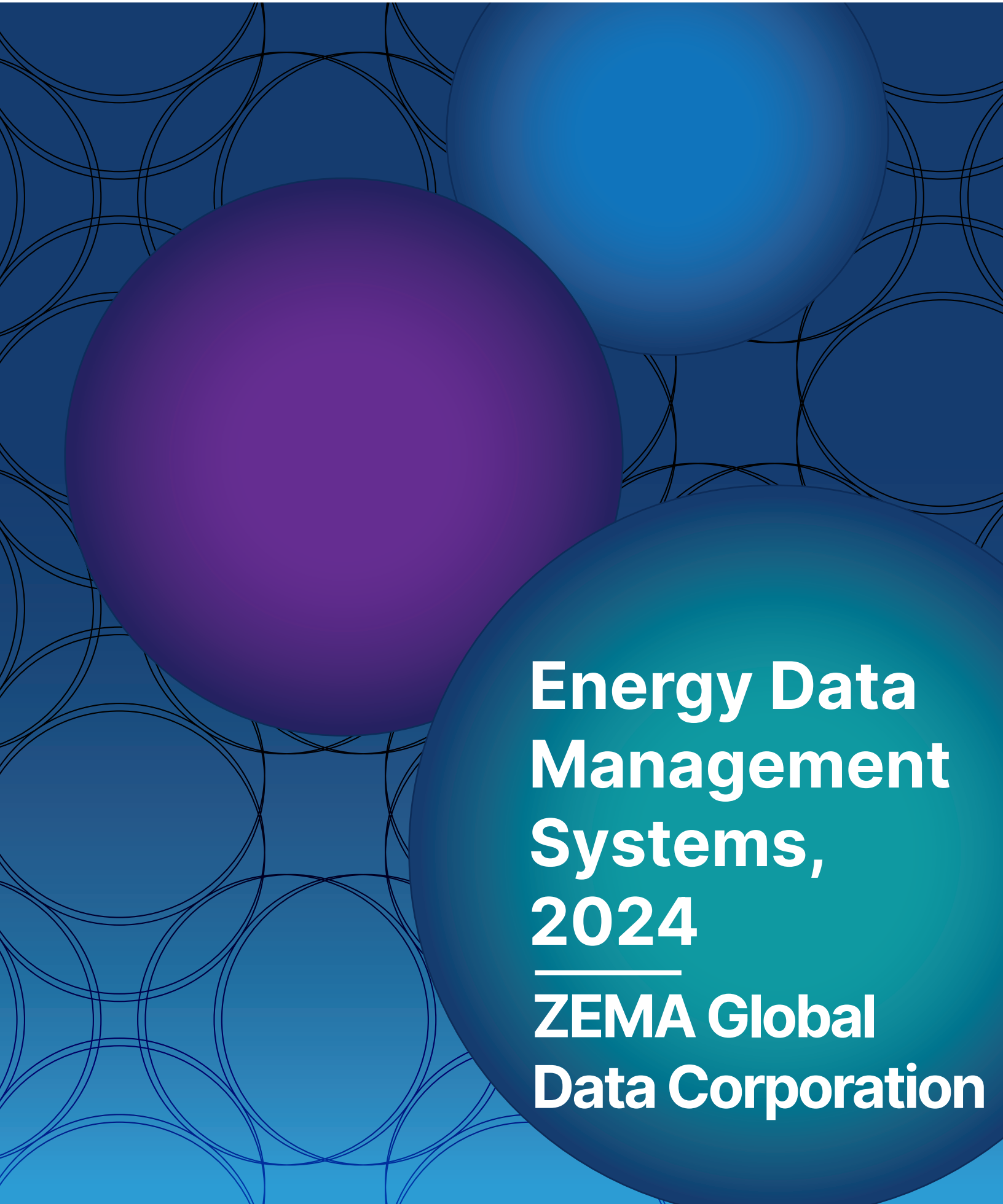
Chartis

VENDOR SPOTLIGHT



Energy Data Management Systems, 2024

ZEMA Global Data Corporation

Executive summary

The energy data landscape has seen tremendous growth as both the amount of commercially available data in the energy sphere and the scope of what is commercially interesting have increased. Much of this data has become more relevant because it increasingly impacts prices.

Energy data firms face a huge challenge created by having to:

- Bring together the hugely diverse and growing set of energy-relevant data sources.
- Aggregate the data into a cohesive system.
- Transform/deliver the data to fill the needs of a variety of end-user systems (such as market risk, credit and finance).

By employing advanced technologies and sophisticated architectures, these firms can incorporate the growing number of price-relevant datasets into a consolidated view, to help empower their customers' success.

Chartis Research's report Energy Data Management Systems, 2024: Market Update and Vendor Landscape considers vendors that aggregate and redistribute data across different asset classes, market environments and geographies, to determine how effective they are in developing and processing their data. The report uses Chartis' RiskTech Quadrant® to explain the structure of the market.

ZEMA Global Data Corporation placed as a 'category leader' in energy data management due to the completeness of its offering and its market potential (see Figure 1).

Figure 1: ZEMA Global Data Corporation's* positioning; energy data management systems, 2024

> **'ZEMA Global Data Corporation's status as a leading and dominant software provider in energy data management is reflected in its quadrant positioning. In particular, the company is distinguished by its long history, the unparallelled variety of its offerings, and the diversity of its coverage.'**
>
> **— Sidhartha Dash, Charis Research**

In Chartis' analysis, category leaders combine depth and breadth of functionality, technology and content with the required organizational characteristics to capture a significant share in their market.

A mix of industry-leading and best-in-class capabilities drives ZEMA Global Data Corporation's category leadership (see the 'ZEMA Global Data Corporation: category leadership' section).

* ZEMA Global Data Corporation was previously known as ZE, and was rated as such in our quadrant.

Market Context

Historically, the energy data market (see Table 1) has consisted of transactional data: prices, volumes and other characteristics gathered from exchanges or over the counter (OTC) environments. However, the growth of independent analytics outside the trading system has led to highly diverse sources of datasets that are now relevant to the energy market.

The rise in availability and demand for what has traditionally been 'alternative data' has had a growing impact on prices. Data such as total warehouse load, railroad traffic, shipping manifests – and even a large range of physical asset data from satellites – is more widely available for incorporation into risk systems, and is an increasingly integral price-formative element.

In turn, the continued fragmentation in the energy data market creates an operational challenge for firms in pulling together a consolidated view of a diverse set of data elements, regardless of asset class, industry and geography.

By embracing advances in data technologies, energy data firms can collect, store, transform and deliver data to meet various system needs. Today, most advanced systems can easily leverage a range of database types to maintain the metadata and a series of targeted databases for each data type. They can then use a relational or object-oriented framework to describe the overarching data structure.

In addition, deploying this type of framework on a hybrid infrastructure (a mix of proprietary data centers and hyperscalers) can add resiliency and scalability to address the unique complexities of energy data. Chartis views this as a positive trend and expects the market to continue moving in this direction.

At their core, energy systems have complex data models as systems for risk, credit and market data and front-office analytics become increasingly separate and distinct. It is now imperative for firms to have a data integration framework that links independent systems with front-to-back platforms.

Table 1: Market landscape factors

Data storage and management best practices

- A relational metadata framework in the data architecture.
- A physical storage framework into which the underlying data structures can be transferred, before being abstracted and mapped.
- A conceptual partitioning of the data into its different structures.

Distinct and opposing trends

- A divergence is occurring in the energy data market, caused by rapid growth in new vendors and new types of data and analytics.
- Convergence and consolidation are also occurring simultaneously among the major energy data players.

Structural considerations in the energy data landscape

- A broader set of tools to abstract the data layer from physical storage is more widely available.
- Explosive growth in a wide variety of databases now enables systems to hold huge amounts of unstructured or semi-structured data.
- Extract, transform and load (ETL) tools are more capable of handling complex data structures (such as spatial, array, etc.).
- High-speed distribution frameworks can handle very large datasets, even if they are not in classical formats or architectures.
- Hybrid cloud architectures – a combination of proprietary data centers and hyperscaler infrastructures – will evolve over the next few years.

ZEMA Global Data Corporation: category leadership

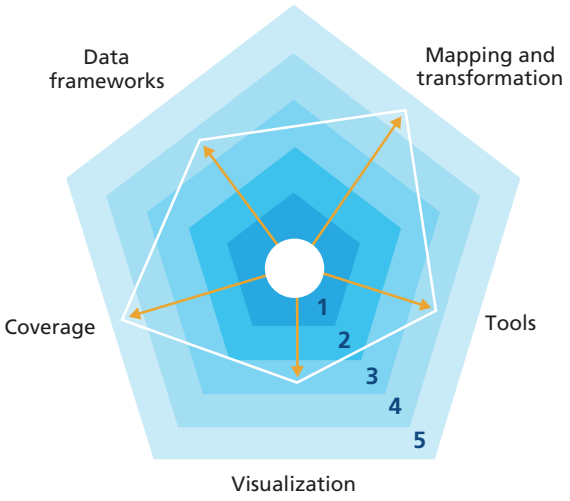
ZEMA Global Data Corporation is a data management technology provider focused primarily on automated market curve generation via robust data collection, validation and management tools. The vendor's strength in these areas makes it a global category leader. ZEMA Global Data Corporation is a best-in-class provider of asset and data coverage, as well as mapping and transformation, including curves and interpolation.

ZEMA, the company's flagship product, stands out in the data management marketplace due to its ability to integrate numerous highly varied data sources with a client's bespoke internal systems. Using individual data modules in a complete end-to-end data management workflow, ZEMA delivers a consolidated view of client data alongside built-in sources (ZEMA collects more than 15,000 data feeds from more than 1,400 cross-asset data providers).

ZEMA then uses this data synthesis downstream to generate client- and context-specific market curves and analytics automatically. The Curve Automated Report Tool (CART) automates curve monitoring and includes alerts, notifications and reports for both system-generated and client-created curves. Risk managers who use the platform for forward curves and risk analytics can extract, transform and load market data across asset classes.

ZEMA Global Data Corporation demonstrates industry-leading data management understanding and capabilities (see Figure 2), which span asset classes and customer types in a rapidly evolving energy landscape.

Figure 2: ZEMA Global Data Corporation's category-leading capabilities



Methodology

Chartis Research ('Chartis') is a research and advisory firm that provides technology and business advice to the global risk management industry. Chartis assesses risk technology vendors using consistent, objective methodology, regardless of business relationships.

The Chartis RiskTech Quadrant® evaluates vendors on both current and future dimensions: completeness of offering and market potential.

- **Completeness of offering** criteria include depth/breadth of functionality, data and infrastructure, analytics, reporting and more specialized capabilities (such as risk/performance linkage).
- **Market potential** considers business model, market penetration, financials, customer satisfaction and growth strategy.

Chartis uses detailed evaluation forms, customer surveys, expert interviews, vendor briefings and other research sources to assess solutions. This rigorous methodology provides an independent view of solutions and vendors.

