

Services & Projects
Energy Consultancy





Why have Schneider Electric adopted the Energy Efficiency attitude?

Energy Efficiency is the quickest, cheapest and cleanest way to reduce our energy consumption and achieve greenhouse gas emission reduction to meet Kyoto targets.

It's also a fast growing demand on the part of everyone in the market. Schneider Electric has made the commitment to be your energy manager, your energy expert and your green partner!

Ambitious energy efficiency actions are feasible NOW: in most existing installations, we can target up to 30% energy savings using existing offers and technologies through our step approach to energy efficiency.

Make the most of your energy™

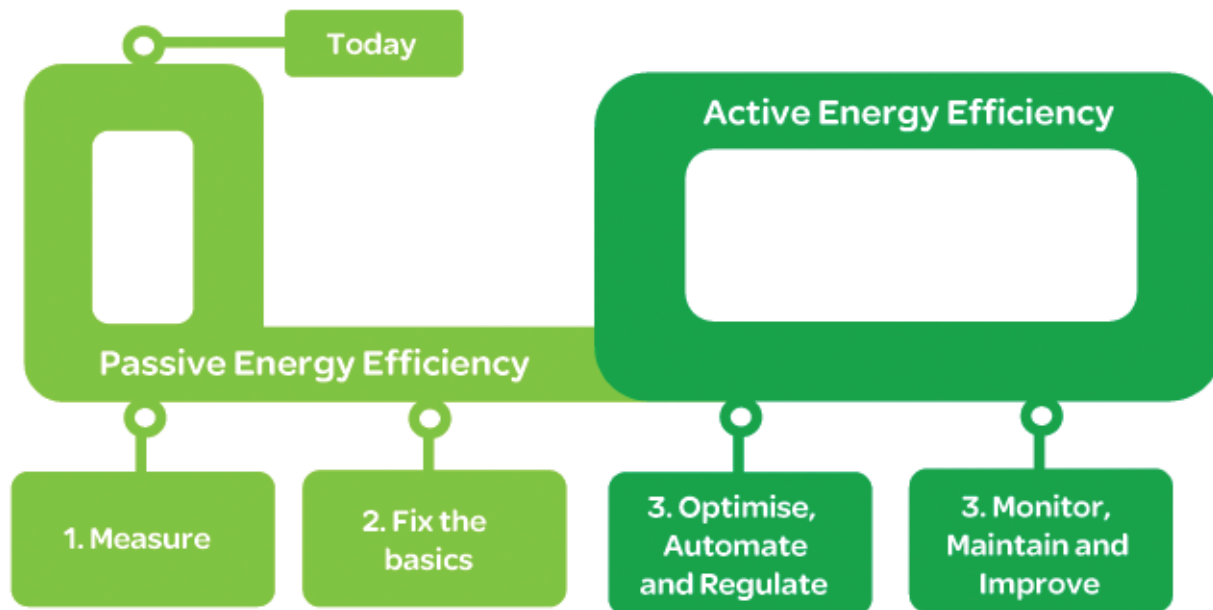


Energy efficient lifecycle solutions

Schneider Electric has a comprehensive offer for residential, building, energy and infrastructure markets with energy efficiency solutions that help you turn energy savings into growth!

Save more than the planet. Make the most of your energy™

The energy efficiency cycle



The energy efficiency cycle helps you to target successful energy efficiency projects:

- > Measure and audit energy use to identify potential savings areas
- > Install low consumption equipment and systems
- > Improve long term use by automating your technology, whilst maintaining high equipment performance.
- > Continuously analyse energy savings through maintenance, supervision and monitoring.

Schneider Electric has made the commitment to be your energy manager, your energy expert and your green partner.



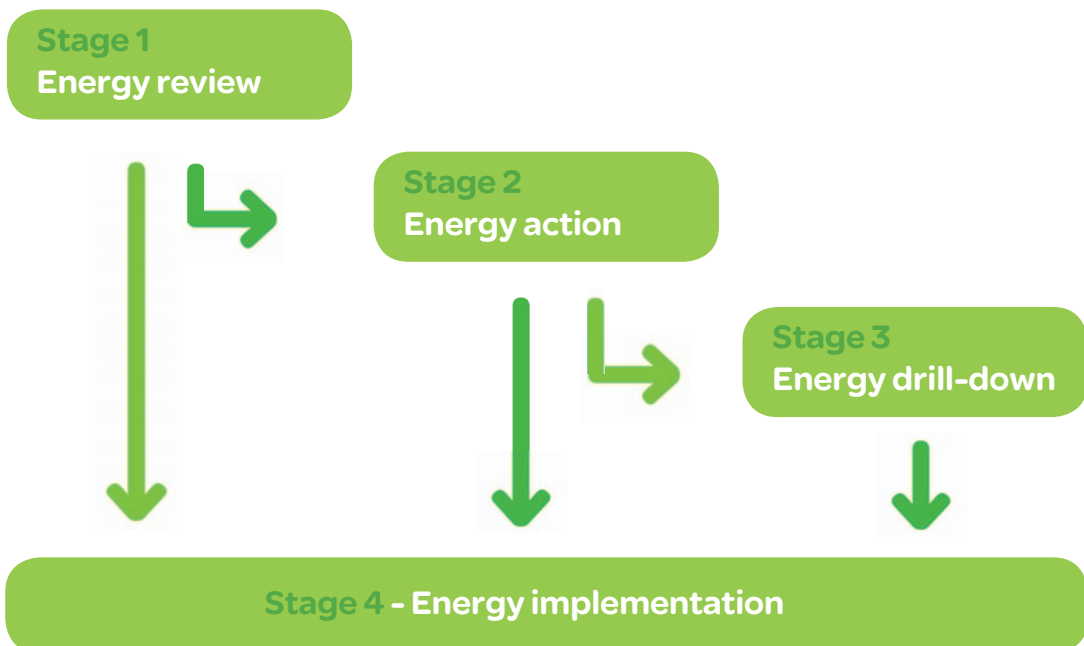
Measure

Energy efficiency is a competitive advantage in any market and an initial energy audit is the start of gaining the advantage for your company.

At Schneider Electric, our Energy Consultants bring practical knowledge and innovation to your business. These solutions have been built into our new step approach for your organisation to audit and measure its energy more effectively

The 3 stages prior to implementation are all impartial energy audits advising you on the best course of action for your organisation. You can join, move to, or leave at any step that best suits your organisation.

Stage 4 is initiated utilising Schneider Electric energy management solutions





Stage 1 - Energy Review

- > Includes walk-around and analysis - generated over 1 working day
- > Delivered by one of our trained Schneider Electric Solutions Engineers
- > Provides a snapshot of your energy usage, including benchmark and consumption profiling
- > Benchmarks your energy usage against businesses of the same size and industry (CIBSE AM05 calculations)
- > Receive a report and presentation on findings discovered on your site / process

Stage 2 - Energy Action

- > Delivered by one of our experienced Energy Consultants
- > Provides a synthesis of process, department, or site energy usage
- > Benchmarks your energy usage against businesses of the same size and industry (CIBSE AM05 calculations)
- > Assesses your current approach towards energy management
- > Receive a report and presentation on recommended actions with return on investment calculations

Stage 3 - Energy Drill-down

- > Delivered by one of our experienced Energy Consultants
- > Specialised in-depth energy analysis of your organisation, process or department.
- > Investigate and resolve energy usage anomalies, or legislation non-compliance issues
- > Return on investment calculations and costs highlighted
- > Benchmarks your energy usage against businesses of the same size and industry (CIBSE AM05 calculations)
- > Assesses your current approach towards energy management
- > Half hourly meter reading analysis



Stage 4 - Energy Implementation

- > Schneider Electric offers one of the most comprehensive range of energy efficient products and services in the UK today. From Variable Speed Drives to lighting control and from Power Factor Correction to monitoring and targeting solutions
- > Delivered by Schneider Electric's Solutions' delivery team*
- > Schneider Electric will ensure that your preferred energy efficiency solution is fully installed and commissioned, giving you peace of mind that savings will be realised at the earliest opportunity

*Or Schneider Electric approved partner.





Fix the basics

Power Factor Correction

Power Factor Correction solutions can reduce the kVA demand to lower your energy bills and reduce carbon emissions in networks with varying levels of harmonics. In addition active harmonic filters can reduce these harmful system harmonics and also provide Power Factor Correction. We have engineers covering the UK that can provide on-site technical service and design, advising on a number of power quality solutions that will improve your network efficiency and reliability.

Control & command

One of the simplest ways of reducing electricity consumption is to use equipment or lighting more wisely. In its simplest form, manually switching equipment off is one way to achieve this, however guesswork and human intervention can be taken out of the equation with the implementation of simple control systems. Schneider Electric offer a broad range of control and command products that facilitate automated switching of loads based upon the individual requirements.

Optimise, automate and regulate

Energy Saving Lamps

The most recent additions to the Building Regulations Part L demand that new domestic lighting installations must include low energy lighting. Fluorescent and compact fluorescent lamps meet this requirement and offer operational energy savings of up to 80% over a conventional incandescent lamp. Schneider Electric is at the forefront of these developments and already offers a 50,000 hour rated LED lamp which consumes only 1W in operation.

Clipsal C-Bus

Clipsal C-Bus is an intelligent lighting control system designed to meet the needs of any modern commercial or industrial lighting scheme, with maximum energy efficiency, flexibility of installation, and future proofing. The system is fully programmable to minimise energy use by employing time schedule switching, occupancy switching, dynamic light level compensation and scene setting.

Variable Speed Drives

In a conventional pumping or ventilation installation, the electric motor is directly supplied by the line supply and runs at its rated speed. With an Altivar variable speed drive installed in line with the motor, there is no need for a mechanical damper and flow variation is achieved directly with Altivar variable speed drives. Testing has proved that where Altivar variable speed drives are applied to centrifugal pumps, fans or rotary compressors, energy savings of up to 50% are regularly achieved, for a speed reduction of only 20%.



Monitor, maintain & improve

Standard metered distribution equipment

The requirement of Part L of the Building Regulations to account for 90% of energy use by end use category has led in recent years to sub-metering of lighting and power circuits being the accepted norm.

Schneider Electric have developed standard solutions to this requirement with simplicity in mind for the designer, ease of installation for the contractor, and efficient operation for the end user.

Schneider Electric offer a standard range single and three phase MCB distribution boards with integrated metering. For compliance with Part L a split metering offer has been developed to allow separate metering of lighting and power.



> Three phase MCB distribution board



> Powerlogic PM 700

Do you understand your energy usage?

Are you getting the best possible rates for your utilities?

Are you monitoring your power usage to better control demand charges?

Is your existing power equipment operating at maximum efficiency?

If you are not monitoring your usage, you probably cannot answer these questions, so the opportunities to reduce your costs and carbon footprint, whilst increasing efficiency of both energy and production, and improving profit margins are passing you by.

The Schneider Electric range of monitoring equipment and software is recognised by the Government led Enhanced Capital Allowance (ECA) scheme and appears on the Energy Technology List (ETL) for automatic monitoring and Targeting (aM&T)

We're all working harder these days to reduce costs and increase productivity. However it takes the right tools and technology to make effective decisions to reduce utility costs and improve your facility's efficiency. From Powerview to Energy Remote Manager (ERM) through to Enterprise Energy Manager (EEM) Schneider Electric has the most comprehensive suite of monitoring & targeting systems for all utilities (electricity, water, air, gas and steam) making it easy to obtain the information you need when you need it, to make those important cost saving decisions.

Schneider Electric can also help you understand and comply with the latest in energy legislation

CRC Energy Efficiency scheme

The Carbon Reduction Commitment is one of the tools implemented by the Department of Energy and Climate Change (DECC) that will help the reduce carbon emissions in the UK.

CRC addresses these issues in two main ways, charging organisations on the carbon emissions that result from their energy use and putting the environmental performance of organisations in the public eye, by publishing the performance of all those covered by the scheme in a league table.

The CRC affects most organisations with a half hourly electricity consumption of over 6,000 MWh per annum (circa £500k). At the start of each year, organisations affected are required to purchase allowances of carbon that they expect to emit over the following year. At the end of each year, organisations covered will be placed in the CRC league table. Carbon allowances will then be recycled based on ranking within the league table. Organisations with poor environmental performance will be penalised, whilst those with good performance will be rewarded.

How can Schneider Electric help?

The cost of carbon allowances for the period 2010 – 2013 will make up approximately 8% - 10% of the annual energy bill. Therefore, by implementing energy efficiency measures and minimising carbon emissions, organisations can take advantage of significant financial benefits.

Schneider Electric offers a complete solution, spanning from an initial energy survey to assess energy efficiency at your site, right up to a project management service. We are committed to preparing you for the CRC and we can improve performance at your organisation, avoid the extra costs and instead take advantage of the financial gains that will result.

Display Energy Certificates (DEC)

Schneider Electric can help you to achieve compliance to Article 7 of the Energy Performance of Buildings Directive; requiring the provision of Display Energy Certificates (DEC's) for public buildings >1000m².

Regardless of the number of buildings that require certification we will provide a complete service, gathering and processing all information, producing accredited certification and advisory reports. We will contact the relevant departments in your organisation to gather data, surveying individual sites where required.

We will also lodge certification with the central register on your behalf and provide a reminder service when your certificate is due for renewal.



Make revenue with Demand Response

Demand Response provides revenue opportunities for energy end-users. By enrolling in our Schneider Electric programmes, participants agree to reduce their electricity consumption in response to peak system demand, grid emergencies or peak wholesale prices, thereby contributing to grid stability and lower market prices. Demand response can be a powerful tool in a company's overall energy management strategy. By participating in demand response programs, companies will earn significant revenue which they can be used to further invest in energy saving opportunities

Carbon Trust - Interest free loans

With Carbon Trust Accreditation, surveys carried out by a Schneider Electric Consultant can receive government support. Funding is subject to eligibility and availability, but if your turnover is less than £50M per year and you haven't had funding in the past three years, assistance may be available.

**> For more information call 0870 608 8 608
or visit www.schneider-electric.co.uk**

Nationwide support on one number -
call the Customer Information Centre on

0870 608 8 608

Fax 0870 608 8 606

Schneider Electric's local support

Schneider Electric is committed to supporting its customers at every stage of a project. Our 180 sales engineers, the largest dedicated sales force in the UK electrical industry, operate from 4 customer support centres.

Our sales engineers are skilled at assessing individual requirements and combined with the expert support of our product specialists, will develop the most effective and economical answer taking relevant regulations and standards fully into account.

To access the expertise of the Schneider Electric group, please call 0870 608 8 608. Each customer support centre includes facilities for demonstrations and training, and presentation rooms fully equipped with audio visual and video, providing excellent meeting facilities.

Merlin Gerin

Merlin Gerin is a world leader in the manufacture and supply of high, medium and low voltage products for the distribution, protection, control and management of electrical systems and is focused on the needs of both the commercial and industrial sectors. The newly launched VDI Network Solutions offer provides flexible, configurable ethernet systems for all communication needs.

Square D

Square D is a total quality organisation and its business is to put electricity to work productively and effectively, protecting people, buildings and equipment. Its low voltage electrical distribution equipment, systems and services are used extensively in residential and commercial applications.

Telemecanique

Telemecanique is a UK market leader and world expert in automation and control. It provides complete solutions, with its range of components, Modicon range of high technology programmable controllers (PLCs), multiple fieldbus and ethernet communication networks, HMI, motion control systems, variable speed drives and communications software. In addition, it offers power distribution through prefabricated busbar trunking.

Local customer support centres

Scotland
Schneider Electric Ltd
Suites 1-6, Technology Building
James Watt Avenue
Scottish Enterprise Technology Park
East Kilbride
Glasgow G75 0QD

South West
Schneider Electric Ltd
PO Box 41
Langley Road
Chippenham
Wiltshire SN15 1JJ

North West
Schneider Electric Ltd
First Floor
Market House
Church Street
Wilmslow
Cheshire SK9 1AY

Ireland
Schneider Electric Ltd
Head office, Block a
Maynooth Business Campus
Maynooth, Co. Kildare
Tel: (01) 601 2200
Fax: (01) 601 2201
www.schneider-electric.ie

Product showrooms

Industrial systems and solutions showroom

Schneider Electric Ltd, University of Warwick Science Park, Sir William Lyons Road, Coventry CV4 7EZ

Building systems and solutions showroom

Schneider Electric Ltd, Stafford Park 5, Telford, Shropshire TF3 3BL

Energy and Infrastructure systems and solutions showroom

Schneider Electric Ltd, 123 Jack Lane, Hunslet, Leeds LS10 1BS

