# INNOVATIVE ENERGY MANAGEMENT WITH ARTIFICIAL INTELLIGENCE

Image: Enerprice AG

The Swiss service provider Enerprice analyzes incoming invoices using the flexible AI from Insiders Technologies and creates a detailed, auditable report on the actual energy consumption of companies. This report forms a valid basis for optimizations and climate protection measures and is immune to any accusations of greenwashing. Additionally, Enerprice relieves the accounting departments of its clients by reviewing, consolidating, and processing incoming invoices.

**enerprice**
Ihr Energietreuhänder

**CUSTOMER**
Enerprice AG

**COUNTRY**
Switzerland

**HIGHLIGHT**
Automated document reading of energy and invoice data

**PRODUCTS**
e-invoice pro basierend auf OmnIA und OvAItion

The Swiss company Enerprice AG leverages the cutting-edge AI solution OvAItion from Insiders Technologies to implement an innovative business model that intelligently processes existing information for a new use case.

Enerprice provides its customers with comprehensive energy monitoring, extracting real consumption data—such as heating oil, natural gas, wood pellets, electricity, and more—from billing documents. This data is then validated multiple times and consolidated.

This service particularly benefits customers with hundreds of properties, such as banks and insurance companies, that need to include precise energy consumption data in their ESG reporting. Unlike reports based on estimates, assumptions, or samples, Enerprice's energy monitoring is fully auditable, certified according to ISAE 3402, and therefore immune to any accusations of greenwashing.

As a second service, Enerprice offers full administrative processing of energy billing. In this case, the numerous individual invoices

## CHALLENGES

✓ Innovative use case beyond standard requirements demands a flexible solution
✓ Complex mapping of extracted data to extensive master data
✓ Highest requirements for the quality of extracted data

from energy suppliers are extracted, validated, and checked—then paid if correct. The customer receives a consolidated invoice from Enerprice, broken down by consumption points.

## HIGHEST REQUIREMENTS FOR DOCUMENT READING

Document reading is the starting point of the process, and its quality is crucial for the degree of automation, directly impacting the profitability and scalability of the business model. The requirements are complex: for example, invoices processed by Enerprice often list multiple energy sources—such as electricity and natural gas—on a single document. Additionally, invoices frequently consolidate individual consumption data from various measurement points and properties.

The correct assignment of extracted consumption data, reading period, energy source, measurement point, and specific property is critical. With over 7,800 active properties, approximately 42,000 measurement points, and more than 100,000 processed documents per year, the scale and complexity of the challenge become clear.

## DATA QUALITY IS CRUCIAL

Customer expectations for detail and accuracy in energy monitoring are continuously rising. Quality is not only a key factor for ESG reporting, but a higher level of detail also delivers value beyond compliance. For instance, detailed reporting enables comparisons of energy consumption across multiple properties over time. This allows for optimization of procurement prices, consumption patterns, and savings strategies in collaboration with property owners.

To maintain business profitability, it is essential to continuously increase automation levels while preserving data quality at the highest standard.

## INSIDERS INVOICE MANAGEMENT PROVIDES THE SOLUTION

Given these challenges, Enerprice chose to implement e-invoice pro from Insiders Technologies. This solution leverages Insiders' OvAItion AI, ensuring the highest quality in document reading. It is highly adaptable, allowing it to meet even specialized requirements.

As a core component of the process, e-invoice pro handles approximately 100,000 documents per year—including invoices, partial invoices, and advance payments. These documents arrive in various formats: PDFs via FTP, email attachments, or even traditional paper mail.

## QUALITY THROUGH INTELLIGENT VALIDATION

Enerprice makes no compromises when it comes to the quality of data provided to customers. All extracted data undergoes a multi-stage validation process. For example, consumption values are read from two different locations within the document whenever possible and cross-checked for accuracy. Additional validation steps—such as calculation checks and historical data comparisons—ensure exceptional data quality in a fully automated document processing workflow.

The key to achieving this high standard is the ability to integrate custom quality control rules into the solution using scripting.

*„e-invoice pro already delivers a very high level of quality and allows us to automate our specific quality control requirements through scripting. This flexibility is crucial for us."*

### STEFAN HAAS

HEAD OF ENERGY CONTROLLING & BILLING, ENERPRICE AG

If manual verification is required, experienced Enerprice employees can efficiently review and, if necessary, correct the data using the Web Verifier. Meanwhile, Insiders Technologies' adaptive system continuously learns in the background, steadily improving the automation rate over time. Automation also continuously optimizes processing time, ensuring that data submitted just before the reporting deadline can still be integrated in time. Enerprice has now introduced the integration of various Large Language Models (LLMs) into e-invoice pro for data extraction and verification. This is enabled by OvAItion, Insiders' AI technology, which follows a best-of-breed strategy—seamlessly providing the most advanced LLMs and AI services out of the box for each specific use case. Even after a short deployment period, Enerprice has already observed a significant increase in automation rates.

## SEAMLESS INTEGRATION WITH M-FILES ECM

e-invoice pro integrates seamlessly into Enerprice's overall architecture. It retrieves essential master data—including properties, measurement points, and creditors—from the M-Files ECM system, along with customer-specific settings for data capture depth, determining which fields should be extracted from the documents. After document reading and validation, e-invoice pro transfers the PDF document along with extracted data in XML format to M-Files for further processing and archiving. If a document requires special clarification with the customer, this process is handled directly via the M-Files Hubshare customer portal, ensuring a seamless, media-break-free workflow, with results automatically fed back into e-invoice pro.

## PROCESS QUALITY CERTIFIED BY KPMG

The entire process—from receiving documents to extracting and consolidating data and delivering reports to customers—was recently certified by KPMG according to ISAE 3402. This certification required ensuring that the entire process generates a comprehensive, transparent, and continuous audit trail, documenting both overall process quality and the compliance of each individual process execution.

## INCOMING INVOICE PROCESSING AS AN ADDITIONAL SERVICE

Since Enerprice already extracts incoming invoices for energy monitoring, many customers find it logical to also entrust Enerprice with invoice payment as a service. In this process, each incoming invoice is validated, checked, and settled. The customer then receives a consolidated invoice from Enerprice, broken down by individual consumption points.

*„Our innovative energy monitoring would not be economically feasible without the extensive automation enabled by Insiders Technologies' flexible AI. This allows us to provide our customers with detailed and reliable energy consumption reporting at an attractive price.*

STEFAN HAAS

HEAD OF ENERGY CONTROLLING & BILLING, ENERPRICE AG

## BENEFITS

✓ Flexible AI from Insiders Technologies enables an innovative business model

✓ Combined use of modern AI technologies, including LLMs

✓ Customized adaptations increase straight-through processing and enhance profitability

✓ Automation also reduces processing times

✓ Highest quality in document reading enables further growth through automation

## AUTOMATION ENABLES FOCUS ON QUALITY AND VALUE CREATION

Die KI-basierte Beleglesung mit e-invoice AI-powered document reading with e-invoice pro achieves a high rate of straight-through processing, eliminating the need for manual intervention. The high degree of automation significantly reduces routine workloads for Enerprice employees, allowing them to focus on quality assurance and other value-adding tasks.

## TRANSPARENCY INSTEAD OF GREENWASHING

The high data quality and ISAE 3402 certification make Enerprice's ESG reporting highly reliable, setting it apart from conventional consumption data collection methods. With its detailed reporting, the solution provides a solid foundation for further optimization of energy costs and consumption. This not only improves economic efficiency but also delivers critical insights for planning $CO_2$ reduction strategies and other climate protection initiatives.

## MODERN AI FROM INSIDERS TECHNOLOGIES ENABLES GROWTH

Ultimately, Insiders' AI OvAItion ensures the scalability of Enerprice's business model by continuously increasing automation through self-learning, custom scripting, and the integration of both proprietary and external LLM and AI services.

As manual tasks become increasingly automated, productivity rises, allowing the team to serve more customers. In this way, AI actively supports Enerprice's growth in the dynamic energy monitoring market. By offering optional services such as invoice settlement or expanding the service to additional procurement categories, Enerprice increases value creation per customer, while customers benefit from further cost savings through synergies.

## KEY FACTS

✓ Around 100,000 documents are largely processed automatically

✓ Assignment of individual energy consumption data to 42,000 measurement points

✓ Approximately 7,800 properties under management, each with 3 to 30 measurement points

✓ Entire process independently certified according to ISAE 3402

✓ Precision

## E-INVOICE PRO: OPTIMIZED AND FAST ACCOUNTS PAYABLE PROCESSES

Seamless invoice processing across all formats, from paper documents and PDFs to e-invoices. The solution captures and validates all relevant invoice data and cross-checks it with corresponding purchase order and goods receipt information. With e-invoice pro, structured invoice data can be exported to any process automation, accounting, or ERP system—all AI-driven and fully automated. The e-connect module enables seamless integration with various national and international portals such as OpenPeppol, ZRE, and Chorus Pro, along with convenient email import capabilities.

With e-convert, incoming e-invoice data is converted upon receipt, while outgoing ERP data is formatted for transmission in the required format. In addition to XRechnung and ZUGFeRD, e-convert supports international formats such as FatturaPA, FacturX, Peppol BIS, and FA(2). These are technically validated for EN 16931 compliance, and a human-readable display document is generated for each format.

https://insiders-technologies.com/en/p2p-automation/

## ABOUT ENERPRICE AG

Founded in 1995, Enerprice is an independent, owner-managed service company. It supports the Swiss economy in energy monitoring and the procurement of electricity, natural gas, heating oil, diesel, wood pellets, and $CO_2$ certificates. Another key focus of its activities is the efficient use of energy and cost-effective climate protection.

www.enerprice.ch



## ABOUT INSIDERS TECHNOLOGIES GMBH

Insiders Technologies is a technological leader and well-established market provider of software for intelligent business process automation (Intelligent Automation, IA). More than 5,000 customers across all industries rely on the innovative solutions from this product-focused company based in Kaiserslautern to optimize their document-centric business processes. As the most successful spin-off of the German Research Center for Artificial Intelligence (DFKI), Insiders is committed to transforming cutting-edge AI into real customer value. Leveraging the latest Deep Learning technologies, Insiders' software solutions understand heterogeneous content, extract business-relevant information, automate transactions, and reduce response times. Its technological pioneering spirit and agility ensure continuous innovation and state-of-the-art products that keep pace with market demands.



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