



## Photovoltaic panels

### Energy business group

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# Guaranteed income for 25 years.

#### Background

The ability to generate electricity from sunlight is a relatively new technology that offers many new opportunities in generating 'green' energy. Solar panels, more commonly referred to as PV, make use of the abundant energy from the sun to generate electricity in a clean, quiet and renewable way.

Despite our perceived inclement weather here in the UK, our climate can utilise the sun's rays for around 900 hours per annum. As such many domestic and commercial properties are now looking to take advantage of PV panels and fit these to roof spaces, whether these be to new builds or retrofits to existing properties.

#### Feasibility

In conjunction with a PV installation company, we can carry out an initial due diligence appraisal of the proposed project. This can include carrying out high level forecasts to give indications of IRR returns, expected profit levels etc. At this stage UHY Hacker Young can comment and advise on the most appropriate structure and corporate vehicle to run and operate the scheme should a separate commercial structure be required.

#### Funding

UHY Hacker Young can assist in the fundraising for the project. We have good relationships with banks, private and institutional investors who are all currently looking to invest in renewable projects. Our work would include the completion of a robust business plan and projections and the project management of the transaction including liaising with solicitors etc, until funds are received.

#### Operations

UHY Hacker Young can assist in the day to day financial running of a scheme once it is operational. Our services can include not only preparing accounts and completing tax returns but also operating and communicating with electricity suppliers regarding electricity sales and dealing with Feed In Tariffs (FITs) as appropriate.

#### Projections

In connection with suppliers and installers of PV Panels, we have prepared high level projections to be used for illustrative purposes and give an indication of the income and returns that could possibly be made from the installation of such panels.

The installation of PV Panels has only recently become more cost effective with the Government's introduction of the FITs to incentivise small scale electricity generation by communities and businesses. Effectively the electricity generator will now be paid for every kilowatt hour (kWh) of electricity generated whether the electricity is used onsite or exported to the local electricity network.

The FIT scheme started on 1 April 2010 and the Government confirmed that tariffs for PV generators will be paid for 25 years once the panels are installed.

It is worth noting that FIT payments are indexed by RPI, to ensure that target rates of return are maintained in real terms for the lifetime of the scheme.



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### Results

A high level projected profit and loss account can be provided for a 22 and 50 panel scheme.

The key figures are as follows:

	22	50
Turnover per annum	£1,500	£3,500
Profit before interest & tax	£1,000	£2,400
Payback period	14 Years	12 Years
Internal rate of return over 25 years	12%	13%

### Assumptions

The projections have been prepared on the following bases and assumptions:

- The capital cost of a 22 panel scheme and 50 panel schemes will amount to circa £14,000 and £28,730 respectively, excluding VAT.
- Each panel can generate 180 watts and is 980cm x 1200cm in size, thus the roof space requirement for 22 panel and 50 panel schemes is circa 28.6 sq metres and 62 sq metres respectively.
- Roof space is south facing with a pitch of 40%.
- The scheme will be utilised on an annualised basis of 900 hours. (The UK has 1350 usable solar hours on average each year).
- The scheme will be entitled to a "feed-in tariff" rate of 41.3p per kW of generation.
- This is based on panels being fitted to existing properties.
- The scheme would earn 3p for each kW of electricity exported. (Sold to the grid and not consumed by the generator).
- It is currently assumed all electricity would be exported.
- The capital equipment is depreciated over 25 years.
- The forecast does not take interest or tax into account. This has been omitted as we have no knowledge of funding structure or vehicle structure being proposed. (Banks are typically lending at circa 5.5% to 6% at present. Corporation Tax for small companies is currently 21%, reducing to 20% in 2012. Profits generated from commercial PV plants are subject to UK Income and Corporation Taxes).

**For further information or advice please contact your usual partner, or visit our website at [www.uhy-uk.com](http://www.uhy-uk.com).**

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