

About Us



Welcome to the exciting and sustainable World of Marlec Engineering

You may not be aware of our name but you will have certainly seen our products and solutions operating quietly and effectively while going about your everyday life.

Products that have not only kept people safe but also helped them to live and work successfully in the remotest of locations both in the UK and right around the globe.

Our product applications can literally be; life giving, life expanding, life changing as well as helping us enjoy it to the full - all of which has helped to put us right at the very forefront of 'clean energy' developments.



The main areas we serve are:

Leisure

Round the world and coastal cruising sailors can charge batteries on board keeping navigation lights, computers, inverters, cabin lighting, pumps, etc. running without the need to run the engine for battery charging.

Caravanners and Motor Home (RV) enthusiasts can stay in one location for extended periods without noisy and costly generators running for lighting, TV's etc.

Holiday Home owners can have power for lighting, TV, computers, inverters for mains equipment such as microwave ovens, telephone chargers etc.

Community

Safe, sound and lighting the way

Our products can regularly be seen in the community, often associated with safety. Rutland Windchargers and solar panels work in harmony to provide year round power for roadside safety signs such as "Slow Down" and sharp bend indicators. As many of these locations are far from the grid our renewable energy systems provide a cost effective solution, saving local authorities thousands of pounds whilst improving road safety.

Green Columns – these are our own manufactured products that provide amenity lighting at sites where the grid is not readily available. Green Columns avoid the costly installation of mains power cables as well as the on-going power costs.



Professional

Telecommunications, broadband and TV networks can be extended to the remotest of areas at minimal cost with the use of our windchargers and solar panels. No more costly grid connections!



Monitoring and datalogging of information at isolated sites for water companies and other utilities can now be considered cost effectively. Add a telemetry link and reduce costly site visits! Navigational installations, on and offshore, and oil platforms can have a reliable, independent power source for essential lighting and telemetry.

Security systems at remote locations, e.g. airfields, storage facilities, etc. can be operated from a small and inexpensive renewable energy system.

Aquaculture and agriculture professionals can benefit from independent power for feeding systems, security e.g. electric fencing and lighting, pest control and small power tools in farm buildings

Developing Countries

Rural clinics either permanently or temporarily sited can have power using our Rutland Windchargers and/or solar panels for vaccine refrigeration and lighting.

Rural schools and missions benefit from lighting and power for TV's, videos and overhead projectors.

Rural electrification programmes operated by government, aid agencies and NGO's can establish low cost battery charging stations in off grid villages so that groups of rural families benefit from lighting, TV and water pumping.



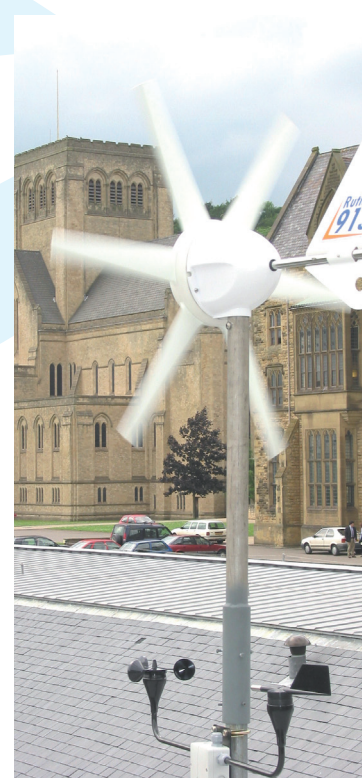
Emergency relief aid organisations can speedily and simply establish power sources for lighting, refrigeration and telecommunications.

Community water supplies can be established in remote areas using our wind and solar systems which are portable, efficient and easy to install.

Education

Schools and colleges find the range of our Green Power Ed kits invaluable as a practical and fun educational tool. Aspects of Key Stages 1, 2, 3 and 4 in Science and ICT in education also find the Green Power Ed a useful tool. For example: in the attainment target Scientific Enquiry "recording and presenting data" the Graduate Power Ed kit can be used to datalog wind speed and wind power generation, similarly so with solar power enabling comparisons to be made.

At primary level the requirement for "Enquiry in environmental and technological contexts" can also be practically illustrated.



If you would like to know more about the exciting world of Marlec please visit :

www.marlec.co.uk

Call us on: +44 (0) 1536 201588
if you have any further questions.

Off Grid

Off Grid or off the beaten track, Marlec can always put power at your fingertips

Wind Power...

...introducing the renowned Rutland Windchargers

Providing power for marine and land based applications, whether you're on the move or at a permanent location - Rutland Windchargers deliver power from the gentlest of breezes and provide living proof that not all wind turbines are created equal.



10 reasons why the Rutland range is unequalled and proves to be so popular:

1. Marlec was the first wind generator manufacturer to design its aerofoil blades and generator specifically as a wind turbine to maximise power conversion.
2. We developed our stator windings without an iron core for low friction so a Rutland offers the lowest wind speed start up by far of any design.
3. Our aerodynamically efficient and finely balanced blades operate smoothly and almost silently in the wind so you won't be disturbed whether you are on board or walking in a park.
4. Our designs are based around a fixed shaft reducing the number of rotating parts and the need for generator brushes, delivering greater reliability in service.

5. The built-in slipping and low wear brushes give the windchargers complete 360° free rotation on the mounting pole for power transmission whilst avoiding twisted cables.

6. Our generator design incorporates just two single magnets moulded into glass fibre avoiding the use of multiple magnets glued into position.

7. These features create a high inertia generator whose flywheel effect generates smooth, continuous power between gusts when other wind turbines have lost the power in the wind the Rutland keeps on generating power.

8. All our designs are tested in real wind conditions and performance monitored and datalogged pre and post market release. (Many companies quote outputs based on fixed wind speeds measured from vehicle top testing).

9. We test and record results of every generator built.

10. And last but not least, Marlec operates under the international standard of ISO9001, the first small wind turbine manufacturer worldwide to achieve this!



©haveblue.com

Why not join the tens of thousands of Rutland Windcharger users worldwide and generate your own free source of electricity

call us on: +44 (0) 1536 201588 today!

www.marlec.co.uk

Off Grid



Off Grid or off the beaten track, Marlec can always put power at your fingertips

Solar Power ...

Power for marine and land based applications whether you're on the move or at a permanent location, solar panels deliver free power from the sun.

Do you have a boat, recreational vehicle or holiday home that relies on battery power for lighting, engine starting or small appliances?



Then you know how frustrating it can be to arrive and find weak or discharged batteries, just when you need them, you may be:

- Tired of having to take batteries away for recharging?
- Fed up with running noisy and costly generators to keep lights, TV and other equipment running on board, at your caravan or motor home?
- Needing power for microwave ovens, laptops, telephones, and other electronics whilst you're on the move?

The solution is to save your batteries from deep discharge with a quality solar panel.

- Just imagine arriving to find fully charged batteries on board enabling you to switch cabin lights on immediately!

- How would you like the peace of mind of knowing you'll have fully charged batteries at your holiday home, even when you have been away for weeks?
- Now you can cut down on noisy, costly and eco-unfriendly generators without compromising on safety such as navigation lights and pumps or your comforts.

Flat batteries are at best a nuisance and at worst a hazard. Now the problem can be easily solved by using the abundant natural power of the sun.

Solar panels are ideal for maintaining and replacing natural discharge in 12V deep cycle batteries for leisure applications. Once installed, the solar panel works quietly and efficiently at recharging without any effort on your part.

Windchargers with Solar Panels

You can also combine windchargers with solar panels from our range of Spectra, SunWare and Ameresco for balanced year round power.



Explore our wide range of Windchargers and solar panels at: www.marlec.co.uk

or call one of our knowledgeable sales engineers on: **+44 (0) 1536 201588** to find which one is right for your application be it marine or land based.

Grid Connected Solar PV systems – Commercial

On Grid and on target to help you and your business to save money.

Energy costs are never far away from the headlines and a lot of businesses and public sector organisations are taking steps to not only reduce their energy consumption and consequently costs but also to improve their carbon footprint.



Marlec Engineering has over 30 years experience of working with “clean energy” products and during that time has built up an enviable history of partnering with the industry’s leading lights to provide complete “clean energy” solutions.

Our solar solutions are a shining example of how our unique experience and on going partnering philosophy deliver the optimum solution with everything coming from a single supply source that has been optimised and is also fully guaranteed.

A “clean energy” solution that is at the very pinnacle of current PV development.

We are an MCS accredited company for Solar PV systems and have vast experience of working and pricing commercial installations. So, if you are looking at ways you can reduce your overheads and make your organisation more efficient, relax safe in the knowledge that we will deliver the very best solution available that will meet your own specific commercial requirement.



**Specifically designed for
Businesses, Public Sector,
Community Projects and
Agricultural use.**

Installing a Marlec Solar PV system will enable you to:

- Save money on running costs and protect your business against future electricity price rises.
- Qualify for Feed in Tariffs paid by your electricity provider for all the energy generated by the system whether used on site or “fed-in” to the grid.
- Benefit from inflation-linked returns on the initial investment guaranteed by the government for the next 20 years.
- Lower carbon emissions and further demonstrate your green credentials to customers, suppliers and industry.
- Use land or roof space to generate a second income stream.
- Gain an extra competitive advantage in this challenging economic climate.



If you would like us to help you make more of your business, **call our commercial sales team today on: +44 (0) 1536 201588** or visit

www.marlec.co.uk

**“Clean Energy” products and solutions
engineered for you, your business and
the environment**

On Grid

Grid Connected Solar PV systems – Residential



On Grid and on your side to help save you money and the environment

- Would you like to cut your electricity bills and reduce your carbon footprint?
- Did you know that feed-in tariffs from April 2010 mean your solar PV system will soon pay for itself?
- Would you like to find out what they cost and how easy they are to have installed?



By choosing to install a solar power electricity generating system on your roof you can cut your electricity bills because the Clean Energy Cash Back Incentives (Feed-In Tariffs) or FITs will pay you a government declared tariff for every

kW generated; and there's more too because you won't have to pay your energy supplier for the energy that you've generated and consumed and in fact if you "export" any surplus back to the grid you will be paid a premium by your electricity or FIT provider.

Like us, if you're also concerned about the environment then you can make this investment with the added knowledge that for every kW of solar panels installed you will save 482kg of carbon emissions per year.

We were established in 1979 to develop and produce a small scale wind turbine, today our range of Rutland Windchargers are renowned around the world and continue to be manufactured in our factory in Corby, UK. We soon developed strong links with quality pv solar manufacturers and represented BP Solar for 20 years until their withdrawal from the market. We maintain our emphasis on good quality solar panels and continue to establish relationships with trusted brands from leading manufacturers.

We provide a range of Marlec PV Home Energiser kits incorporating our range of panels because we believe these are the best long term offering and will enable users to gain both maximum energy and cost benefits. The standard kits start at a power rating of 500W and ranges up to 4kW. They include everything your qualified installer needs to complete a professional finish at your property.

What is the Marlec PV Home Energiser Kit?

Put simply, it is Solar Energy in a box!

It's a complete solar PV system ready for your qualified installer to fit at your home. Here at Marlec we have selected, manufactured, assembled and quality controlled all the necessary components that your installer needs to ensure your system will qualify for the Feed-in Tariff.



Speak to our in-house experts with no obligation, **call us today** on: **+44 (0) 1536 201588** or email us at: **sales@marlec.co.uk** and see for yourself how we can help you to save money and the environment.

"Clean Energy" products and solutions engineered for you, your family and the environment

Off Grid System



Marlec Engineering's Integrated Wind and Solar Systems

Off Grid but not off limits - let there be light...

...The Green Column

An environmentally friendly and economic solution to provide light at remote sites.

Areas located off grid can now have efficient and reliable lighting provided for them easily with the help of the Green Column. The wind and solar powered solution delivers free, renewable energy, which is stored in a battery ready to be consumed when darkness falls.



If you are currently looking for a lighting solution for an off grid location, you may be thinking:

- Of the time, cost and hassle of digging trenches for underground cabling to the site?

- That you want to avoid introducing excessive light pollution into the night sky?
- That such a solution would not only be extremely expensive, but also difficult to set up and even harder to maintain?

Thankfully there is now a solution that can solve just these sorts of problems and more.

- Imagine being able to install amenity lighting without excavating expensive trenches on your property or deal with noisy, bulky and unreliable generators to provide power.
- Wouldn't it be great to know that you are using a truly modern and environmentally friendly lighting system in your community or business premises. Green Columns barely disturb any surrounding ground and sit in harmony with other street furniture.
- Imagine that all this can be provided at an affordable price with no complicated installation, minimal maintenance and no energy bills!

Green Columns are already in use all over the UK on footpaths, playgrounds and car parks. A Rutland Windcharger and solar photovoltaic panels power the columns. The small discreet wind turbine and solar panel work quietly and efficiently to generate sufficient power to run lighting for up to 16 hours per day.

The Green Column has been developed as part of Marlec's continued commitment to expanding the use of renewable energies around the world. The system can even be adapted for applications other than roadside illumination, such as shore based navigation systems, CCTV and other novel uses.

To speak to a Green Column sales engineer to help you select the right model call:
+44 (0) 1536 201588

now, or visit our website:
www.marlec.co.uk

Off Grid System

Green Power Education



An educational system that makes environmental learning practical and fun

Our Green Power Ed systems are ideal for schools, colleges, universities and eco-friendly demonstration centres. Students gain practical experience of wind and solar energy whilst using the power generated into 12V batteries to operate low energy lamps, pumps, etc. or through inverters which convert the power to 240Va.c., for computers and other low energy mains appliances.



It is a system that is designed to educate on utilising renewable energy for sustainable development which has become a major issue world-wide, creating a need for trained and knowledgeable practitioners, hence renewable energy is now part of many curricula. The principles of generating electricity from renewable resources include the fundamentals of science and technology so Marlec's Green Power Ed is designed to reinforce basic knowledge of the environment, electricity, data monitoring, statistics and theory thus supporting education.

3 questions for professional educators

- Do you find it hard to teach your students about renewable energy just from text books?
- Do you find school budgets hard to stretch to purchase renewable energy teaching systems?
- Have you ever longed for a practical approach to teaching renewable energy?

The solution is to introduce one of our systems that are Ideal for science, environmental and technology activities.

- Imagine having a real windcharger and solar panel to demonstrate how renewable energy really works.
- What about a range of renewable energy systems that suit all education levels and budgets?
- Would you like a system that is simple and safe to install and use?

We have three systems to accommodate a range of educational levels and budgets; the Junior, Senior and Graduate packages. All supplied in easy to assemble, install and use kits.



To speak to a Green Power Ed sales engineer to help you select the right model call

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