Remote energy monitoring and management

# Schools







energy efficiency in schools is becoming an increasingly important task, both from an economic and ecological perspective, as well as from

the educational point of view. There is a demand for increased cost effectiveness since schools must deal with reduced financial resources and tight budgets. All schools, universities and other education institutions are pushed to make the most of their resources, whilst providing a solid education for students.

Being energy efficient saves money, so it is an excellent way to release funds for improving the quality of teaching. It also allows schools to be in the forefront of the fight against climate change, an increasingly important feature for their reputation. Students, teachers, parents and all the remaining school elements will become more and more aware for this reality and will begin to adopt efficient behaviours in all other aspects of life.

Efficient practices help controlling and managing levels of lighting, temperature and air quality to the needs of the students.



It is vital that the entire school gets involved

Energy savings add up when the entire educational establishment joins efforts together. Involving all school community ensures that saving opportunities are implemented at every level. It also allows everyone to

be equipped with practical skills, tools and knowledge that they can use daily, both in and out of school.

Schools with effective conservation programs have been able to reduce their energy bill by 20% or more. Furthermore, actions taken to become energy efficient provide an excellent opportunity for practical learning and real-life application for students, as the science behind it is a great opportunity for targeted classes.

There are plenty of opportunities for optimising your energy consumption!

## Major costs enhance great savings

The increasing energy consumption and the substantial rise of energy costs have led energy efficiency to be an educational establishment finance officers' constant concern. It is essential to reduce energy needs and save in operating costs without decreasing quality of education and comfort, since the optimal environment is crucial for learning.

In many cases, implementing some simple energy saving measures actually improves conditions, as well as it saves money. Lighting and HVAC altogether represent about 70% of all the energy used by school centres. This means millions of euros are spent every year to maintain the correct temperature and to light educational establishments. In fact, energy costs are a significant financial burden - the third after the payroll and facilities management, and more than the amount invested in computers and books combined.





There are no two identical schools when it comes to energy consumption.

So, it is important to know the set of variables that differ from school to school:

- Type
- **▶** Age
- Conservation state
- Buildings' area and location
- ▶ Number and type of devices the school has
- Lighting
- Heating and cooling systems
- ▶ Educational level
- Operating schedule

### Kisense is your answer!

Our model has the advantage that it can be applied to all education levels - public and

private schools, universities, vocational training schools and all other training institutes or centres. Whilst there are local differences, all these institutions are enclosed into a group of buildings which have intensive energy consumption, allowing significant energy savings, and consequently reducing costs drastically.

Our Kisense system allows each school to understand which energy savings can be immediate, which require small investments and which have the quickest payback. After the energy audit is finished it is easy to know where, how and when energy is being used and which actions should be taken to ensure the intended savings. For this we rely on our Energy Manager's team devoted to attain the desired results.



#### **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.





#### **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.

**VPS** 

is an innovative, market leader in the design 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 Power Plants in Europe.

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