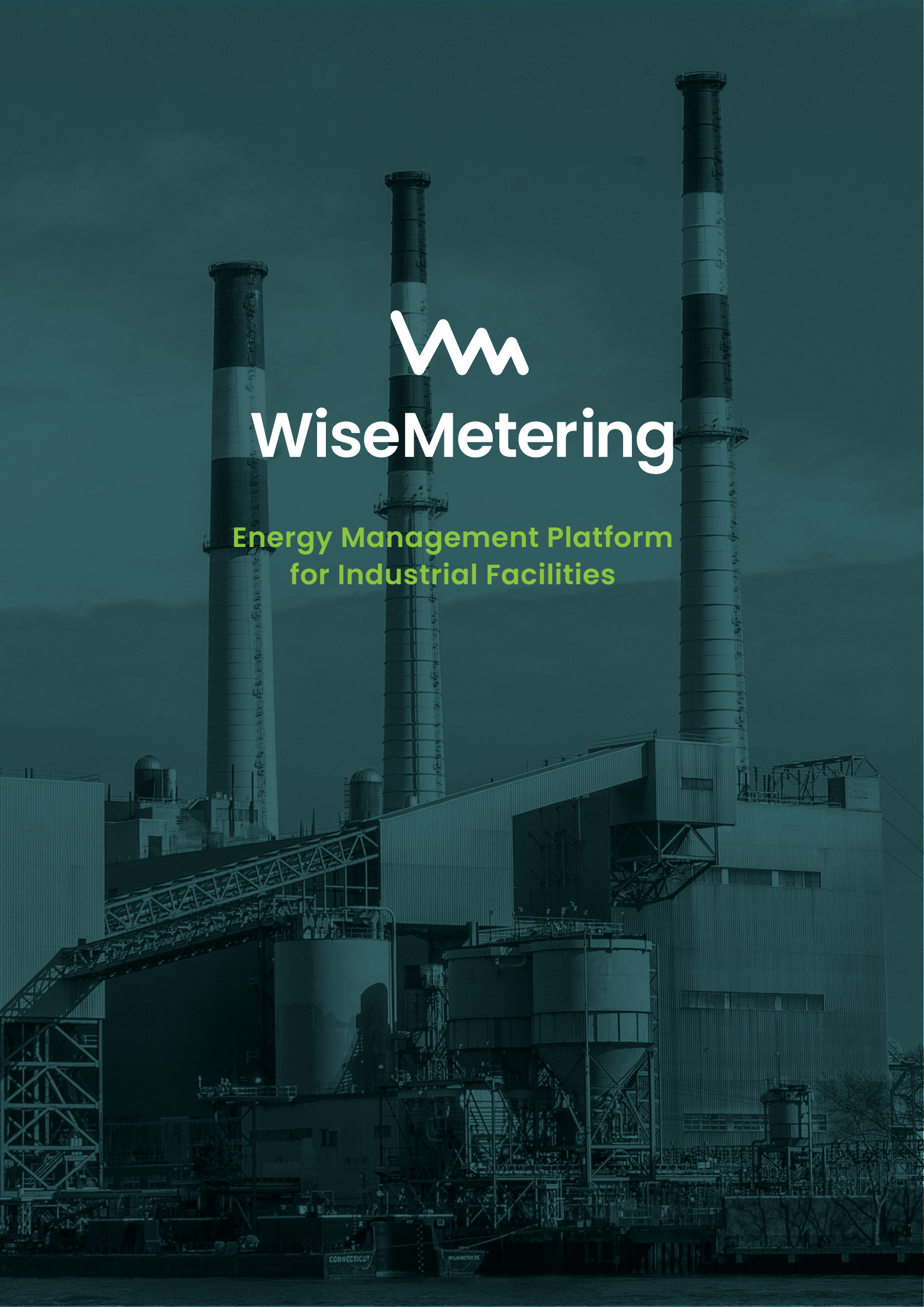


WiseMetering

Energy Management Platform for Industrial Facilities

FRAMEWORK

The impact of energy and water consumption on industrial facilities is huge, especially in terms of electricity consumption. Better information on consumption profiles and the implementation of energy efficiency initiatives enables industry owners to optimize operation, eliminate waste and cut operating costs.
These initiatives benefit not only the business owners but all of us for the good of future generations!

The WiseMetering approach to energy efficiency is based on optimizing operating conditions and eliminating waste.

GLOBAL IMPACT OF INDUSTRY

GLOBAL ELECTRICITY CONSUMPTION

SOURCE: Key World Energy Statistics 2021

GLOBAL NATURAL GAS CONSUMPTION

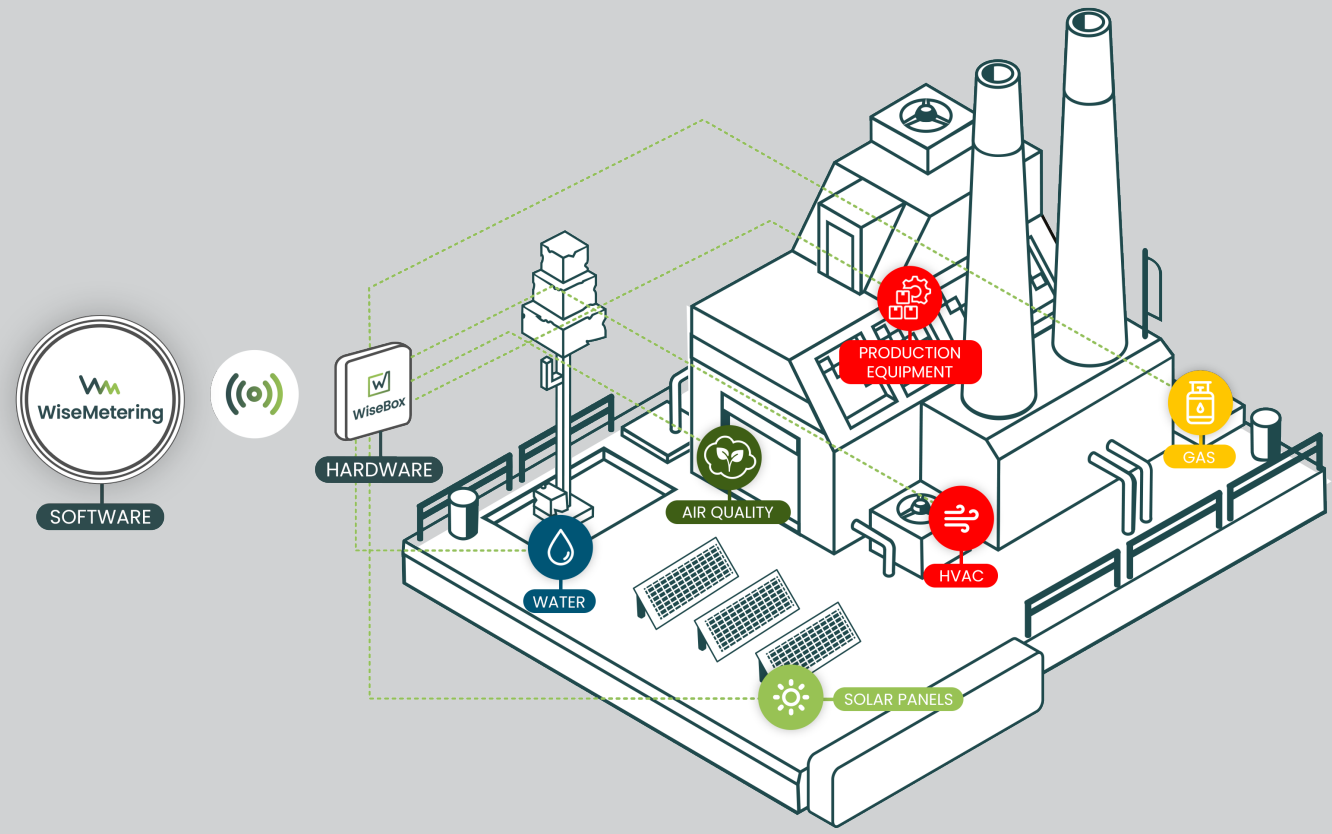
SOURCE: Key World Energy Statistics 2021

HOW DOES IT WORK?

WiseMetering provides monitoring of energy and water consumptions from the main consumers within an industrial facility. By using WiseMetering it is possible to gain good comprehension on consumption profiles and to implement the appropriate measures to optimize operations and achieve significant and ongoing savings.

In addition to the technology, WiseMetering includes consulting services supported through the software, which enable adjustments to obtain greater savings.

The WiseMetering platform is technologically supported in an application Software that, in turn, is supported locally in Hardware. The key Hardware components are a WiseBox and a network of Peripherals. This network allows local monitoring of equipment relevant to energy consumption, as well as the consumption of other utilities such as water, gas and heat. These two fundamental components of the Hardware - Wisebox and Peripherals - are parameterized using the WiseMetering Software.



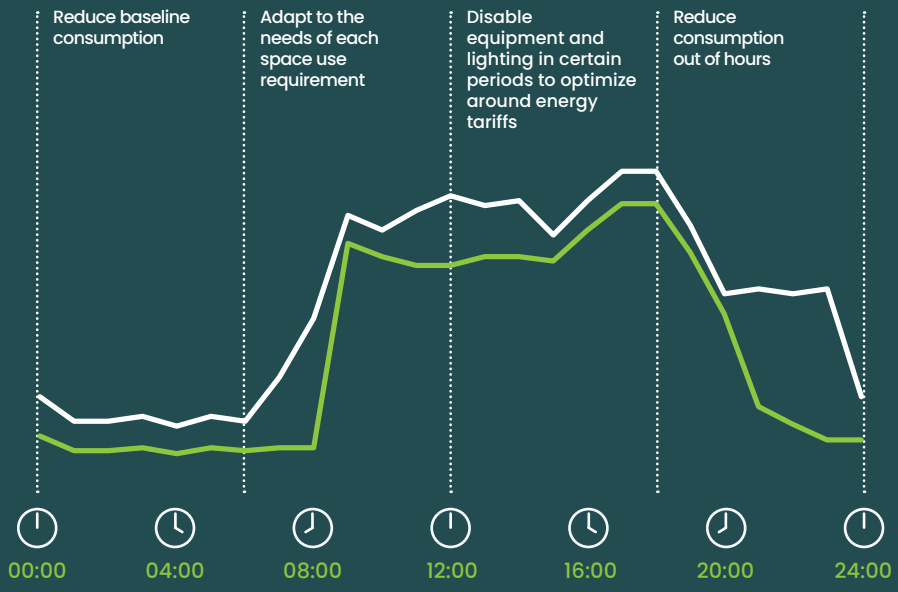
OBJECTIVE

The implementation of WiseMetering saves energy and reduces costs by optimizing the operating profiles of major utilities consumers.

EQUIPMENT

- Ancillary Equipment
- Interior Lighting
- Exterior Lighting
- Air Conditioning /HVAC
- Refrigeration

DAILY CYCLE



POTENTIAL SAVINGS

The potential savings result in better operation and the elimination of waste.

10% to 20%

BENEFITS

There are several benefits that come
from the implementation of WiseMetering.
Many of these benefits are easily measurable
and directly correspond to a reduced energy bill.
Other benefits, namely optimized operating conditions,
are more difficult to measure.

UP TO 10% SAVINGS
Reduction in cost and consumption.

ONGOING SAVINGS
For the long term, from a building life cycle perspective.

REMOTE AND CENTRAL SUPERVISION
Of corporate policies for the function and comfort of spaces.

REPORTING
Automatic report generation and delivery.

BENCHMARKING
Benchmarking between spaces according to performance indicators.

INVESTMENT SUPPORT
Technical support for new investments in energy efficiency.

INVOICE VALIDATION
Invoice validation through an independent accountant.

SUPPORT FOR OPERATION & MAINTENANCE ACTIVITIES
For the long term, from a building life cycle perspective.

AUTOMATIC COST ALLOCATION
Through periodic reports to departments, tenants and franchisees.

PERFORMANCE
Automated optimization of operation through the monitoring of consumers.

THE COMPONENTS OF WISEMETERING

WiseMetering has several components.
These are grouped into an Implementation Phase including hardware, installation and configuration, and an Operation Phase including software, maintenance and consulting.

SOFTWARE

The software component is fundamental to the platform concept. It is through the software that peripherals are configured, indicators are created, information is collected and reviewed, alarms are created, and operating programs are scheduled, among other relevant actions.

NO NEED FOR SERVERS

UPDATES AND UPGRADES INCLUDED

NO NEED FOR INITIAL LICENSING

**AVAILABLE ON ANY DEVICE
ANY TIME AND PLACE**

SIMPLE, CENTRALIZED, MULTI-SITE

WISEBOX INCLUDED

WISEBOX

The WiseBox is responsible for the interface between the Software component and the network peripherals installed locally.

4 I/O DIGITAL
(state measurement)

1 MODBUS LINE
1 MBUS LINE

4G COMMUNICATION

1 LINE 1-WIRE
(temperature measurement)

16 I/O ANALOG OR DIGITAL
(current, pulse and state measurement)

HARDWARE · PERIPHERALS

The WiseBox collects a wide range of information about the space through the use of sensors.

These sensors are conventional on the market.

ELECTRICITY METERS

WATER METERS

HEAT METERS

GAS METERS

TEMPERATURE PROBES

AIR QUALITY

INSTALLATION

The installation time depends on the quantity and dispersion of the measurement points.

The installation is performed according to the scope of each project and may or may not occur during site operating hours.

CONFIGURATION

The configuration process is critical to the implementation of WiseMetering, as it gives logic to all the data collected.

CHARACTERIZATION OF THE NETWORK OF INSTALLED PERIPHERALS

CREATION AND PARAMETERIZATION OF LARGE MEASUREMENTS

CREATION OF CALCULATIONS FROM THE DATA OBTAINED DIRECTLY FROM THE SENSORS

DEFINITION OF THE INFORMATION STRUCTURE

ASSOCIATION OF LARGE MEASUREMENTS TO THE DEFINED INFORMATION STRUCTURE

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