renewable devices

SWIFT Rooftop Wind Energy System™

Marketing Guide

Renewable Devices Swift Turbines Ltd, Bush Estate, Edinburgh EH26 0PH

Contents

1. Introduction

The need for increased use of renewable energy sources is well established. Opportunities to generate bulk electricity from renewable projects are currently being exploited throughout the world, however it is widely recognised that in order to both meet objectives for CO2 reduction and to reduce our dependency on fossil fuels, renewable energy initiatives must also be applied to smaller scale domestic and commercial applications.

Government targets are high: the Scottish Government in particular aim to generate 50% of energy from renewable sources by 2020. But its not only political pressure that gives strength to the renewables market. Businesses and individuals are increasingly aware of their environmental impact and wish to reduce their "carbon footprint", offset energy derived from fossil fuels and seek to "displace" carbon consumption through more environmentally friendly purchases, behaviours and through carbon replenishment schemes such as "planting trees"

Besides even the choices that consumers make, the global fuel market is unstable and fuel security remains to be a global concern. Generating energy on site removes not only the losses of transport from source to end user, but also negates any dependency on external factors over which we have no control.

Micro-wind power provides a local source of sustainable clean energy and in Europe, where according to the European Wind Energy Association (EWEA) there is enough wind energy resources to support our entire energy consumption (currently 2,900TWh), we have the potential to drastically increase sustainable energy sources.

Renewable energy, specifically micro-renewable energy, is a growth industry where the sky is the limit.

This guide will provide you with all you need to know about the SWIFT Rootfop Wind Energy System™ and parent company Renewable Devices, to allow you to successfully tap into this growth market, and to reach potential new custom with this innovative product.

Please note: We do not allow the SWIFT™ to be sold under any other brand. Please credit Renewable Devices on any literature or other material where images supplied by Renewable Devices are used. SWIFT™ is a trademark of Renewable Devices Swift Turbines Ltd.

2. Key Messages

Using Key Messages

The following key statements are the most important messages that we wish to convey about our company and our product.

Please use these statements when describing Renewable Devices Swift Turbines, and the SWIFT Rooftop Wind Energy System™. This may be on your website, in communications with your customers or in your product literature.

Accompanying this document you wil also find an electronic package of images, logos, technical and planning information, a copy of the installation manual (strictly for reference only), and an example case study, for ensuring that you and your staff are able to comfortably and confidently promote the unique selling points of the SWIFT™ to your customers.

Key Messages - Renewable Devices

When describing Renewable Devices Ltd, or Renewable Devices Swift Turbines Ltd, please use the following Key Statements:

- Renewable Devices provide accessible renewable energy technologies.

- Renewable Devices Swift Turbines are a multi-disciplinary team of engineers and designers passionate about the development of clean, green, renewable energy.

- Renewable Devices' flagship product is the 1.5kW SWIFT Rooftop Wind Energy System™, a breakthrough in micro-wind technology and the world's first silent building mountable wind turbine.

Key Messages- SWIFT Rooftop Wind Energy System™

When describing the SWIFT Rooftop Wind Energy System™, please use the following Key Statements:

- The SWIFT Rooftop Wind Energy System™ is the world's first silent building mountable turbine with unique patented aerodynamic technology for unprecedented safe, efficient and near-silent operation in the built environment.

- With installations worldwide, the SWIFT™ has become a design icon, quietly generating clean energy for homeowners, community groups, commercial and industrial customers for over 5 years.

- When correctly sited, the SWIFT Rooftop Wind Energy System™ drastically cuts carbon emissions, reduces electricity bills and makes the world a more beautiful place.

3. Features and Benefits

The SWIFT™ will generate sales on the basis of its performance and design; your key to maximising the market potential in your area is very simply awareness.

The SWIFT™ is the only building mountable wind system with patented aerodynamic technologies for silent efficent operation specifically designed to perform within the built environment.

The innovative design, high quality manufacture and rigourous testing of the SWIFT™ mean that it not only has a number of unique selling points but also ensure that it significantly outperforms other wind turbines.

The following pages will explain each of the SWIFT's™ unique selling points; the key features and benefits of the SWIFT™ turbine which differentiate it from other small wind turbines on the market, and make it the small wind wonder that it is.

Unique Selling Points

If you only remember three things about the SWIFT,™ remember these...

- **Silent**
- **Safe**
- **Efficient performance**

More key features and benefits:

- Universal Application
- Building Mountable or Stand Alone
- Grid connect, battery charging or immersion water heating
- Attractive design
- Vibration Absorbing system
- Maintenance Free
- 20 Year Life
- Harm Neutral
- Quality of components
- Planning Compliant
- Bat and Bird Safe
- Elligible for Grant Funding (see grants and funding pages)

Silent

How?

The diffuser ring, which circles the blade tips, not only gives the SWIFT™ its trademark circular shape but is the key to its incredible acoustic performance. By shedding the turbulent air currents that flow from the blade tips (and create sound) noise is removed.

Why?

These patented acoustic suppression dynamics ensure that the SWIFT™ always operates below background noise, making it virtually inaudible in all wind conditions. The SWIFT™ operates at less than 35 decibels of noise in all wind conditions - thats less than a whisper!

Acoustic performance is a critical requirement for wind systems which will be installed in inhabited areas, and has traditionally been a major concern in small wind energy. By resolving this issue, and patenting the diffuser ring design, Renewable Devices have ensured that the SWIFT™ remains to be the quietest wind energy system available.

Especially critical for domestic customers, the acoustic properties of the system will be something you will repeatedly be asked to explain.

Prove It!

It is hard to believe - we know that. But for those who don't, log on to the website at www.renewabledevices.com, follow the link for the Image Gallery, and watch BBC Newsnight presenting a piece on the system at the Scottish Seabird Centre in North Berwick. This video clip can be sent for inclusion on your website and is a fantastic tool to demonstrate to potential customers just how quiet it is!

Safe

Structural Safety

The SWIFT™ Rooftop Wind Energy System has been designed and independently tested to ensure compliance with all mandatory product standards (see the Technical and Planning Pack for details).

System Control in High Winds

The SWIFT™ has a unique overpower regulation mechanism to control rotation speed and maintain system integrity/safety in high winds. This consists of an innovative twin-vane progressive mechanical furling mechanism (meaning that the SWIFT™ will typically 'furl out' in high wind speeds to protect the turbine from damage) coupled with a sophisticated electronic control system.

This allows the optimum amount of power to be drawn from the turbine under varying wind and loading conditions, representing a step change in the accurate and safe control of small wind turbines.

The SWIFT™ is designed (and has been independently verified) to meet and exceed all of the British Standard structural and safety constraints required by UK safety standards for machines of this type. For a full certification list, please refer to the Technical and Planning pack.

Efficient Performance

The SWIFT™ has been designed for optimum performance in all wind conditions.

Its bespoke design means that it is able to draw energy from gusty conditons because the SWIFT™ has the ability to automatically adapt control of the turbine to take advantage of these conditions, maximising the energy drawn during each gust.

Energy potential in the wind dramatically increases during gusty conditions even if the average wind speed over the course of the day stays the same. Unlike other wind systems of its class, the SWIFT™ is specifically designed to capture this additonal energy potential.

To maximise performance the twin vane furling system allows the SWIFT™ to rapidly track the wind direction and point directly into the wind, furling only when the wind reached furling speed.

The aerodynamic design of the rotor allows the SWIFT™ to efficiently extract energy even when partially furled.

The advanced electronic controls integrated into the custom designed SWIFT inverter help synchronise the generated electricity with the mains supply with minimal losses.

Universal Application

The SWIFT™ was originally designed to be a building mounted micro-wind system which could generate electricity for a property on-site. In the 6 years since its conception, the system has evolved with technological advances and to meet consumer demands. The SWIFT™ is now available in a variety of options for universal application.

Option 1 - Mounting System (see technical specification for material details)

• Building Mounted SWIFT™ is most commonly used in urban installations where a building of sound structure and suitable to take advantage of the prevailing wind resource can be utilised.

• Flat Roof Stand has been designed for rooftop mounting on flat surfaces, most often used in commerical and industrial installations where multiple SWIFT's™ are being sited together.

• Stand Alone Wooden or Steel Pole is used for free-standing applications in instances where the client requires added flexibility in siting the turbine, prefers the look of the freestanding system or lacks suitable building type.

Building mounted SWIFT

Multiple roof mounted SWIFT

Stand alone wooden pole

Stand alone steel pole

Option 2 - Energy supply

• Grid connect via the specially designed SWIFT™ Inverter, supplementing the grid supply with your own low cost green energy and with the added capacity to import or export additional energy requirements to and from the national grid.

• Battery Bank for off grid energy.

• Hot Water Immersion heating system captures and stores energy in your hot water system. Very simple and efficient.

Attractive Design

The SWIFT™ boasts not only excellent performance credentials but has been designed to be aesthetically beautiful.

The black rotor makes the system less intrustive in situ (spot the SWIFT™ in the Image below), and the diffuser ring and 5 blade star like rotor is appealing in design.

Make a Statement

As environmental awareness becomes more and more important to companies and to individual consumers, the SWIFT™ makes a bold and beautiful statement about the owners environmental credientials.

Award Winning Aesthestics

We think the SWIFT™ is beautiful, but we're not the only ones. In 2008 alone, the SWIFT™ won the International Design Awards 2008, and reached the final round of the Design Weeks Award in the product:land category, alongside the Apple iPhone.

design week awards08

The Scottish GREEN ENERGY Awards 2003

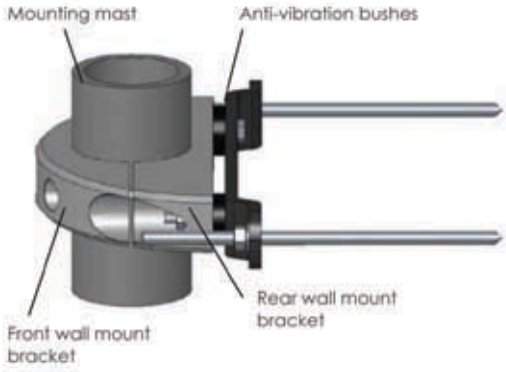
International Design Awards

the Ashden Awards for sustainable energy 1st prize winner 2005

Vibration Absorbing Mounting Systems

Specifically developed vibration damping systems in the mounting system and brackets prevent the transmission of oscillations from turbine to building by absorbing almost all frequencies produced in normal operation.

As a result, the SWIFT™ can be installed on a multitude of building types including solid, brick and block, double skin brick, and steel framed wall types where the thickness of the wall is in excess of 250mm or incorporated into new building design.



Why is it important?

To ensure minimal transmission of oscillations from turbine to building, the mounting brackets incorporate damping systems as described above. The vibration damping system in the SWIFT™ mounting system has undergone rigourous fatigue and lifecycle testing to ensure that it does not affect the structural integrity of the building over the 20 year product lifetime.

This system ensures that vibration noise is elimated, and negates any risk of structural damage caused as a result of prolonged vibrations.

Maintenance Free

The SWIFT™ is maintenance free, meaning that the initial financial outlay is the only outlay. Once it's up, it will operate automously looking after itself and has been designed to continue to generate clean energy for your home or business for up to 20 years!

Harm Neutral

The SWIFT™ system is environmentally sustainable and harm neutral in design. A study published by the Institute of Mechanical Engineers shows that in good wind conditions the SWIFT™ can become carbon and energy positive in as little as two years.

Quality of Components

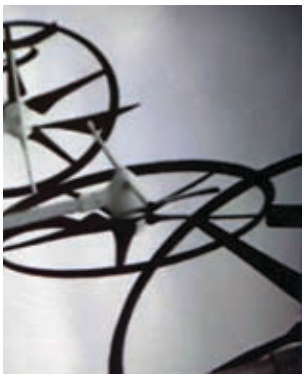
The quality of the SWIFT™ is paramount to us, as is our own impact on the environment. Components of the SWIFT Rooftop Wind Energy System™ have been manufactured from recycled materials wherever possible.

Furthermore, over 90% of the materials which make up the system are recyclable themselves and those which are not (because some of the parts just cannot be) have been sourced from environmentally friendly companies/sources.

All company printing is on recycled paper and we have an active recycling commitment for company waste.

Rigourous Testing Procedure

The SWIFT™ underwent a lengthy and detailed research and development period since its inception in 2002, as part of which a rigourous testing programme has ensured that each of the components individually and the system as a whole has been tested throughoughly under a range of wind conditons for strength and integrity.



Planning Compliant

The SWIFT™ meets all planning criteria and is welcomed by planning authorities across the UK due to its unobtrusive design and as part of government objectives to support the development of renewable energy sources. Due to its size and application, a SWIFT™ is deemed to be no more visible than a satalite dish - while its aesthetic qualities ensures that its much prettier!

The Planning Process

The planning process can be a worry for consumers however unfortunately it is a vital part of the installation process. With a little time, patience, and help from their installer, they will sail through it relatively unscathed (well, except from writers cramp from all the paperwork!)

Permitted Development Rights

In 2008/9 Permitted Development Rights, meaning general planing permission granted by Parliament permitting to the installation of approved technologies that meet planning criteria, will include micro-wind turbines (and the SWIFT™). Permitted development rights will apply in 'designated areas' only so look out for updates to this information on the UK planning website at www.planningportal.gov.uk

If you live in a listed building, conservation area, national park, area of outstanding beauty you will likely be required to apply for planning permission after this time.

Help is at hand

Renewable Devices Swift Turbines - The Technical and Planning pack includes all relevant product information required to complete a planning application. The SWIFT™ Installer will be able to provide more detailed information on the siting of the turbine and answer any questions or concerns with regard to the visual impact of the installation.

Bat & Bird Safe

The small diameter of the SWIFT™ rotor makes it comparable as an obstacle to a rooftop television aerial, satellite dish or chimney stack.

It is extremely unlikely therefore, that the location of a rooftop turbine will cause a significant increase in bird strike, beyond the rates already caused by existing buildings, windows and other such obstacles.

During a five year in situ testing program at the Scottish Seabird Centre, not a single bird collision was recorded, neither have any been reported from turbines installed throughout the UK to date.

4. Site Suitability

Customer Experience & the Sales Process

The SWIFT™ is available through accredited installation companies, distributors, stockists and reselllers throughout the world. Though it can be purchased without a site assessment having taken place, the following site factors should be considered during the sales process in order to provide the best experience for your customer:

Wind Resource
Is there are an adquate wind resource at the site? Customers must not only consider their wind speed for the area but take into account local obstacles which may impact upon the exact location. It is important that they have thought about this prior to making the sale.

Location suitability (building struture/adequate land)
Has the customer considered where on the property/in the grounds the SWIFT will be installed? You should prompt them to consider the suitability of the building or, if the order is for a freestanding system, the suitability of the land. Any questions regarding this can be resovled by a local installer prior to works commencing.

Access requirements
If access to the preferred site is difficult, an alternative may have to be considered. Additional access requirements may increase the price of an installation if it is neccesary for the installer to hire special equipment.

5. Installation

Installation of the SWIFT Wind Energy System™ must be carried out by Renewable Devices accedited installers.

Below steps are required to achieve a safe and effective installation;

- Transportation and receipt of the SWIFT Rooftop Wind Energy System™.
- Preparation of walls and installation of mounting brackets or, for freestanding models, preparation of ground and installation of pole.
- Installation of grid tie inverter or battery bank
- Installation of SWIFT™ turbine
- Electrical connection of system
- Testing
- Commissioning
- Completion of test certificates and commissioning documentation

Installation of the mounting system will typically take take a two-man installation team one day however installers should also consider additonal factors including access requirements before confirming a timescale or quote for works. Installation of the SWIFT™ Turbine, electrical connection and commissioning will typically take a further day.

6. Payback

The time it will take for the SWIFT™to have paid for itself, i.e. to have saved the owner the equivalent in energy costs as the price of the installed system is a common consideration for new renewable energy customers.

As a guide, in a good wind resource, where the SWIFT™ is generating 2000kWh annually, at current energy prices in excess of18p per unit, and inclusive of grant support, the SWIFT will pay for itself within 5 years. However this is a very general figure and in considering any individuals expected payback the following factors should be considered:

- Expected generation
- Current price of energy (and current price of Green energy)
- Cost of installed system
- Grant available
- Renewable Obligation Certificates
- Energy Price Inflation
- Level of energy exported to the grid
- Payment arrngement with District Network Operator for returned units

The payback time dependent on the above factors and at current energy costs can vary between 5 and 12 years. The lifetime of the SWIFT™ is 20 years and therefore irrespective of predicted energy increases which will bring the paback time down, the system will have paid for itself long before the end of its design lifetime witht he added benefit of providing the end user with 100% green energy.

7. Frequently Asked Questions

This section will answer the most frequently asked questions about the SWIFT™. Questions are grouped in the following categories:

- Small wind energy
- The SWIFT™ system
- Performance
- Installation
- Lifetime, payback and maintainance
-

About Small Wind Energy

How does a small wind turbine make electricity?
When the wind blows, the blades of the turbine catch the wind and turn the rotor. This turning motion causes the shaft in the nacelle to rotate and this movement is used to generate energy. DC electricity is transported from the nacelle into the Swift Invertor, which converts it into useable AC electricity for the property.

How do I find out if my site is windy enough?
You can find out the windspeed for your local area by using the NOABL database on www.bwea.com/noabl. This will give you an estimated wind speed for your grid area and not an exact measurement to expect on your property - always be mindful of local obstructions or factors which could affect your wind resource such as trees and neighbouring buildings. Then reference the SWIFT power generator graph to see roughly what you might expect from your system.

Should I consider wind monitoring first?
If your site is unobstructed and the predicted yield from the power graph is good, then there is little need to monitor the wind. However if your wind speed is low, and the site is obstructed, then would be worth investing in an anemometer, and studying your wind conditons over a 12 month period before you purchase a turbine. Remember that you will experience higher winds in the winter months than through the summer and in order to get an accurate year round picture your study should take place throughout all the seasons.

Do I need planning permission?
Yes, at present you do. However the SWIFT™ will be included within the permitted development rights due to come into play in late 2008/early 2009, after which time planning consent will not be required.

Can I get a grant?
Yes. For more information please see the Grants and Funding pages later in this guide.

Can you apply for it for me?
Unfortunately not, the end user must apply for the grant directly though we will provide you with all the information required to complete the application in the form of our Technical and Planning Pack. Some installers will offer planning application services to help you.

My planning application requires technical details - can you help?
Yes, all the information you wll require for a standard planning consent application is included in the Technical and Planning Pack.

About the SWIFT Rooftop Wind Energy System

How big is it?
The blades of the SWIFT are 2metres in diameter.

What is it made of?
The turbine blades and rotor are made of injection moulded glass reinforced polymer, The stand-alone pole is wooden or steel. The building mounting system is aluminium. Over 90% of the materials used to make the SWIFT are recyclable.

How much does it cost?
A standard building mounted kit costs approximately £4,499. A free-standing kit costs around £5,299. Installation should cost between £1,000 and £2,000. Grant funding can reduce the total cost by up to 30%. See Grants and Funding section for more details.

The SWIFT is more expensive than other wind turbines - why is this?
The cost of the SWIFT is derived from the actual cost of the product. We use high quality components, and as a result it is safer, more efficient and better value for money than competitors in the micro-wind market.

How safe is it?
Safety is our number one priority. This is why we use the highest quality components and personally train and accredit all of our installers. Only SWIFTs installed by our network of installers are covered under warranty.

Will it power my house?
The exact level of energy that the SWIFT will generate depends on a number of factors, most importantly the wind resource at the site. According to the British Wind Energy Association, the average house will use 4700kWh of energy annually and, as a well sited SWIFT will generate approximately 2000kWh annually, the SWIFT can significantly contribute to the energy used by the property. Lowering your energy usage is another great way to increase the percentage sourced from the SWIFT.

In which countries are you currently installing Swifts?
Our international network of installers is continually growing. At the time of going to print, we have installations taking place throughout Europe, North America, Africa and Australasia.

Performance

If I buy two could I be self sufficient?
This depends entirely on your energy usage and your wind resource. The SWIFT has been designed to work with an existing supply and in most cases, a secondary source of energy or a battery pack is recommended.

Is it noisy?
No, the diffuser ring around the outside of the blade tips removes noise normally associated with wind energy systems by redirecting the turbulent airflow at this point. The SWIFT omits less than 35 decibels of sound in all wind conditions - making it quieter than a whisper.

My site is very windy - what will happen in high winds?
The SWIFT has a unique overpower regulation mechanism to control rotation speed and maintain system integrity/safety in high winds. This consists of an innovative twin-vane progressive mechanical furling mechanism (meaning that the SWIFT™ will typically shut down or 'furl out' in extreme high wind speeds to protect the turbine from damage) coupled with a sophisticated electronic control system.

Can I store the energy generated?
Yes, if you have the battery bank or water heating version of the system you can store energy generated. If you have chosen the grid connect system you will not store it, but can feed it back into the grid via an export meter and so use the grid as a kind of virtual storage system. Contact your local District Network Operator for details.

Can I connect it to the grid?
Yes, this is by far the most popular method of installation and works by drawing your energy usage in your property directly from the turbine, and topping up any additional requirement from the grid.

What happens if I generate more than I use?
Electricity generated by the turbine but not required by the property will be fed back into the grid by means of the Swift Inverter.

Can I receive payment for units put back into the grid?
If you are generating significant energy which is not required on site, you can arrange with your local District Network Operator to be paid per unit.

Installation

Can I install it myself?
No. The SWIFT is not a DIY product and must be installed by a Renewable Devices Swift Turbines Ltd accredited installer. Industry persons with relevant experience may be eligible to attend the installer course to gain certification to install their own turbine - contact installers@renewabledevices.com for more information.

What will my installation cost?
Installation of a SWIFT will cost, on average, between £1,000 and £2,000 depending on your site. Your local installer will be able to provide you with a final quote for works.

How do I find an installer in my local area?
To find your local installer, contact Renewable Devices Swift Turbines Ltd or your retailer if purchased from a third party, who will provide you with the names and contact details of accredited installers available to carry out work in your area.

How long will it take to install?
An average installation will take two working days. If you have special requirements at your site, for example if access is particularly difficult, it may take longer. In some cases the SWIFT may be installed within a single day. Your installer will be able to advise you in more detail.

Will it affect my TV signal?
No, the SWIFT will not interfere with television signals.

Will it harm bats and birds?
No, the SWIFT is wildlife friendly and represents no greater a threat to bats and birds that a chimney stack or a satalite dish.

Do I have to tell my electricity supplier?
Your installer will advise you on this. If you wish to be paid for energy returned to the grid you will require an export meter.

Who is responsible for the national grid in my area?
Your District Network Operator will be detailed on your energy bill. It may not be your direct supplier.

How much space do I need?
The SWIFT can be mounted on the side or roof of a property without an exclusion zone as it has been specifically designed for use in inhabited areas within a built environment. There is a minimum distance of 4.4 meters between the hubs of consecutive SWIFTs on mulitple installation sites.

Lifetime, Payback and Maintenance

What will happen if I am unhappy with the Swift after install?
If you are unhappy with your SWIFT, your first point of contact should be your installer, who will do their very best to resolve any issues you have.

What will happen at the end of the lifespan?
At the end of the SWIFTs 20 year lifespan it should be decommissioned, removed and recycled. We hope to be offering a recycling/reconditioning services for SWIFTs at the end of their lifecycle. For more information contact us neither the time.

How long does it take to pay for itself?
This dependent on a number of factors. In a good wind resource, where the SWIFT is generating 2000kWh annually, at current energy prices of 18p per unit, and inclusive of grant support, the SWIFT will pay for itself within 5 years. See the payback section of this guide for more details.

What does it need in terms of maintenance?
The system is maintenance free and will run automously.

How long is the manufacturers warranty?
The warranty is 2 years return to base.

What is the expected life?
The expected design lifespan is 20 years.

Can I take it with me if I move house?
You could do, however in order to retain the system warranty it would have to be decomissioned and removed, then refitted to the new property and commissioned again by an accredited installer. As the SWIFT will make an attractive selling feature of any home, it is more likely that it would remain on the property for the new owners.

6. Grants & Funding

The SWIFT™ is a technically certified and officially accredited1.5kW silent rooftop wind energy system eligible for grant funding under The Low Carbon Buildings Programme in the UK, which could reimburse up to 30% of the cost of the installed turbine. There are various funding streams available when considering the installation of a wind turbine, however not all are currently available for the SWIFT™.

We would always advise you to seek information from the grant scheme helplines listed below or your local enterprise company so that you may take advantage of funding and advice that may be available in your area.

There are two major schemes that apply and run on roughly the same lines which offer grants for communities and householders. There are some differences between the schemes in Scotland and the rest of the UK both schemes offer useful advice on how to get started.

Scottish Community and Household Renewable Initiative

If you live in Scotland the relevant information can be found at http://www.est.org.uk/schri and is known as the Scottish Community and Household Renewable Initiative - run by the EST (Energy Savings Trust) on behalf of the Scottish Executive. Scotland may also benefit from the alternative Low Carbon Buildings Programme as follows:

- 30% grant for householders with maximum grant set at £4,000.
- Up to 100% funding (in exceptional circumstances) for non-profit community groups.
- An accredited supplier must supply and install approved equipment.
- Not allowed to be used in tandem with other government funding (reason given is efficiency of government spending).

Scotland SCHRI Helpline– tel: 0800 138 88 58 - www.est.org.uk/schri

Low Carbon Buildings Programme

If you live in Scotland, England, Wales or Northern Ireland information is at www.lowcarbonbuildings.org and www.lowcarbonbuildingsphase2.org.uk and is known as the Low Carbon Buildings Programme - run by the EST (Energy Saving Trust) on behalf of the DTI.

- Grant of £1,000 per kW of wind turbine capacity installed up to a maximum of £5,000.
- Tied in with other energy saving measures to reduce the buildings total carbon footprint.
- 50% funding for non-profit community groups with funding capped at £100,000.
- An accredited supplier must supply and install approved equipment
- Not allowed to be used in tandem with other government funding (reason given is efficiency of government spending).

Free UK-wide Helpline - tel: 0800 915 0990 - www.lowcarbonbuildings.org
Funding for Non – Profit Organizations, Communities, Educational Centres, Schools andVisitor Centres

The Green Energy Trust

The Green Energy Trust is available via Scottish Power to projects anywhere in the UK.

- http://www.scottishpowergreentrust.co.uk/content /
- Up to 50% available.
- Educational and high visibility projects within the community are given priority.

The HIGHLANDS AND ISLANDS COMMUNITY ENERGY COMPANY
The HIGHLANDS AND ISLANDS COMMUNITY ENERGY COMPANY is a 'non-profit' distributing company with a voluntary board of directors appointed for their specialist knowledge and involvement in renewable energy and community development in the Highlands and Islands area of Scotland. They provide free advice, grant funding and finance for renewable energy projects developed by community groups to benefit their community. This extends to non-profit distributing organisations such as social enterprises and housing associations. More details are available on www.hie.co.uk/community-energy.html

LEADER PLUS or LEADER+ is a European Community Initiative for assisting rural communities in improving the quality of life and economic prosperity in their local area. Further information is available on www.defra.gov.uk/rural/leader.

LEADER PLUS IN SCOTLAND link to http://www.wisl.org.uk/leader-plus-scotland.html

Interest Free Loans For Companies

Loan Action Scotland provides loans from £5,000 to £50,000 at 0% fixed interest. These loans attract no interest or arrangement charges so, what you borrow is what you repay. Loan Action Scotland loans can be repaid over a period of up to five years with the aim of being 'capital neutral' - the savings from the new energy saving equipment will help cover the cost of repayments. Funded by the Scottish Executive, the scheme is managed by The Energy Savings Trust and aims to support companies taking action to reduce their energy bills. http://www.est.co.uk/

Funding for Farmers In England

DEFRA - Rural Enterprise Scheme and the Objective 1 Programme in appropriate areas of England. Assistance is only available for schemes that form part of the development and improvement of an agricultural business. Details are available from the Defra website on www.defra.gov.uk.

Funding for Farmers In Scotland

Agricultural Business Development Scheme (ABDS)
The Agricultural Business Development Scheme is a business development scheme for farmers/crofters and their immediate families. It operates under the Highlands and Islands Special Transitional Programme within the legal framework of the Rural Development Regulation. It is a discretionary and competitive scheme. Legal occupiers of agricultural units within the Highlands and Islands Special Transitional Programme Area, who have been actively engaged in agriculture for a minimum of two years, are eligible to apply to the scheme for both

investments in agricultural holdings and diversification projects.

Crofting Counties Agricultural Grants (Scotland) Scheme (CCAGS)
This may in some circumstances apply to small wind energy projects. Grants covering a wide range of agricultural activities are available to the following persons in the former Crofting Counties:

- Tenants and legal sub-tenants of crofts, and owners occupying unlet crofts who are of the same economic status as crofters;
- Common Grazings Committees and Grazings Constables where all the work relates to the Common Grazings;
- Occupiers of holdings other than crofts, the area of which does not substantially exceed 30 hectares (excluding common pasture) or where the annual rent would not substantially exceed £100 if the holding were let as a croft. In addition, the occupier must be of the same economic status as a crofter.

Information about these grants can be obtained from the Crofters Commission, 4-6 Castle Wynd, Inverness, IV2 3EQ, Tel: 01463-663450 or from your local SEERAD Area Office or visit www.crofterscommission.org.uk

Other links worth noting:

http://rinf.com/alt-news/activism/how-to-install-micro-wind-turbines-and-solar-panels/2166/
http://www.energysavingtrust.org.uk/What-can-I-do-today/Energy-saving-grants-and-offers

7. Consumer Profiles
and Case Studies

Identifying Potential Consumers

Globally SWIFT™ Wind Turbines are being used to power large and small scale projects, from eco-homes to government offices, schools to supermarkets, and even multi-installation industrial units, in both urban and rural locations.

The scope for contiued growth and sales is enormous and with increasing environmental awareness, and political and consumer pressure on the use of green energy, the world is your oyster as far as generating cross-sectoral sales in the commercial, industrial and domestic markets in your area.

And their needs....

When considering how you will market the SWIFT™, always keep your customer in mind. Who are they? What makes them a potential customer? What are the key product attributes that are of interest to them? What level of information do they require? How do they communicate?

Targeting Your Marketing

Depending on your location and your business, you may wish to target marketing directly to certain consumer groups where you see the greatest demand or potential. It is useful to think about energy grants and incentives such as the Low Carbon Buildings Programme, consider companies who have an environmental policy or are looking to promote themselves as a green business, and keep an eye on local business/renewable energy/homeowner events or awards which you may attend or apply for.

Installation Gallery: Consumer examples

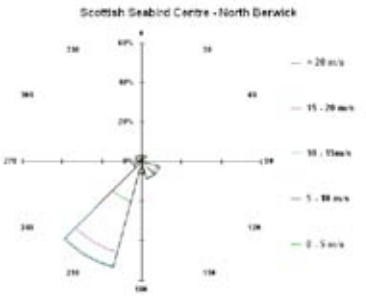
Scottish Seabird Centre - SWIFT™ Case Study

The Site

The Scottish Seabird Centre is an award winning five star wildlife visitor attraction providing information about the local bird species and remote camera viewing to nest sites on the local Bass Rock. The centre is perched on a rocky outcrop at North Berwick Harbour, overlooking the islands of the Firth of Forth and sandy beaches of East Lothian.

The Scottish Seabird Centre is a key site for the SWIFT™ Team, having been a pre-production research and development site and currently still providing a valuable monitoring post for our engineers.

Wind Conditions



The Scottish Seabird Centre is a coastal site with an average annual wind speed of 5.1m/s. The coastline is to the north of the building. The prevailing wind for the site is from the south west.

Generation

A SWIFT™ is used to supplement the electricity supply for the administration function of the centre. Annual energy output is 1700 kilowatt hours.

This SWIFT™ is currently being independently monitored by the Energy Saving Trust as part of their micro wind trials

Annual Wind Resource 5.1m/s
Annual Power Output 1700kWh
Annual CO^2 Displaced 1.02tonnes

energy saving trust

8. Marketing Methods

The following section will provide you with some marketing ideas and methods of promoting the SWIFT™ which we have found particularly sucessful.

Price Related Promotions

We have designed an industry sales package to allow you to benefit from self-generated sales and though we have recommended retail values for your market you may wish to consider independent short term price related promotional activities if you feel they may support sales in your area.

Depending on your region, capacity, and assessment of your market, you could hold promotions such as a free site assessment for a limited time only, or a money-off offer in January order to support those with Green New Years' Resolutions.

Website

Developing an on-line presence can be as costly and time consuming as you wish it to be. A well planned and executed website could however be invaluable for attracting and retaining new customers for your business. It is worth investing time and effort in keeping any details you do have online up to date.

The standard texts earlier in this guide can be used for developing web content on the Swift on your site. A variety of images can be found on our website www.renewabledevices.com available for download and may be used.

Please do include a link to www.renewabledevices.com on your SWIFT™ page.

Nifty Hint - small companies can sign up to a free google service called Analytics which allows you to monitor usage of your site.

On-line presence

Aside from a company website, you should be aware of other ways to maximise your online presence. Is there a local business listing for example? What about a local online magazine or community forum? Be creative when thinking about where and how to advertise - the traditional and costly methods of advertising are not neccessarily the best.

Media Coverage

Local media coverage (press, radio & tv) is a free and effective way to raise awareness in and around a new installation site. If you are carrying out work on, for example, a site of particular local interest or somewhere particuarly visible or high profile, consider contacting local press to ask if they are interested in the story. Local media thrive on local stories, especially those with a human interest angle such as a new eco-build development or a "first install". Commercial customers will generally be keen to promote new renewable technologies as part of their green policy and take part in publicity of this sort. Always gain permission from the customer first.

Case Studies

Case Studies are a really useful tool for demonstrating the real life capacity of the Swift, and also the variation between sites. We would always avoid providing the customer with an exact figure of predicted output for their turbine, but would use case studies as a way to give potential customers a reference site to draw rough conclusions from.

Exhibitions & Trade Fairs

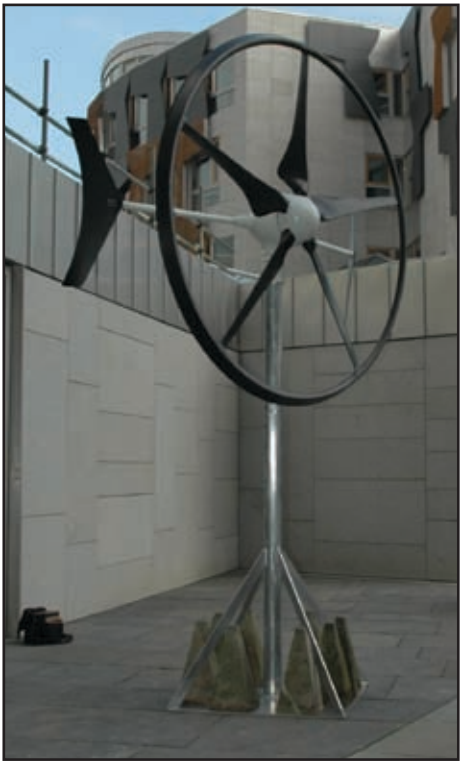
Attend exhibitions, trade fairs and local/national events to promote your company and the services that you offer, including installation of the Swift. Be imaginative and use your initiative when deciding which events to go to - Renewable Energy specific shows are not always the most fruitful; often choosing events such as farming shows or home improvement exhibitions have less competition and attract a more serious buying audience.

We can provide you with literature to display at promotional events - please contact marketing@renewabledevices.com for more information. It is also a good idea to make up some branded order forms or register of interest for those who wish to request more information. This will allow you to capture details of leads you make up on the day and to follow up thereafter. Purchasing a Swift is not a decision that will in most instances be made on the spot and potential customers will more than likely wish to engage with you further after the show before coverting to a sale.

We would be interested to hear about any shows or exhibitions that you are attending - please do drop us a line at marketing@renewabledevices.com to tell us.

9. Showcasing the SWIFT

We have a single display turbine which we are able to send you for large conferences or events where you feel you would benefit. The display turbine is a full size flat roof stand, rotor and nacelle (if you have attended the Installer Course you may remember seeing it in the production facility). You will be liable for shipping charges incurred in sending/returning the demo rotor and it will be your responsibility whilst in your care. Any damage may be charged in full.



Demo Swift

If you would be interested in purchasing your own demo Swift rotor and stand for use at events or to display at your premises, please contact us to discuss your requirements. The demo model is a non-functional turbine and will be sold at a reduced cost for demonstrations purposes only.

10. Contacts & Useful Links

Contacts

Renewable Devices Swift Turbines Ltd
Bush Estate
Edinburgh
EH26 0PH
UNITED KINGDOM
Phone +44 (0) 131 535 3301
Fax +44 (0) 131 535 3303

General	info@renewabledevices.com	
Sales	swift@renewabledevices.com	Zeno
Installations	installers@renewabledevices.com	Jamie
Marketing	marketing@renewabledevices.com	Ellie

Useful Links

Micro-Wind
British Wind Energy Association www.bwea.com

Micro-generation
The Energy Savings Trust www.est.org.uk
The Carbon Trust www.carbontrust.co.uk

Consumer Information - Energy
Ofgem www.ofgem.gov.uk

Planning Permission
UK Government Planning Website www.planningportal.gov.uk

Renewable Energy Grants
www.lowcarbonbuildingsprogramme.org.uk
www.energysavingstrust.org.uk/schri (Scotland)
www.nie-yourenergy.co.uk/renewablesgrants.php (Northern Ireland)
www.sei.ie (Republic of Ireland)

Swift Rooftop Wind Energy System
www.renewabledevices.com/swift

Renewable Energy Consultancy Services
www.rdenergysolutions.com