


Ineco Energy

Powering a sustainable future





In **one hour**, the amount of solar power that touches the earth is more than the entire world consumes in **one year**.

And in **one year**, it exceeds all known energy reserves of oil, coal, natural gas and uranium **combined**.

Why Solar Power?

1. Financial Savings

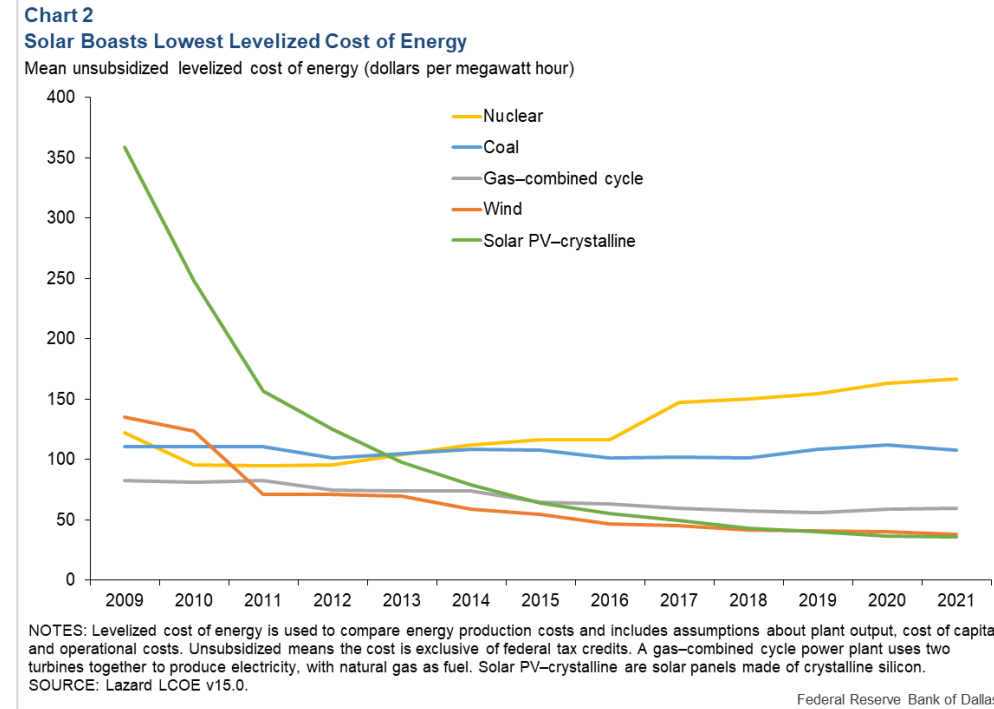
- Solar power generated on site offsets grid supplied electricity consumption providing an energy and financial saving to the business.
- Generating Solar power onsite (~4p/kWh) is cheaper than buying it from the grid (~35+p/kWh).
- Paybacks are currently 3-5 years, offering double digit returns for a system lifespan of 25 years.

2. Energy Independence

- Solar power prices are fixed and provides security of supply.
- Decouples your risk of energy price volatility.
- Mitigates the threat of geopolitical issues.

3. Environmental Benefits

- Solar power generation reduces a businesses carbon emissions.
- Zero carbon at the point of generation.
- A buildings environmental performance (EPC) is improved by Solar.



“Solar PV is now the cheapest source of electricity in history.” (IEA,2020)

How can we generate Solar power?



Solar Rooftops



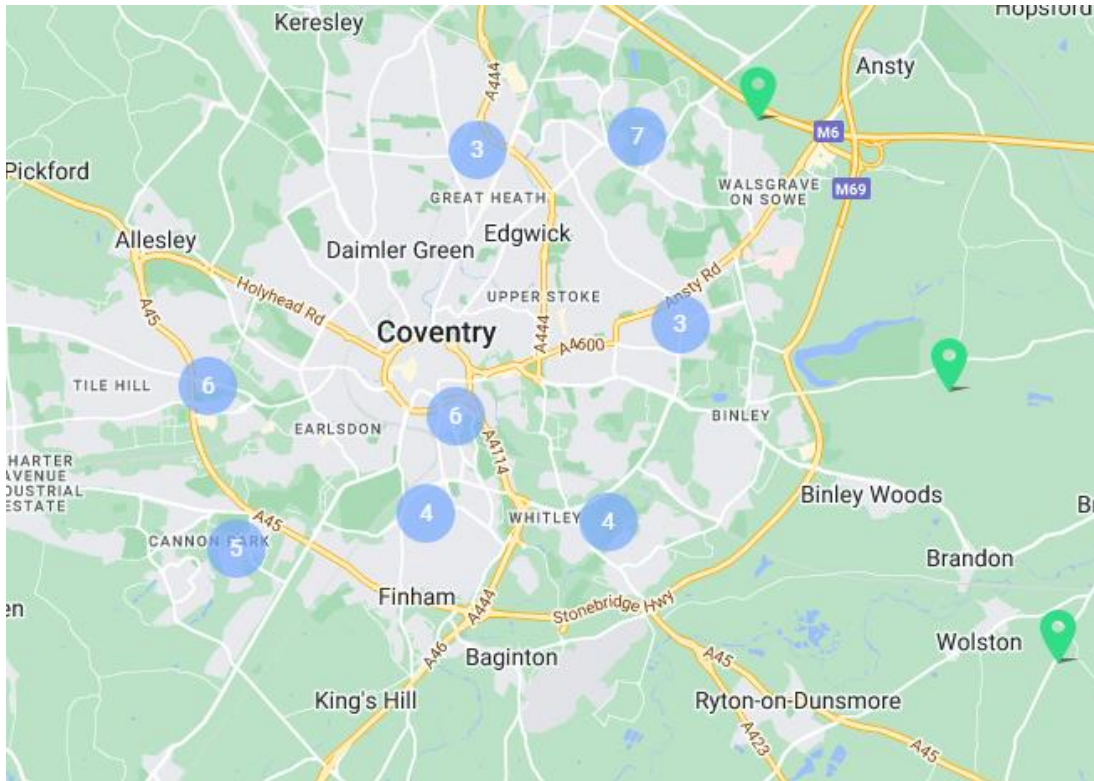
Solar Carports



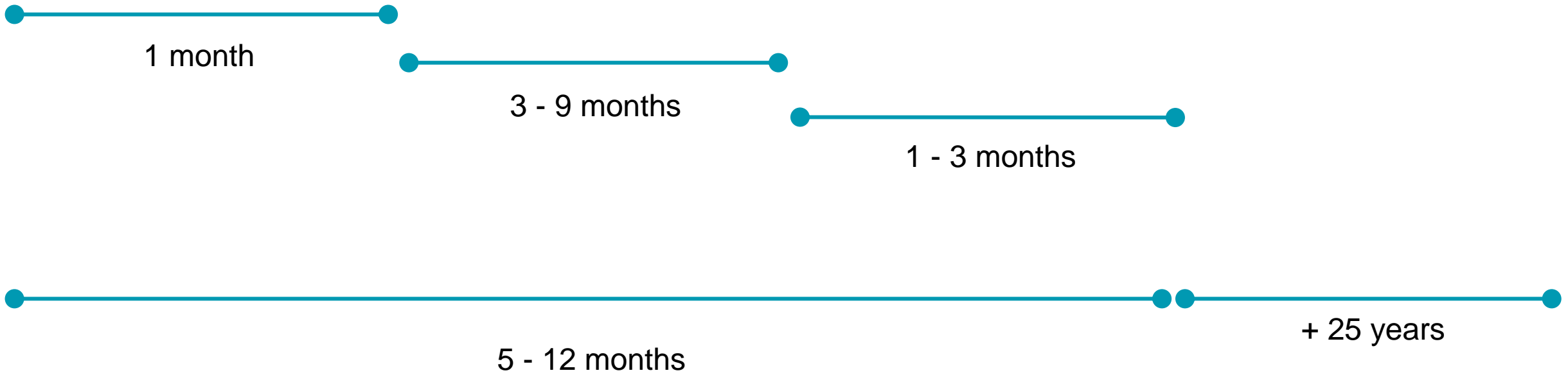
Solar Farms

Coventry City Council Programme

- **39** Coventry City Council projects installed to date.
- **2.11** MWP installed generating 1.56 GWh of Solar power so far...
- **£483,600** worth of financial electricity savings based on current electricity rates.



High Level Process & Timeline



Feasibility Stage - What are the challenges?

- **Objectives** – What's the priority: financial returns / environmental offsetting / self sufficiency?
- **Funding** – How to we fund these projects? Cash, Asset Finance or External Finance?
- **Procurement** – How do we compare apples with apples? What's the spec & Scope?
- **Knowledge** – How do we know what are good or bad solutions?
- **Trust** – Who to trust?



Development Stage – What are the challenges?

- **Timeframes** – External consents & approvals Req'd.
- **Grid** – Particularly on Larger Commercial projects
- **Asbestos** – Older buildings
- **Structural** – Older or Unique buildings
- **Mechanical** – Various Roof types not always accessible.
- **Electrical** – Old infrastructure
- **Environmental** – Wind
- **Planning** – PD, Listed buildings, bats etc.
- **Insurance** – Are there requirements?

C.C.C Project's	Qty	%
Sites Assessed	48	
Projects Installed	39	81%
Roof Condition	1	2%
Asbestos Concerns	1	2%
Shading Issues	1	2%
Cost Effective	1	2%
Structural	5	10%



Installation Stage – What are the challenges?

Health & Safety

- Working at Height
- Working with Electricity
- Weather Conditions
- Asbestos Containing materials
- Safeguarding vulnerable users or 3rd parties.
- Welfare facilities for workers.
- Skilled & Competent Persons
- Etc...

Electrical

- AC & DC power
- Cable runs from roof to ground.
- Inverter locations
- Points of Connection & Isolation
- Electrical Infrastructure
- Communications i.e. LAN, Firewall Settings etc.
- Etc...

Access Issues

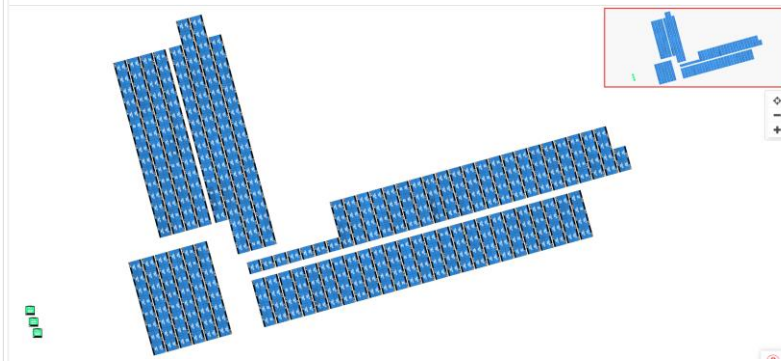
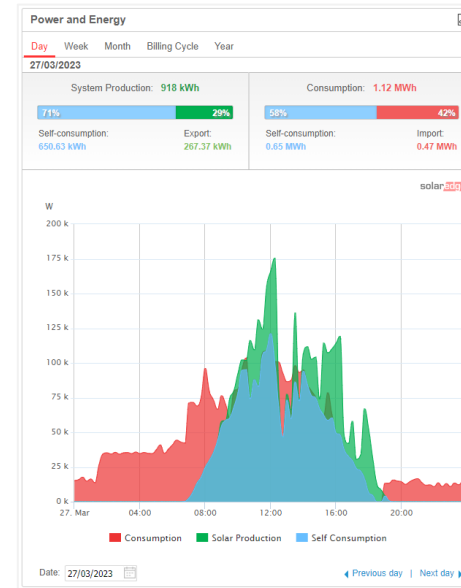
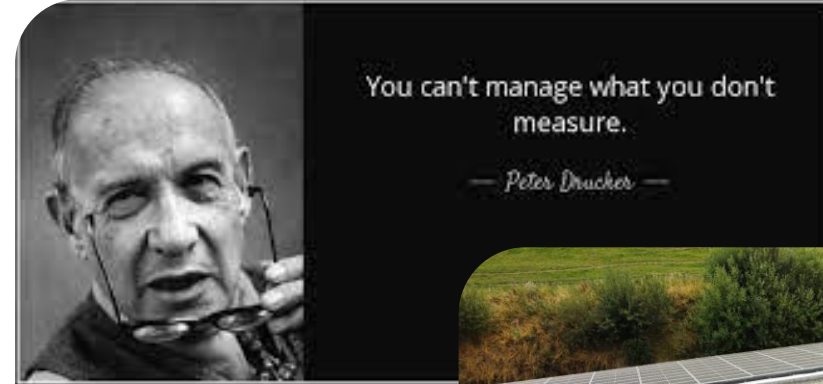
- Mechanical Lifting
- Manual Handling
- Deliveries Access
- Offloading facilities
- Storage
- Etc...

Mechanical

- Roof Condition
- Roofing types
- Fixing types
- Quality of installation
- Roof obstacles & furniture i.e. Skylights
- Etc...

Maintenance – What are the challenges?

- Monitoring your system
- Costings for maintenance
- Electrical testing experience
- Mechanical Inspections accessibility & costs implications
- Solar Panel Cleaning requirements
- Maintenance Walkways
- Roof Repair costs



Solar Industry Challenges

1. Resource

– Skilled & Competent Persons

2. Supply Chain's

– Product availability & traceability

3. Grid Constraint's

– Ageing infrastructure, Intermittency & Storage



Our Track Record



Thank You

If you have any questions, please do not hesitate to contact:

Angus Rose
Director

07967 686650
Angus.rose@inecoenergy.com

