

Investing in The Energy Agenda

The future is?.



Overview

- Energy Objectives
- Approach
- Progress to date
- Case Studies
- Investments
- Future
- Q&A



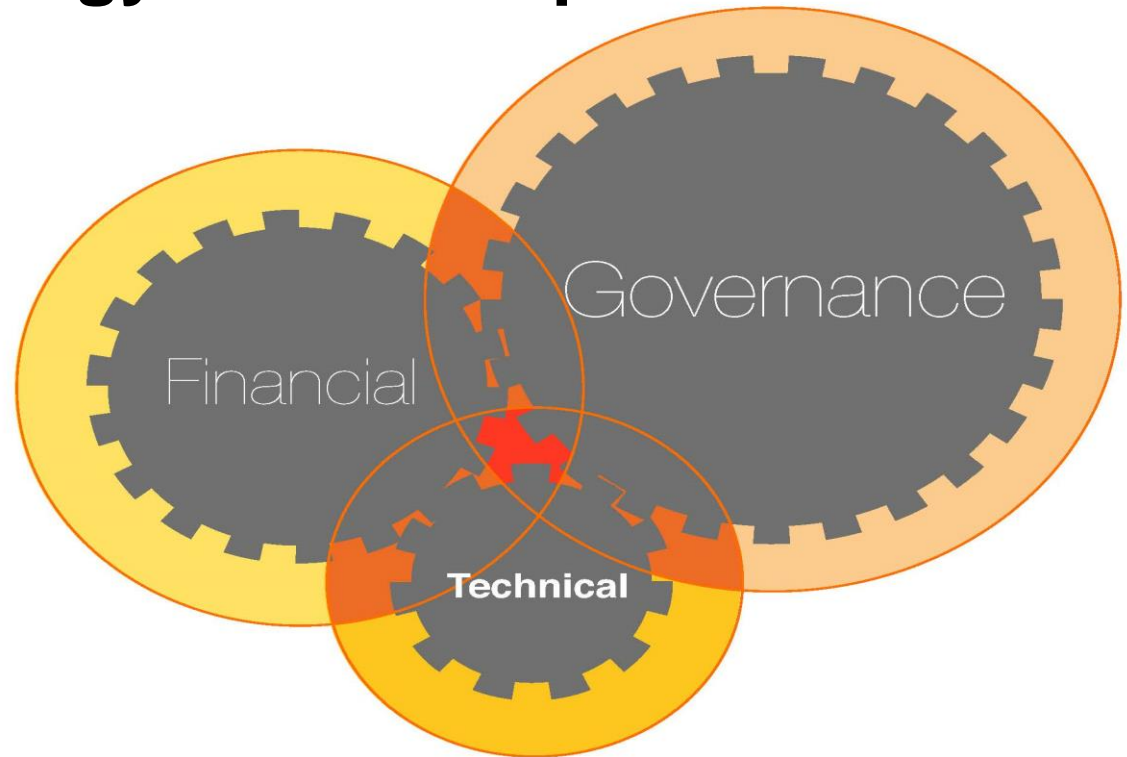
Renewable Objectives

- Affordability – Fuel Poverty
- CO₂ emissions reduction
- Security of supply
- Regeneration
- **Revenue generation**
- Sustainability

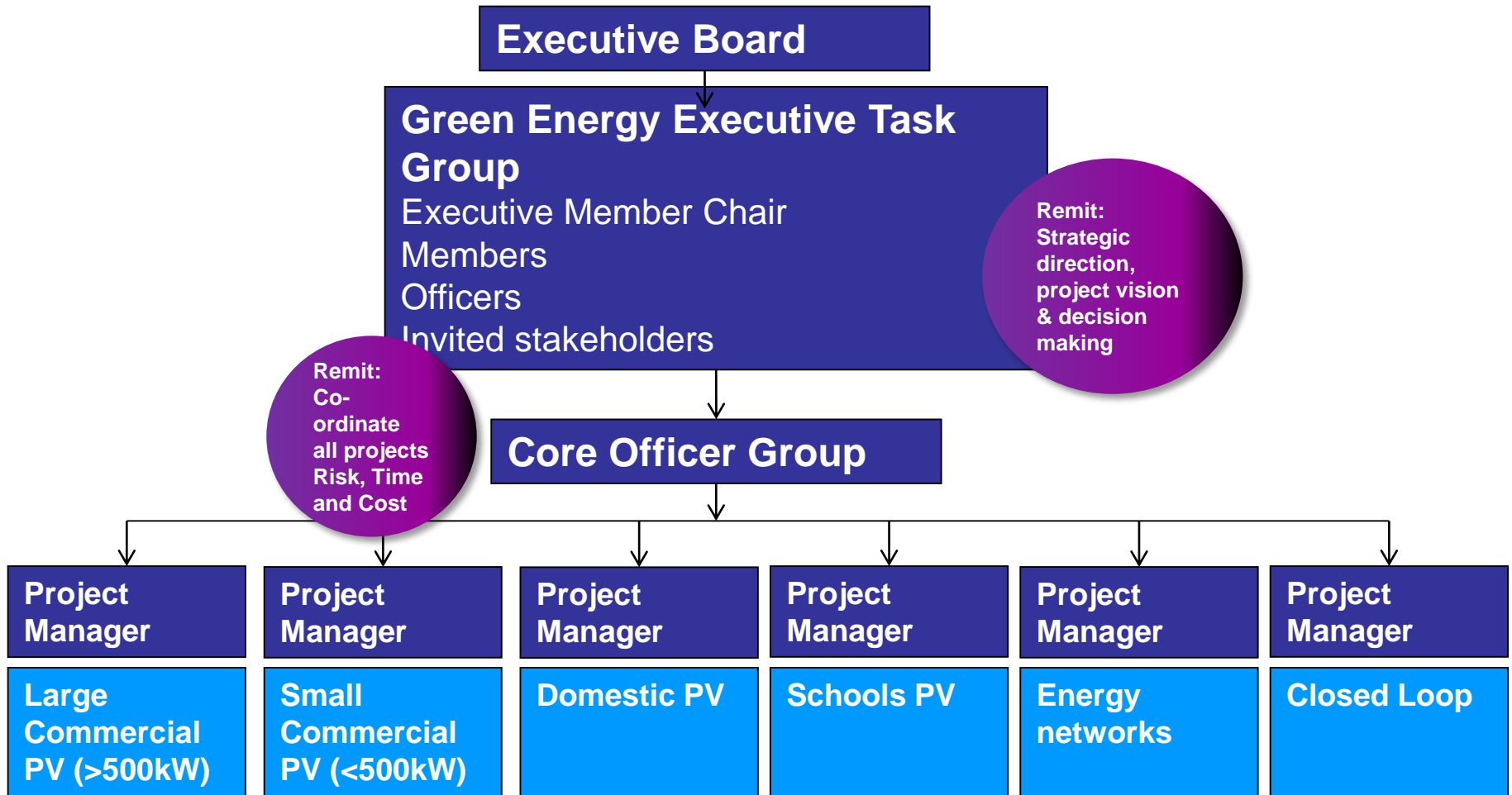


Approach

- **Executive Energy Task Group**



Governance - Internal Delivery



Progress to Date

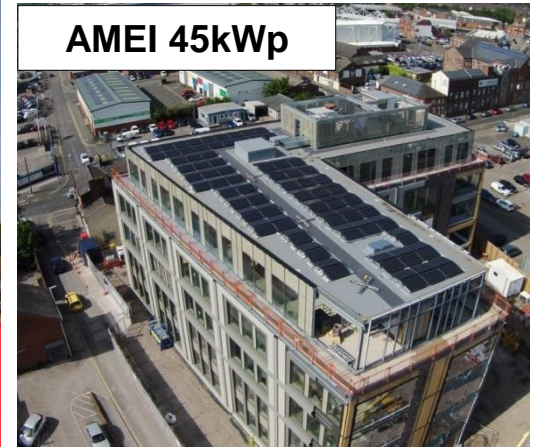
- Solar on 2,500 Properties
- Community Energy
- Commercial Arrays – Plastic Omnium / Hermes
- Warrington Wolves Stadium
- Solar Investments
- Swindon Solar Farm
- York / Hull Solar Farms / Gridserve
- Together Energy

Installed so far....

Great Sankey Primary 45kWp



AMEI 45kWp




Walton Lea Crematorium 10kWp



Stockton Heath Primary 45kWp




Commercial Partner Documents



Warrington Solar

Commercial Solar Photovoltaic Prospectus

August 2015

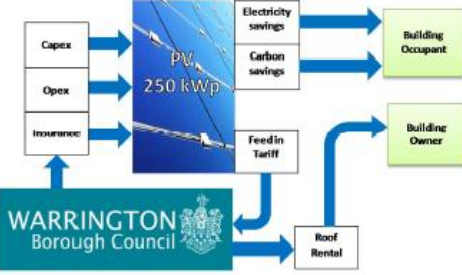


Page 2 of 8


Overview

WBC will undertake a feasibility study of your site and provide you with a site specific offer. If it found suitable and legal heads of terms are agreed, we will tender for the array and manage the procurement and installation. We will work with the selected contractor to minimise interference during installation.

WBC will own, operate and maintain the panels. We will enter into a roof rental agreement with the building owner for the space above the roof and an energy supply contract to supply discounted electricity. The rate for electricity will be linked to the price paid for grid electricity on the site, providing a predictable financial benefit to you. Roof rental will increase annually with RPI. Where the building owner will also be the user of electricity produced by the panels would propose a peppercorn rent so that maximum benefit can be provided through electricity discounts and legal agreements can be simplified.



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graph TD
    WBC[WARRINGTON Borough Council] --> PV[PV 250 kWp]
    Capex[Capex] --> PV
    Opex[Opex] --> PV
    Insurance[Insurance] --> PV
    PV --> ES[Electricity savings]
    PV --> CS[Carbon savings]
    ES --> BOcc[Building Occupant]
    CS --> BOcc
    PV --> FIT[Feed-in Tariff]
    FIT --> BOwner[Building Owner]
    BOwner --> RR[Roof Rental]
    RR --> WBC
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Page 2 of 8

Process

Initial Feasibility

From desk top review, to initial overview of site and early discussions with stakeholders, the high level feasibility will establish whether a scheme is likely to be technically and financially feasible. This will be based on visual inspection of site, projected outputs and simple paybacks.

Detailed Feasibility

A detailed financial model will be put together based on actual or predicted energy use and costs, together with detailed surveys or review of designs if new build. Discussion will take place with commercial partner to agree the model and obtain agreement before progressing to detailed design. During this stage we will require access to site for surveys and either half hourly energy data or predicted energy use.

Detailed Design


The appointed solar contractor will undertake detailed design of the system, carry out DNO application and obtain planning permission, if required, for the site.

Installation

The system will be installed, commissioned and FIT certified.

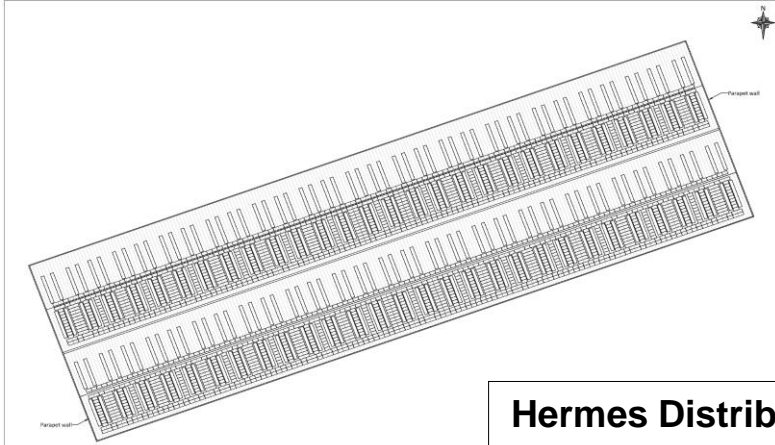
Operation and Monitoring

Regular monitoring combined with annual visual checks will make sure the system performs in line with predictions. Reports will be provided to the commercial partner (format and frequency to be agreed) giving details of PV output and carbon emissions avoided.



Page 4 of 8

Current Commercial Schemes



Hermes Distribution Centre 530kWp



Plastic Omnium Factory 999kWp

Big Commercial



Council installs solar panels at Plastic Omnium to reduce carbon emissions

Solar Bond Investments



THE SUNDAY TIMES

Willersley Gloucestershire Farm

- <http://www.thisismoney.co.uk/money/investing/article-2734877/You-7-cent-return-sun-latest-energy-mini-bond.html>

Kent Hop Farm

Rolls Royce HQ

Swindon Solar Farm



York & Hull

–Coincidence or opportunity!?



GRIDSERVE[®]
sustainable energy

“

These will be
**the most advanced
solar farms in the UK,**
ushering in a new era
of subsidy-free
renewable energy.

Toddington Harper
CEO and founder
GRIDSERVE



Together

Warrington borough council to buy half of Together Energy



Q&A

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