

Report Price: £995.00 | \$1343.55 | €1119.77

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



"The approach to infrastructure investment is in transition across the utility industry. Whereas spending in the past was mainly output-driven, investment is now more centred on innovation, higher efficiencies and long-term outcomes.

The rising pressure from industry regulators to reduce costs for consumers is another challenge utility operators face."

- Claudia Preedy, B2B Analyst

This report looks at the following areas:

- English water companies plan to spend a record £50 billion+ in AMP7 (2020-25)
- Innovative smart grid technologies will help enable the transition to a smarter and more flexible energy system

Network operators have also been warned by utility regulators that they will face tougher price control and performance targets in the upcoming spending periods. These cost and efficiency pressures are passed onto the supply chain. Collaboration, technology and innovation will play a key role in enabling utilities and their supply chain to deliver future capital projects in the most efficient way.

The business environment is in transition across the utility sectors, with the industry challenged by a changing regulatory environment, climate change, security of supply and uncertainties regarding future network requirements. These factors also influence the industry's approach to capital expenditure.

Infrastructure investment will continue to be a key focus across the utility sectors, driven both by the need to replace old assets and new capacity requirements on networks. However, approaches to investment are now shifting across sectors due to changes in the regulatory environment, including increased pressure to reduce costs for consumers while ensuring security of supply. There is a focus on innovation, efficiencies and long-term outcomes in infrastructure management and investment, replacing the short-term outputs and capital expenditure preferred in the past. The scope for traditional infrastructure investment may be limited, but there will be more opportunities for companies that can provide innovative solutions for efficient network and asset management.

BUY THIS REPORT NOW

VISIT: store.mintel.com

CALL:EMEA
+44 (0) 20 7606 4533

Brazil 0800 095 9094

Americas +1 (312) 943 5250

+86 (21) 6032 7300

APAC +61 (0) 2 8284 8100

EMAIL: reports@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



Report Price: £995.00 | \$1343.55 | €1119.77

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

Table of Contents

Overview

What you need to know

Covered in this Report

Water & sewerage

Electricity transmission

Electricity distribution

Gas distribution

Gas transmission

Executive Summary

Capital expenditure in water and sewerage sector

Capital investment across industry rose by 9% to £5.7 billion in 2017/18

Figure 1: UK capital expenditure on water and sewerage services, 2015/16-17/18

English water companies plan to spend a record £50 billion+ in AMP7 (2020-25)

Capital expenditure in electricity transmission and distribution sector

Capital investment in distribution networks expected to be lower in current price control

Figure 2: UK gross capital expenditure by electricity distribution network operators, 2012/13-2017/18

Change in energy mix is a key driver for investment in transmission network

Capital expenditure in gas transmission and distribution sector

Capital spending picks up as current price control period progresses

Figure 3: Total gas transmission and distribution capital expenditure, 2013/14-2017/18

Companies and brands

Utility operators are adopting a more collaborative approach and closer relationships with the supply chain

What we think

Issues and Insights

English water companies plan to spend a record £50 billion+ in AMP7 (2020-25)

The facts

The implications

Innovative smart grid technologies will help enable the transition to a smarter and more flexible energy system

The facts

The implications

Water and Sewerage Sector – What You Need to Know

Focus on total expenditure (totex) in AMP6 (2015-20) set to reduce bias towards capital spending

Move towards long-term alliances and frameworks across industry

English water companies plan to spend a record £50 billion+ in AMP7 (2020-25)

Water and Sewerage Industry Capital Expenditure

Overview

BUY THIS REPORT NOW

VISIT: store.mintel.com

CALL: EMEA +44 (0) 20 7606 4533 | Brazil 0800 095 9094 Americas +1 (312) 943 5250 | China +86 (21) 6032 7300



Report Price: £995.00 | \$1343.55 | €1119.77

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

Figure 4: UK capital expenditure on water and sewerage services, 2015/16-17/18

Sewerage-related capital expenditure

Figure 5: Analysis of sewerage-related capital expenditure, by water and sewerage companies in England and Wales, 2015/16-2017/18

Figure 6: Analysis of sewerage capital expenditure in England and Wales by water and sewerage companies, by type, 2015/16-2017/18

Water-related capital expenditure

Figure 7: Analysis of water-related capital expenditure in England and Wales by water and sewerage companies, by type, 2015/16-2017/18

Figure 8: Analysis of water capital expenditure in England and Wales by water and sewerage companies, by type, 2015/16-2017/18

Figure 9: Analysis of water capital expenditure in England and Wales by water only companies, by type, 2015/16-2017/18

Scottish Water capital expenditure

Figure 10: Analysis of Scottish Water capital expenditure on water and sewerage services, 2013/14-2017/18

Northern Ireland capital expenditure

Figure 11: Analysis of Northern Ireland Water capital expenditure on water and sewerage services, 2013/14-2017/18

Water and Sewerage Future Capital Investment

Future challenges facing the water and sewerage sector

Figure 12: UK population, by region, 2014-36

Move towards totex in AMP6 and beyond set to reduce bias towards capital spending

Move towards long-term alliances and frameworks across industry

Total expenditure plans for AMP6

Figure 13: Total expenditure (totex) allowance for AMP6 in England & Wales, by water & sewerage company, 2015/16-2019/20

Thames Tideway Tunnel

Figure 14: Estimated cost of Thames Tideway Tunnel, 2016/17-2021/22+

Next price control process (PR19) to be substantially more challenging

English water companies plan to spend a record £50 billion+ in AMP7 (2020-25)

Opening up of non-household retail market in England to provide new opportunities for water and sewerage companies

Water and Sewerage Industry Legislative and Regulatory Environment

Industry regulation

Legislative environment

European Water Framework Directive (WFD)

Urban Waste Water Treatment Directive (UWWTD)

The Drinking Water Directive

Revised Bathing Water Directive

Implications of Brexit on the UK water and sewerage sector

Transfer of private sewers in England and Wales

The Flood and Water Management Act 2010

Water and sewerage retail competition opens up for all business customers in England in April 2017

Electricity Distribution and Transmission – What You Need to Know

New RIIO model for electricity network regulation sees shift in focus from capital expenditure to total expenditure

Change in energy mix is a key driver for investment in transmission network

BUY THIS REPORT NOW VISIT: store.mintel.com

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

Americas +1 (312) 943 5250 | China +86 (21) 6032 7300



Report Price: £995.00 | \$1343.55 | €1119.77

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

Electricity Distribution Capital Expenditure

Introduction

DNOs spent a record £4 billion on asset replacement in last five-year price control period DPCR5 (2010-15)

Figure 15: Breakdown of total expenditure by DNOs during DPCR5, by area, 2010-15

Current price control period RIIO-ED1 runs for eight years from April 2015 to March 2023

Figure 16: Total expenditure versus allowance, by DNO, 2015-16-2016/17

Figure 17: Total expenditure by electricity distribution network operators in Great Britain, by type, 2015/16 and 2016/17 cumulative total

Capital expenditure expected to be lower in current price control

Figure 18: UK gross capital expenditure by electricity distribution network operators, 2012/13-2017/18

Figure 19: UK gross capital expenditure by electricity distribution network operators, 2012/13-2017/18

Figure 20: UK gross capital expenditure by the electricity distribution network operators, by company, 2013/14-2017/18

Electricity Distribution Future Capital Expenditure

Forecast Total Expenditure in RIIO-ED1 (2015-23)

Figure 21: Actual total expenditure in 2015/16 and 2016/17, totex allowance and forecasts for RIIO-ED1, by company

Ofgem slashes £200 million from RIIO-ED1 DNO spending allowances in September 2017

Figure 22: Total expenditure forecast for RIIO-ED1 in Great Britain, by company, 2015/16-2022/23

Electricity Transmission Capital Expenditure

Overview

Figure 23: Size of electricity transmission network in great Britain, 2018

Figure 24: Capital expenditure by the electricity transmission industry in Great Britain, 2013/14-2017/18

Figure 25: Capital expenditure by the electricity transmission industry in Great Britain, 2013/14-2017/18

Electricity Transmission Future Capital Expenditure

New Price Control Period RIIO-T1 2013-21

Figure 26: NGET annual capital expenditure, Actual 2014-18 and Forecast 2019-21

Figure 27: SHET annual capital expenditure, Actual 2014-18 and Forecast 2019-21

Figure 28: SPTL annual capital expenditure, Actual 2014-18 and Forecast 2019-21

Drivers for Investment in Electricity Distribution and Transmission Infrastructure

Decarbonisation of UK energy system

Change in energy mix is a key driver for investment in transmission network

Smart grid development to support low-carbon economy and aid transition to a more flexible energy system

Ofgem supported innovation schemes to drive smart grid market and transition to low carbon economy

Growth in distributed generation

Figure 29: Distributed generation connected to the distribution network during DPCR5, 2012-17

Figure 30: Distributed generation connected to the distribution network, 2016/17, (MW)

Renewables capacity development pipeline

Figure 31: Renewable energy projects in pipeline, by technology, as of August 2018

Growth in decentralised and renewable electricity generation will increase the complexity of operating a secure and cost-effective energy system

BUY THIS REPORT NOW VISIT: store.mintel.com

CALL: EMEA +44 (0) 20 7606 4533 | Brazil 0800 095 9094 Americas +1 (312) 943 5250 | China +86 (21) 6032 7300



Report Price: £995.00 | \$1343.55 | €1119.77

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

Energy storage to play key role in transition to clean electricity supply system

BEIS and Ofgem unveil plans for major upgrade of the UK's energy systems, including the removal of barriers to storage

Government unveils £246 million battery investment strategy in July 2017

Electrification of transport creates new opportunities

Despite Brexit uncertainty, interconnector capacity between Britain and Europe is set to increase

Figure 32: Existing and planned interconnectors, as of November 2018

Gas Distribution and Transmission - What You Need to Know

Capital spending picks up as current price control period progresses

Gas network operators to face tougher price controls from 2021

Gas Capital Expenditure

Capital spending picks up as current price control period progresses

Figure 33: Total gas transmission and distribution capital expenditure, 2013/14-2017/18

Figure 34: Total gas transmission capital expenditure, 2013/14-2017/18

Figure 35: Total gas distribution capital expenditure, 2013/14-2017/18

Figure 36: Total gas transmission and distribution capital expenditure, 2013/14-2017/18

Replacement expenditure dominated by iron mains replacement programmes

Figure 37: Length of iron gas mains replaced, by distribution network operator, 2012-17

Gas Future Capital Expenditure

Ofgem has introduced new regulatory framework for current price control period 2013-21

Figure 38: Ofgem's required expansion of the number of properties to alleviate fuel poverty, 2013-21

Innovation at centre of new price control model for gas distribution and transmission network

Gas network operators to face tougher price controls from 2021

Transmission network

Figure 39: Annual capital expenditure plans by National Grid Gas Under RIIO-T1, by category, 2014-21

Distribution network

Figure 40: Annual capex plans under RIIO-GD1, by GDN, 2014-2021

Figure 41: Annual repex plans under RIIO-GD1, by GDN, 2014-21

Figure 42: Forecast total capex and repex during RIIO-GD1, 2013/14-2020/21

Gas Industry Market Factors and Drivers

Social factors

Economic factors

The UK's increased reliance on gas imports

Government push for shale gas exploration to reduce reliance on imports

Wholesale gas prices

Figure 43: Average wholesale gas prices, 2006-18

Environmental and legislative factors

UK energy policy

UK committed to reducing carbon emissions by 80% below 1990 levels by 2050

BUY THIS REPORT NOW VISIT: store.mintel.com

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

Americas +1 (312) 943 5250 | China +86 (21) 6032 7300



Report Price: £995.00 | \$1343.55 | €1119.77

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

UK currently on track to miss emission reduction targets between 2023 and 2032

Policies to decarbonise electricity

Companies and Brands - What You Need to Know

Kier acquires McNicholas Construction to strengthen their combined market positions and meet demand in the UK infrastructure sector Balfour Beatty's transformation programme is delivering results, with the group now focused on selected markets, winning new business on terms and conditions that balance risk and reward

Laing O'Rourke establishes a more focussed business structure

Industry Structure

Company Profiles

Balfour Beatty

Build to Last transformation programme launched in 2015

Figure 44: Financial analysis of Balfour Beatty, 2013-17

Figure 45: Turnover analysis of Balfour Beatty, by segment, 2015-17

The Costain Group

Group strategy

Company performance and outlook

Figure 46: Financial analysis of Costain Group, 2013-17

Figure 47: Turnover analysis of Costain Group, by segment, 2015-17

Laing O'Rourke

Following a Strategic Review in 2015-16 Laing O'Rourke has established a more focussed business structure

Company performance and outlook

Figure 48: Financial analysis of Laing O'Rourke, 2013-17

Morrison Utility Services

Company performance

Figure 49: Financial analysis of Morrison Utility Services, 2013-17

McNicholas Construction Holdings

Kier acquires McNicholas Construction (Holdings)

Company strategy performance

Figure 50: Financial Analysis of McNicholas Construction (Holdings), 2013-17

Appendix - Data Sources, Abbreviations and Supporting Information

Abbreviations

Methodology

Further Sources and Contacts

Trade associations and regulatory bodies

Energy UK

Energy Networks Association

Energy Industries Council

Office of Gas and Electricity Markets (Ofgem)

BUY THIS REPORT NOW

VISIT: store.mintel.com

CALL: EMEA +44 (0) 20 7606 4533 | Brazil 0800 095 9094 Americas +1 (312) 943 5250 | China +86 (21) 6032 7300



Report Price: £995.00 | \$1343.55 | €1119.77

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

Office of Gas and Electricity Markets - Scotland (Ofgem Scotland)

Office of Gas and Electricity Markets - Wales (Ofgem Wales)

Association of Consulting Engineers

British Water

Chartered Institution of Water & Environmental Management

International Water Association

OFWAT

Street Works UK

Trade magazines

The Engineer

European Process Engineer

Plant and Works Engineering

Utility Week

Trade events

edie live 2019

Utility Week Live 2019