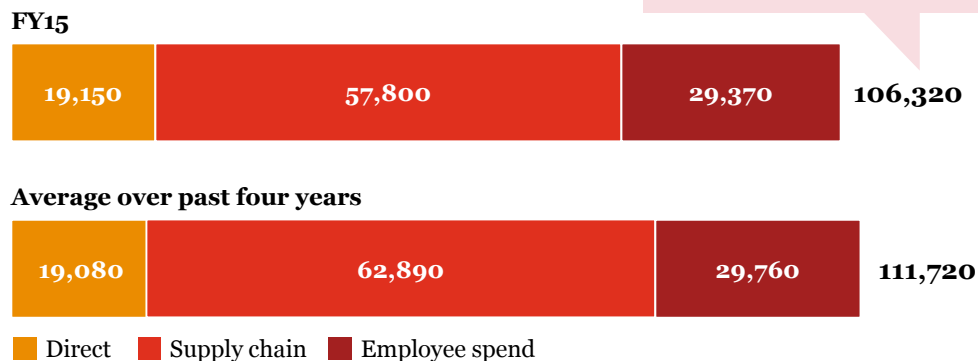
The total number of SSE supported jobs in FY15, 106,320, is equivalent to 0.4% of UK employment in 2013. SSE’s direct employment accounts for 19,150 of these jobs.

Figure 2.3: SSE’s employment multiplier in the UK



Source: SSE, PwC analysis

Figure 2.4: Total UK employment supported



Equivalent to **0.4%** of UK employment in 2013⁴

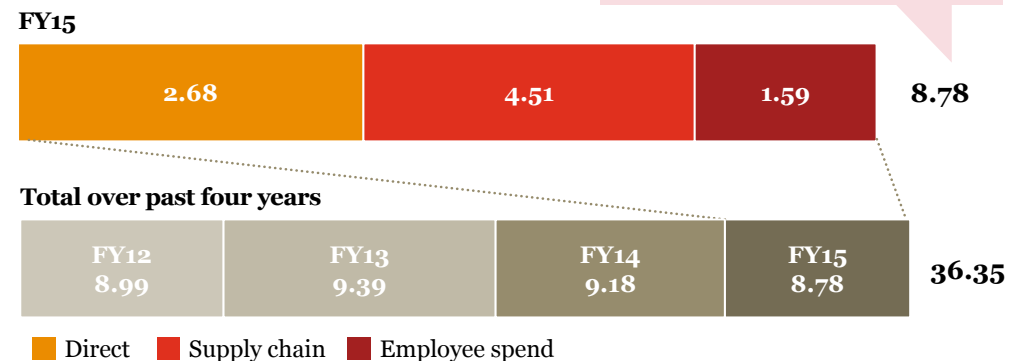
Source: SSE, PwC analysis. Rounded to the nearest 10 jobs.

³ Source: ONS, PwC analysis. UK average defined as the unweighted average of all UK sectors.

⁴ Source: Business Register and Employment Survey (BRES), PwC analysis.

⁵ Source: ONS. GDP measured at factor cost.

Figure 2.5: Total contribution to UK GDP (£bn in FY15 prices)



Equivalent to **0.6%** of UK GDP in 2014⁵

Source: SSE, PwC analysis. Please note direct GVA in FY14 have been restated after the previous report to correct for a small error in the data. Therefore the UK and Scotland FY14 figures have increased by 1% and 2% respectively compared to the results initially stated. We have also inflated results from the FY14 report using the GDP deflator. As a result, the values appear slightly higher than reported in our FY14 report, as they are expressed in FY15 prices rather than current prices.

*SSE's contribution to Scotland GDP and
employment*

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Section 3 – SSE’s contribution to Scotland GDP and employment

Direct contribution to the Scotland economy



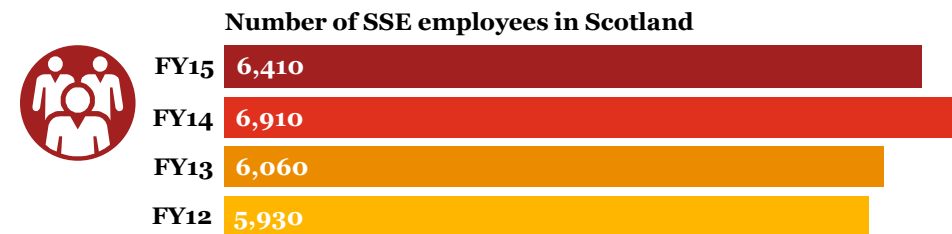
In FY15, SSE employed 6,410 people in Scotland.

SSE employed staff with a range of different skill sets, including engineers, technicians, business administration staff and customer support personnel. These staff are employed across the SSE Group, in SSE’s Retail, Networks and Wholesale businesses.

SSE’s direct contribution to GDP in FY15 amounted to £927m⁶.

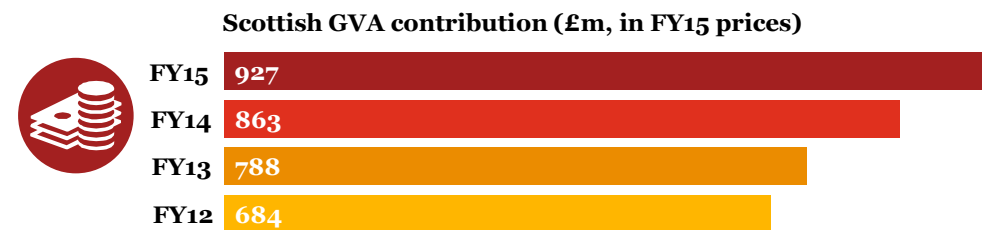
Combining SSE’s direct contribution to Scottish GDP and the size of its workforce implies that SSE’s average output per employee in Scotland was £144,620 in FY15. This compares to just under £48,220 (in FY15 prices) at a national level for Scotland in 2013. This implies that SSE’s average productivity is 3.0 times the national average at that time⁷.

Figure 3.1: Direct contribution to Scottish employment



Source: SSE, PwC analysis. Rounded to the nearest 10 jobs.

Figure 3.2: Direct contribution to Scottish GDP



Source: SSE, PwC analysis. Please note direct GVA in FY14 have been restated after the previous report to correct for a small error in the data. Therefore the UK and Scotland FY14 figures have increased by 1% and 2% respectively compared to the results initially stated. We have also inflated results from the FY14 report using the GDP deflator. As a result, the values appear slightly higher than reported in our FY14 report, as they are expressed in FY15 prices rather than current prices.

At £144,620, SSE’s average output per employee in FY15 was 3.0 times the Scottish national average of £48,220

⁶ SSE’s direct contribution to GDP is estimated from data contained in its financial accounts that are prepared on an accruals basis for the financial year. For a more detailed description of the approach used in this section, please refer to the Appendix of this report.

⁷ Source: ONS. Average output per employee is defined as Gross Value Added per employee. The latest consistent data available for Scotland are for calendar year 2013. We convert to FY15 prices using the GDP deflator, a measure of price inflation in the economy.



Section 3 – SSE’s contribution to Scotland GDP and employment

Total contribution to Scotland GDP and employment



SSE’s contribution to Scottish GDP is largely driven by the GVA generated directly⁸. We estimate that in FY15 SSE’s operations in Scotland made a direct contribution of £927m to Scottish GDP, as part of a total contribution of £1,465m. The large direct contribution to Scottish GDP is driven by the high proportion of SSE employees in Scotland, as SSE’s UK profits are apportioned to Scotland based on the Scottish share of total UK wage payments. In addition, Scotland’s relatively small, open economy means the multiplier effect tends to be smaller than in larger, more closed economies.

We estimate that SSE’s Scottish supply chain contributed £359m to Scottish GDP. Spending by employees of SSE and those in its Scottish supply chain contributed a further £178m.

The total contribution of £1,465m to Scottish GDP in FY15 is equivalent to approximately 1.3% of the GDP of Scotland in 2013.

We estimate that in FY15 SSE supported a total of 17,730 jobs in Scotland. This is equivalent to 0.7% of Scotland’s employment in 2013. SSE’s direct employment accounts for 6,410 of these jobs.

Figure 3.3: SSE’s employment multiplier in the UK



Source: SSE, PwC analysis

Figure 3.4: Total Scottish employment supported

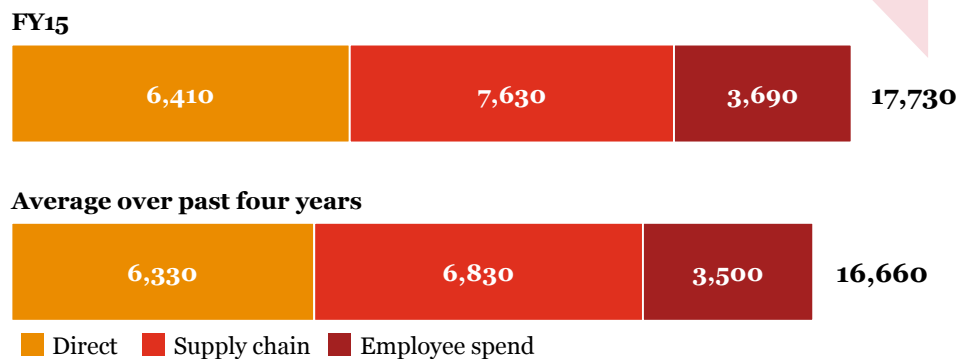
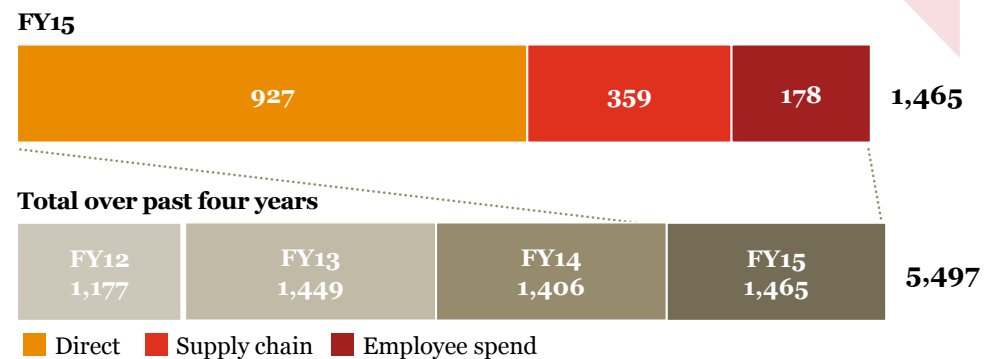


Figure 3.5: Total contribution to Scottish GDP (£m, in FY15 prices)



Source: SSE, PwC analysis. Rounded to the nearest 10 jobs.

⁸ Please note that we look at the overall contribution of SSE to Scotland, which includes procurement from the rest of the UK and the Republic of Ireland. This does not reflect the multiplier effect of Scottish operations only.

⁹ Source: BRES, PwC analysis.

¹⁰ Source: ONS. GDP measured at factor cost. The latest consistent data available for Scotland are for 2013. We have adjusted to FY15 prices using the GDP deflator.

Source: SSE, PwC analysis. Please note direct GVA in FY14 have been restated after the previous report to correct for a small error in the data. Therefore the UK and Scotland FY14 figures have increased by 1% and 2% respectively compared to the results initially stated. We have also inflated results from the FY14 report using the GDP deflator. As a result, the values appear slightly higher than reported in our FY14 report, as they are expressed in FY15 prices rather than current prices.

*SSE's contribution to Republic of Ireland
GDP and employment*

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Section 4 – SSE’s contribution to Republic of Ireland GDP and employment

Direct contribution to the Irish economy



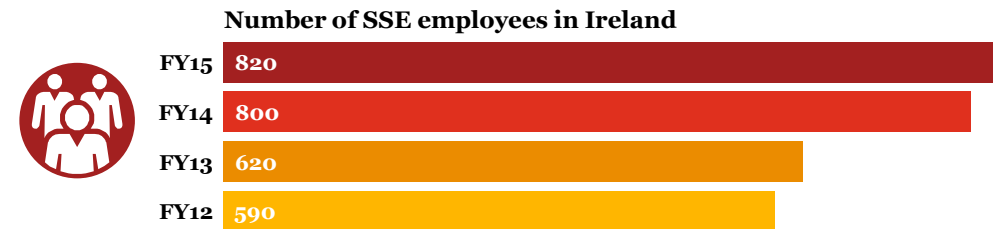
In FY15, SSE employed 820 people in Ireland.

SSE employed staff with a range of different skill sets, including engineers, technicians, business administration staff and customer support personnel. These staff are employed across the SSE Group, in SSE’s Retail and Wholesale businesses.

SSE’s direct contribution to GDP in FY15 amounted to €161m¹¹.

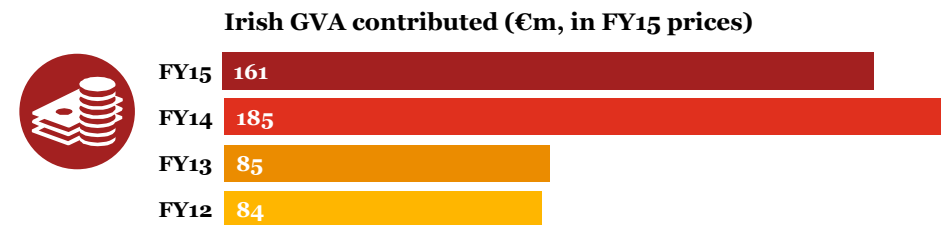
Combining SSE’s direct contribution to Irish GDP and the size of its workforce implies that SSE’s average output per employee in Ireland was €197,670 in FY15. This compares to the Irish national average output per employee of €86,280 in 2014, which implies SSE’s average productivity is 2.3 times the national average¹².

Figure 4.1: Direct contribution to Irish employment



Source: SSE, PwC analysis. Rounded to the nearest 10 jobs.

Figure 4.2: Direct contribution to Irish GDP



Source: SSE, PwC analysis.

At €197,670, SSE’s average output per employee in FY15 was 2.3 times the Irish national average of €86,280

¹¹ SSE’s direct contribution to GDP is estimated from data contained in its financial accounts that are prepared on an accruals basis for the financial year. For a more detailed description of the approach used in this section, please refer to the Appendix of this report.

¹² Source: CSO. Average output per employee is defined as Gross Value Added per employee.



Section 4 – SSE’s contribution to Republic of Ireland GDP and employment

Total contribution to Irish GDP and employment



We estimate that, in FY15, SSE’s total contribution to Irish GDP was €954m. This is equivalent to 0.6% of Irish GDP in 2014. This brings SSE’s total contribution between FY12 and FY15 to €3,497m when expressed in FY15 prices¹³. On average, 15% of this contribution was from SSE’s direct operations, 72% from its supply chain spend and 13% from spending by its employees and those of its suppliers. The supply chain contribution is partially a result of spending in Ireland by SSE’s UK business.

We estimate that SSE supported 6,460 jobs in Ireland in FY15. Given SSE’s direct payroll of 820 employees. This implies that for every SSE employee in Ireland, the company supports another 6.9 Irish jobs¹⁴. Over the last four years, SSE has supported an annual average of 5,870 jobs in Ireland.

Figure 4.3: SSE’s employment multiplier in Ireland



Source: SSE, PwC analysis

Figure 4.4: Total employment supported in Ireland

Equivalent to **0.3%** of Irish employment in 2014¹⁵

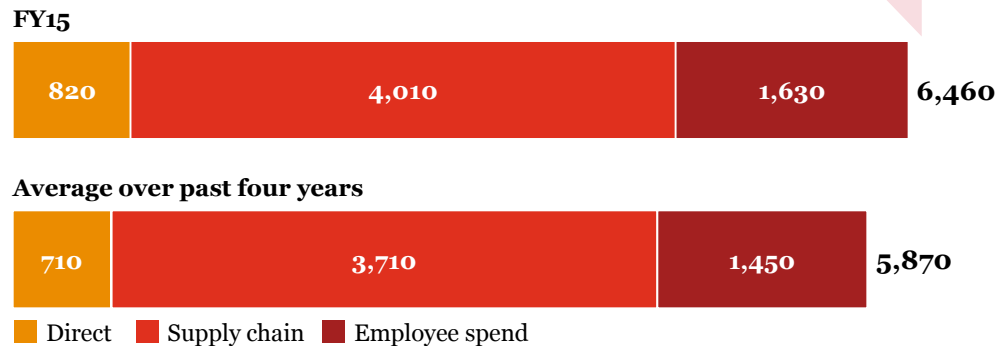
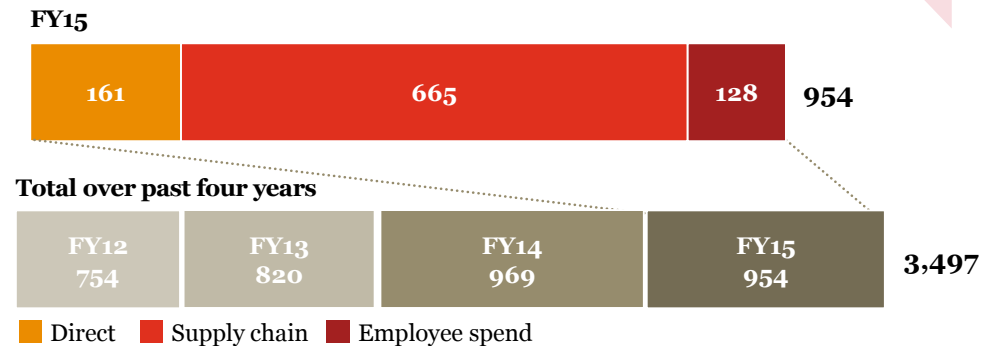


Figure 4.5: Total contribution to Irish GDP (€m, in FY15 prices)

Equivalent to **0.6%** of Ireland’s GDP in 2014¹⁶



Source: SSE, PwC analysis. We have inflated results from the FY14 report using the GDP deflator. As a result, the values appear slightly higher than reported in our FY14 report, as they are expressed in FY15 prices rather than current prices.

Source: SSE, PwC analysis. Rounded to the nearest 10 jobs.

¹³ Please note that we look at the overall contribution of SSE’s to Ireland, which includes procurement from the UK business. This does not reflect the multiplier effect of Irish operations only.

¹⁴ Source: SSE, CSO, PwC analysis.

¹⁵ Source: CSO, PwC analysis.

¹⁶ Source: CSO. GDP measured at factor cost.

Please note that due to rounding some of the figures may not sum to the totals presented

Appendix

5

Section 5 – Appendix

Economic contribution approach (1/7)

Overview

SSE's economic contribution is defined in terms of its contribution to GDP and employment supported.

Contribution to GDP is measured in terms of Gross Value Added (GVA). GVA is a monetary measure of the value a company adds during its production process. Hence, it is the difference between the price of its products (outputs) and the price of the inputs it uses in producing these (or intermediate consumption). GVA is an alternative term for GDP at factor cost, which is GDP before taxes and subsidies on products. As such, GVA is the company-level equivalent of GDP.

The contribution to GDP and employment is estimated at the direct, indirect and induced levels. The direct contribution results from the company's own operations: it includes the people employed directly by a company and the economic value the company creates. The indirect contribution is generated in a company's supply chain through the procurement of inputs. The induced contribution is generated through the spending by employees throughout the value chain from their earnings. It includes both SSE's own employees and those in its supply chain. In our report these contributions have been called direct, supply chain spend and employee spend to make it easier for readers not familiar with the economic terminology.

SSE provided us with the input data to estimate its direct economic contribution. We also relied upon data from various governments to build the economic Input-Output models used in our calculations (as described on the following slides). We did not carry out any testing of, and do not provide any assurance over, the underlying data provided by SSE or obtained from the other external sources, and hence do not provide any assurance over outputs based on such data.

Approach to estimating direct economic contribution

We estimate SSE's direct contribution to GDP using an income approach from data contained in its financial accounts that are prepared on an accruals basis for the financial year (rather than relating to the cash spent during the year). The following equation is used:

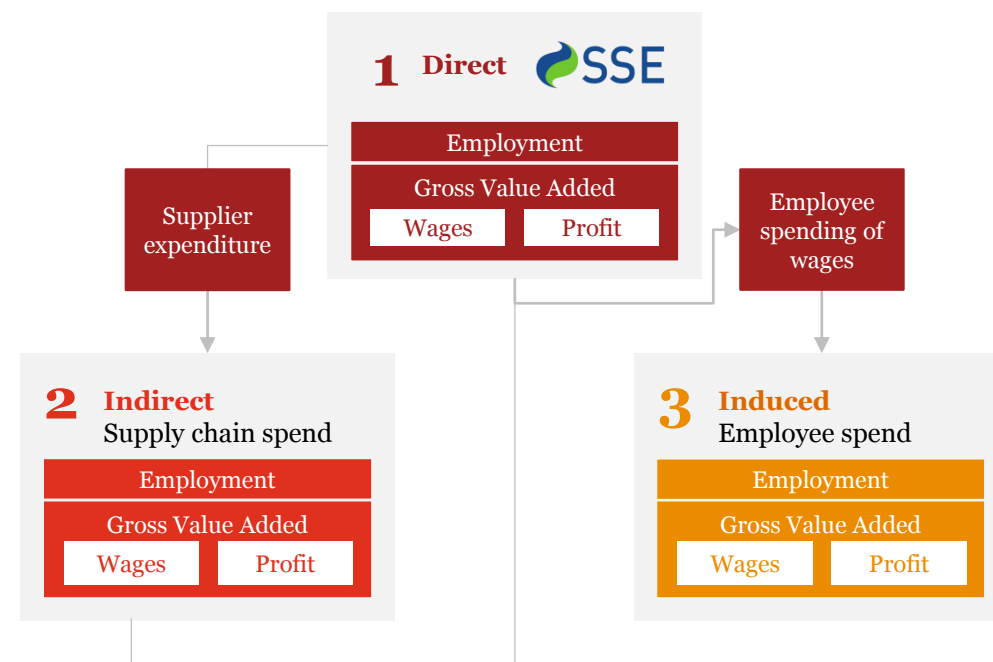
$$\begin{aligned} &\text{Direct contribution to GDP} \\ &= \text{profit before interest and taxation} + \text{employee costs} \\ &\quad + \text{depreciation} + \text{amortisation.} \end{aligned}$$

These indicators are prepared for the UK and Ireland. For Scotland, it was agreed with SSE to apportion a share of SSE's direct contribution to UK GDP to Scotland on the basis of employee compensation.

Direct employment is taken directly from SSE's human resources data. The breakdown by country and nation is based on the home address of its employees.

A more detailed explanation of our approach can be found on the following pages.

Figure 5.1: The relation between the three levels of economic contribution



Section 5 – Appendix

Economic contribution approach (2/7)

Approach to estimating indirect and induced economic contribution

The indirect and induced economic contributions are estimated using an Input-Output model which describes how different industries in the economy relate to each other. On this basis we can estimate how activity by one company stimulates activity elsewhere in the economy.

SSE's indirect (or supply chain) contribution is estimated using its procurement data. SSE gathered and provided data from its accounts which it analysed to identify in which sectors of the economy it purchases its inputs. The Input-Output tables show how much a typical business in each supplier's sector requires to produce one unit of output. Equally, it shows what inputs are required from other sectors to produce one unit of its own output. In this way we can estimate SSE's input requirements through the entire supply chain and estimate the total value of production stimulated. This process of one company stimulating economic activity in other companies is referred to as the multiplier effect.

In addition to the above, an Input-Output table provides data on the share of revenue that constitutes profit and wages for each sector. We apply this ratio to the total production value stimulated to estimate the total GVA in the supply chain by sector. We also use government statistics on employment in each sector to estimate the total employment associated with SSE's activity. We derive the average output per head by sector and apply this to the total production value stimulated in each sector in the supply chain. In this way, we estimate the indirect employment supported by SSE.

These steps get repeated to estimate the induced contribution, but through using wage data to estimate how much production is stimulated in the supply chain that supports the products employees buy, e.g. accommodation, food and entertainment.

Figure 5.2: A simplified version of an Input-Output table, the basis for an Input-Output model

	Agriculture	Manufacturing	Transport	Retail	Financial services	Household demand	Gov't demand	Gross capital formation	Export demand	Total demand
Intermediate consumption										
Agriculture										100
Manufacturing	10								20	
Transport										
Retail										
Financial services					50					
Final consumption										
Imports										
Taxes minus subsidies										
Employee wages			20							
Gross operating surplus										
Total output	100									

The data sources used in for our modelling are described on the following pages.

Section 5 – Appendix

Economic contribution approach (3/7)

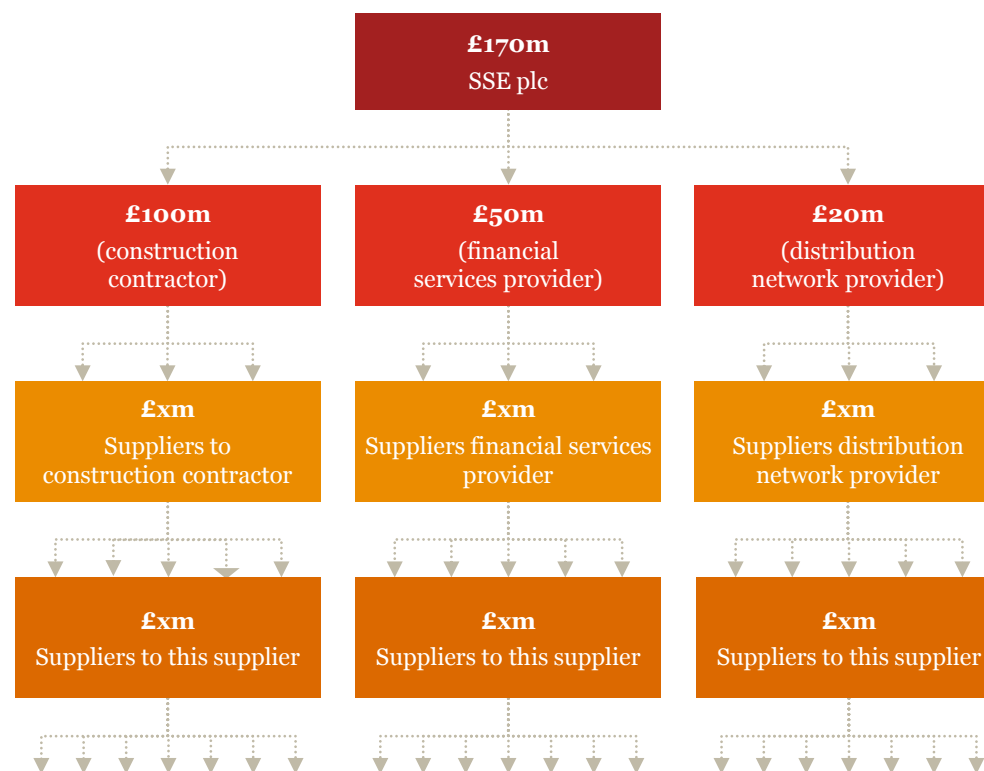
Model data sources

The Input-Output models for each geography are based on Input-Output tables provided by the relevant national official statistics offices. These are described in detail on the next page.

Input-Output tables are based on data collected through business surveys undertaken by national statistics offices on an annual basis. We have combined data from the Input-Output tables with employment data for the relevant years to obtain employment to output ratios. These have been updated using estimates for labour productivity and inflation to reflect the time period covered by our assessment. It should be noted that this type of adjustment does not capture structural changes in the economy that occur between the Input-Output table year and the year of analysis. This means that results should be treated with caution for sectors that have changed significantly since the preparation of the most recent Input-Output tables.

SSE provided us with the input data we used to estimate its direct economic contribution. We also relied upon official statistics to build the economic models used in our calculations (as described on the following pages). We did not carry out any testing of, and do not provide any assurance over the underlying data provided by SSE or obtained from any other external source.

Figure 5.3: A simplified representation of the relation between SSE and its supply chain (note: hypothetical numbers used below)



Section 5 – Appendix

Economic contribution approach (4/7)

Table 5.1: Key data sources for our Input-Output models

Country	Source
<i>Input-Output tables</i>	
UK	ONS. UK Input-Output Analytical Tables, 2010
Scotland	Scottish Government. Input-Output Analytical Tables, 2011
Ireland	CSO. Input-Output Tables for Ireland, 2010
<i>Employment data</i>	
UK and Scotland	ONS. Annual Employment Statistics (BRES) for relevant years
Ireland	CSO. Earnings Hours and Employment Costs Survey (EHECS)
<i>Inflation data</i>	
UK and Scotland	ONS. GDP deflators
Ireland	IMF. International Financial Statistics database
<i>Labour productivity</i>	
UK and Scotland	ONS. Labour Productivity Statistics
Ireland	OECD. Productivity statistics.
<i>Household income</i>	
UK	ONS. UK Economic Accounts
Scotland	Scottish Government. Quarterly National Accounts Scotland.
Ireland	CSO. Quarterly Accounts by Uses and Resources, Institutional Sector, Current Account and Quarter
<i>Expenditure data</i>	
All geographies	SSE

Section 5 – Appendix

Economic contribution approach (5/7)

Data treatment

- SSE used its judgement to map the majority (95%) of its supplier expenditure to the relevant sector of the economy and country of operation.
- As agreed with SSE, we extrapolated any remaining expenditure in the same proportion as the mapped expenditure, to obtain total expenditure by sector and country.
- SSE also provided data on its employment headcount, profits and wages from its annual accounts.
- SSE provided all data related to its business and we obtained other inputs for our modelling from the official statistics authorities. We have used these data in our analysis, but we have not tested any of the input data and so do not provide any assurance over them.
- In order to ensure consistency both between our model and SSE's data as well as across years, we have adjusted all figures so that they are measured in equivalent prices. All financial data received from SSE are in FY15 prices (i.e. the price level for the year 1 April 2014 to 31 March 2015). The national statistics used to contextualise our results and underpin our model are on a calendar year basis. Where these data are historic we have adjusted them using the 2014 GDP deflator from the relevant national statistics authority. For convenience we refer to this approximately equivalent price level as FY15 prices throughout. All data are presented in these FY15 prices unless otherwise stated.
- A significant share of SSE's purchases is related to commodity trading. As agreed with SSE, we have only included SSE's net expenditure on energy commodities, as this is assumed to represent better the genuine economic contribution of the company. For financial instruments, we have only included the commission paid by SSE, for the same reason.
- Part of SSE's expenditure is Feed-In Tariff (FIT) payments. These are subsidies paid to renewable energy generators and SSE is required to contribute to their cost by Ofgem based on its share of the retail market. SSE pays these directly to generators and also indirectly via balancing payments administered by Ofgem. SSE has mapped the FIT expenditure as payments to the UK Public Administration and Defence sector. This is consistent with previous economic contribution reports published by SSE. However, this does not take account of the fact that these payments are eventually distributed to a range of generators in a variety of sectors. This simplification has been made because information about the recipients of FIT available from SSE is limited. In future, the quality of the results would be improved if more specific data could be made available on the recipients of the FIT payments. We tested the sensitivity of our results to different approaches. We estimate that alternative assumptions about the sectors of the economy in receipt of FIT payments could lead to SSE's contribution varying by up to 3%. In the absence of more reliable information on the specific beneficiaries of SSE's FIT payments, we have agreed with SSE that this is a reasonable way to treat FIT transactions for the purposes of this analysis.
- To contextualise the contribution that SSE makes to the UK, Scottish and Irish economies we have presented economic data from the Office of National Statistics (ONS) and other statistics agencies, such as the Central Statistics Office (CSO) in Ireland. It should be noted that these data generally refer to calendar years as opposed to financial years. We have referred to financial year data as FY[yy] and calendar year data as 20[yy]. When comparing calendar to financial years, we use 2011 for FY12, 2012 for FY13, 2013 for FY14, and 2014 for FY15. However, due to 2014 data not yet being available for the relevant UK and Scottish employment statistics as well as Scottish GDP, FY15 results are compared to calendar year 2013 – the latest year for which data are available. All are presented in FY15 prices.
- We have corrected a small error in the data from FY14 that affects the depreciation and amortisation rate which forms part of the direct GVA impact of SSE. This means that the UK and Scotland FY14 figures have increased by 1% and 2% respectively compared to the results initially stated.

Section 5 – Appendix

Economic contribution approach (6/7)

Modelling methodology

- We have taken Input-Output analytical tables and employment statistics from the UK (ONS), Irish (CSO) and Scottish Governments. We have used these to create economic models that were used, in conjunction with the data provided by SSE, to estimate SSE's indirect and induced economic contribution.
- All analysis is done in gross terms and we have not assessed the net contribution of SSE to the economy (i.e. we have not considered what would have happened in the economy if SSE did not exist).
- SSE is a Group of companies. We have excluded any transactions between the individual companies that make up the group to avoid double counting contributions.
- Our analysis does not cover jointly controlled entities in which SSE has a stake of 50% or less (e.g. Scottish Gas Networks) unless they are suppliers to SSE in which case they are treated as any other supplier in the analysis. Jointly controlled entities in which SSE has a majority stake (e.g. SSE Contracting) are included.
- Jobs and GVA are different indicators that are driven by the same underlying economic activity. They should not be added together or otherwise considered additional to one another.
- We have used three stand-alone models to estimate SSE's economic contribution in the UK, Scotland, and Ireland. These models are not linked and the results presented are, therefore, only related to the direct expenditure in each geography. They do not take into account feedback loops between geographies. For example, if SSE within Scotland purchases goods from an English supplier, and that English supplier sources goods from Scotland to meet SSE's demand, this additional spending in Scotland is not captured. The results, therefore, represent a conservative estimate of SSE's economic contribution (particularly in Scotland). For this reason, SSE's contribution in England, Wales and Northern Ireland cannot be derived by calculating the difference between the results for the UK and Scotland.
- The economic contribution for UK, Scotland and Ireland is based on total SSE expenditure in these regions. It is not related to the supplier expenditures of the operations based in these regions only. This explains the large indirect and induced contribution in Scotland in particular.
- We have used the FY15 average exchange rate to convert any foreign currency transactions. This is different to how foreign currency transactions were dealt with last year where a mid-point exchange rate was used. The new approach has been adopted for more consistency with the principles outlined in International Accounting Standard 21 'The effects of changes in foreign exchange rates'. This change has a minor effect on the overall results: at the UK level in FY15 the resulting change represents less than 0.1% of the total GVA impact and for Ireland (where the impact of exchange rates is most important) it represents 1.1%.
- SSE's UK direct GVA is apportioned to Scotland based on the Scottish share of SSE's UK wage payments as agreed with SSE.

Section 5 – Appendix

Economic contribution approach (7/7)

Table 5.2: Key definitions

Indicators	Definition	Source
<i>Model indicators</i>		
GVA	GVA is a measure of the value generated in the economy and represents the difference between the value of goods and services sold and the goods and services used as an input to their production. Hence, it is the company-level equivalent of GDP: adding up the GVA of all individual companies in the economy is equivalent to a country's GDP after adjusting for taxes and subsidies on products, a component of GDP which is not included in the calculation of GVA.	SSE, ONS, Central Statistics Office, and PwC analysis.
Employment	Employment supported: expressed as number of jobs (headcount).	
Multipliers	GVA multiplier: total GVA (direct + indirect + induced) for every £1 or €1 of GVA generated directly by SSE. Employment multiplier: total employment (direct + indirect + induced) for every job supported directly by SSE.	
<i>Contextual metrics</i>		
Labour productivity	Labour productivity is defined as SSE's direct GVA per employee (based on headcount).	SSE, ONS, Central Statistics Office, and PwC analysis.
SSE contribution to GDP as % of national GDP	SSE's contribution to national GDP as a percentage of total GDP at factor costs. For the UK and Ireland the latest 2014 GDP figure was used, and for Scotland we have used the latest data available, 2013, and adjusted to 2014 calendar year prices using GDP deflator data from the ONS.	
SSE supported employment as % of national employment	Total employment supported by SSE as a percentage of national employment. For the UK and Scotland the latest national data available that are fully consistent with previous years' analysis are 2013. For Ireland the latest 2014 figure has been used.	

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