

# FutureBridge

## What is?

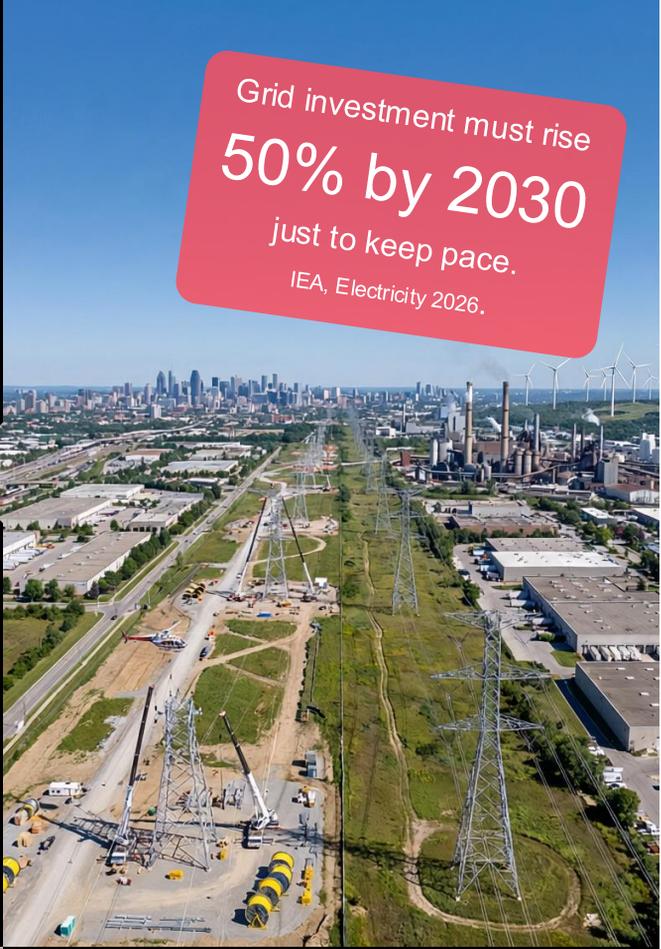
### The New Energy Reality Check

The world's energy system is not in transition. It is in turbulence.

And flexibility is no longer an operational preference. It is a survival posture.

- Russia's war shattered the belief that industrial competitiveness could rely on cheap, predictable energy.
- Transmission constraints now cost industry billions, directly eroding margins and widening competitive gaps.
- Grid investment is surging, yet 5-15 year queues and single-grid dependence are becoming structural cost risks for industry.

The energy crisis is no longer temporary. Geopolitics, climate shocks, and electrification have made volatility structural.



Grid investment must rise  
**50% by 2030**  
just to keep pace.  
IEA, Electricity 2026.

## What if

### Electrification goes further?

Electrification is already reshaping industry. The next phase will reshape where production happens, how materials flow, and which operating models survive.

- Industrial processes reorganize around electric-first architectures. Companies like Equinor and BP are already electrifying offshore compressors and pumps to run on grid or renewable power.
  - Material systems are being redesigned around circular flows and lower mineral intensity, with companies like Northvolt building battery supply chains around recycled metals.
  - Energy generation moves closer to industrial demand. Firms like Amazon and Google are pairing data centers with dedicated renewable generation and storage to stabilize power costs.



O&G electrification:  
**\$32.45B**  
by 2031

## What now?

### The BIG questions

If electrification accelerates while grid capacity remains constrained, then...

- Will securing long-term grid access become as strategic as securing capital, land, or raw materials?
- As power volatility persists, will industrial competitiveness depend on the ability to flex, shift, or self-generate energy?
- If energy begins determining industrial geography, will production increasingly cluster where reliable power and infrastructure intersect?
- As electrification scales across sectors, will capital shift toward grid expansion, storage, and decentralized generation at unprecedented speed?



Global energy storage  
100 GW installed in 2025.  
**up 43%**  
year-on-year

## About FutureBridge

FutureBridge is a techno-commercial consulting and advisory company. We track and advise on the future of industries from a 1-to-25-year perspective to keep you ahead of the technology curve, propel your growth, identify new opportunities, markets and business models, answer your unknowns, and facilitate best-fit solutions and partnerships using our platforms, programs, and access to global ecosystems and players.