



The APSE Energy Summit

WElink Energy

Solar Systems and Meeting the Future Energy Needs

26-27th May 2016



WElink Energy: Who are We?

WElink Energy is a specialised renewable energy company with extensive experience of **project development, financing, marketing and construction of Photovoltaic plants** in both Europe & the Americas.

- ▶ Founded in 2007, the company evolved from its initial focus as a distributor into an integrated Solar Project Developer with a strong track record of completed projects.
- ▶ We are now active in the development of both small and large scale installations in Europe, Asia, the Middle East and the Americas.
- ▶ From 2011 - 2016 WElink increased its focus on the development of PV projects worldwide :
 - We have participated in more than 550 MW of projects in Italy, Germany, the UK, Ecuador & Thailand.
 - Currently, we have a pipeline of > 1.4 GW under review in the UK, Europe, US, South America & Japan



WElink Energy: An International Group



Global footprint with an extensive Partner network

WElink Energy: The WElink Group



- Multinational firm founded in 2007, specializing in renewable energy and affordable housing
- 70+ team with significant industry experience and track record
- Well established global strategic relationship with CNBM for renewable energy and affordable homes

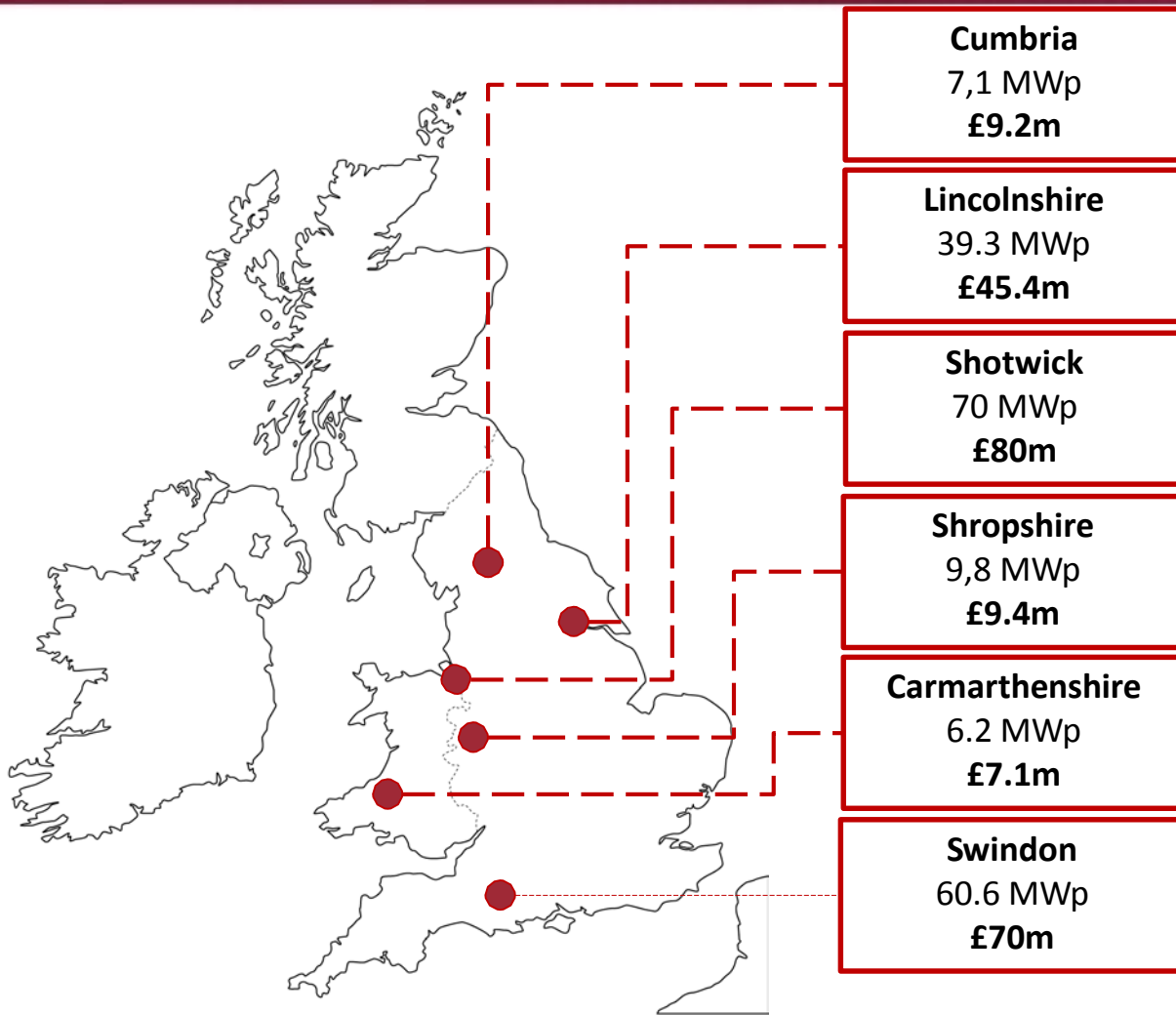


- Leading China SOE, listed on HK SE with assets in excess of \$55 billion
- World's largest provider of building materials and a Fortune 500 Company
- Extensive track record and experience in building materials, construction & infrastructure projects worldwide



- Spin-off of Cesar Martinell & Associates – a 100 year old leading European architectural firm
- Notable projects include the Guggenheim, Olympic Village (Barcelona)
- Extensive experience in large complex building projects

WElink Energy: Track Record in the UK



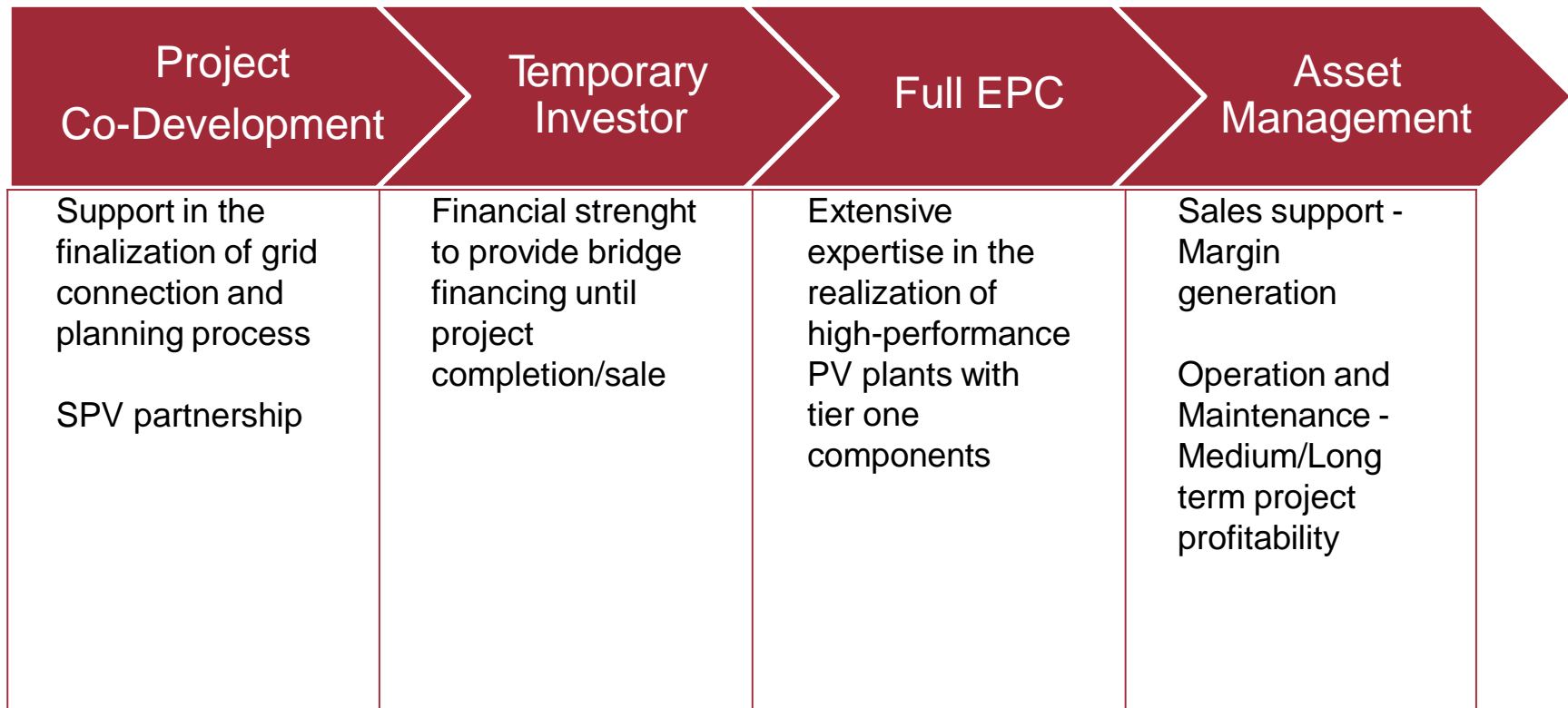
Between 2014 and 2016 the cooperation between WElink and CTIEC delivered in the UK **193MW** of PV plants with a value of over **GBP £220m**

WElink Solar PV Development Pipeline

Geographic Area	EMEA	Asia/Middle East	North-Latin America	South America
Year				
2016	<ul style="list-style-type: none"> • UK to 130MW (already connected) • Portugal 20MW • Other 10MW 	<ul style="list-style-type: none"> • Myanmar 50MW 	<ul style="list-style-type: none"> • USA (Under Development) 	
210 MW	<hr/>			
2017	<ul style="list-style-type: none"> • Portugal 100MW • Egypt 60MW • UK 40MW 	<ul style="list-style-type: none"> • Myanmar 80MW • Sri Lanka 50MW • Japan 50MW 	<ul style="list-style-type: none"> • USA 100MW 	<ul style="list-style-type: none"> • Brazil 50MW • Cuba 20MW
550 MW	<hr/>			
2018	<ul style="list-style-type: none"> • Portugal 100MW • Other 100MW 	<ul style="list-style-type: none"> • Myanmar 80MW • Sri Lanka 50 MW • Other 100MW 	<ul style="list-style-type: none"> • USA 200MW 	<ul style="list-style-type: none"> • Brazil 50MW • Other 100MW
780 MW				

Over 1.5 GW of potential installations = Solid global Solar PV growth

WElink : An All-around Partner



WElink : An All-around Partner Case Study 1

Location: Wales

Plant Power: 16.2 MWp

Plant production (est.): 16.604.000 kWh/year

Grid Connection date: September 2014



Pure EPC

Project
Co-Development

Temporary
Investor

Full EPC

Asset
Management

- ▶ The Project was already financed by an Investment Fund
- ▶ CTIEC acted as Main EPC contractor being in charge of all the project completion activities from design to project management and electrical activities.
- ▶ CTIEC/WElink currently in charge of all the O&M activities

WElink : An All-around Partner Case Study 2

Location: North Lincolnshire

Plant Power: 39.3 MWp

Plant production (est.): 32.010.000 kWh/year

Grid Connection date : March 2015



EPC + Financial Partner /Co Developer

Project
Co-Development

Temporary
Investor


Full EPC

Asset
Management

- ▶ CTIEC/WElink took part in the development process in partnership with the developer
- ▶ CTIEC/WElink bought 50% of the Project SPV shares
- ▶ Also in this case CTIEC acted as Main EPC contractor
- ▶ Upon completion Welink was actively involved in the project sale process
- ▶ CTIEC/WElink in charge of all the O&M activities to grant the project profitability

Key Trends in the Solar Market

- ▶ The global electricity market is 6,000GW – by end of 2014 solar was 180GW which represents 3% of market; Analyst believe **by 2050, 30% of electricity could be solar !!**
- ▶ Despite the drop in world oil prices, declining solar panels, lower financing costs and balance of systems costs has meant **50% of global PV markets are at grid parity**
- ▶ PV Market leaders such as SolarCity, JA Solar, Trina and others, despite having started from different points of the value chain, are each growing at dramatic rates based on a strategy of full vertical **integration across project development, technology deployment and financial products**

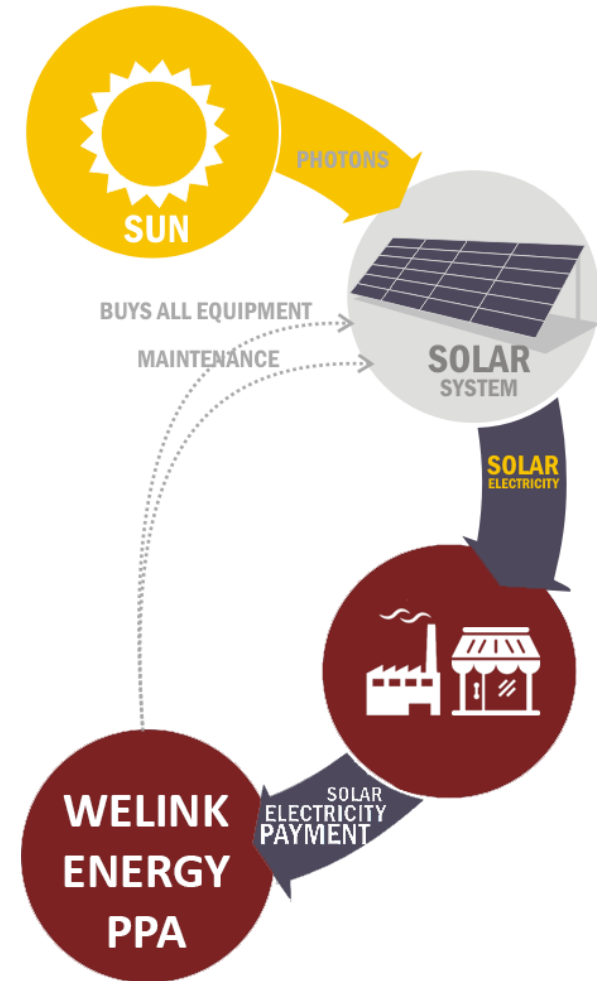


Vertical integration in the project value chain, capability to manage detailed technical/financial solutions and commercial/development skills in diverse geographic areas represent the key success factors in the PV market

Solar PV Beyond Subsidies

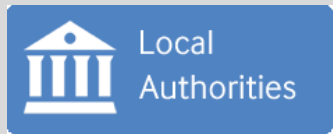
Power Purchase Agreements (PPA)

- ▶ Under the terms of a solar PPA, a third party owns, operates, and maintains the solar system and sells 100% of the solar electricity generated to the customer at a locked price for a term of up to 25 years.
- ▶ In the case that solar energy is not enough to supply the demand, the Grid will supply the rest within DNO contract.
- ▶ At a PPA price of **7,5 – 8,5 p£/kWh** there is space for:
 - Still a profitable business
 - Savings in the electricity bill for the customer.



What Can WElink Offer to Local Authorities?

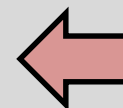
Solar PV Generation on LA Land or Roofs



LA Land or Roof
not being used



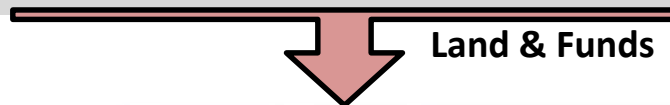
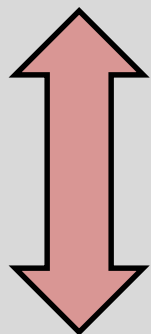
LA Funds or
LA Pension Fund



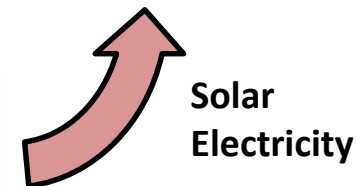
Fixed-Price
Electricity



Local Businesses
Local Authorities



Land & Funds



Solar
Electricity



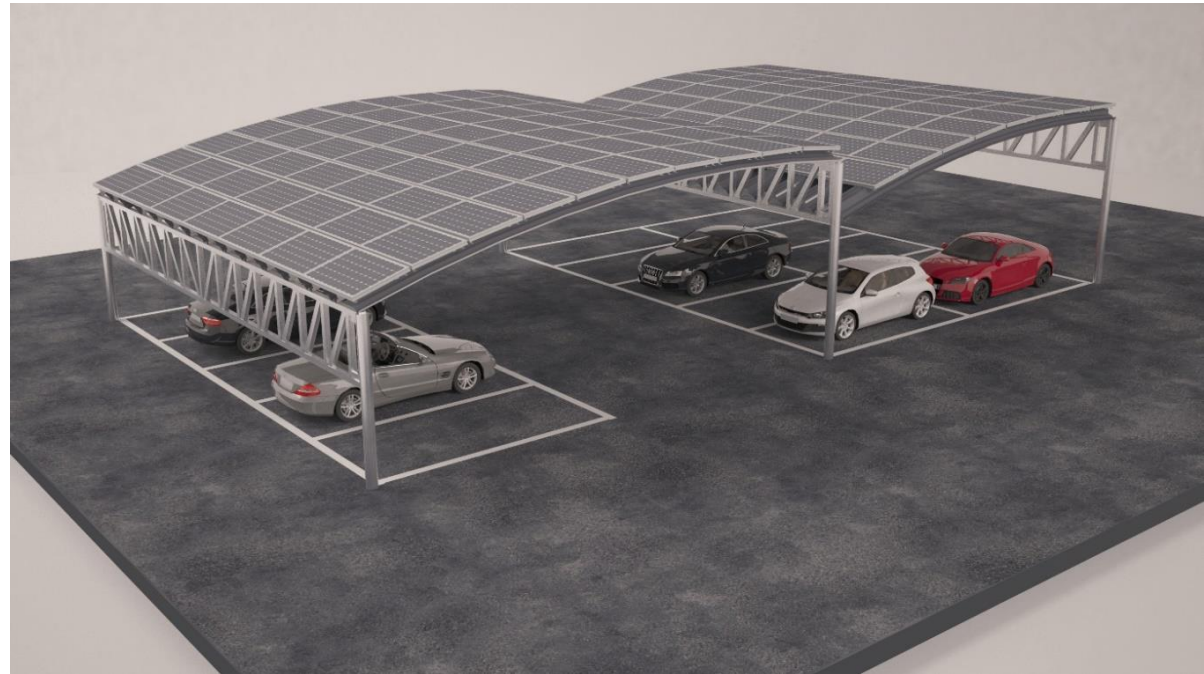
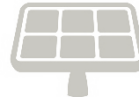
Flexible
Project Delivery



Unlocking Additional Value from Carparks

SOLAR CARPORT

- Designed with the same BHS concept: Light Steel Structure, pre-designed elements, assembly without concrete or on-site welding.
- Price below 1£ / Wp
- Best use of space to generate the necessary Energy for the community.
- Integration of Energy Solutions:
 - ✓ Energy Storage Systems
 - ✓ Electric Vehicle charging stations
 - ✓ LED lighting
- Integrartion into community micro-grids and controlled by the Energy Management System.



With a total power of 65 kWp in 500 sqm, covering 28 car spaces, can produce the equivalent energy to supply 10 BHS apartment yearly demand or fully charge 5 standard electric vehicles per day.

Addressing the UK Government Affordable Housing Challenge

GOVERNMENT REQUIREMENTS

- Initial target of 400,000 new homes not capable of being met by traditional industry (could be even larger opportunity given land availability)
- Policy to move to zero carbon houses by 2019/2020
- Need to provide quality and appropriate standard of accommodation for UK
- Need to reduce energy dependence and mitigate grid requirements
- Need to create jobs from the housing and construction sector
- Need to provide certainty of delivering number of dwellings , affordability, quality targets



OUR SOLUTION

- BHS provides a fully funded solution adopting an industrialization approach that can be deployed quickly and in scale
- We have a near-zero carbon new home solution
- We have factory made precision engineered finished homes ready to assemble on site to be compliant with all building regulations
- Our homes are 75% off-grid moving to 90-95% incorporating storage technology
- 200 local jobs created (unskilled and skilled) per factory and more during assembly.
- We bring the world's leading building material company CNBM with their industrial and financial strength

Our Green Building Technology

TRADITIONAL CONSTRUCTION

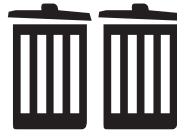
SLOW



WATER, CO2



HUGE WASTE



EXPENSIVE



FAST ASSEMBLY



ENERGY EFFICIENT



NO WASTE



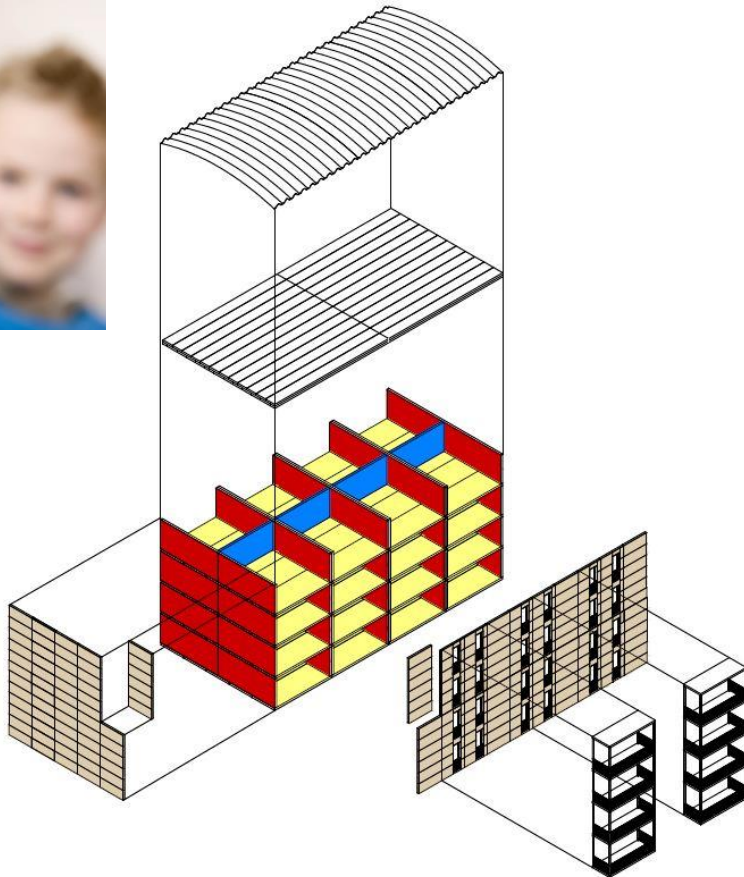
MORE ECONOMICAL



Solutions up to now are ineffective and obsolete...
We still build like 7,000 years ago!

A pre-fabricated, industrialised, modular and green solution

Our Green Building Technology



BHS new constructive process is based on integrated panels using Light Weight Steel Framing technology.

BHS is sustainable

- ✓ More efficient use of land ... less cost
- ✓ Less material ... less cost
- ✓ Less labour ... less cost
- ✓ Efficient logistics less cost
- ✓ No carbon footprint major costs avoided
- ✓ Renewable energy integration reduced operating costs
- ✓ 20 times faster in delivery

**WE DON'T BUILD...
WE ASSEMBLE!**

Zero-Carbon Affordable Housing on LA Land

We can build low carbon homes which are affordable, quick to build, comfortable and economic to run





WElink Energy

Your Partner for Meeting
your Energy Needs

Thank you for your
attendance!

