

Maximise the commercialisation of power generation, balance and settlement processes, and customer contracts.

Energy Data Management (EDM) is a vital tool used by Energy Traders, Balance Responsible Parties (BRPs), and various energy market participants such as Transmission and Distribution operators. EDM enables the management of customer contracts and time series data related to electricity and gas operations. It optimises balance management and settlement processes and the provision of market-messaging to facilitate industry compliance.

Hansen EDM improves business process efficiency by combining metered asset, contract and market communication data into a single platform that seamlessly automates all trading, balance, settlement, and billing operations. Automating all metered and contract data enables effective trading and position management, delivering imbalance and settlement calculations across the asset portfolio. Hansen EDM complements and enhances the financial, treasury, and risk management functions offered by traditional ETRM systems by supporting contract and portfolio management, forecasting and scheduling capabilities, production and emissions reporting, pricing and pre-billing services and processing vast amounts of time series data.

This domain is complex and challenging, particularly with an increase in distributed renewable generation and the growth in PPA contracts; organisations often find themselves with large portfolios of highly dynamic and diverse assets. The crucial challenge for organisations operating an EDM is maintaining a real-time overview of imbalances and dispatching controllable assets. Additionally, organisations must discover agile and innovative solutions to handle significant increases in data volumes and contractual complexity, manage data security and privacy concerns, and ensure system interoperability, data quality, and regulatory compliance.

An effective EDM platform must deliver a broad range of capabilities that collect, process, analyse, and manage all commercial aspects of energy-related data. It also provides a powerful toolset for organisations seeking to optimise and balance their operations and positions across all asset classes.

Hansen EDM is a scalable and performant application optimised for time series-based data consumption, aggregation, and complex calculation featuring:

- Billing of generation and consumption volume
- Centralised repository of all asset parameters and trading operations
- Provides balance group management
- Delivers market compliance and market messaging
- Consumption of all measurement data
- Automation of end-to-end balance and settlement processes
- Creation of complex aggregations and calculations
- Management of all contract data with the ability to calculate and create invoices
- Delivers market communications between the various market participants

Specific requirements vary depending on the organisation's size, industry, and objectives, yet Hansen EDM offers a comprehensive suite of capabilities to satisfy any application or use case:

- Geographic Reach. Ability to operate in multiple countries and regions, with localised market-messaging compliance.
- Asset Management. Agility to model individual assets and asset portfolios.
- Data Collection & Integration. Collecting data from various sources, including bills, meters, sensors, and BMS.



Optimised for complex time series data



Seamless billing of generation and consumption volume.



Centralise all asset and trading operations.

- **Data Validation & Quality Control.** Verify the accuracy and integrity of incoming data and identify and correct errors or anomalies.
- **Data Storage.** Secure and scalable data storage infrastructure, often including databases or cloud-based solutions, plus long-term data retention and archiving options.
- **Automatic model creation.** Creating new calculation and market messaging models and reports after changing structural data, for example, when adding a new market role.
- **Data Analysis & Modelling.** Advanced analytics and complex calculation capabilities to analyse energy consumption patterns, identify trends, conduct predictive modelling, and support statistical analysis for deeper insights.
- **Real-time Monitoring.** Monitoring energy data in real-time, providing immediate feedback on energy usage and performance, including alerts and notifications for abnormal energy consumption or system failures.

As part of the Hansen Suite for Energy & Utilities and a companion product to Hansen MDM, Hansen EDM delivers crucial energy data management capabilities built on a single unified platform, leveraging a consolidated data repository to efficiently process time-series data from various energy assets and manage multiple contractual positions.

With ready access to compelling features and functionality, Hansen EDM enables organisations to implement automated control of their operations, and it empowers them to meet the challenges of their increasingly diverse and distributed portfolios more efficiently. The deployment agility – including a Cloud-based platform option – reduces time-to-market and leverages a deterministic OPEX funding model.

Organisations implementing Hansen EDM realise tangible value through increased automation, control and optimisation of their asset portfolio, thereby reducing the cost of operations, minimising imbalance penalties, and maximising revenue potential.

Framework for Meter & Energy Data Management

HansenMDM

METER ASSETS

EVENTS & ALARMS

DEMAND-SIDE CONTROL

WORK ORDERS

HansenEDM

CONTRACTS & PORTFOLIOS

FORECASTS & SCHEDULES

PRODUCTION & EMISSIONS

PRICING & PRE-BILLING

Common Functions

BALANCES & SETTLEMENTS

MEASUREMENTS

VALIDATION, ESTIMATION & EDITING

Common Tools

SYSTEM INTEGRATION

ANALYTICS

CONTROL DISPLAYS & WEBUI

CALCULATIONS

B2B MESSAGING

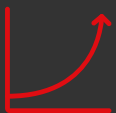
REPORTING

ORCHESTRATION

FUNCTIONS

Hansen EDM delivers timely access to new and advanced capabilities, is proven at scale, and provides confidence that matches market requirements. Conceived by a software solutions provider with a global reach and fifty years of industry expertise across multiple energy and regulatory environments, Hansen EDM innovates the energy data management market.

Consolidate, Automate, & Optimise



**Scalable and Performant
Optimised for Time-Series Data.**



**Billing of Generation
and Consumption Volume.**



**Centralised Repository of All
Asset Parameters, Trading
Operations.**



Provides Balance Group Management.



**Delivers Market Compliance
and Market Messaging.**



**Automation of End-to-End Balance
and Settlement Processes.**



**Creation of Complex
Aggregations and Calculations.**



**Manage All Contract Data;
Calculate and Create Invoices.**