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The ReIndustrial Revolution

Building the foundations of the UK's future economy



Foreword

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building the foundations of the UK's future economy



A vision of the ReIndustrial Revolution

From Turner to Lowry, the Industrial Revolution – and its impact on Britain's landscapes and people – inspired some of its most iconic art. To explore what a new industrial era could look like, E.ON partnered with artist Mark Hearld to collaborate with primary school pupils in Sheffield, Glasgow and East London through our New Energy Academy.

Drawing on their ideas and aspirations, Mark created three original collages to reimagine a future UK – cleaner, more connected and rooted in communities. These are the artworks used throughout this report.

From the first Industrial Revolution to modern day, the UK's ability to innovate, build and adapt has defined both its economic strength and leading position on the global stage. Now we stand at the start of another industrial chapter, one that will see our response to the challenges of energy, fuel economic growth and deliver cleaner cities to the benefit of the people living and working in them.

As global economies evolve and the need for secure, affordable energy intensifies, there is a growing recognition the UK must once again strengthen its industrial base. But this moment is not about returning to the past, instead **we need to reimagine what industry can be in a modern economy and changing world – cleaner, more efficient, more connected and better integrated into communities.**

This report explores what we are calling the ReIndustrial Revolution: a new phase of industrial development shaped by energy innovation – turning energy from a cost to be managed into an asset that puts the UK in control, helps customers cut bills, and creates a competitive edge for business. It brings together research, economic analysis and real-world examples that show how the transition to smarter, lower-carbon energy systems can unlock economic growth, improve affordability and support the creation of high-quality, skilled jobs across the country, helping to make new energy work for everyone: businesses, communities and future generations alike.

What this transition means in practice is a shift to a new industrial model. One that is visible, inclusive and, most importantly, better understood by the people and places it can benefit, so the opportunities created by cleaner, smarter energy are shared more widely.



Chris Norbury
Chief Executive, E.ON UK

The case for electrification has never been stronger or more urgent. The only lasting protection against global energy shocks is to reduce our dependency on fossil fuels altogether. We're already showing we can make new energy work for everyone by helping people and businesses take advantage of innovative tariffs and technologies like solar, batteries and EVs.

Government, industry and consumers need to move faster together. The technology is already at home and in business. The demand is growing. What we need now is the desire to accelerate the transition and bring its benefits to households and businesses more quickly.

The prize for transforming our industrial landscape will be significant: a stronger, faster-growing economy, more affordable and secure energy, and an industrial system that supports the businesses and communities around us.

We no longer have to accept a trade-off between 'greener versus cheaper' energy. The solutions already exist to build a system that lowers bills, delivers cleaner power, creates jobs and ensures no one is left behind.

That is what making new energy work for everyone means: empowering customers and lowering bills, increasing energy security, and helping communities to thrive.

We are the *partner of choice,* and ready to do more...

The UK's energy infrastructure will define its competitiveness, resilience and decarbonisation trajectory for decades. E.ON Energy Infrastructure Solutions (EIS) is designed for this moment: helping businesses, cities and communities access clean, reliable energy systems that support growth, cut costs and improve lives.

Across Europe, EIS is already delivering for both the private and public sectors. From smart energy systems and community heat networks to on-site clean energy generation.

We are also supporting a growing supply chain that sustains thousands of jobs in engineering, construction, operations and maintenance.

Our mission is to demonstrate how investment in energy infrastructure can accelerate industrial decarbonisation, turn clean energy into a competitive edge for business, and equip the UK with the skills and infrastructure needed for sustained growth.

Together, these form the basis of a new kind of industrial transformation. One where prosperity and sustainability are not in tension, but inseparable.



Vijay Tank
Chief Commercial Officer
E.ON Energy Infrastructure Solutions

370,000

UK businesses trust
E.ON with their energy

Unlocking growth and *business prosperity*

Businesses can play a vital role in driving growth and shaping a fairer, cleaner energy future. But to invest with confidence they need clarity and consistency: stable policy, predictable costs and a clear route to benefit from the transition, not simply bear its costs.

Sustainably lowering business energy costs helps to make our economy more competitive, and supports long term investment, growth and job creation. We must also recognise the key role of cleaner energy technologies alongside flexibility – increasing 'home-grown' energy can only reduce our dependency on volatile global markets for fossil fuels. This cuts bills and ensures more of the benefits of the energy transition feed directly into providing a competitive edge for UK businesses.

npower Business Solutions is helping businesses to be active participants in the new energy system. On-site generation, storage, smart controls and flexible demand helps organisations and, crucially, rewards them for that value – turning energy flexibility into a commercial opportunity as well as a lower-carbon one.

With the right support, the transition can unlock investment, strengthen competitiveness and help businesses of every size contribute to a cleaner, fairer and more prosperous economy.



Anthony Ainsworth
Chief Operating Officer
npower Business Solutions

E.ON has
10,000+

employees and apprentices
across the UK



How clean energy has the *power to rewrite* our industrial advantage

Clean energy = growth

From the 'dark, satanic mills' and factories of the nineteenth century to today's advanced manufacturing facilities, safer workplaces and cleaner urban air, the story has been one of continuous improvement. Economic prosperity, better health and stronger social outcomes all depend on access to energy that is affordable, reliable and increasingly low carbon.

The range of technologies needed by our businesses and communities already exist, from generation and storage to energy recovery and smart management systems. The opportunity is clear but the path to improving efficiency and reducing costs depends on navigating a complex mix of investment, returns, reliability and flexibility. Indeed, one of the most daunting and demanding of the challenges around electrification and reducing our reliance on fossil fuels is the need to overcome electrical grid constraints so we have the power we need, where and when we need it.

Again, the solutions are available. The task now is to deploy them faster and more fairly, so cleaner energy becomes a practical route to lower costs, greater security and stronger growth.

Whether they involve battery flexibility (for business as well as homes), smart network management, or demand management opportunities, these approaches are already in use around the UK and Europe and are already providing their value.

In a new survey of 500 UK business leaders for this report, almost half (48%*) cited upfront costs as the biggest obstacle to reducing energy consumption, while 37% pointed to uncertainty around return on investment.

These findings highlight an important challenge: **the willingness to invest exists, but many organisations require greater certainty and support before proceeding.**

Policy naturally has an important role to play. Alongside long-term certainty for investors, businesses need electricity prices that reward electrification rather than discourage it if the UK is to accelerate industrial transformation.

Reassurance + support = action

In our poll, 89% of UK business leaders say they are likely to invest in energy efficiency or low carbon technologies over the next two years.

Almost half (44%) say cost savings are the single biggest factor influencing investment decisions, while a further 15% identify energy security and reliability as their primary concern.

58% say grants or subsidies would encourage further investment, while 56% identify tax incentives as another important enabler.

There is also strong support for place-based approaches. Almost all business leaders (95%) say support from councils or regional authorities to meet specific local challenges – or to benefit from local opportunities – is important in helping businesses to manage their energy challenges.

This reflects the reality that industrial transformation needs long-term and consistent policy support to remove barriers to green energy adoption, make energy more affordable and improve energy security. Alongside support for investment, policymakers should ensure electricity pricing encourages businesses to electrify, recognising that stronger demand ultimately helps to improve the economics of the UK's growing clean energy system.

89%

of UK business leaders say they are likely to invest in energy efficiency or low carbon technologies over the next two years

44%

say cost savings are the single biggest factor influencing investment decisions, while a further 15% identify energy security and reliability as their primary concern





UK-wide concern on costs

Concern about energy costs is now widespread across the UK economy.

More than nine in ten businesses in every region say energy costs are important to business performance. The same proportion (91%) of the same group said rising energy costs were of significant concern for their business and had increased significantly (93%) in the last 12 months.

The picture is particularly pronounced in Scotland, where 97% report rising energy costs over the past twelve months. In London, the figure stands at 94%.

While the scale of concern varies slightly, the direction of travel is consistent. Businesses across the country are looking for ways to improve resilience, manage costs and strengthen their competitiveness.



The ReIndustrial Revolution provides a framework for achieving those objectives.

¹ Online research conducted by Clariti among 502 UK business leaders aged 18+ in a nationally representative sample in May 2026

Letting the numbers do the talking

What could a ReIndustrial Revolution deliver?

To understand the scale of the opportunity, E.ON partnered with independent market research and economic impact specialists Development Economics to model the potential impact of greater investment in four proven energy interventions across UK manufacturing:

- Energy audits
- Energy monitoring and management
- On-site renewable energy generation/storage
- Waste heat recovery/sharing

Drawing on data from the Office for National Statistics, UK energy consumption and emissions data, alongside a review of more than 30 UK and international studies, the analysis modelled how greater adoption of these technologies and approaches between 2027 and 2035 could improve the UK's industrial competitiveness while reducing overall energy demand, operating costs and carbon emissions.



The opportunity at a glance

UK manufacturing today

193,000GWh
Annual gas consumption

£197bn

Annual contribution
to the UK economy

**2.16
million**

People employed
across the sector

82TWh

Electricity consumed
every year

16%

Share of
UK carbon
emissions

Current trends won't be enough

Manufacturing output is projected to grow by around 8.5% by 2035, reaching an annual contribution to the UK economy of £214bn.

Yet employment is forecast to fall by around 36,000 jobs, while businesses remain exposed to high energy costs and increasing international competition.

Without further intervention, manufacturing will continue to consume more than 77TWh of electricity and 136,000GWh of gas each year by 2035.

56%

of business leaders say tax incentives are an important enabler of investment in energy efficiency



The opportunity with greater adoption

Development Economics modelled three adoption scenarios. Under the highest adoption scenario, UK manufacturers could achieve by 2035:

£2.1bn

Cumulative gas cost savings between 2027 and 2035

£406m

Lower annual gas costs

>43TWh

Cumulative electricity savings over the period

8.8TWh

Less electricity consumed every year

Nearly

80,000GWh

Cumulative gas savings over the period

15,269GWh

Less gas consumed every year



Where the biggest gains come from

The analysis shows the greatest opportunity lies in making existing industrial assets work smarter.

Across every scenario modelled, energy monitoring and management systems account for around half of all potential gas savings, while energy audits contribute around a quarter. Together, these two measures consistently track and deliver the largest share of overall savings, highlighting the value of understanding and optimising energy use before investing in larger infrastructure projects.

Calculating the £2.1bn

Electrification is the most cost-efficient option for driving the energy transition – weaning ourselves off foreign fossil fuel imports and increasing our reliance on a smarter, cleaner energy system.

Independent analysis from modelling by Development Economics found opportunities to reduce commercial gas use by 80,000GWh between 2027 and 2035 under its highest adoption scenario. That translates to £2.1 billion in energy savings over that period.

The model estimated how much gas UK manufacturers would consume under a 'business as usual' scenario before calculating the additional gas that could be avoided through wider adoption of four proven energy interventions. Those avoided energy volumes were then converted into financial savings using average industrial gas prices (expressed in constant 2022 prices), resulting in an estimated £2.1 billion in cumulative savings.

What this means

The technologies needed to improve industrial competitiveness already exist. The remaining challenge is creating market conditions that encourage faster adoption, ensuring businesses are rewarded for – or made more confident towards – investing in electrification rather than deterred by comparatively high electricity costs.

The analysis shows that wider adoption of proven energy solutions could significantly reduce energy demand, strengthen resilience against volatile energy markets and unlock billions of pounds in savings across UK manufacturing.

The ReIndustrial Revolution is not about waiting for the next technological breakthrough. It is about accelerating the deployment of solutions that are available today, giving UK industry the confidence, competitiveness and energy infrastructure it needs to grow.

Around
50%

of gas savings could come just from monitoring and management systems

Sector Focus

Manufacturing

Manufacturing remains a foundation of the UK economy and our wider national heritage.

It drives the creation of new skills and secure, well-paid jobs. It supports our international trade and exports. It attracts investment and spurs innovation across the country. Yet manufacturers are operating in an increasingly competitive global environment, where energy costs, security of supply and our impact on the planet increasingly influence investment decisions. Clean energy is no longer simply an environmental choice; used well, it can become a competitive advantage.

For many manufacturing businesses energy is as much a boardroom issue as it is an operational consideration.

Energy as industrial infrastructure

Manufacturers require certainty. They need infrastructure capable of supporting growth and electricity prices that encourage investment in electrification rather than discourage it. This is where modern energy systems play such an increasingly important role. Solutions such as heat recovery or on-site generation can help businesses to reduce their exposure to volatile international energy markets while improving operational performance.

Building the conditions for growth

Across the UK and Europe, businesses are already adopting new approaches that allow them to reduce emissions while maintaining competitiveness.

These projects demonstrate that industrial growth and sustainability need not be opposing objectives.



Diageo

Solar-powered spirits

E.ON partnered with global drinks manufacturer Diageo to install a 4.2MW ground-mounted solar farm at its packaging facility in Leven, Fife. The 7,700 solar panels generate almost 3.9GWh of renewable electricity each year, around a fifth of the site's annual electricity demand. The project is expected to reduce carbon emissions by approximately 850 tonnes each year.

850 tonnes

Expected reduction in carbon emissions
for Diageo's Leven packaging facility



Reed Boardall

Frozen peas...and flexibility

Reed Boardall, one of the UK's largest cold chain providers, operates a 55-acre site in North Yorkshire, storing up to 168,000 pallets in a 24/7 operation serving major supermarkets and food service providers.

Through npower Business Solutions' Demand Shift service, Reed Boardall reduces electricity use for short periods at peak times, selling un-needed power back into short-term power markets to generate revenue. Crucially, this temporary turn-down has no impact on day-to-day operations.

As more renewable generation comes onto the grid, businesses able to adjust demand can support a more resilient energy system – managing costs while unlocking new value and playing a more active role in the transition to a cleaner energy future.

95%

of UK business leaders say local support is important to manage energy challenges



Port of Liverpool

Powering critical infrastructure

E.ON is delivering the UK's largest roof-mounted solar installation at the Port of Liverpool through a 25-year partnership with Peel Ports Group. The 48,000-panel system will generate around a quarter of the port's annual electricity demand and reduce carbon emissions by approximately 4,700 tonnes each year.

48,000

solar panels, the biggest system of its kind in the UK

Blackburn Meadows

Warmth that works

E.ON's Blackburn Meadows renewable energy plant uses recycled waste wood that would otherwise go to landfill to generate enough energy to supply the equivalent of around 69,000 homes. As well as electricity, it provides heat to nearby industrial and commercial buildings including Ikea, the Sheffield Arena and Sheffield Forgemasters steelworks.

Plans are in place to more than double the size of the network, delivering lasting social and economic benefits including around 2,000 jobs and apprenticeships, boosting green skills and funding community initiatives including warm spaces, biodiversity projects and better walking and cycling infrastructure.

Enough energy to supply around

69,000 homes



Sector Focus

Cities

Cities and towns are the nerve centres of our society. They increasingly act as hubs, not just attracting people but also investment, infrastructure and innovation. They are also where many of the UK's most pressing challenges are most visible – from energy affordability to essential infrastructure in need of upgrade.

The purpose of urban energy infrastructure is not just to lower carbon. Our work in cities around the country is showing we can also help lower bills, support vulnerable households, provide opportunity for local business and improve the quality of life for the people who live and work in these places.

Much of the energy infrastructure that supports urban areas today was designed for a different era, one of distant power stations pushing electricity down long-distance power networks to consumers who played no other role than simply using the product.

Today, local authorities face growing pressure to facilitate economic growth while improving infrastructure to support how businesses and people live alongside one another and how they can play a far more active and financially rewarding role in the energy system.

There is no single technology that provides a silver bullet to this problem. It requires a more integrated approach to how energy is generated, distributed, even shared and ultimately consumed by all those who live and work in cities.

Infrastructure as an economic enabler

Energy infrastructure has often been viewed as a consequence of economic growth as cities expand and evolve. But in today's world, it's the key to ensuring growth can be sustained, delivered equitably and translated into practical benefits for communities – from lower bills and warmer homes to local jobs, cleaner air and stronger local economies.

All the evidence suggests that heat networks, local energy generation, smart systems and energy efficiency measures all help cities to reduce costs, strengthen energy security and create conditions for business investment.

In doing so, these projects can support wider objectives, including regeneration, employment, social equality and regional growth.

The role of partnership

Successful urban energy projects never rely on a single organisation.

Instead, they are built through collaboration between local authorities, businesses, infrastructure providers and communities.

These partnerships help align economic priorities with long-term energy planning, creating solutions that deliver wide ranging benefits.





Glasgow

Unlocking the value of flexibility

E.ON Next is working with Glasgow City Council to install home battery systems that allow households to store electricity when demand and prices are low, ready for use at more expensive times. This approach can reduce bills in those homes by up to 30% and changes the relationship households have with energy: turning the energy they consume into a more flexible asset.

Increasing local energy flexibility also helps reduce costs across the wider energy system by using more renewable power when it is available, easing pressure on the grid and reducing the need for more expensive fossil-fuel generation at peak times. Projects like this – and similar opportunities in Coventry, Greater Manchester, and Lincolnshire and North Yorkshire – demonstrate how distributed electricity storage can support a more efficient energy system while delivering tangible benefits for communities.

30%

Expected cuts in household energy bills with battery flexibility

Queen's Medical Centre

Geothermal healthcare

E.ON is delivering a geothermal heating and cooling network at Nottingham's Queen's Medical Centre using 64 boreholes and high-efficiency heat pumps. The system is expected to cut heating and cooling-related carbon emissions by more than 40%, supporting the decarbonisation of one of the UK's largest hospitals and reducing costs so budgets can be focused more on patient care.

40%

64 boreholes and high-efficiency heat pumps expected to cut heating and cooling-related carbon emissions by more than 40%



Coventry Strategic Energy Partnership

City-wide energy transition

E.ON is working with Coventry City Council, forming a 15-year Strategic Energy Partnership to transform how the city produces, shares and uses energy. The partnership combines renewable energy generation, homes and public building improvements, heat networks and community energy programmes. This approach is proving that at the same time as reducing energy costs, cutting carbon emissions and improving energy security, it can also create green jobs, support vulnerable households and ensure more of the benefits of the energy transition are felt locally.

15 years
long-term strategic energy partnership



Sector Focus

Data centres

Artificial intelligence, digital media and cloud computing are all driving unprecedented demand for data centres, making them a critical part of the digital economy. But as these facilities expand so too does their energy footprint.

Data centres require vast amounts of electricity, not just to power servers but also to maintain the cooling systems needed to prevent overheating, creating both an energy challenge and an untapped opportunity.

Rather than being viewed solely as large energy users, data centres can increasingly be considered as part of wider energy ecosystems, creating opportunities to turn waste heat into a community asset.

Instead of allowing that server heat to go to waste, it can be captured and redistributed through district heat networks to warm nearby homes and businesses. This transforms data centres from energy-intensive consumers into contributors to local energy systems, improving efficiency while reducing emissions.

Public support reflects this potential: E.ON research* found that 67% of people in the UK would support a data centre in their local area if its waste heat was reused to benefit nearby communities, while 76% support collaboration between data centre operators, energy providers and local authorities to maximise these benefits.

* E.ON survey published in February 2026, conducted by Appinio polling 1,000 people aged 18 to 65 in both Germany and the UK on their acceptance of data centres and their energy supply.



Silvertown

Unlocking low-carbon growth for data centres

At the Silvertown development in East London, E.ON is extending its innovative ectogrid™ energy-sharing network to integrate a large-scale data centre into the local energy system. By capturing and redistributing waste heat, the project will provide low carbon heating and cooling across the wider development while supporting the data centre's operational efficiency.

The system is designed to recover around 40 GWh of heat annually, delivering an estimated 88% reduction in CO₂ emissions compared with conventional gas boilers, and avoiding around 4,000 tonnes of carbon emissions each year. The project demonstrates how intelligent energy infrastructure can transform data centres from major energy users into active contributors to resilient, low-carbon urban energy systems.



Energy and industry

Intertwined futures

Our economy is at a crossroads. Energy and reindustrialisation are central to the UK's future prosperity – from increased competitiveness and energy security, to creating jobs and supporting fairer growth in communities that have too often been left behind.

Electrification has a critical role to play and this chapter sets out the support needed from Westminster to unlock that potential, build confidence for businesses looking to invest, and ultimately deliver an affordable, secure energy system that works for everyone.



Policy recommendations:

Make electricity more competitive with gas

Remove legacy policy costs including the Renewables Obligation, Feed-in Tariff and the electricity element of the Climate Change Levy from business electricity bills, and fund these through taxation or a dedicated Energy Transition Fund. This would help close the electricity-gas price gap and make low-carbon investment more commercially viable.

Provide a clear pathway for business electrification

Set out a long-term framework for reducing the cost of electricity relative to gas, supported by stable carbon and energy policy signals. Businesses need confidence on future energy prices, available infrastructure and technology before committing capital to electrification.

Create a Business Energy Upgrade Scheme

Introduce a national scheme offering advice, grants, low-cost finance and targeted incentives for SMEs and larger businesses investing in proven technologies such as heat pumps, solar panels, batteries, smart controls, waste heat recovery and onsite electrical infrastructure.

Accelerate grid access and local energy infrastructure

Speed up grid connections, reinforce local networks and provide clearer local energy plans so businesses can understand what infrastructure will be available, when and at what cost. This should include better coordination between grid investment, heat networks, hydrogen planning and industrial decarbonisation clusters.

Reward flexibility and reduce system costs

Reform balancing and network charging so businesses are rewarded for shifting demand, using storage and participating in flex markets where possible. Policy should recognise that flexibility varies by sector and process, and should avoid a one-size-fits-all approach.

Support innovation in harder-to-electrify sectors

Target innovation funding, demonstration projects and sector-specific support at hard-to-electrify applications. Government can help de-risk investment by supporting testing, scaling and evidence-sharing for technologies not yet widely commercially deployed.

Strengthen commercial energy efficiency standards

Raise and enforce minimum energy efficiency standards for commercial buildings, supported by practical funding and advice. Reducing demand should sit alongside electrification, helping businesses cut bills, improve productivity and reduce pressure on the wider energy system.

Conclusion

The UK's industrial future will be shaped by the decisions being made today

Consumers, business leaders, metro mayors, councils and policymakers are all trying to achieve the same outcomes: energy that is affordable, reliable, cleaner and capable of supporting or growing economic prosperity.

Businesses are investing in technologies that improve efficiency and productivity while seeking greater certainty over future energy costs. Policymakers are focused on strengthening industrial competitiveness, improving economic resilience and delivering regional growth.

Energy is the thread that connects these priorities and the engine that can unlock them.

Across manufacturing, cities and digital infrastructure, organisations are already demonstrating how smarter energy systems can reduce costs, strengthen resilience and accelerate the transition to a lower-carbon economy.

Delivering the ReIndustrial Revolution will require investment in both infrastructure and demand. Building cleaner energy networks is only part of the solution. A successful industrial strategy should focus not only on financing clean energy, but on ensuring businesses can afford to use it.

The technologies exist. The expertise exists. The opportunity is clear. By creating the right conditions for investment and electrification, the UK can build an industrial economy that is more productive, more resilient and better equipped to compete in the decades ahead — with cleaner power, lower bills, stronger energy security, new jobs and communities that are not left behind.



