Remote energy monitoring and management

### Industry





## Monitoring is vital for efficient management

#### The industrial sector

is, by its nature, where most energy is consumed. Energy is now a key factor

in industrial company's competitiveness. Globally, industry represents more than 1/3 of the worldwide energy consumption, and in the EU and the UK markets that value reaches up to 70%.

In this sector, energy consumption will grow, during the next 25 years, at a rate of 2.5% annually, which means that industrial companies have the most technical potential for decreasing their ecological footprint. It is possible to reduce around 30% of energy costs and consequently  $\rm CO_2$  emissions, allowing a decrease of more than 10% in the energy consumption and greenhouse effect gas emissions at a worldwide level.

#### The answer is to increase energy efficiency

#### But what does it mean to be energy efficient?

- Save money in energy costs
- Reduce the impact on the environment
- Increase your company's ecological reputation



#### **Knowing**

when, where and how energy is spent is vital

to adopt the best corrective measures without compromising business. Analysing energy consumption and assigning each cost to the correct department and process, is an important step to achieve the defined energy efficiency objectives.

# Saving means consuming less energy to meet your clients' needs, using more efficient or high performance systems



#### Our Kisense software

is the most visible part of this system which has been designed to help you understand

where, when and how energy is spent and what it represents in terms of CO<sub>2</sub> emissions. The tools, resources and information available are extremely useful for you to incorporate energy efficiency measures both in the daily activities of your hotel as well as planning any larger investments.

#### **Optimising**

an energy system in the industrial sector is quite

different from commercial or residential sectors, since production processes have numerous variables that often change the characteristics of each company. These include adjustments in the volume and schedule of the production, and more wide ranging changes such as product development, during the lifetime of the industrial plant.

The efficient use of energy in the industrial sector is more related to operational practices and goes beyond the simple energy efficiency of the devices.

The maximum energy efficiency can only be obtained when all the devices operate in the most efficient manner, whilst keeping in consideration adequate maintenance for minimising malfunctions, downtime and maximising their lifetime.

Energy efficient components from industrial systems only reach their maximum potential when they are designed and operated correctly. The savings from the components represent 2% to 5%, but their integration into fully optimised systems can generate benefits from 20% to 30%. The investment payback of an optimised system can be less than 2 years.

#### **Monitoring**

alarms, event log and energy quality analysis are essential

for the optimal performance of each industry and allow, by detecting anomalies in real-time, isolate the origin of each problem, avoiding its propagation and ensuring a swift return to normal operation.

Providing detailed consumption data in real time, and the analysis of the available saving opportunities, allows energy managers to have insights with greater precision about all energy costs. This data gives them a remarkable power when negotiating energy supply contracts with their suppliers.



#### Data explorer

Analyse your energy consumption and act quickly. Know when, how and where energy is spent and find out which devices consume more energy.



#### **Alarms**

Define when and how you want to **be alerted** for excessive consumption that occur outside scheduled time and/or defined objectives.



#### **Events**

**Identify the key-moments** of your company's energy consumption.

Power Plants in Europe.





#### **Savings**

**Define saving targets** and permanently monitor their evolution. Compare the obtained savings with the implemented measures and perform a ROI forecast of these measures.



#### Control

Remotely control devices and your company's energy consumption areas, schedule working periods and parameters.



#### Reports

Obtain customisable regular reports as well as specific reports for the different areas of your company. Closely monitor your company's energy consumption.

is an innovative, market leader in the design VPS and operation of dynamic connected platforms, providing real-time granular data to consumers, network operators and utilities. Minimising consumption by increasing energy efficiency, optimising the time of use and

realising the monetisation of loads. With over 10 years of experience, VPS has a proven team of experts with a strong track record of providing significant benefits to all stakeholders in the modern energy network. Our

aim is to become the largest builder and operator of Virtual



#### Virtual Power Solutions Ltd.

Unit 12 | 10 Acklam Road | Notting Hill London W10 50Z United Kingdom

#### **Contacts:**

sales@vps.energy +44 (0) 203 179 2100

www.vps.energy



