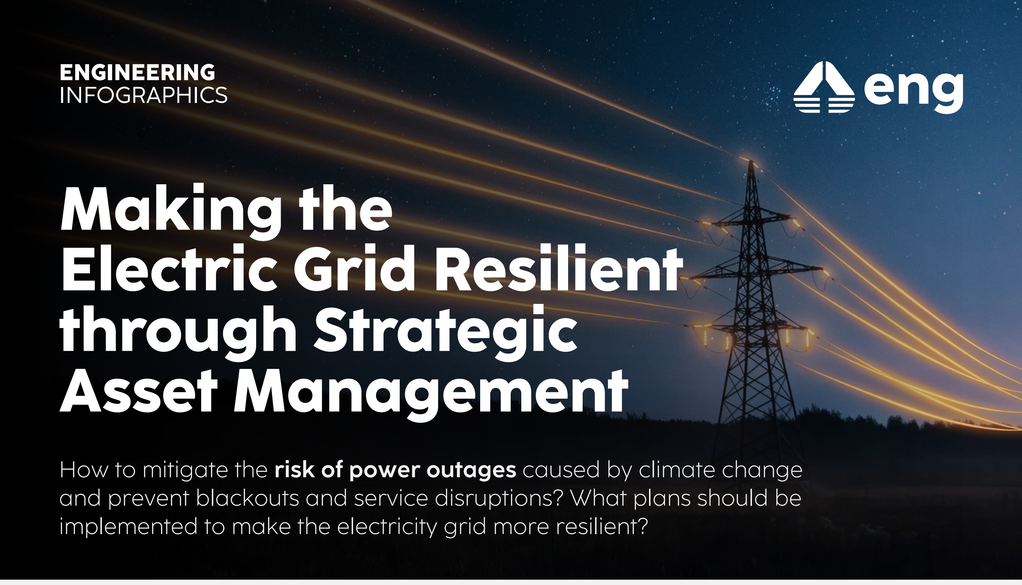
ENGINEERING
INFOGRAPHICS



Making the Electric Grid Resilient through Strategic Asset Management

How to mitigate the **risk of power outages** caused by climate change and prevent blackouts and service disruptions? What plans should be implemented to make the electricity grid more resilient?

In recent months, events in countries like Chile, the Iberian Peninsula (Spain and Portugal), and Italian cities such as Turin and Florence have caused serious power outages, service disruptions, and significant social and economic impacts. It is therefore crucial to **define and implement plans to increase the resilience of transmission and distribution networks** through targeted modernization efforts and the use of innovative technologies.

Forecasted Investments in Global Power Grids

*Source: Statista

PERIOD: 2024–2050, BY REGION*

Asia
42%
of total investment

America
30%
of total investment

Europe
11%
of total investment

TSOs will invest approximately **€800 billion** in their networks, while DSOs are expected to spend around **€37 billion per year** until 2050.

NEARLY
50%
of DSOs' investments will go toward network renewal and maintenance**

** ENTSO-E Position Paper Finance ability and Affordability for a Secure Energy Transition (July 2025). EU DSO Entity's Technical Vision (FLAGSHIP PROJECT JANUARY 2025)

A Future-Proof Power Grid

Recent studies and international reports highlight how investing in grid infrastructure creates value for society and saves money in the long run.
It becomes a **critical success factor** to implement effective business processes, models, skills, and digital systems to manage investments — especially considering an ever-changing regulatory framework that influences asset management approaches.

In this context, it's also essential to: **maximize asset value** throughout their entire lifecycle, **identify the best investment portfolio** based on Asset Management objectives, **manage risks**, **align processes and models** with regulatory frameworks — while combining specialized and digital skills and adopting Artificial Intelligence as an advanced step in the company's Digital Transformation Roadmap.

Our Toolbox

Our Numbers

1100+
SPECIALISTS

300+
CLIENTS

10+
CENTERS OF EXCELLENCE

Our Approach

Eng & Be have developed a **bimodal value-oriented approach** that merges deep knowledge of core business processes with innovation and AI.

Asset Management

+ **Asset Lifecycle Management** (ALM)
+ **Investment Prioritization & Optimization**
+ **Risk-Based Asset Management**
+ **Alignment of vertical domain processes/models to standards and regulatory frameworks**

Digital Jump

+ **AI&DATA**
  - Simulate investment scenarios with massive datasets (Asset Investment Planning)
  - Optimize permitting, design, and planning processes
  - Manage bidirectional energy flows and integrate FRNP within Smart Grid logic
+ **Proprietary Platforms** and **best in class site safety solutions**
+ **Phygital Control Center** for remote asset monitoring and predictive fault detection