



Towngate Technologies Ltd

RENEWABLE ENERGY SOLUTIONS

Solar PhotoVoltaic Specialists

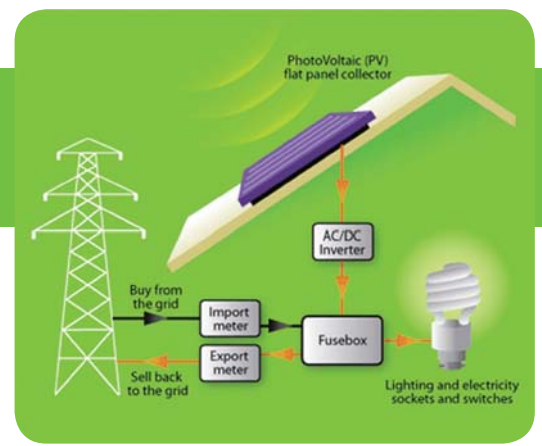
RENEWABLE ENERGY SOLUTIONS

www.towngatetechnologies.co.uk

What is Solar PV and How Does it Work?

Solar PV uses energy from the sun to create electricity to run appliances and lighting. PV requires only daylight - NOT direct sun-light to generate electricity.

PV systems use cells to convert solar radiation into electricity. The PV cell consists of two layers of a semi-conducting material, usually silicon. When light shines onto the cell it creates an electric field across the layers, causing electricity to flow.



Installation Methods

Retrofit



Semi integrated



5 YEAR GUARANTEE ON ALL WORK

Integrated



Frame mounted



Towngate Technologies - Solar PV specialists for industrial, Commercial, Manufacturing, Agricultural, Architectural, Heritage and Domestic markets.

TYPICAL WORK PROCESS

- Site Survey • System Design • Installation of System • Test & Commission • Monitoring of System Data

Benefits

- **Feed in tariff**
Government guaranteed payments for 25 years
- **Guaranteed ROI**
Ranked top 5 investments by Guardian, 6 – 12% annual return
- **Tax free!!!**
Payments made are tax free and retail price index linked so it will increase with inflation rate
- **Off set system costs**
The cost of the system can be off set against company costs saving even more money
- **Quick payback**
Payback between 5 and 10 years depending on size of system

Financial Benefits	Environmental Benefits	Environmental Targets
11% ROI Tax-Free	CO₂ Reduction	Meeting Planning Targets
<ul style="list-style-type: none"> • Get paid for every unit of electricity produced • Significantly reduce electricity bills • Protection from rising electricity prices • Increase property value and rental yield 	<ul style="list-style-type: none"> • Reduce your carbon footprint • Reduce your reliance upon fossil fuels • Generate your own clean green electricity • A typical 50kWp system will save 550 tonnes of CO₂ over 25 years 	<ul style="list-style-type: none"> • Building regulations / Part L • Carbon Reduction Commitments • BREEAM (BRE Environmental Assessment Method) • Code for Sustainable Homes

Ultimately . . . HUGE COST SAVINGS



The Feed In Tariff Scheme (FiTS)

- Solar PV has been given the highest rate of payment, and so for the majority of people is the best option.
- The FIT scheme was introduced by the government in April 2010 to encourage new investment in low carbon green technologies.
- You will receive a guaranteed fixed payment for all the electricity you generate, including what you use for a period of 25 years.
- You will receive an additional payment for any electricity you don't use and you feed back into the National Grid.
- You will also benefit from reduced energy bills as you will effectively become your own supplier.
- Anyone from a home owner to a large scale business can benefit from the Feed in Tariff.

Feed-In Tariff Rates

Size of Solar PV system	Generation Tariff (pence per kWh) Self Used Energy
< 4kW (new build)	37.8 per kW hour
< 4kW (retrofit)	43.3 per kW hour
4 - 10kW	37.8 per kW hour
10 - 100kW	32.9 per kW hour
100kW - 5MW	30.7 per kW hour
Stand Alone	30.7 per kW hour

Latest rates as at March 2011

the guardian

Saturday, 6th February 2010

"If the government offered to pay you £1,000 a year for the next 25 years, in return for an up-front investment of £12,500, you'd snap it up in a second. Well, that's pretty much the deal on offer this week after the government finally revealed what it will pay those who install electricity generating solar panels."

Case Study

Mr Dalton purchased a 3.36kW PV system from Towngate Technologies for his B&B in Scotland costing £13,500.00

The system will produce 2833 kWh/year based on Standard Assessment Procedure (SAP) calculations.

Year 1 will return £1,170 from the FIT, £42 from export tariff, and £184 on import savings.

The system payback will be in year 7. Annual return at 7.70%

Projected saving after 25 years = £59,512.00

(Based on 8% fuel inflation and RPI linked FiTS increase)

Total carbon saving after 25 years = 27,073Kg

which is equal to 98 return flights London / Spain.

THE SUNDAY TIMES

Tuesday, 25th May 2010

"Given that the income is tax-free, the return on £14,000 investment is equivalent to 12.9% for a 50% tax-payer and 10.3% for a 40% tax-payer, with the investment recouped in as little as seven years. As the payments are linked to RPI, this equates to a real return of 18.2% and 15.6% respectively at today's RPI rate of 5.3%"



**saving
£59,512
after 25 years**

Technology

Panels



Towngate can provide panels ranging from value for money monocrystalline panels to some of the highest performing hybrid modules available, enabling us to find the perfect panel for your needs

Inverters



The Towngate range of inverters all operate at market leading conversion rates, ensuring that you get the most out of your panels

Monitoring



Towngate provide a full range of monitoring systems from small hand held devices to fully featured web solutions

What makes us different?

As a company we have an electrical industry background

We are an intimate company large enough to take on large scale installations but at a competitive rate

We offer a personal service from start to finish, with no heavy sales techniques

We offer a complete "turn key" service or an individual service if required

We have a catalogue of approved contractors in relevant fields

Most cost effective and appropriate techniques employed

Specialist installers working in markets we understand

MCS approved contractors who only use MCS approved technology

Call us today

t: 01226 767 909
m: 07766 148278

or visit
www.towngatetechnologies.co.uk
for a 'No Obligation' Survey and Quotation

Considerations

- Planning Permission
- Roof Materials
- Towngate Technologies are fully qualified to provide guidance when considering Solar PV technology
- Roof/Ground Space
- Obstacles
- Roof Orientation
- Shading
- Roof Inclination



Maintenance

- Solar PV systems need very little maintenance
- There are no moving parts
- They are silent in operation
- Rainwater cleans the panels
- Remote web based monitoring for every installation
- Tailored maintenance package if required



e: info@towngatetechnologies.co.uk