

Thematic Intelligence  
Power

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January 24, 2024

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# Power Predictions 2024

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- The report helps understand technology themes such as artificial intelligence, big data, and blockchain, among others.
- The report identifies power predictions on macroeconomic and ESG themes.
- The report provides predictions on industry themes such as electric vehicles, energy storage, and energy transition.
- It presents an integrated global research platform for an easy-to-use framework to track all themes and their impact on the power sector.
- The report provides an outlook on the significant impact of each theme on power utilities, in terms of application and investment.

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# Executive Summary

In this report, we identify the top 20 themes that will impact the power sector in 2024. For each theme, we offer a series of predictions, identify winners and losers, and point you to further reading.

## Our top 20 themes for 2024

We classify our top themes for 2024 into four groups. The major technology themes impacting the power sector in 2024 will be artificial intelligence (AI), big data, blockchain, cloud, cybersecurity, digitalization, the Internet of Things (IoT), the metaverse, and robotics.

The major industry themes impacting the power sector in 2024 will be electric vehicles, energy storage, energy transition, hydrogen, nuclear, renewable energy, smart grid, carbon emissions, and distributed generation.

The major macroeconomic theme impacting the power sector in 2024 will be geopolitics.

The major environmental, social, and governance (ESG) theme impacting the power sector in 2024 will be ESG-environmental.

## Our thematic research ecosystem

Companies who invest in the right theme become leaders; those who miss the big themes end up as failures. Given that so many themes are disruptive, it is very easy to be blindsided by industry outsiders who invade your sector.

So, to help our clients gain a competitive advantage, we have developed GlobalData's thematic research ecosystem, a single integrated global research platform that provides an easy-to-use framework for tracking all themes across all companies in all sectors.

## How to use this report

GlobalData's thematic intelligence ecosystem assesses how well companies are positioned based on their competitive position in the main themes disrupting their sector. So, we produce three tiers of thematic reports:

- **Single theme:** These reports offer in-depth research into a specific theme (e.g. artificial intelligence). They identify winners and losers based on factors such as technology, leadership, market position, and alternative data signals.
- **Multi-theme:** These reports cover all companies and all themes within a sector, giving readers a strong sense of how everything fits together and how conflicting themes might interact with one another.
- **Sector scorecard:** Each sector scorecard has a thematic screen, a risk screen, and a valuation screen. Live sector scorecards are available through our client portal.

This report is a multi-theme report organized by theme. It covers 20 themes drawn from technology, industry, macroeconomics, and ESG.

For further details of our market-leading thematic methodology, please refer to the methodology section at the back of this report.

## Inside

### Technology themes

- Artificial intelligence
- Big data
- Blockchain
- Cloud
- Cybersecurity
- Digitalization
- Internet of Things
- Metaverse
- Robotics

### Industry themes

- Electric vehicles
- Energy storage
- Energy transition
- Hydrogen
- Nuclear
- Renewable energy
- Smart grid
- Carbon emissions
- Distributed generation

### Macroeconomic themes

- Geopolitics

### ESG themes

- ESG-Environmental

## Related reports

- [Thematic Research: Power Predictions 2023](#)

## Report type

- Single theme
- **Multi-theme**
- Sector scorecard

## 2024 Theme Map

This report identifies the top 20 themes that will impact the power sector in 2024. For each theme, we offer a series of productions, identify leaders and losers, and point you to further reading.

Viewing the world's data by theme helps you make important decisions.

Here at GlobalData, we have developed a unique thematic research ecosystem designed to take a holistic view of the big themes that impact companies in the power sector. Our thematic research ecosystem is a single, integrated global research platform that provides an easy-to-use framework for tackling all themes across all companies in all sectors.

The graphic below represents our 2024 theme map for power. It highlights the big themes driving share prices for power companies and is the result of a series of interviews with senior industry executives and investors, reflecting an up-to-date view of the issues that keep them awake at night. Our theme map covers not only disruptive tech and industry themes but also macroeconomic and ESG themes.

### **Our 2024 theme map shows the biggest themes driving growth in the power sector**

It covers the big issues that keep senior industry executives awake at night

[\*Click here to purchase the full report\*](#)

Source: GlobalData

Over the following pages, we look at 20 of the most important themes from the theme map above, classified under four groupings: technology, industry, macroeconomic, and ESG themes.

# Artificial Intelligence

## AI will help in remote power management

Smart power management is essential for hardware architecture, especially in artificial intelligence (AI). AI can help optimize energy efficiency, reduce costs, enhance performance, and ensure the reliability and safety of power delivery and distribution networks.



Deal trends | Published patents | Job trends

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Source: GlobalData

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## Winners and losers

- **Winners:**
- **Losers:**

## Further reading

See [Thematic Intelligence: Artificial Intelligence in Energy](#)

# Big Data

## Big data analytics will optimize the smart grid

Big data analytics can help optimize energy consumption and distribution in smart grids. By analyzing data on power generation, consumption patterns, and weather conditions, utilities can optimize load balancing, reduce power wastage, and identify opportunities for energy conservation. It can also help power utilities to save costs and build a more sustainable energy system. Companies such as Siemens have incorporated big data analytics with smart meters to gain deeper insight from the smart grid, allowing them to cut down on extra energy consumption.

Deal trends
Published patents
Job trends

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## Winners

- **Winners:**

## Further reading

See [Thematic Intelligence: Data Analytics](#)

# Blockchain

## Blockchain will create next-gen energy trading platform

One of the most promising applications of blockchain technology in the energy sector is in energy trading. The technology provides a reliable and efficient platform for executing and recording transactions, eliminating the need for intermediaries, and minimizing reconciliation.

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Deal trends
Published patents
Job trends

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## Winners

- **Winners:**

## Further reading

See [Innovation Radar – Beyond crypto: how blockchain advances in the enterprise](#), [Innovation Radar – Track and trace: how blockchain is making supply chains more transparent and efficient](#)



# Cloud

## The cloud market will reach \$XX trillion by 2026

Cloud computing refers to computing delivered as an online service. It encompasses the provision of IT infrastructure, operating systems, middleware, and applications hosted within a data center accessed by the end-user via the internet. The cloud is now the dominant model for delivering and maintaining enterprise IT resources. In the power sector, there is widespread use of infrastructure as a service (IaaS), platform as a service (PaaS), software as a service (SaaS), and managed cloud services. According to GlobalData, the global cloud computing industry is anticipated to reach \$XX trillion by 2026.



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## Winners

- **Winners:**

## Further reading

See [Thematic Intelligence: Cloud Computing in Power](#)

# Cybersecurity

## The cybersecurity market will be \$XX billion by 2026

The frequency, complexity, and severity of cyber-attacks have increased, as threat actors continually adapt their strategies. Consequently, it is essential to employ sophisticated cybersecurity measures to identify and counteract these threats. Therefore, the evolving security threats coupled with the rising threat of targeted cyberattacks are factors expected to favor cybersecurity market growth over the forecast years.



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## Winners and losers

- **Winners:**
- **Losers:**

## Further reading

See [Thematic Intelligence: Cybersecurity \(2023\)](#)

# Digitalization

## Power utilities will increasingly adopt digital solutions

Digitalization has become a priority for power utility companies, as they look to further drive efficiency, ensure reliability, and improve sustainability, in turn helping them to stay competitive during a period of accelerated change. One of the top issues that remains for a power utility is to improve its operational efficiency. Forward-thinking organizations are focused on data and intelligence and leverage technologies such as cloud, analytics, artificial intelligence, and machine learning. It will help utilities make more informed decisions toward energy generation, distribution, and maintenance. For example, predictive maintenance will help reduce downtime and enhance the reliability of critical infrastructure.

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## Winners and losers

- **Winners:**
- **Losers:**

## Further reading

See [Thematic Intelligence: Artificial Intelligence in Energy](#)

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# Internet of Things

## IoT will protect renewable energy systems

The Internet of Things (IoT) is becoming increasingly prevalent in a variety of industries. With an increasing number of connected devices, IoT security has become a top concern. In response to the pressing challenge of energy demand, renewable energy sources have gained immense significance, harnessing the power of IoT technology to propel this transformative transition. Wind, solar, and hydro have emerged as vital catalysts enabling efficient utilization of clean and sustainable energy. IoT will play a crucial role in supporting the effective operation and management of renewable energy systems. Companies such as Amazon, Alphabet (Google), Apple, Intel, and Microsoft are developing IoT-connected devices for renewable energy systems.



Deal trends | Published patents | Job trends

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## Winners and losers

- **Winners:**
- **Losers:**

## Further reading

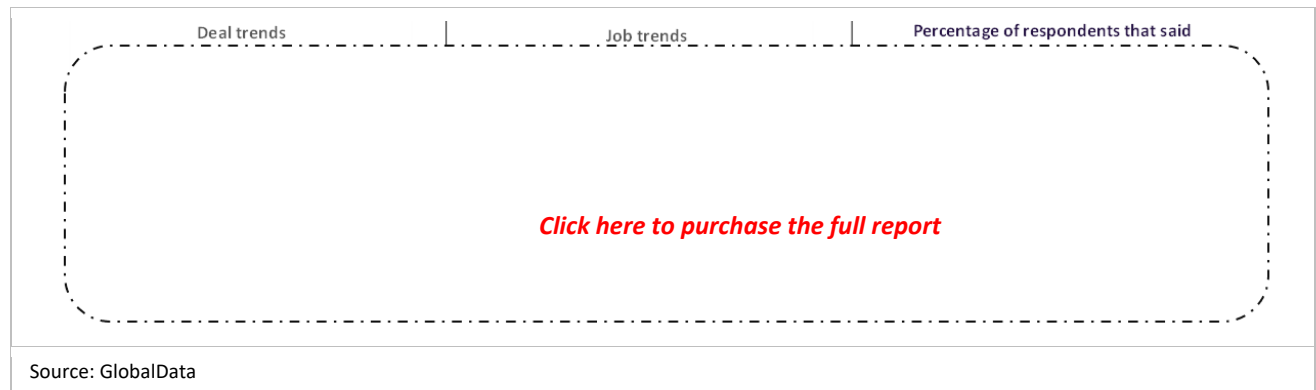
See [Thematic Research: Internet of Things in Energy](#)

# Metaverse

## The metaverse market will flourish in the coming years

Metaverse is a virtual world where users share experiences and interact in real-time within simulated scenarios. The metaverse could transform how people work, shop, interact, and consume content.

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## Winners

- Winners:

## Further reading

See [Thematic Intelligence: The Metaverse \(2023\)](#)

# Robotics

## The robotics market will surge

Robotics is a fast-growing industry. The robotics industry can be split into two main areas: industrial robots and service robots. Each can be subdivided into additional categories, with service robots being a particularly fragmented category. According to GlobalData forecasts, it was worth \$XX billion in 2022, and by 2030, it is estimated to grow at a compound annual growth rate (CAGR) of XX% to \$XX billion.



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## Winners

- **Winners:**

## Further reading

See [Thematic Intelligence: Robotics \(2023\)](#)

# Electric Vehicles

## The EV market will continue to expand

Consumer demand for electric vehicles has risen significantly over the past years and is likely to grow in the coming years. By the end of 2022, GlobalData’s Global Vehicle Parc Database estimates there were XX million battery electric vehicles on the road globally equating to a XX% total share.

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## Winners and losers

- **Winners:**
- **Losers:**

## Further reading

See [Thematic Research: Electric Vehicles in Power \(2023\)](#); [Thematic Intelligence: Batteries \(2023\)](#)



# Energy Storage

## Battery storage power generation capacity will continue to grow

The battery storage power generation capacity will continue to grow thanks to several energy storage projects. Various economies are making significant progress towards the deployment of battery energy storage systems (BESS). The US battery storage capacity will surpass XXGW in 2024 from XXGW in 2023.

Deal trends
Published patents
Job trends

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### Winners

- **Winners:**

### Further reading

See [Industry Analysis: Global Power Mix in Transition – 2023](#), [Thematic Research: Batteries in Power](#)

# Energy Transition

## Renewable power will accelerate the energy transition

Renewable electricity growth is accelerating faster and supporting the emergence of a new global energy economy. The growth of the world’s capacity to generate electricity from solar panels, wind turbines, and other renewable technologies is on course to accelerate in the coming years and support energy transition goals. Wind and solar power will continue to play a significant role in renewable energy growth additions.

Global power generation mix
Deal trends
Published patents

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Source: GlobalData

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### Winners

- **Winners:**

### Further reading

See [Thematic Intelligence: Critical Minerals, Industry Analysis: Global Power Mix in Transition – 2023](#)

# Hydrogen

## Green hydrogen will boost renewable production capacity

Green hydrogen produced through renewable resources such as wind and solar holds a significant promise in meeting global sustainable energy demands. Hydrogen produced from renewable electricity will play a key role in reaching long-term decarbonization goals and improving energy security.

Deal trends
Published patents
Job trends

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Source: GlobalData

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## Winners and losers

- **Winners:**
- **Losers:**

## Further reading

See [Thematic Intelligence: Hydrogen in Power \(2023\)](#)

# Nuclear

## Global nuclear energy capacity will be tripled

Nuclear energy will play a significant role in reaching net zero. A total of 22 countries pledged in the World Climate Action Summit of the 28th Conference of the Parties to the U.N. Framework Convention on Climate Change in December 2023 to triple their nuclear energy capacity by 2050. These countries invite shareholders of international financial institutions to encourage the inclusion of nuclear energy in energy lending policies. However, tripling nuclear capacity will require enhancing international cooperation, creating an enabling policy environment, securing supply chains, training skilled and diverse future workforce, and achieving greater regulatory and industrial standardization.

Deal trends	Published patents	Job trends
<a href="#">Click here to purchase the full report</a>		
Source: GlobalData		

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## Winners

- **Winners:**

## Further reading

See [Sector Report: Nuclear Power in China](#), [Sector Report: Nuclear Power in India](#)

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# Renewable Energy

## Renewable power generation will continue to soar high

Renewable power generation capacity has been experiencing a steep rise as a result of the global energy transition outlook and compliance with net zero emission targets. The deployment of renewables in the power, heat, and transport sectors is one of the main enablers of keeping the rise in average global temperatures below 1.5°C. In the ‘net zero emissions by 2050’ scenario, renewables will allow electricity generation to be almost completely decarbonized. Growing policy momentum, higher fossil fuel prices, and energy security concerns are continuously driving strong deployment of solar PV and wind power, which is resulting in an exponential rise in renewable power generation. GlobalData estimated the total renewable power generation from wind and solar PV will reach XXTWh and XXTWh in 2024 from XXTWh and XXTWh in 2023.

Deal trends
Published patents
Job trends

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### Winners and losers

- **Winners:**
- **Losers:**

### Further reading

See [Industry Analysis: Global Power Mix in Transition – 2023](#), [Thematic Research: Power Predictions 2023](#)

# Smart Grid

## Digitalization in electricity grids will grow

Digital technologies can greatly improve the functioning of power grids to help successfully integrate clean energy sources. Digital solutions enable utilities to better predict demand and supply imbalances and to locate and fix faults more quickly. The net-zero target is pushing companies to adopt clean and green technologies and support decarbonization.

Deal trends
Published patents
Job trends

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Source: GlobalData

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## Winners and losers

- **Winners:**
- **Losers:**

## Further reading

See [Thematic Research: Smart Grid](#)

# Carbon Emissions

## The renewable energy transition will expedite net zero targets

Power companies must prioritize transitioning their energy generation sources towards renewable and low-carbon options if they hope to achieve net zero targets. Transitioning to renewable sources of energy generation will greatly reduce not only the Scope 1 emissions produced from company operations but also mitigate the Scope 3 emissions associated with the use of generated energy sold to end users. Leading companies, such as Ørsted, that have prioritized adapting their business structure towards predominantly selling renewable energy have significantly reduced both their Scope 1 and Scope 3 emissions. Leading companies focused on zero carbon energy production will benefit greatly in the short term due to the higher wholesale cost assigned to electricity supplies. This will further provide financial incentives to invest in carbon-free energy sources and decarbonize energy portfolios.

Global power generation mix	Deal trends	Published patents
<a href="#"><i>Click here to purchase the full report</i></a>		
Source: GlobalData		

[\*Click here to purchase the full report and get access to the other predictions associated with this theme\*](#)

## Winners and losers

- **Winners:**
- **Losers:**

## Further reading

See [Thematic Intelligence: Net Zero Strategies in the Power Sector](#), [Webinar: CCS Outlook and emerging utilization sectors](#); [Thematic Intelligence: Carbon Offsets](#)



# Distributed Generation

## Distributed generation will support decarbonization

Distributed generation (DG) can support decarbonization objectives in many ways, especially by supporting fuel switching. For example, distributed solar can replace fossil fuel generators and electric vehicles could enable the switch from oil to electricity for transport. DG will play a significant role in regions particularly where demand growth is high, loads are geographically dispersed and new infrastructure is being built or planned. Distributed generation can provide the flexibility to penetrate more renewable energy into the grid helping toward decarbonization goals.

Deal trendsPublished patentsJob trends

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## Winners and losers

- **Winners:**

## Further reading

See [Thematic Intelligence: Power Predictions 2023](#)

# Geopolitics

## Geopolitics will influence energy supply dynamics

Geopolitical events are influencing energy supply dynamics and heightening the risks of supply disruptions. With the ongoing geopolitical events, the supply chain dynamics will be impacted. Since Russia invaded Ukraine, the supply and demand cycle has been deeply impacted. Adjustments were made in the global gas markets due to reduced Russian gas supply to Europe coupled with high prices and economic slowdown restraining demand. The recent Panama and Suez Canal has posed double crises threatening the supply chains. The rising tension between China and Taiwan may escalate supply chain disruptions impacting delays and shortages of semiconductors and chips. The series of geopolitically influenced events will impact the supply chain dynamics causing delays and increased prices of critical materials.

Deal trendsNews trendsCorporate filing trends

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Source: GlobalData

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## Winners

- **Winners:**

## Further reading

See [Thematic Analysis: Ukraine Conflict Executive Briefing](#), [Thematic Intelligence: Supply Chain Disruption](#)

# ESG-Environmental

## ESG 2.0 will mainly focus on the 'environmental' component

Environmental, social, and governance (ESG) is moving into an upgraded era, which can be described best as 'ESG 2.0'. This second phase of ESG will be more focused on the 'environmental' component with a shift from a voluntary regime to a mandatory one. This transition will be driven by government mandates rather than consumer pressure. The EU has taken the regulatory lead, with rules introduced or in the pipeline that will price emissions, regulate the use of the terms 'ESG' and 'sustainability' in marketing materials, and make ESG reporting mandatory. The US has taken a different approach, favoring less regulation and more financial support in the form of tax breaks for clean industry (renewables plus nuclear and hydrogen). China is planning to expand its emissions trading system to more sectors, decarbonize its heavy industry, and ramp up its use of renewables.



Deal trends | Published patent | Job trends

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## Winners and losers

- **Winners:**
- **Losers:**

## Further reading

See [Thematic Intelligence: ESG 2.0](#)

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## Glossary

Term	Definition
<b>Artificial intelligence</b>	Refers to software-based systems that use data inputs to make decisions on their own.
<b>Big data</b>	Extremely large data sets that may be analyzed computationally to reveal patterns, trends, and associations, especially relating to human behavior and interactions.
<b>Biochar</b>	Biomass is heated at high temperatures in a low-oxygen environment (pyrolysis) to produce a coal-like substance called biochar.
<b>Blockchain</b>	A type of distributed ledger, comprised of unchangeable, digitally recorded data in packages called blocks. Each block is then “chained” to the next block, using a cryptographic signature. This allows blockchains to be used like a ledger, which can be shared and assessed by anyone with the appropriate.
<b>Carbon emissions</b>	Carbon emissions can be defined as the release of carbon dioxide and other greenhouse gases into the atmosphere, leading to global warming and climate change.
<b>Carbon capture and storage (CCS)</b>	A technology that captures carbon and waste at the source and safely deposits it elsewhere to prevent it from entering the atmosphere. The process can capture up to 90% of the CO <sub>2</sub> emissions produced from fossil fuels and industrial activities.
<b>Carbon offset</b>	A reduction or removal of emissions of carbon dioxide or other greenhouse gases made to compensate for emissions made elsewhere. Companies purchase carbon offsets to reduce their net emissions when they cannot adequately cut emissions from their own direct activity.
<b>Cloud</b>	Cloud computing is delivered as an online service. It encompasses the provision of IT infrastructure, operating software, middleware, and applications hosted within a data center and accessed by the end user via the internet.
<b>Cybersecurity</b>	The technologies, processes, and practices designed to protect networks, computers, programs, and electronic data from attack, damage, or unauthorized access.
<b>Digitalization</b>	Digitalization is the use of digital technologies to change the business model.
<b>Distributed generation</b>	When energy is generated and distributed using small-scale technologies closer to its end users, it is termed distributed or decentralized generation.
<b>Drones</b>	Unmanned aerial vehicles can be remotely controlled or fly autonomously through software flight plans embedded in their system.
<b>Electric vehicles (EV)</b>	A vehicle that uses one or more electric motors for propulsion.
<b>Energy storage</b>	Energy storage is the capture of energy produced at one time for use at a later time.
<b>Energy transition</b>	The energy transition is a major structural shift in the global energy industry towards a cleaner energy mix as the world looks to combat climate change. This transition has implications for all aspects of the industry and involves reductions in fossil fuel use in favor of cleaner energy sources, improvements in energy efficiency as well as many other aspects.
<b>ESG-Environmental</b>	Environmental performance measures the energy a company consumes, the waste it generates, the natural resources it uses, and the consequences for ecosystems and habitats.

Term	Definition
<b>Geopolitics</b>	The study of the effects of geography on politics and international relations. It covers the way a country's size, politics, and geographical position influences its relationships with other countries.
<b>Hydrogen</b>	Hydrogen is a clean fuel that does not emit CO <sub>2</sub> on combustion and also offers greater energy security. Hence, it is generating increasing interest across the world for use as a fuel.
<b>Internet of Things (IoT)</b>	An umbrella term to describe the use of connected sensors and actuators to control and monitor the environment, the things that move within it, and the people that act within it.
<b>Metaverse</b>	The metaverse is a virtual world where users share experiences and interact in real-time within simulated scenarios.
<b>Net zero</b>	Net zero refers to the balance between the amount of greenhouse gases produced and the amount removed from the atmosphere.
<b>Nuclear</b>	Nuclear power is the use of nuclear reactions to produce electricity. Nuclear power can be obtained from nuclear fission, nuclear decay, and nuclear fusion reactions.
<b>Renewable energy</b>	Energy that is generated from renewable resources, which are naturally replenished on a human timescale, such as sunlight, wind, rain, tides, waves, and geothermal heat.
<b>Robotics</b>	This deals with the design, construction, operation, and use of robots, as well as computer systems for their control, sensory feedback, and information processing.
<b>Robots</b>	Machines capable of carrying out a complex series of actions (typically programmed by a computer) automatically and repeatedly.
<b>Scope 1 emissions</b>	Greenhouse gas emissions that occur from sources that are controlled or owned by a company, e.g., from a gas boiler, company vehicles, or industrial equipment.
<b>Scope 2 emissions</b>	Greenhouse gas emissions that are created as a result of a company's electricity usage. E.g., the emissions created by power stations supplying the company's electricity.
<b>Scope 3 emissions</b>	All indirect emissions (not included in Scope 2) that occur in the value chain of the reporting company, including both upstream and downstream. E.g., emissions produced by suppliers, when products are used or shipped, and business and customer travel.
<b>Smart grid</b>	A smart grid is an electrical grid that includes a variety of operational and energy measures including smart meters, smart appliances, renewable energy resources, and energy efficient resources.
<b>Sustainability</b>	An approach that focuses on ESG factors to ensure the long-term growth of a company or country and to continue generating value for stakeholders. The term is notoriously ambiguous and poorly defined.
<b>Technology diversification</b>	Introducing and diversifying into various power generation sources. In the current context, it has become extremely important for utilities to diversify their portfolio to include low-carbon cost-effective generation sources.

Source: GlobalData

# Further Reading

## GlobalData reports

Publication date	Report title
January 2024	<a href="#"><u>Thematic Intelligence: Hydrogen in Power (2023)</u></a>
December 2023	<a href="#"><u>Thematic Intelligence: Net Zero Strategies in the Power Sector</u></a>
December 2023	<a href="#"><u>Thematic Intelligence: Carbon Offsets</u></a>
November 2023	<a href="#"><u>Webinar: CCS Outlook and emerging utilization sectors</u></a>
November 2023	<a href="#"><u>Thematic Intelligence: Batteries (2023)</u></a>
November 2023	<a href="#"><u>Thematic Intelligence: Electric Vehicles in Power (2023)</u></a>
October 2023	<a href="#"><u>Equipment Market: Battery Energy Storage Market Size, Share, and Trends Analysis by Technology, Installed Capacity, Generation, Drivers, Constraints, Key Players, and Forecast, 2022–2027</u></a>
October 2023	<a href="#"><u>Thematic Intelligence: Internet of Things in Energy</u></a>
October 2023	<a href="#"><u>Thematic Intelligence: The Metaverse (2023)</u></a>
September 2023	<a href="#"><u>Sector Report: Nuclear Power in China</u></a>
September 2023	<a href="#"><u>Sector Report: Nuclear Power in India</u></a>
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June 2023	<a href="#"><u>Thematic Intelligence: Critical Minerals</u></a>
March 2023	<a href="#"><u>Thematic Intelligence: Cybersecurity (2023)</u></a>
March 2023	<a href="#"><u>Thematic Intelligence: Cloud Computing in Power</u></a>
January 2023	<a href="#"><u>Thematic Analysis: Ukraine Conflict Executive Briefing</u></a>
January 2023	<a href="#"><u>Innovation Radar – Beyond crypto: how blockchain advances in the enterprise</u></a>

Publication date	Report title
December 2022	<a href="#"><u>Thematic Intelligence: Power Predictions 2023</u></a>
September 2022	<a href="#"><u>Thematic Intelligence: The Future of Work (2022)</u></a>
December 2022	<a href="#"><u>Thematic Intelligence: Robotics in Power</u></a>
November 2022	<a href="#"><u>Thematic Intelligence: Cloud Computing (2022)</u></a>
August 2022	<a href="#"><u>Thematic Intelligence: Supply Chain Disruption</u></a>
July 2022	<a href="#"><u>Thematic Research: Cybersecurity in Power (2022)</u></a>
May 2022	<a href="#"><u>GlobalData Power Webinar – Battery Energy Storage</u></a>
May 2022	<a href="#"><u>Innovation Radar – Track and trace: how blockchain is making supply chains more transparent and efficient</u></a>
August 2020	<a href="#"><u>Thematic Research: Renewable Energy (2020)</u></a>
Source: GlobalData	



# Our Thematic Research Methodology

Companies that invest in the right themes become success stories. Those that miss the important themes in their industry end up as failures.

## Viewing the world’s data by themes makes it easier to make important decisions

We define a theme as any issue that keeps a senior executive awake at night. GlobalData’s thematic ecosystem is a single, integrated global research platform that provides an easy-to-use framework for tracking all themes across all companies in all sectors. It has a proven track record of identifying critical themes early, enabling companies to make the right investments ahead of the competition and secure that all-important competitive advantage.

## Traditional research does a poor job of picking winners and losers

The difficulty in picking tomorrow’s winners and losers in any industry arises from the sheer number of technology cycles—and other themes—that are in full swing right now. Companies are impacted by multiple themes that frequently conflict with one another. What is needed is an effective methodology that reflects, understands, and reconciles these conflicts.

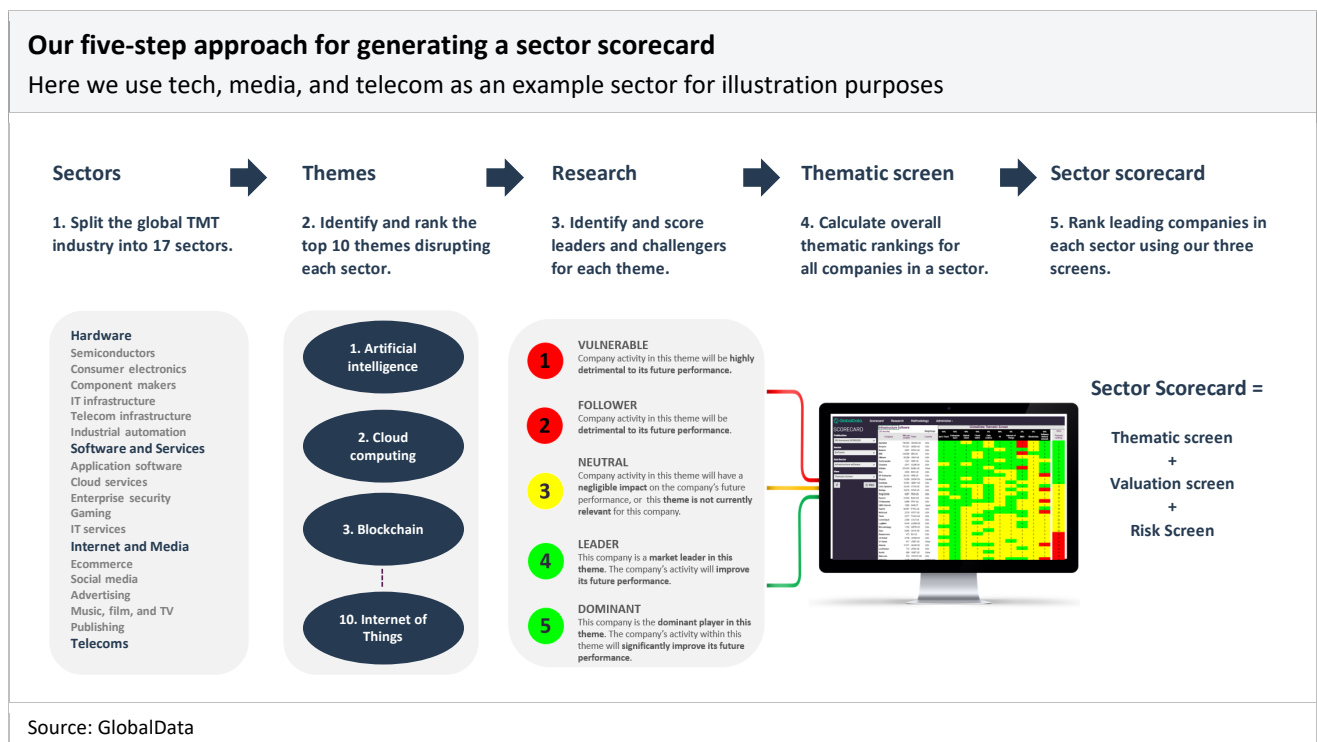
## That is why we developed our thematic engine

At GlobalData, we have developed a unique thematic methodology for ranking all major companies in all major sectors based on their relative strength in the big themes that are impacting their industries.

Our thematic engine tags over 145 million data items across five alternative data sets—patents, jobs, deals, filings, and news—to themes. The vast datasets within our thematic engine help our analysts to produce sector scorecards that identify the companies best placed to succeed in a future filled with multiple disruptive threats.

## How do we create our sector scorecards?

First, we split each industry into sectors because a different set of themes drives each sector. Taking the TMT (technology, media, and telecom) industry as an example, we split this industry into the sectors shown in the graphic below.



Second, we identify and rank the top 10 themes for each sector (these can be technology themes, macroeconomic themes, or industry-specific themes). Third, we publish in-depth research on specific themes, identifying the winners and losers within each theme. The problem is that companies are exposed to multiple investment themes, and specific themes' relative importance can fluctuate. So, our fourth step is to create a thematic screen for each sector to calculate overall thematic leadership rankings after taking account of all themes impacting that sector. Finally, to give a crystal-clear picture, we combine this thematic screen with our valuation and risk screens to generate a sector scorecard used to help assess overall winners and losers.

## What is in our sector scorecards?

Our sector scorecards help us determine which companies are best positioned for a future filled with disruptive threats. Each sector scorecard has three screens:

- **The thematic screen** tells us who are the overall leaders in the 10 themes that matter most, based on our thematic engine.
- **The valuation screen** tells us whether publicly listed players appear cheap or expensive relative to their peers based on consensus forecasts from investment analysts.
- **The risk screen** tells us who the riskiest players in each industry are, based on our assessment of four risk categories: operational risk, financial risk, industry risk, and country risk.

## How do we score companies in our thematic screen?

Our thematic screen ranks companies within a sector based on overall leadership in the 10 themes that matter most to their industry, generating a leading indicator of future earnings growth.

Thematic scores predict the future, not the past. Our thematic scores are based on our analysts' assessment of their competitive position in relation to a theme, on a scale of 1 to 5:

<b>1</b>	<b>Vulnerable</b>	The company's activity in this theme will be highly detrimental to its future performance.
<b>2</b>	<b>Follower</b>	The company's activity in this theme will be detrimental to its future performance.
<b>3</b>	<b>Neutral</b>	The company's activity in this theme will have a negligible impact on the company's future performance, or this theme is not currently relevant for this company.
<b>4</b>	<b>Leader</b>	The company is a market leader in this theme. The company's activity in this theme will improve its future performance.
<b>5</b>	<b>Dominant</b>	The company is a dominant player in this theme. The company's activity in this theme will significantly improve its future performance.

## How do our research reports fit into our overall thematic research ecosystem?

Our thematic research ecosystem is designed to assess the impact of all major themes on the leading companies in a sector. To do this, we produce three tiers of thematic reports:

- **Single theme:** These reports offer in-depth research into a specific theme (e.g., artificial intelligence). They identify winners and losers based on thematic leadership, market position, and other factors.
- **Multi-theme:** These reports cover all themes impacting a sector and the implications for the key players in that sector.
- **Sector scorecard:** These reports identify those companies most likely to succeed in a world filled with disruptive threats. They incorporate our thematic screen to show how conflicting themes interact with one another, as well as our valuation and risk screens.

## About GlobalData

GlobalData is a leading provider of data, analytics, and insights on the world's largest industries. In an increasingly fast-moving, complex, and uncertain world, it has never been harder for organizations and decision makers to predict and navigate the future. This is why GlobalData's mission is to help our clients to decode the future and profit from faster, more informed decisions. As a leading information services company, thousands of clients rely on GlobalData for trusted, timely, and actionable intelligence. Our solutions are designed to provide a daily edge to professionals within corporations, financial institutions, professional services, and government agencies.

### Unique Data

We continuously update and enrich 50+ terabytes of unique data to provide an unbiased, authoritative view of the sectors, markets, and companies offering growth opportunities across the world's largest industries.

### Expert Analysis

We leverage the collective expertise of over 2,000 in-house industry analysts, data scientists, and journalists, as well as a global community of industry professionals, to provide decision-makers with timely, actionable insight.

### Innovative Solutions

We help you work smarter and faster by giving you access to powerful analytics and customizable workflow tools tailored to your role, alongside direct access to our expert community of analysts.

### One Platform

We have a single taxonomy across all of our data assets and integrate our capabilities into a single platform—giving you easy access to a complete, dynamic, and comparable view of the world's largest industries.



## Contact Us

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