

West Oxfordshire Council

Solar Framework 3rd December 2014

Steven Morris
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Peterborough City Council

UK Environment City

to

UK Environment Capital



Energy Strategy

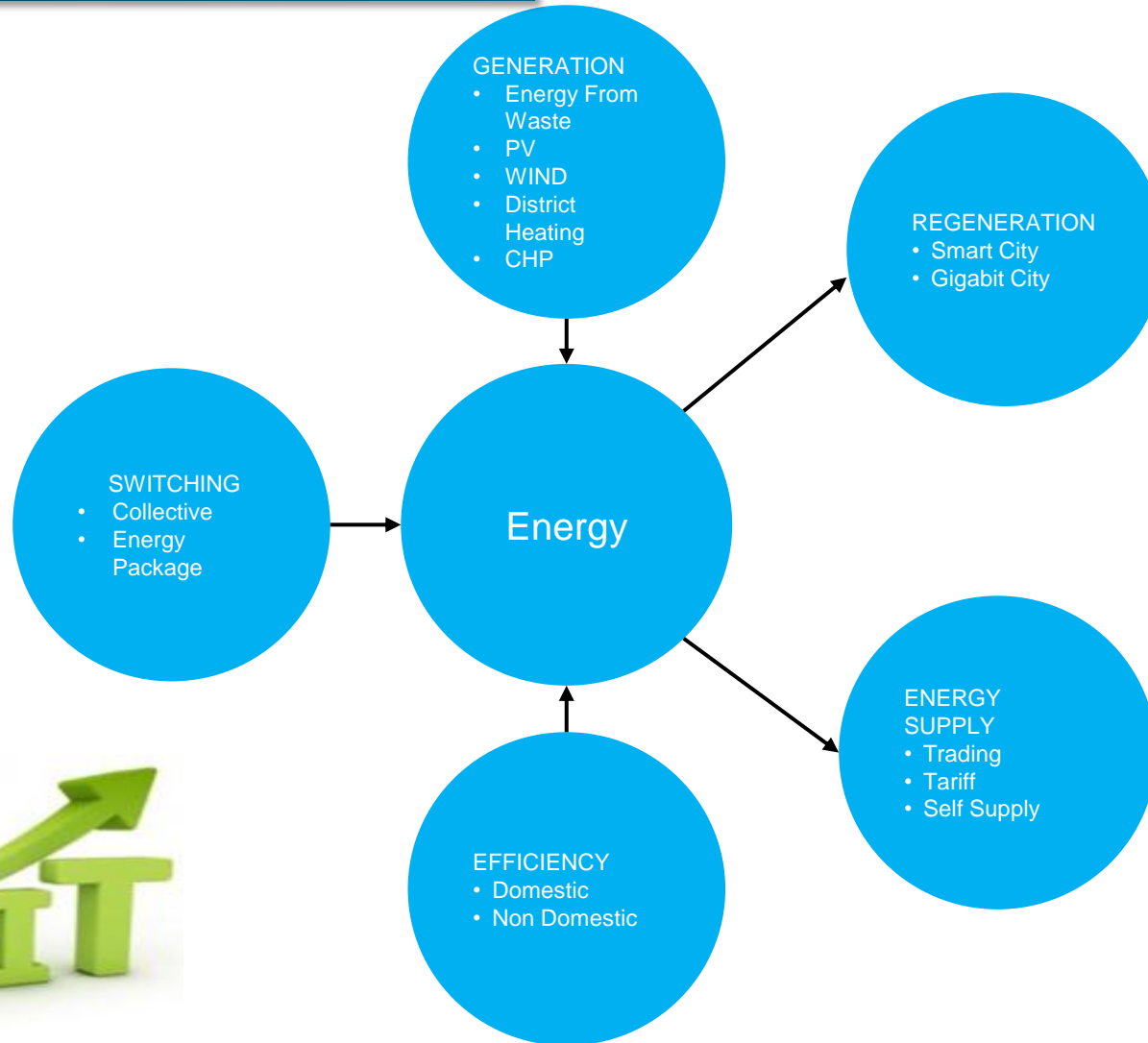
The Peterborough approach:-

- Generate Renewable Energy
- Reduce Energy Consumption
- Enable regeneration
- Reduce carbon
- AND:
- Get financial benefits to the city

- AND LAST BUT NOT LEAST!!!
- Make and save money!



Energy : The drivers for the Council



Solar PV projects

Solar projects - Complete

Completed - Peterborough

1.26MW of roof mount solar including:

- Town Hall
- Regional Pool
- Sports Centres
- Commercial Roof
- 12 Schools

Completed – Colchester Borough Council

0.5 MW of roof mounted solar including:

- Leisure Centre
- Offices
- Sports Pavilion
- Crematorium



Bushfield Sports Centre - Before



Bushfield Sports Centre - After

Solar PV projects

Solar projects

Work in progress:

Peterborough

- Phase 2 of PCC Corporate Properties 9 properties 0.2MW
- Phase 3 of PCC Schools (43 Schools in total) 2.28MW
- 3 industrial estates 1.22MW

Colchester Borough Council

- 4 installations to Colchester CC at 0.25MW.

Under Development

- Commercial Roofs in Peterborough
- Private residential solar offering to all residents
- Ground mounted solar scheme currently in planning and consultation
- South Cambridgeshire District Council, 3 Corporate Buildings and 1500 Houses
- Roll out to other authorities - proposals currently with 14 authorities for approval.



Bushfield Sports Centre - Before



Bushfield Sports Centre - After

What?

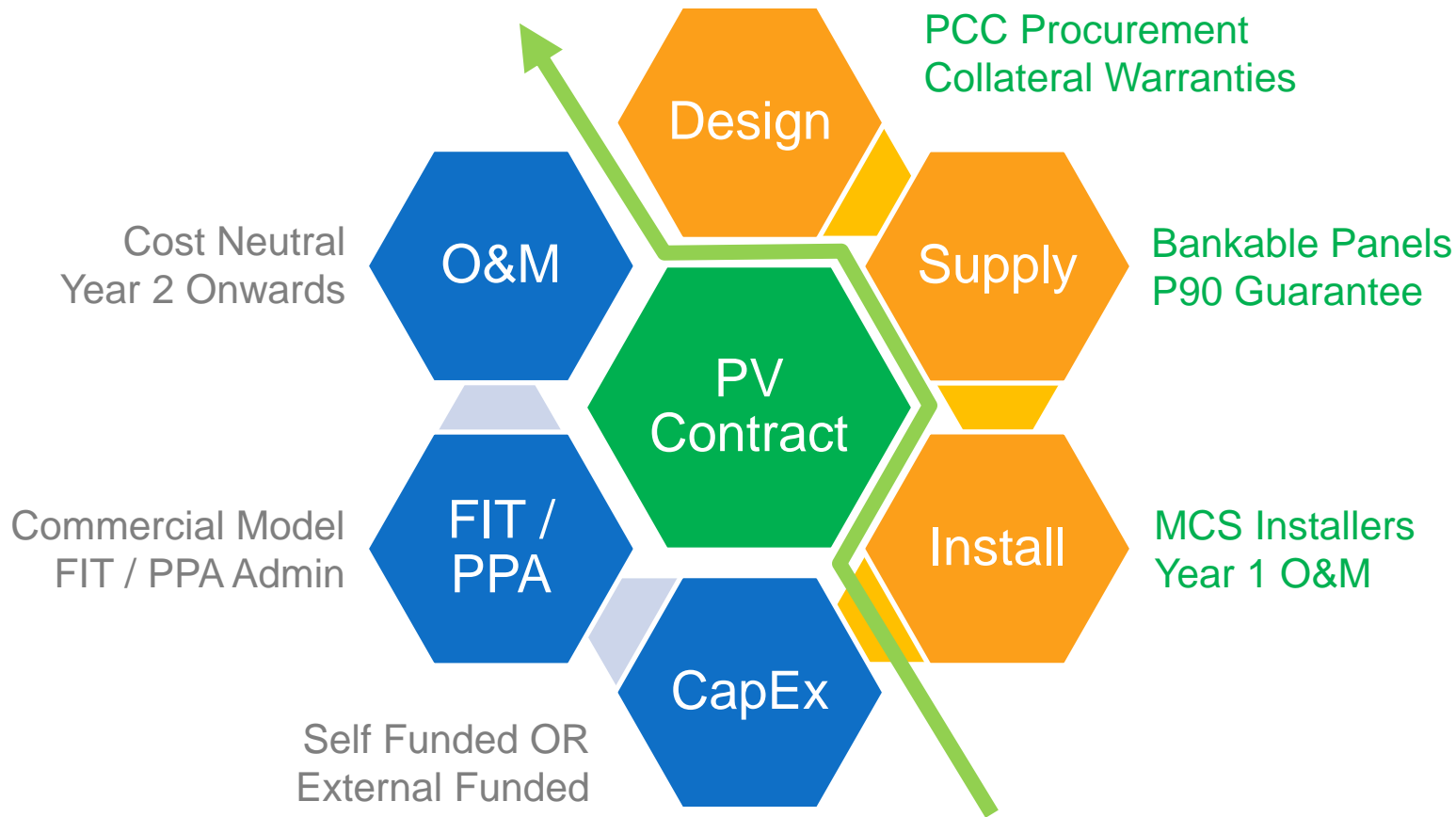
- Council to council contract for the supply, design and install of PV systems & Year 1 O&M
- Offers a funded solution with payback between 7 to 12 years

Who?

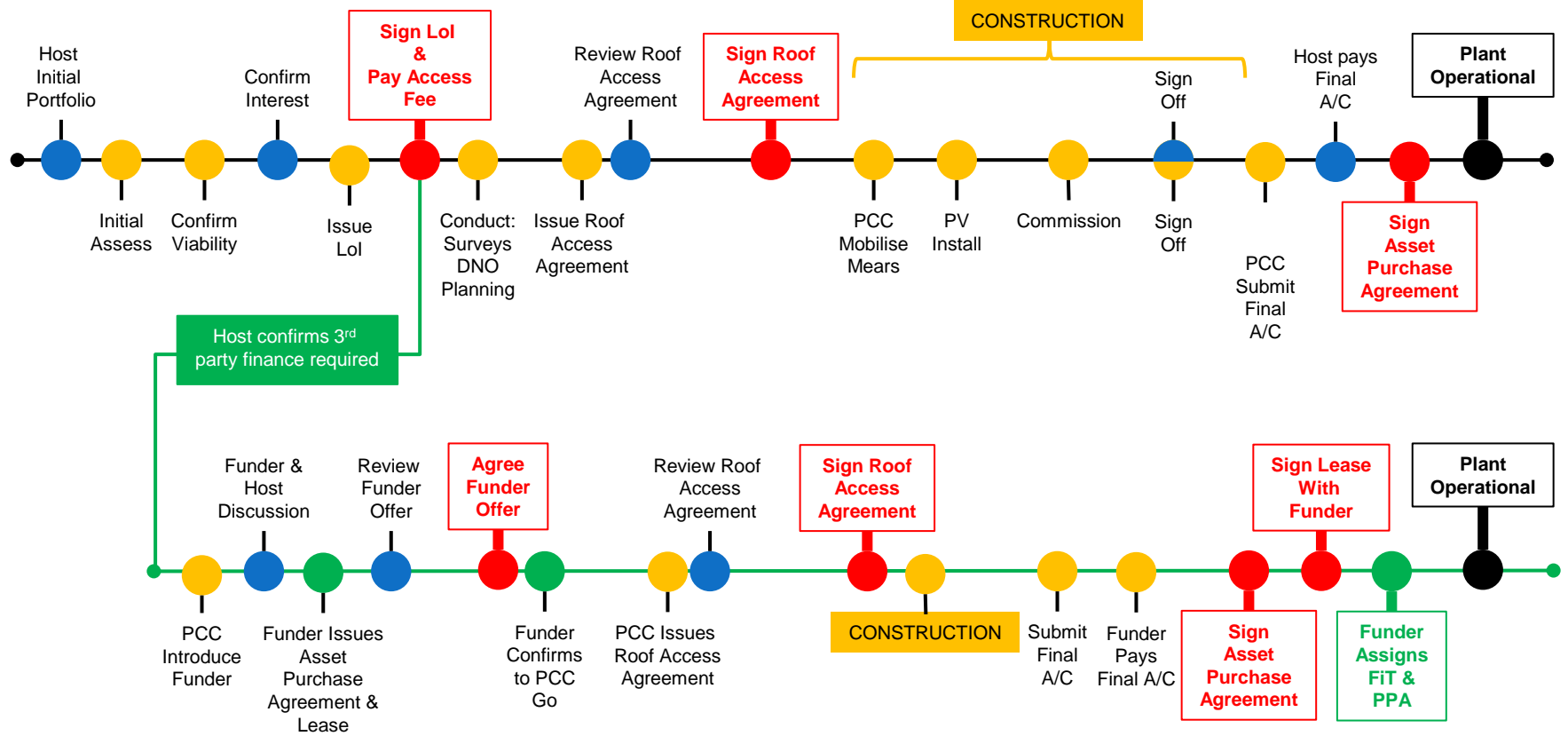
- Client is the “Host”
- Peterborough City Council (PCC) is the main contractor
- Mears sub contract to PCC

Why?

- OJEU Compliant Framework
- Accelerated Delivery: low barriers to entry



Mears solar contract: Overview



NB: year 1 below is first full year of operation and assumes occupier pay for energy

PV Assessment		
ITEM	UNIT	VALUE
Roof Area	m2	350
Solar Irradiation	Hours	1020
Plant Size	kW	50
Yr 1 Energy Yield	kWh	51,000
CapEx	£	72,000
O&M Cost p.a.	£	1,276
Insurance Cost p.a	£	230
CO2 avoided	Kg / yr	20.5
Inflation	%	HMT then 2.5%

PV Assessment		
ITEM	UNIT	VALUE
Yr 1 Energy @ £8.50 / MWh	£	3,637
Yr 1 FIT @ £10.92 / MWh	£	6,489
Yr 1 Export @ £4.77/ MWh	£	510
Yr 1 Income (inc Schools)	£	10,636
Lifetime Incentive Income	£	153,211
Lifetime Total Income	£	281,224
Lifetime Operating Costs	£	51,272
Lifetime Funding Costs	£	122,736
NET POSITION (+/-)	£	107,216

Based on 100% Feed In Tariff for first 25 sites

Ref	Scenario	Net Nominal Position (£)
BC	Base Case	107,216
a	Capex decreases by 10%	119,932
b	Capex increases by 10%	94,500
c	Yield increases by 10%	135,339
d	RPI increases by 0.5%	121,328
a+c	Scenario 1	148,055
b+c	Scenario 2	122,623
a+c +d	Scenario 3	164,014



Roof PV : Business Case – West Oxfordshire -
Carterton Leisure Centre

Key Points – 8 Year Pay Back	
Size Of System	100kw
CO2 Savings Over 20 Years	781 Tonnes
Total Cost Of Installation	£155,000.00
Total Income	£480,494.91
<u>Gross Profit</u>	<u>£325,494.91</u>



- Our framework contracts with Honeywell and Mears were procured through OJEU procurements
- **Honeywell:**
 - Peterborough City Council procured as Central Purchasing Organisation
 - Open to all LAs across the UK
- **Mears:**
 - Ability to install on LA and other roofs across the UK
 - Ability to install ground mount PV
- **Ichoosr:**
 - Collective Switching
- **Mark Group & EON**
 - Green Deal Providers and External Wall Insulation Installers
 - Open to all LA's across the UK
- Our advisor contracts with **Pinsent Mason, EC Harris and Deloitte** were procured through the Crown Commercial Services (CCS) Frameworks
 - Ability to trade with other Councils
 - Full understanding of issues surrounding setting an ESCo up

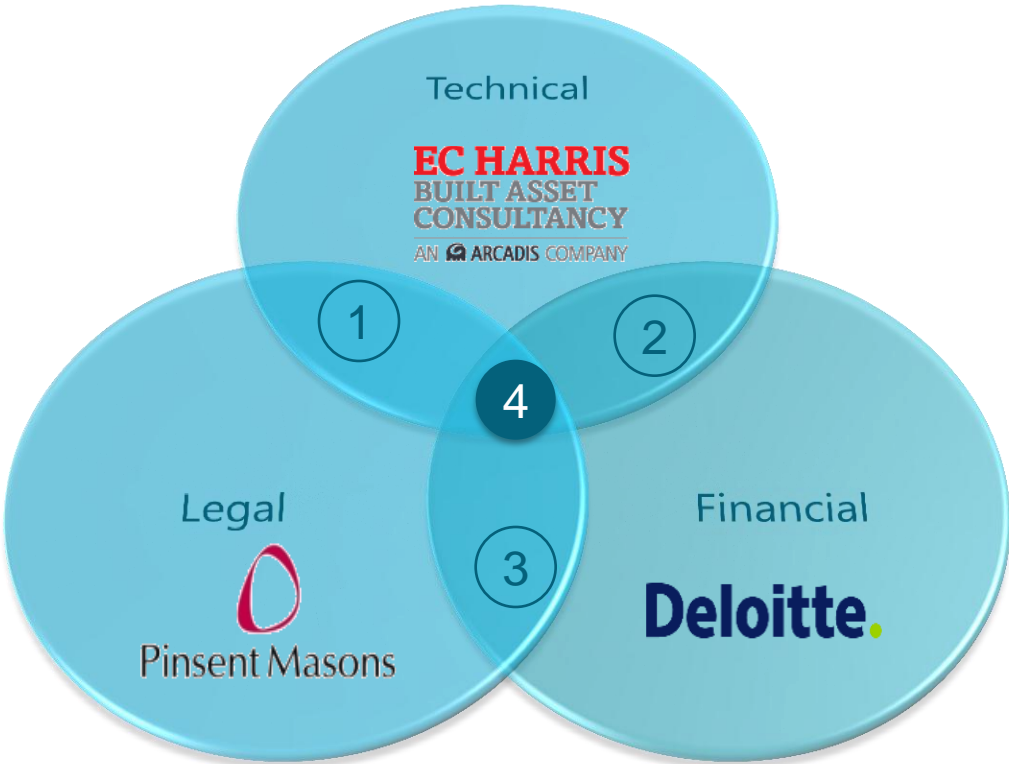


“The 3 P’s”

- People
- Poverty
- Pounds

ESCO resourcing requirements

- 1 Compliant
- +
- 2 Bankable
- +
- 3 Structured
- =
- 4 Commercialised



Partners



CityFibre



Honeywell



Deloitte.

SKANSKA



Next steps

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