

# Electricity Supply and Distribution (Industrial Report) - UK - June 2014

Report Price: £995.00 | \$1611.35 | €1263.96

The above prices are correct at the time of publication, but are subject to change due to currency fluctuations.



“The country’s ageing infrastructure assets continue to drive capital investment in the electricity distribution industry. Distribution network operators are also ramping up investment in new technologies to accommodate higher quantities of distributed generation and low carbon technologies on the grid.”

– Claudia Preedy, Industrial Analyst

## This report looks at the following areas:

- What are the key drivers for network investment in the electricity distribution sector?
- How do legislative changes affect the industry?
- What challenges does the transition to a low carbon economy present to distribution network operators (DNOs)?
- What are the expenditure plans of individual DNOs for the next price control period R110-ED1?
- What are the major challenges facing the electricity supply sector?

The terms of reference for this report are predominately the 15 DNOs in the UK, comprising 12 in England and Wales (though some are now grouped within broader companies), two vertically integrated companies in Scotland, and one in Northern Ireland. The report examines the capital expenditure of those companies, and their financial performance, as well as providing an insight into the key challenges facing the industry. The report also covers the electricity supply sector, providing an analysis of its key competitors and issues.

**BUY THIS REPORT NOW**

**VISIT:**  
[store.mintel.com](http://store.mintel.com)

**CALL:**  
EMEA  
+44 (0) 20 7606 4533

Brazil  
0800 095 9094

Americas  
+1 (312) 943 5250

APAC  
+61 (0) 2 8284 8100

**EMAIL:**  
[oxygen@mintel.com](mailto:oxygen@mintel.com)

## DID YOU KNOW?

This report is part of a series of reports, produced to provide you with a more holistic view of this market

# Electricity Supply and Distribution (Industrial Report) - UK - June 2014

Report Price: £995.00 | \$1611.35 | €1263.96

The above prices are correct at the time of publication, but are subject to change due to currency fluctuations.

## Table of Contents

### Executive Summary

#### The market

##### Gross capital spending driven by asset replacement and refurbishment activity

Figure 1: UK gross capital expenditure by the electricity distribution network operators, 2008/09-2012/13

##### Major variations in gross capital spending by geographical area

Figure 2: UK gross capital expenditure by the electricity distribution network operators, by company, 2008/09-2012/13

##### Non-load related capital spending to dominate network investment between 2015 and 2023, reflecting asset replacement requirements

##### Innovation to focus on smart grid technologies to facilitate the transition to a low-carbon economy

##### Low Carbon Network Fund provides support to DNOs to trial new technologies

Figure 3: Forecast network investment of the electricity distribution network operators in Great Britain, 2015/16-2022/23

##### Electricity supply market dominated by the 'big six' energy suppliers, with a combined market share of more than 90%

##### Average dual fuel bills more than doubled over the last 10 years

Figure 4: Breakdown of average domestic electricity household bill, as of January 2013

##### Roll-out of smart meters at centre of key changes to energy supply markets over the next few years

#### Market factors

##### DNOs subject to price controls set by industry regulator Ofgem

##### Decarbonisation of UK economy to increase loads placed on distribution network

##### Renewables Obligation leading to rise in Distributed Generation

##### Renewable Heat Incentive (RHI) promotes take-up of heat pumps

##### Energy Company Obligation (ECO) scheme and Green Deal

##### Ofgem market review – Reforming the electricity retail market

#### Companies

##### Electricity distribution Industry

##### Introduction of competition in network connections

##### Electricity supply Industry

##### Proposed CMA investigation could lead to break-up of 'big six' energy suppliers

#### What we think

### Introduction

#### Definitions

#### Methodology

#### Abbreviations

#### Market positioning

#### Great Britain

#### Northern Ireland

### Economy

#### Inflation

BUY THIS  
REPORT NOW

VISIT: [store.mintel.com](http://store.mintel.com)

CALL: EMEA +44 (0) 20 7606 4533 | Brazil 0800 095 9094

Americas +1 (312) 943 5250 | APAC +61 (0) 2 8284 8100

EMAIL: [oxygen@mintel.com](mailto:oxygen@mintel.com)

# Electricity Supply and Distribution (Industrial Report) - UK - June 2014

Report Price: £995.00 | \$1611.35 | €1263.96

The above prices are correct at the time of publication, but are subject to change due to currency fluctuations.

Interest rates

Business investment

## Market Factors

Price controls

Environmental and legislative factors

Climate Change Programme (including Climate Change Levy and Agreement)

Carbon Plan

Green Deal & Energy Company Obligation (ECO)

Ofgem Retail Market Review

Electricity Market Reform

Renewables obligation

The Renewable Heat Incentive

Combined Heat and Power

## Distribution Industry Structure

Key points

Industry overview

Figure 5: Ownership of the distribution network operators in the UK, as of May 2014

Regional electricity demand

Figure 6: Electricity consumed in Great Britain, by region, 2012

Figure 7: Regional proportional importance of electricity consumed in Great Britain, 2012

Electricity consumption by end-use sector

Figure 8: Analysis of electricity usage, by type of industry, UK, 2005-12

Figure 9: Analysis of electricity usage, by the commercial sector, 2008-12

Figure 10: Analysis of electricity usage graph, by the commercial sector, 2008-12

Scotland

Northern Ireland

## Electricity Distribution Sector Overview

Key points

Overview

Figure 11: Distribution network operators in Great Britain, by region, 2014

Size of UK distribution networks

Figure 12: UK distribution networks, 2012/13

## Electricity Distribution Market Trends

Key points

Introduction of Competition in Network Connections

Trends in UK Electricity Supply

Figure 13: Analysis of electricity supply in the UK, 2009-13

Figure 14: Analysis of electricity supplied in the UK, by type of fuel used in generation, 2009-13

BUY THIS  
REPORT NOW

VISIT: [store.mintel.com](http://store.mintel.com)

CALL: EMEA +44 (0) 20 7606 4533 | Brazil 0800 095 9094

Americas +1 (312) 943 5250 | APAC +61 (0) 2 8284 8100

EMAIL: [oxygen@mintel.com](mailto:oxygen@mintel.com)

# Electricity Supply and Distribution (Industrial Report) - UK - June 2014

Report Price: £995.00 | \$1611.35 | €1263.96

The above prices are correct at the time of publication, but are subject to change due to currency fluctuations.

Figure 15: Analysis of electricity supplied in the UK, by type of fuel used in generation, 2013

Smart Grid Development to Support Low Carbon Economy

Figure 16: Renewable electricity generation in the UK, 2009-13

Figure 17: Renewable electricity generation in the UK graph, 2009-13

Distribution Price Control Review

The Low Carbon Network Fund (LCN)

Electricity North West

Northern Powergrid

SP Energy Networks

SSE

UK Power Networks

Western Power Distribution

## Electricity Supply Sector Overview

Key points

Market background

Figure 18: Proportion of domestic electricity customers by supplier type, by region, 2000 and 2012

## Electricity Supply Market Issues

Key points

Rise in Energy Bills and Dominance of the 'Big Six' Suppliers

Figure 19: Breakdown of average domestic electricity household bill, as of January 2013

Figure 20: Breakdown of average domestic electricity household bill graph, as of January 2013

Increased Competition from Smaller Suppliers

Smart Meter Roll-out

## Capital Expenditure

Key points

Capital expenditure

Figure 21: UK gross capital expenditure by the electricity distribution network operators, 2008/09-2012/13

Figure 22: UK gross capital expenditure by the electricity distribution network operators graph, 2008/09-2012/13

Figure 23: UK gross capital expenditure by the electricity distribution network operators, by company, 2008/09-2012/13

Forecast capital expenditure

Capital spending during price control period 2010-15 focussed on asset replacement

New price control framework based on Revenue = Incentives+Innovation+ Outputs to come into effect from April 2015

Maintain reputational incentive for business carbon footprint (BCF)

Figure 24: Proposed total expenditure for RIIO-ED1 in Great Britain, by company, 2015/16-2022/23

Figure 25: Proposed total expenditure for RIIO-ED1 in Great Britain graph, by company, 2015/16-2022/23

Figure 26: Forecast network investment of the electricity distribution network operators in Great Britain, by company, 2015/16-2022/23

DNOs

Western Power Distribution

BUY THIS  
REPORT NOW

VISIT: [store.mintel.com](http://store.mintel.com)

CALL: EMEA +44 (0) 20 7606 4533 | Brazil 0800 095 9094

Americas +1 (312) 943 5250 | APAC +61 (0) 2 8284 8100

EMAIL: [oxygen@mintel.com](mailto:oxygen@mintel.com)

# Electricity Supply and Distribution (Industrial Report) - UK - June 2014

Report Price: £995.00 | \$1611.35 | €1263.96

The above prices are correct at the time of publication, but are subject to change due to currency fluctuations.

Figure 27: Core activity costs by Western Power Distribution, by type, 2011-15 and 2016-23

Figure 28: Asset replacement expenditure by Western Power Distribution, by type and company, 2016-23

Figure 29: Capital expenditure planned by Western Power Distribution for the West Midlands, by type, 2016-21

Figure 30: Capital expenditure planned by Western Power Distribution for the East Midlands, by type, 2016-21

Figure 31: Capital expenditure planned by Western Power Distribution for South Wales, by type, 2016-21

Figure 32: Capital expenditure planned by Western Power Distribution for the South West, by type, 2016-21

## UK Power Networks

Figure 33: Activity costs by UK Power Networks, 2011-15 and 2016-23

Figure 34: Activity costs by UK Power Networks graph, 2011-15 and 2016-23

Figure 35: Asset investment by UK Power Networks, by type, 2011-15 and 2016-23

Figure 36: Capital expenditure planned by London Power Networks, by type, 2016-21

Figure 37: Capital expenditure planned by Eastern Power Networks, by type, 2016-21

Figure 38: Capital expenditure planned by South Eastern Power Networks, by type, 2016-21

## Northern Powergrid

Figure 39: Activity costs by Northern Powergrid, by type, 2011-15 and 2016-23

Figure 40: Comparison of average annual activity costs by Northern Powergrid, 2011-15 and 2016-23

Figure 41: Network investment by Northern Powergrid, by type, 2011-15 and 2016-23

Figure 42: Capital expenditure by Northern Powergrid (Northeast), by type, 2011-15

Figure 43: Capital expenditure planned by Northern Powergrid (Northeast), by type, 2016-21

Figure 44: Capital expenditure by Northern Powergrid (Yorkshire), by type, 2011-15

Figure 45: Capital expenditure planned by Northern Powergrid (Yorkshire), by type, 2016-21

## SP Energy Networks

Figure 46: Activity costs by SP Energy Networks, 2011-15 and 2016-23

Figure 47: Comparison of average annual activity costs by SP Energy Networks, 2011-15 and 2016-23

Figure 48: Asset replacement expenditure by SP Energy Networks, by asset type, 2016-23

Figure 49: Capital expenditure planned by SP Distribution, by type, 2011-15 and 2016-23

Figure 50: Capital expenditure planned by SP Manweb, by type, 2011-15 and 2016-23

## Electricity North West

Figure 51: Activity costs by Electricity North West, by type, 2011-15 and 2016-23

Figure 52: Comparison of average annual activity costs by Electricity North West, 2011-15 and 2016-23

Figure 53: Asset investment by Electricity North West, by type, 2011-15 and 2016-23

Figure 54: Planned expenditure by Electricity North West, by type, 2014-21

## Scottish and Southern Energy Power Distribution

Figure 55: Core activity costs by Scottish and Southern Energy Power Distribution, by type, 2011-15 and 2016-23

Figure 56: Comparison of average annual activity costs by Southern Energy Power Distribution, 2011-15 and 2016-23

Figure 57: Asset Investment by Scottish and Southern Energy Power distribution, by type, 2011-15 and 2016-23

Figure 58: Capital expenditure planned by Scottish Hydro Energy Power Distribution, by type, 2016-23

Figure 59: Capital expenditure planned by Southern Energy Power Distribution, by type, 2016-23

## Northern Ireland Electricity

**BUY THIS  
REPORT NOW**

VISIT: [store.mintel.com](http://store.mintel.com)

CALL: EMEA +44 (0) 20 7606 4533 | Brazil 0800 095 9094

Americas +1 (312) 943 5250 | APAC +61 (0) 2 8284 8100

EMAIL: [oxygen@mintel.com](mailto:oxygen@mintel.com)

# Electricity Supply and Distribution (Industrial Report) - UK - June 2014

Report Price: £995.00 | \$1611.35 | €1263.96

The above prices are correct at the time of publication, but are subject to change due to currency fluctuations.

Figure 60: Capital expenditure by NIE Transmission and Distribution, 2008/09-2012/13

Figure 61: Capital expenditure determination for NIE Transmission and Distribution, 2012/13-2016/17

## Company Profiles Introduction

Key points

## Western Power Distribution

Western Power Distribution (East Midlands)

Figure 62: Financial analysis of Western Power Distribution (East Midlands), 2008-13

Western Power Distribution (West Midlands)

Figure 63: Financial analysis of Western Power Distribution (West Midlands), 2008-13

Western Power Distribution (South West)

Figure 64: Financial analysis of Western Power Distribution (South West), 2009-13

Western Power Distribution (South Wales)

Figure 65: Financial analysis of Western Power Distribution (South Wales), 2008-12

## UK Power Networks

UK Power Networks: Eastern Power Networks

Figure 66: Financial analysis of Eastern Power Networks, 2008-12

UK Power Networks: London Power Networks

Figure 67: Financial analysis of London Power Networks, 2008-12

UK Power Networks: South Eastern Power Networks

Figure 68: Financial analysis of South Eastern Power Networks, 2008-12

## Northern Powergrid

Northern Powergrid (Northeast)

Figure 69: Financial analysis of Northern Powergrid (Northeast), 2009-13

Northern Powergrid (Yorkshire)

Figure 70: Financial analysis of Northern Powergrid (Yorkshire), 2009-13

## SP Distribution

SP Manweb

Figure 71: Financial analysis of SP Manweb, 2008-12

SP Distribution (South & Central Scotland)

Figure 72: Financial analysis of SP Distribution, 2008-12

## SSE

Figure 73: Financial analysis of SSE, 2009-13

Figure 74: Turnover analysis of SSE, by business segment, 2012-13

Southern Electric Power Distribution

Figure 75: Financial analysis of Southern Electric Power Distribution, 2009-13

Scottish Hydro Electric Power Distribution

Figure 76: Financial analysis of Scottish Hydro Electric Power Distribution, 2008-13

**BUY THIS  
REPORT NOW**

VISIT: [store.mintel.com](http://store.mintel.com)

CALL: EMEA +44 (0) 20 7606 4533 | Brazil 0800 095 9094

Americas +1 (312) 943 5250 | APAC +61 (0) 2 8284 8100

EMAIL: [oxygen@mintel.com](mailto:oxygen@mintel.com)

# Electricity Supply and Distribution (Industrial Report) - UK - June 2014

Report Price: £995.00 | \$1611.35 | €1263.96

The above prices are correct at the time of publication, but are subject to change due to currency fluctuations.

## Electricity North West

Figure 77: Financial analysis of Electricity North West, 2009-13

## Northern Ireland Electricity

Figure 78: Financial analysis of Northern Ireland Electricity, 2010-13

## British Gas Trading

Figure 79: Financial analysis of British Gas Trading, 2008-12

## EDF Energy

Figure 80: Financial analysis of EDF Energy, 2008-12

## NPower

Figure 81: Financial analysis of Npower, 2008-12

## E.ON Energy

Figure 82: Financial analysis of E.ON Energy Solutions, 2008-12

Figure 83: Turnover breakdown for E.ON, 2012

## Scottishpower Energy Retail

Figure 84: Financial analysis of ScottishPower Energy Retail, 2008-12

## First Utility

Figure 85: Financial analysis of First Utility, 2008-12

## Further Sources and Contacts

Trade associations and regulatory bodies

Trade magazines

Trade exhibitions

**BUY THIS  
REPORT NOW**

VISIT: [store.mintel.com](http://store.mintel.com)

CALL: EMEA +44 (0) 20 7606 4533 | Brazil 0800 095 9094

Americas +1 (312) 943 5250 | APAC +61 (0) 2 8284 8100

EMAIL: [oxygen@mintel.com](mailto:oxygen@mintel.com)