



GUIDE

# Energy and utilities companies succeeding with API management

How one industrial sector is adopting an API-first strategy to accelerate digital transformation and new service initiatives



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01

## As the future takes shape, companies are investing accordingly

Energy and utility firms face a diverse set of challenges as the world approaches the second quarter of a century. On the environmental front, regulatory demands and stiffer penalties for non compliance take center stage. In terms of power generation, companies are up against limited natural resources, increased calls for renewable energy, and distributed energy resources. Meanwhile, meeting customer expectations – especially in digital experiences – remains a major point of product and service differentiation.

As a result, investment outlays in digital transformation and customer experience are driving accelerated activities to meet tightening regulatory and market-imposed deadlines. Adoption of an API-first approach to integration is compulsory to success.



**\$323.2B** in power and utilities IT spending globally is expected by 2028 – a five-year CAGR of about 10.8%

Source: [Gartner, Forecast: Enterprise IT Spending for the Power and Utilities Market, Worldwide, 2022-2028, 1Q24](#)



**98%** of utilities executives agree that leveraging AI agent ecosystems will be a significant opportunity for their organization in the next 3 years

Source: [Accenture, Tech Vision 2024](#)



**38%** of working hours in utilities could be either automated or augmented by Gen AI, creating an additional \$334B in value

Source: [Accenture, Tech Vision 2024](#)

## Investment in security is crucial to success

Managing the flow and demand for renewable and distributed energy resources is a complex undertaking that requires secure API connectivity among power networks, operators, and market platforms. Cyberattacks are a constant threat and need to be met head-on. Companies investing in mastering complexity and connecting securely can ensure the availability and reliability of their own networks and gain control over pricing as a market differentiator.



**42%** of critical infrastructure companies (including energy infrastructure) recently faced cyber breaches

Source: [Thales, 2024 Data Threat Report](#)



**39%** of cyberattacks are most intensely focused on the energy sector. This represents over 3x more than the next sectors, critical manufacturing (11%) and transportation (10%).

Source: [Rockwell Automation, Anatomy of 100+ Cybersecurity Incidents in Industrial Operations](#)

## Key technological evolutions in the utilities industry that rely on an API-first strategy



**IoT.** Connect physical objects with other devices and systems over the internet.



**BDA.** Create efficiencies and boost optimization through big data and analytics (BDA).



**Edge computing.** Enable decisions at the point of energy collection and use.

## 02

## The way forward goes through API management

Making energy systems around the world more connected, intelligent, efficient, reliable and sustainable means digitalization. The Internet of Things (IoT), artificial intelligence (AI), big data and analytics (BDA), and edge computing are key enablers for operational excellence and new revenue streams. However, all these technologies require APIs for connectivity, data access, and management.

With an API-led approach to digitalization, energy and utility companies can launch and scale IT projects up to four times faster due to API reuse – deriving significant value. Some will lead. Some will fall behind.



**53%** of energy and utilities companies are monetizing APIs directly to build an external ecosystem

Source: [Axway 2024 State of Enterprise API Maturity Report](#)



**73%** of energy C-suite executives view generative AI as a catalyst for reinvention, powering cloud-based platforms and data analytics

Source: [Accenture, Fuel energy resilience and reinvention](#)



**\$12.8B** in spending on analytics for energy and utility organizations is expected by 2032 – a CAGR of 16.8% from 2024. 40% is used on predictive maintenance – i.e., using data and technology to predict equipment failures and prevent downtime

Source: [Market Research Future, Energy and Utility Analytics Market Research Report](#)

## API-first technology puts security first

Increased amounts and sources of open data escalate the importance of cybersecurity, API security, and data governance. Emerging technologies and data use mean comprehensive and secure API management systems are required, and utilities need to invest in securing their digital infrastructure.

## APIs give customers greater control

Customers are demanding more control and transparency of their energy consumption and pricing, as well as accessible and flexible digital customer experiences. This presents opportunities for business growth since enterprises can use APIs to open data and new services to customers and partners.

## Getting smart about climate change with APIs

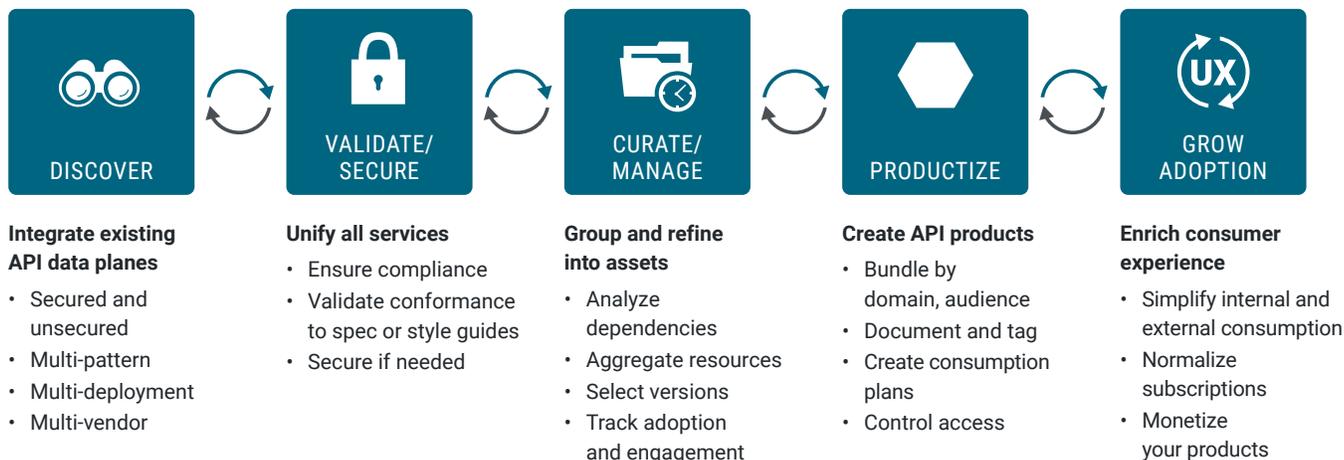
Energy sector legislation and various data sharing frameworks are putting added pressure on companies to diversify energy sources, and track and demonstrate energy efficiency. A smart technical infrastructure and API implementation are key to implementing a decarbonized energy system that operates optimally.

## Amplify Platform. Powering the API-first approach.

Axway's Amplify Platform is a federated API management platform that provides the protection, assurance, and proven path to fast-track your digital business initiatives. Energy systems around the world need to be more connected, intelligent, efficient, reliable, and sustainable. Amplify lets you:

- Secure and operationalize new and existing APIs by implementing a defense-in-depth strategy to safeguard all your APIs regardless of development or deployment
- Maintain a reliable and functioning energy grid to drive API usage and communicate with market platforms, power networks and operators
- Accelerate delivery of new services and reduce IT technology debt to reach parity with competitors

Amplify Platform enables you to master the complex API landscape and drive consumption of APIs among developers and partners. As the only truly federated platform Amplify lets you discover, use, and govern APIs across multiple gateways, vendors, and environments.



The platform's breakthrough Amplify Engage (formerly Amplify Enterprise Marketplace) simplifies adoption and use of APIs for optimal business value, while enabling energy and utility companies to monetize their APIs for new revenue streams.

## 03

## Energy and utility companies succeeding with Amplify Platform



Ultra-efficient, API-driven services drives digital transformation journey

Headquartered in Paris, France, and with operations on five continents, SUEZ is a world leader in smart and sustainable resource management. The company uses the Amplify Platform to deliver API services to all 24 business units across the organization.

**15 million** data transactions per month

**45 million** tons of waste recovered annually

**7.7 TWh** of local renewable energy generated

[Read the Case Study](#) →



Building new services in a matter of days cuts costs adds revenue

NOV is a global leader in equipment for oil and gas drilling, oilfield services, and supply chain integration. Using Amplify Platform for API management in the hybrid cloud, NOV's developers can build internal and customer-facing services quickly, reducing costs and creating new revenue streams.

**95%** faster development thanks to a central API catalog

**Enhances** data-sharing across the business

**Supports** hybrid operations, streamlining NOV's cloud journey

[Read the Case Study](#) →



*As well as offering a proven platform for developing and managing the new APIs, Axway showed a clear commitment to partnering with us throughout our transformation journey.*

Samir Doudech, Head of Data and Integration at SUEZ



*By deploying a central Axway API platform in the hybrid cloud, we were able to empower our developers to build internal and customer-facing services in days, not weeks.*

Michael Lynch, Director, Application Development & Interfaces at NOV



### Building data-sharing applications faster with API marketplace

ENGIE is a global leader in innovative, low-carbon energy and services. Using the Amplify Engage capabilities of Amplify Platform, the company created an API marketplace where documentation on all APIs can be published across all business units for easy access by business users.

**Accelerates** time to market through open access to APIs

**3x reduction** in requests to outside weather data providers

**26 business units** leverage APIM to connect with customers

[Read the Case Study](#) →



### Securely sharing smart-meter data and supporting green-energy initiatives

GRDF, part of ENGIE, distributes natural gas to businesses and homes, ensuring reliable supply while promoting sustainability. Using Amplify API Management, they handle 1B+ API calls yearly with built-in security. They also help consumers track energy use for a greener future.

**1 billion +** API calls per year using a flexible API platform

**Built-in** security protects data without increasing costs

**Green-energy** support through understanding of energy use



*Amplify Engage has the potential to be a gamechanger for the developer experience. Once finalized, it will bring together a curated set of API products across our different business units.*

Grégory Wolowiec, Chief Technology Officer at Engie



## Sharing data access securely to energy companies and authorities

Maintaining France's high voltage power grid, RTE found traditional data exchange methods (MFT, downloads, emails) difficult to monitor while complying with open data policies. They adopted the Amplify Platform, enabling centralized monitoring of electric meter data across its transmission grid.

**150 million** calls made per year by energy stakeholders

**Real-time** data sharing improves service levels for customers

**Regulatory** compliance due to access to public data

[Read the Customer Q&A](#) →



*Setting up an API management platform fits within our plan to reshape customer relations, alongside a desire to create new services.*

Stéphane Ménozzi, API Services Lead at RTE

## A valued partner in energy and utility digital transformation

### Who is Axway?

Axway is a pioneer in the world of data integration, enabling enterprises to securely Open Everything and move data across a complex world of new and old technologies. Our API management platform, Amplify Platform, serves as the cornerstone for API strategies and successes realized by top brands worldwide, and our managed file transfer and EDI/B2B integration solutions have been proven and trusted for over two decades.

### What we do

We provide expertise and technology that has helped over 11,000 businesses in more than 100 countries unlock the full value of their enterprise data to create brilliant customer experiences, expand into new markets, and take advantage of emergent opportunities.

### How we do it

Axway's API-first approach supports secure on-premises, cloud-based, and hybrid digital ecosystems. With Axway Amplify Platform, businesses can:

- Secure and operationalize APIs
- Drive API discovery, use, and reuse
- Accelerate innovation
- Deliver omnichannel customer experiences

Learn more about accelerating digital transformation with an API-first strategy.

[Start Here](#) →