



# ScottishPower Energy Networks



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## Introduction

ScottishPower Energy Networks (SP Energy Networks, part of the Iberdrola Group) own and operate the electricity transmission and distribution network in central and southern Scotland and the distribution network in Cheshire, Merseyside and North Wales.

Zero Waste Scotland have worked with SP Energy Networks to establish circular metrics for measuring the impact of their projects. This case study focuses on the process of engaging with the supply chain to develop reporting metrics, outcomes and next steps.



Figure 1 SP ENERGY NETWORKS Sustainable Business Strategy ([link](#))

## Supply Chain engagement and management

As a regulated energy networks company SP Energy Networks has a duty to deliver and report on environmental sustainability activity. SP Energy Networks cannot deliver sustainability without an engaged supply chain, therefore many of these commitments are embedded within the procurement and contract management process, including:

1. Identify, monitor and annually report

metrics to track carbon reduction across the value chain.

2. Follow an appropriate recognised standard such as BS8001 to embed circular economy principles where relevant throughout business processes.
3. Further enhance environmental sustainability standards and performance metrics in contracts and collaborate with the supply chain to target more than 80% of RIIO-ED2<sup>1</sup> suppliers (by value) in meeting these

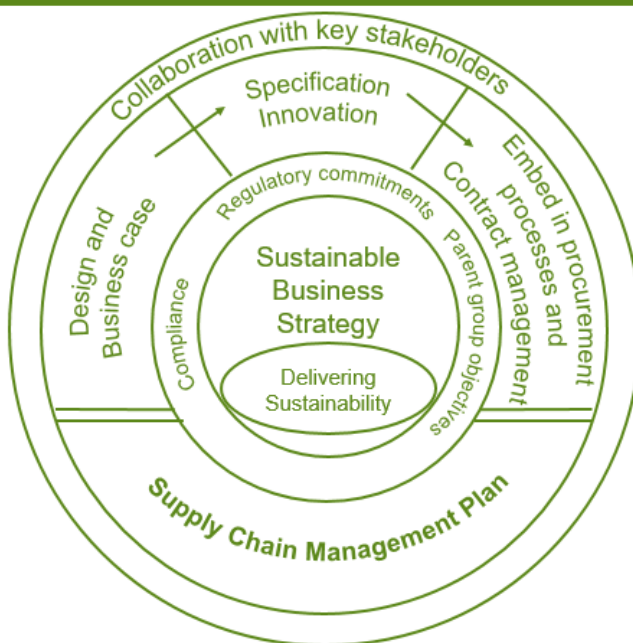
<sup>1</sup> The RIIO-ED2 price control sets the outputs that the 14 electricity Distribution Network Operators (DNOs) need to deliver for their consumers and

the associated revenues they are allowed to collect for the five-year period from 1 April 2023 to 31 March 2028



- standards.
4. Set targets for recycled and reused materials as a % of total input materials, to be achieved by 2026, 2030 and 2050.
  5. Implement metrics to measure the sustainability of resource use, with the aim of establishing a baseline to enable target setting during RIIO-ED2.
  6. Engage with suppliers throughout the duration of their contracts to continue to reduce impacts and benefits.
  7. Continue our work to minimise the environmental impacts of our use of aggregates (soils and stones) via collaboration with other transmission operators, our supply chain and membership on infrastructure resource optimisation groups with the aim of identifying and implementing solutions to reduce the use and disposal of aggregates, including increased use of secondary aggregates.

## Overview



### Supply chain management plan

- Ongoing national and local engagement – identifying stakeholders, frequency and type of engagement, key engagement nodes
- Adapting to procurement regulations across the UK
- Aligning with Ofgem and organisational objectives
- Providing cost effective sustainable solutions
- Driving innovation
- Contract management with maturing KPIs
- SPEN and supply chain change management
- Next steps: Driving social sustainability through the supply chain



Figure 2 SP ENERGY NETWORKS Supply Chain Management Plan



## Challenges: Developing an Absolute Contraction Method

### Data and Baselines

We must accurately measure emissions associated with our supply chains and develop baselines to measure progress.

### Commitment

We will need our supply chain to support us in achieving our Scope 3 carbon reduction targets and provide reliable carbon emissions data

### Methodology and Target Setting

Actively manage carbon emissions by setting reduction targets and implementing PAS2080 carbon management internally and through our supply chains.

### Delivery and Reporting

Requirements to report carbon emissions associated with materials, products and equipment and associated construction emissions used to build the network .

**Developing an absolute contraction method will require a significant step change in how we gather carbon information from our supply chain and drive reductions**



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## Challenges: Supply Chain Setting Science Based Targets



### Data and Baselines

Data must be relatively complete and verified to enable the development of a carbon baseline. Scope 3 data collection can be challenging.

### Commitment

Setting and delivering a Science Based Target requires resources and may require business transformation. Board level commitment is required.

### Methodology and Target Setting

Technical process to choose the relevant methodology, develop Scope 1, 2 and 3 targets and gain verification by the Science Based Targets Initiative.

### Delivery and Reporting

Ongoing commitment to delivering reductions against the target with regular, detailed and transparent reporting.

**Over 1000 businesses worldwide have set official targets to date and all GB electricity networks are setting targets.**



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## Market Engagement

### Supply Chain Engagement to Measure Carbon Impact

SP Energy Networks conducted a series of supplier engagement workshops to set out the scope of ambition and are working in collaboration with their supply chain to establish common standards for contract performance measurement.

Eighty-two percent of stakeholders at the workshops were in favour of SP Energy Networks mandating that suppliers, covering 2/3rds or more of their scope 3 emissions footprint, should set their own Science Based Targets within 5 years (ensuring that smaller companies were not unfairly disadvantaged).

The current approach with contractors is to specify the following:

- Sustainability standards in tenders.
- Contractors to use an online SmartWaste tool.
- Supply Chain School sustainability partner; require contractors and suppliers for all new contracts to become members and undertake relevant sustainability and environmental training.

### Carbon impacts

SP Energy Networks recently did a full analysis of their carbon footprint. The greatest carbon emissions occurring in Scope 2 emissions are from transmission and distribution losses (58% of the total value chain).

Analysis of scope 3 emissions indicates that purchased goods and services account for 9% of the total value chain, whereas capital goods accounts for 19%, with upstream transportation and distribution accounting for 2%.

Current waste diversion targets are:

- Divert 95% of waste from landfill by 2023
- Divert 100% of our waste from landfill by 2030
- Achieve zero waste by 2050 – may be brought forward to 2040

There is a focus on collecting more accurate waste data directly from partners in the value chain in terms of construction materials type and quantity, and waste quantity (carbon emissions tCO<sub>2</sub>e). This will be inputted directly into their SmartWaste tool.

There is a strong focus on improving waste management from contractors, as they account for 98.6% of waste generated overall; of this 85% is recycled and 15% is landfilled. There is a target to divert 100% of waste from landfill by 2030.

### Metrics

Through Interreg NSR ProCirc support SP Energy Networks will focus on the following metrics, green will be the initial focus, with amber being metrics for future focus:



Impact Based Metrics (input and in use) <i>Initially used on an individual project basis</i>	Impact Based Metrics <i>End of life</i>	Enabler Based Metrics	Maturity Model
Carbon Emissions from Materials	Carbon Emissions from Waste	Proportion of Procurement Activities which Incorporated Circular Economy Requirements	Map Progress Against a Maturity Model
Virgin Materials Avoided	Waste Generation	Number of Circular Economy Innovation Initiatives Implemented	
Waste Prevented	Landfill Diversion	Number or Proportion of Assets and/or Asset Components that are using Condition-Based Monitoring And Maintenance	
% Recycled Content	Waste Reuse	Number or Proportion of Procurements/Projects that Incorporated Whole Life Costing	
% Reused Materials/Products	% to Remanufacture/ Refurbished	Number or Proportion of Procurements/Projects that Incorporated Whole Life Carbon Foot Printing	
% Refurbished Materials/Products	% Recycled	Proportion of Assets that have End-of-Life/Decommissioning/ Adaptability Plans and/or Materials Passports	
Years Beyond Usual Lifetime	% Recovered (e.g. Energy from Waste)		
	Waste to Landfill		

In order to monitor and measure these metrics SP Energy Networks will:

- Set contract KPIs.
- Develop processes to manage performance.



## Lessons Learned

As other private and public sector bodies have realised carbon calculated from financial spend is the least accurate methodology to calculate scope 3 emissions, lacking detail to inform decision making.

In order to improve this, SP Energy Networks needs to increasingly request carbon information from suppliers.

It will take a number of years before maturity is built up in this area to develop a more accurate baseline.

The next steps are for SP Energy Networks to identify methods of supporting and incentivising the supply chain to meet enhanced environmental standards.

This may include participating in innovation working groups (for example the Scottish Circular Economy Infrastructure Forum), increasing Scottish Power Energy Networks support staff, standardised KPIs across utilities organisations, recognition through awards, and longer-term frameworks.

SP Energy Networks are also working with major Scottish business leaders to develop a support programme for businesses to deliver net zero in their organisations and contracts.