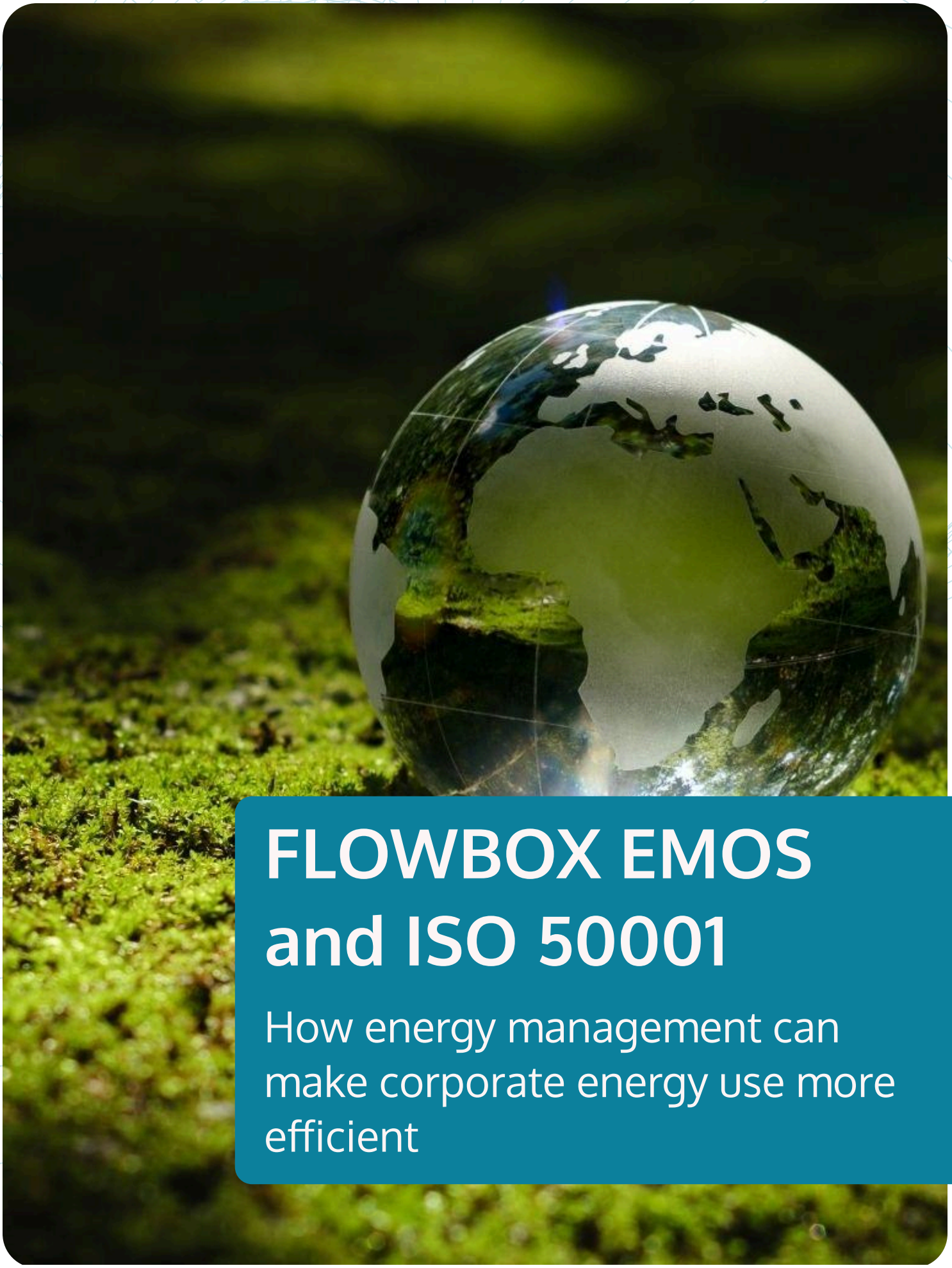

FLOWBOX EMOS and ISO 50001

How energy management can make corporate energy use more efficient

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What Is ISO 50001 and Why Implement It?

ISO 50001 is an international standard that helps organizations manage energy use more efficiently and systematically. It provides a structured framework and defined processes to help companies gain better control over their energy flows, identify savings opportunities, reduce operating costs, and lower greenhouse gas emissions.

The Continuous Improvement Cycle in ISO 50001

PLAN

Goal: Establish the foundation for effective energy management.
Key Activities:
- Analyze current energy consumption
- Define Energy Baseline (EnB) and Energy Performance Indicators (EnPIs)
- Set measurable objectives and targets
- Develop energy policy aligned with business goals

DO

Goal: Put planned actions into motion.
Key Activities:
- Implement energy-saving measures
- Upgrade technologies and equipment
- Train employees and establish new procedures
- Ensure resource availability

ACT

Goal: Optimize and continuously improve.
Key Activities:
- Take corrective or preventive actions
- Refine processes and control systems
- Integrate lessons learned
- Update policies and objectives

CHECK

Goal: Measure and evaluate performance.
Key Activities:
- Monitor real-time energy consumption
- Review EnPI trends and compare with targets
- Conduct internal energy audits
- Identify deviations or inefficiencies

Why Implement ISO 50001?

Reducing energy costs – better energy consumption management leads to direct financial savings.

Higher energy efficiency – supporting the adoption of modern technologies and more efficient processes.

Lower greenhouse gas emissions – more efficient energy use reduces CO_2 emissions.

Enhanced reputation and credibility – demonstrates a commitment to sustainability and responsible energy management.

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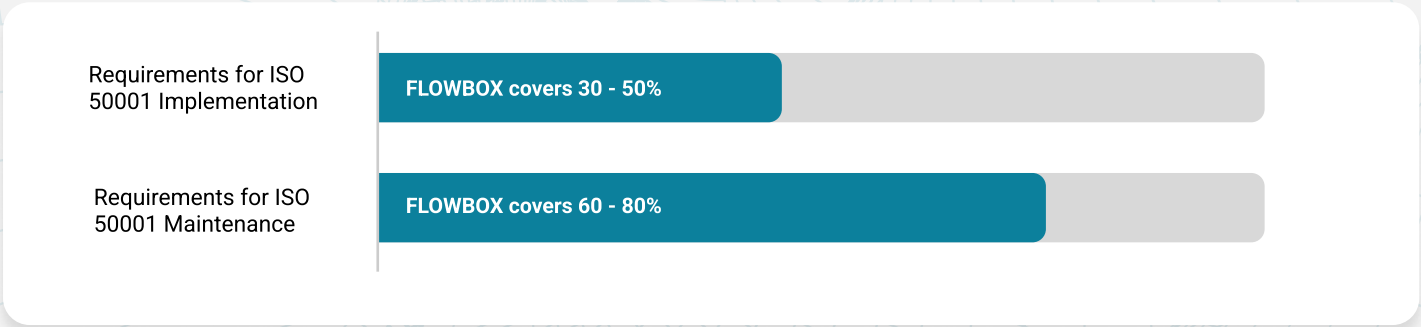
How FLOWBOX EMOS Supports ISO 50001 Implementation

Fully covers key processes such as asset management, data collection, and evaluation.

Significantly saves the energy manager's time on data collection and measure preparation.

Directly reduces energy consumption and lowers costs.



How FLOWBOX EMOS Supports the Individual Phases of ISO 50001

1 Plan

FLOWBOX collects energy consumption data from various sources and generates clear reports. Thanks to advanced energy data intelligence, it:

- Identifies and quantifies operational inefficiencies
- Helps define areas for improvement
- Simulates the impact and payback of individual measures

With this data, you can confidently decide which measures to implement.

2 Do

FLOWBOX supports gradual integration of various technologies regardless of brand (it is hardware-agnostic). It flexibly adapts to your operations.

3 Check

The system continuously monitors real-time consumption and provides:

- Automated EnPI reports
- Evaluation of measure impacts
- Alerts on unmet targets or consumption deviations

4 Act

FLOWBOX continuously analyzes data and suggests new saving measures, enabling companies to advance in energy efficiency.

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Key ISO 50001 Requirements and How FLOWBOX Aligns

ISO 50001	Benefits of FLOWBOX EMOS
Chapter 5: Planning – Defining energy policy and objectives	Poskytuje nástroje pro sběr a analýzu dat o spotřebě energie, což umožňuje stanovit realistické a měřitelné cíle pro zlepšení energetické účinnosti.
Chapter 9: Performance Evaluation – Monitoring and measuring energy consumption	Nabízí sledování spotřeby energie v reálném čase, detailní analýzu dat a přesné měření, což je klíčové pro identifikaci příležitostí ke zlepšení.
Chapter 10: Improvement – Identifying and implementing measures to improve energy efficiency	Umožňuje optimalizaci provozních procesů pomocí automatizace a pokročilých analytických nástrojů, což vede k významným úsporám energie.
Chapter 9: Performance Evaluation – Reporting and auditing	Generuje podrobné reporty a analýzy, které jsou nezbytné pro auditování a certifikaci podle normy ISO 50001.
Chapter 10: Continuous Improvement – Ongoing enhancement of the energy management system	Díky neustálému monitorování a analýze dat umožňuje identifikovat nové příležitosti pro zlepšení a průběžně optimalizovat energetické procesy.

Key Features of FLOWBOX EMOS for ISO 50001 Compliance

- **Real-time monitoring:** Continuous tracking of energy consumption across the entire operation
- **Detailed data analysis:** Deep insights into energy consumption structure using advanced analytics tools
- **Accurate measurement:** Integration with a wide range of measuring devices for maximum data accuracy
- **Data visualization:** Clear graphs and dashboards for easy interpretation of energy consumption data
- **Automation:** Automated adjustments of operational processes for maximum energy efficiency
- **Reporting:** Generation of detailed reports and analyses for auditing and certification

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How FLOWBOX EMOS Helped GRAMEX with ISO 50001 Implementation and Certification

GRAMEX s.r.o. is a Czech company that has specialized in industrial sewing and the production of upholstered seats, primarily for means of transport, since 1991. In 2021, it decided to implement and certify an energy management system according to the ISO 50001 standard.

Thanks to historical energy consumption data in FLOWBOX, GRAMEX was able to easily:

- Monitor and analyze the energy intensity of operations
- Identify specific saving opportunities
- Manage individual technological measures using FLOWBOX EMOS tools

Ongoing monitoring allows the company to evaluate the effectiveness of implemented measures. For internal audits and reporting, data can be easily exported in a visualized format, which is also appreciated by auditors.

The system implementation also had a positive impact on employee comfort – intelligent building management improved the working environment.

> ***"ISO 50001 is primarily about measuring, evaluating, and taking follow-up actions that lead to savings. With FLOWBOX, we have all the tools to cover this. We don't need any external Excel sheets or manual data entry – everything is clearly available in one place, on a single screen."***
>
> **Jiří Pajer, Managing Director, GRAMEX.**

Why FLOWBOX EMOS for ISO 50001

Simplifies preparation and implementation
FLOWBOX EMOS automates data collection, records assets and consumption points, monitors indicators (EnPI), defines the baseline (EnB), and evaluates consumption based on real operational data.

Speeds up certification
All information, visualizations, and auditor-ready exports are available in one place, with no additional processing required.

Reduces system operating costs
Minimizes manual evaluations, spreadsheet work, emails, and unclear responsibilities.

Enables real improvements
Continuously uncovers new savings and evaluates the effectiveness of implemented measures.

Covers up to 80% of processes related to ISO 50001 maintenance.
Helps not only maintain the system but also to actively develop it.

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