enistic

Energy Guardian

The UK's Leading Energy Saving & Management Solution

Benefits of Energy Guardian

• Decrease your energy spend by 21%

• Seamlessly integrates into your existing infrastructure to monitor all areas of your energy consumption and generation

• 24/7 online access to your real-time energy profile

• Receive regular remote energy coaching sessions to help eliminate waste from your facilities

• Installed with zero downtime or disruption to your organisation

• Trusted by over 200 of the UK's leading companies and public sector organisations

• As we manufacture our own hardware and software, Enistic customers benefit from our unrivalled solution expertise and flexibility of supply

The 8 Modules of Energy Guardian

Incoming Electrical Feed

Using an Enistic Fiscal Meter to monitor the incoming feed, Energy Guardian gives an accurate figure of the amount and rate at which electricity is consumed within a site. Your dedicated Energy Coach is able to use this information to ensure that clients are on the best possible tariff and make low carbon recommendations as well as using the overall consumption figure for bill validation purposes.

Micro Generation

Understanding the actual value and payback rate of micro-generation schemes is critical for many of our customers. Our equipment provides our clients not only with real-time access to the amount of energy that their wind turbines or solar panels are generating, but also an accurate figure for the amount of energy being fed back to the distribution networks.

Water & Gas

Pulse counters are installed at sub-metering points across a client's site to help organisations understand exactly where water and gas is consumed. Our Energy Coaches then add value to this by providing behavioural and infrastructural recommendations to improve the management of water and gas consumption within the organisation.

Air Conditioning

We monitor individual air conditioning units on the distribution board. Energy Guardian provides users with a graphical representation of the amount of energy consumed by each air conditioning unit. Our Energy Coaches interpret this information to identify anomalies and make behavioural or infrastructural recommendations to ensure that your air conditioning (or HVAC) units operate as efficiently as possible.

Central IT

By monitoring consumption across an organisation's server or other IT infrastructure, our Energy Coaches will highlight discrepancies between the amounts of energy consumed by servers and then make recommendations to help them run more efficiently, eliminating energy wastage.

Lighting

By collecting granular information about the amount of energy used by lighting circuits across your facilities, our Energy Coaches will not only highlight if and when you are lighting an empty office, but also assess your lighting cost and make energy-saving recommendations of alternatives such as LED lighting solutions.
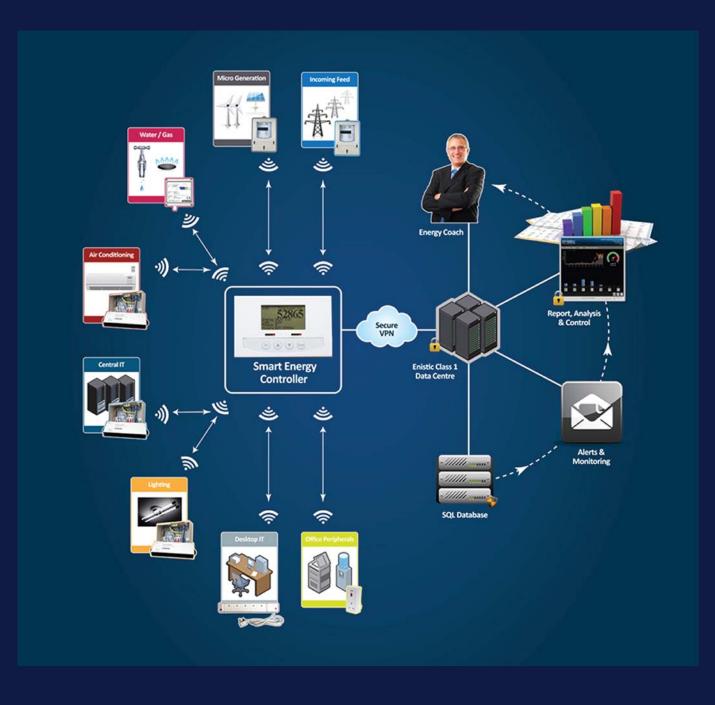
Desktop IT

Using 5-Way Smart Meters, organisations can obtain highly accurate information about the amount of electricity consumed by entire departments and even individual users. This information can then be used to identify high power consumers and inform employees about simple-energy saving steps that they can take. Should a company wish, Active Energy Management (AEM) profiles can be established to ensure that work stations and peripheral devices are automatically powered off at the end of each working day.

Office Peripherals

By using a Single Smart Metering Socket, Energy Guardian users can gain an accurate understanding of the amount of energy being consumed by shared resources such as water coolers, networked printers or vending machines. Your Energy Coach can then identify energy-saving opportunities and implement AEM functions, to ensure that appliances with a standby function are automatically powered down at the end of each working day to help decrease the amount of energy being consumed unnecessarily outside of office hours.

An overview of Energy Guardian

How Does Energy Guardian Work?

Energy Guardian works through the installation of a range of smart meters which capture information about a site's energy consumption and generation. All of our smart meters and pulse counters communicate using the Zigbee Wireless Protocol to relay captured data back to the Smart Energy Controller.   Once the data has passed through a secure VPN to our Enistic Class 1 Data Centre, Energy Manager Online produces reports, provides analysis and enables users of the system to control and automate the management of certain metered appliances

The Energy Coaching Process

Our Energy Coach works with you and your team over the agreed period to monitor and plan your energy savings. Our research from live installations shows that this process can make up to 40 % savings- on average our clients have saved an average of 21% on their energy spend.

The Energy Guardian Life Cycle

1. Order Confirmation

Once your Energy Guardian order has been confirmed, an Enistic project manager will contact you to begin planning the delivery of your Energy Guardian solution. During this process we will arrange to complete the on-site survey and coordinate with all the stakeholders involved to construct a project schedule.

2. Site Survey

Site Surveys are completed prior to any installation of an Energy Guardian solution. During the site survey we will determine the total number of metering points to be monitored and test the quality of communications between your site and our data centre. The site survey is also our opportunity to identify any areas for special consideration in order to complete your installation successfully.

3. Installation

Energy Guardian can be installed without incurring any downtime of electrical supply. The objective of the installation day is to install and configure Energy Guardian so that it is ready to collect and send data to our data centre. On the day of the installation, our commissioning engineer will arrive on site with everything that is required to install Energy Guardian.

Our commissioning engineer is on hand to provide support to your on-site electrician during the installation and ensure that work is carried out in accordance with our quality standards and on the agreed metering points.

4. Configuration

Following the installation of Energy Guardian we will provide remote support, helping you to establish logical reporting groups. This ensures that the reports collected are relevant and understandable, relating directly back into your local facility.

5. Establishing Baseline Readings

Before any energy-saving steps can be taken it is essential that baseline figures are established. During this phase, no behavioural or infrastructural changes will be implemented. This process normally takes a month. At the end of the month, your energy coaching sessions will begin and you will be provided with remote support, giving you a detailed breakdown of your baseline values.

6. Energy Coaching

Throughout the duration of the energy monitoring cycle our Energy Coaches will review each of the 8 modules that are integral to Energy Guardian to identify and eliminate energy wastage from your organisation.

7. Project Completion and Renewals

At the end of the agreed contractual period, your Enistic Energy Coach will provide you with a complete report documenting the savings that have been achieved across the agreed monitoring points and confirm the total reduction in energy consumption. You are then presented with a series of options:

I. The project agreement can be extended, enabling you to focus on the continuous improvement of your energy management.

II. A new project can be designed and the equipment reinstalled across a new set of metering points.

III. The equipment can be left in place and users provided with a local version of the software to monitor the project locally in a self sufficient manner.

IV. If the project has reached a natural conclusion, the equipment can be removed with both parties shaking hands and parting ways.

Energy Guardian: a simple solution that just works.

What is Energy Guardian?

Energy Guardian is a simple, full-service solution that can be installed with zero downtime and provides organisations with an average 21% reduction on their energy spend. Energy Guardian will give you a breakdown of where and when your site is using energy by looking at the following 8 modules: incoming feed, micro generation, air conditioning, lighting, desktop IT, central IT systems, office peripherals, gas & water. Our qualified Energy Coaches will work with your organisation to make infrastructural and behavioural recommendations to help you achieve your energy-saving targets.

Benefits of Energy Guardian

• Decrease your energy spend by an average of 21%
• Short return on investment - Energy Guardian typically pays for itself within 18 months
• Installed with zero downtime or disruption to your organisation
• Our unique Energy Coaching Programme is designed to ensure that you make savings without any hassle
• Energy Guardian is a tried and tested solution used by over 200 of the UK's leading private and public sector organisations
• 24/7 online access to your real-time energy profile
• Fully scalable solution that can be extended in line with the development and growth of your organisation
• For the ultimate in flexibility you can buy, lease or rent Energy Guardian
• The reports provided by Energy Guardian can be used to demonstrate your commitment to carbon reduction

Energy Manager Online Dashboard

Smart Meters

Our range of smart meters, which includes fiscal meters, distribution board smart meters, 5 way & single smart sockets and pulse counters, means that we are able to offer a complete solution for all areas of your energy portfolio.

A Complete Service

There is no need for you to set aside hours of staff time to deal with your site's energy management issues - we will do this work for you and put you in control of your energy. The Energy Manager software can be used to generate a range PDF reports, at the touch of a button, and can also help you to fulfil the reporting requirements of the CRC Energy Efficiency scheme.

No Hidden Extras

To encourage customers to maximise the return on their investment, we don't bill you with hidden extras throughout the duration of the service. The price you see is the price you pay.

Frequently Asked Questions

What does Energy Guardian monitor?

Energy Guardian is a complete solution that monitors your electrical incoming feed, circuits on your distribution board, mains powered devices, gas and water consumption as well as the amount of energy generated by renewable sources at your site.

Who is Energy Guardian designed for?

Energy Guardian is an ideal solution for organisations with an energy spend of over £20,000. Typically a company with an energy spend of this size could expect to see a ROI of approximately 18 months and achieve savings of 20%.

How does the system work?

Energy Guardian uses industry standard Zigbee Wireless Pro technology to relay information between metering points and back to our Smart Energy Controller. This data is then relayed via a secure internet connection to our Class 1 Data Centre where Energy Manager Online (our reporting software) is hosted.

Is there any software to install?

No, the software used by Energy Guardian is all delivered via the internet and hosted in our Class 1 Data Centre. Once an account has been established, users are able to access their account from any internet enabled PC or smart phone.

Will it take up much of my time?

No, Energy Guardian includes a remote Energy Coaching service. Our Energy Coaches take on responsibility for interpreting your data and delivering recommendations to you. If implemented, these changes will save you money and energy.

What kind of reporting can I expect as part of the Energy Coaching Programme?

This will depend on the size and nature of your organisation. The reports will break down your energy consumption into agreed groups so that areas within your organisation where savings can be achieved are readily identifiable. Typical reports include:
• reports on energy usage by different departments
• assessments of the energy efficiency of specific equipment
• overnight / out of hours analysis, so that you can see where energy is wasted whilst your facility is not in use.

Solutions for Key Sectors

	Smart Metering	Energy Guardian 25, 50 & 100	Energy Guardian 250+
Sector	All	Education	Large Businesses
Hardware	Per Item	All Inclusive	All Inclusive
Software	Energy Manager Online	Energy Manager Online + Local Desktop Software	Energy Manager Online + Local Desktop Software
Training	Online	Online + Offline	Online, Offline + Onsite
Support	Email, Telephone, Help Engine	Email, Telephone, Help Engine + Energy Coach	Email, Telephone, Help Engine, Energy Coach + Onsite