

# Powering Forward: 2025 Energy Transition Snapshot

Insights from L.E.K.'s 7th Annual  
Global Energy Study

## Diverging investment priorities

Investment across the energy sector remains strong, but priorities are pulling in different directions.

Executives are balancing ambition with execution realities — channelling capital where near-term impact and commercial viability are clearest.

### O&G: Disciplined growth, targeted transition

Maintaining capital discipline in core operations while selectively increasing investment in proven transition technologies such as carbon capture, efficiency and alternative fuels.

### Renewables: Growth meets reality

Continuing to expand capacity, but with sharper cost focus and execution discipline amid policy and supply-chain uncertainty.

### Utilities: Acceleration phase

Expanding grid and storage infrastructure to meet surging electrification and data-centre demand.

## Grid under pressure

Modernization and flexibility are now mission-critical

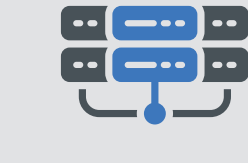
T&D, battery storage and solar remain top priorities for utilities

**59%** of utility leaders see rising reliability risk from intermittent renewables

**ONLY 22%** are confident that new gas plants can meet near-term demand

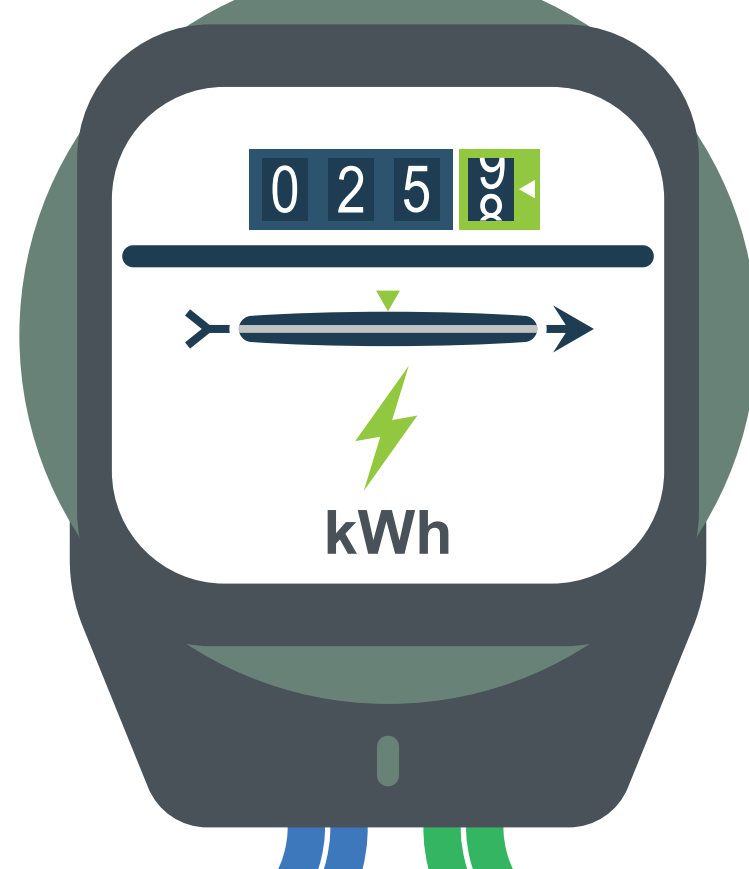
## Behind-the-meter: The flexibility fix

Scaling fast but still a short-term solution



**x2**

BTM use for data centers set to more than double between 2026 and 2030



**63%**

of O&G firms without grid confidence now using BTM



most still see BTM as a <2-year solution

## AI goes operational

From pilot phase to performance driver



**62%**

of utilities use AI for forecasting; 53% for maintenance



**52%**

of O&G use AI for analytics and market sentiment



**c. 80%**

expect full AI value realization in 10 years

## Barriers to scaled adoption

Data quality

Governance

ROI uncertainty

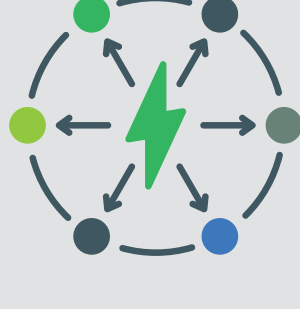
## Strategic priorities

Disciplined moves in a constrained environment



**Disciplined investment**

Focus spend on commercially viable projects and selective M&A



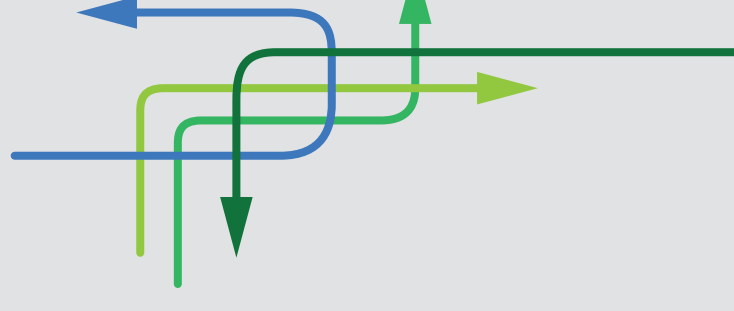
**Grid resilience**

Modernize and expand networks; pair with storage



**AI at scale**

Build data infrastructure and internal alignment to unlock AI value

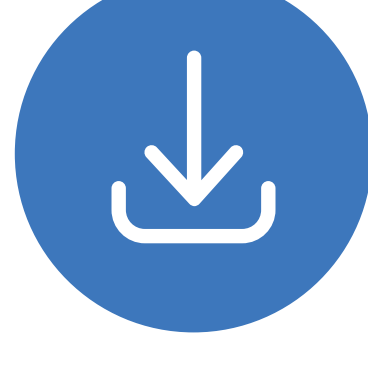


**Flexible infrastructure**

Use BTM as a stopgap while navigating turbine and grid delays

## Take a closer look

Explore the full survey findings in our article series  
**Powering Forward: Energy's Next Phase**



### About L.E.K. Consulting

We're L.E.K. Consulting, a global strategy consultancy working with business leaders to seize competitive advantage and amplify growth. Our insights are catalysts that reshape the trajectory of our clients' businesses, uncovering opportunities and empowering them to master their moments of truth. Since 1983, our worldwide practice — spanning the Americas, Asia-Pacific and Europe — has guided leaders across all industries from global corporations to emerging entrepreneurial businesses and private equity investors. Looking for more? Visit [www.lek.com](http://www.lek.com).

L.E.K. Consulting is a registered trademark of L.E.K. Consulting. All other products and brands mentioned in this document are properties of their respective owners. © 2025 L.E.K. Consulting