The Energy Projects Service

- Renewable energy
- Smart technology & low carbon energy system
- Energy efficiency investment | Invest to save
- Energy assessments and compliance











Solar Carports & Canopies

- Introducing NCC
- Meet the team
- Solar Carport case study Ken Martin Leisure Centre
- Solar Carport case study Harvey Hadden Leisure Centre
- Innovation
- The offer
- Next steps





Introducing NCC – The Energy Projects Team

- Delivered over 14MW of Solar PV in the last 3 years
- Renewable energy specialists.
- Sensible use of innovative technology delivering commercial returns.
- Energy investment programme management.
- Income generation and energy asset management.
- Leaders in the field multiple industry award winners.
- Creating the future of energy generation and smart infrastructure.





Meet the Team

- Gordon Thomson Director of Highways and Infrastructure
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What have we done so far?

- Domestic 4,200 properties Total of 12 MWp.
- 52 sites totaling 1.8 MWp.
- 2 large scale canopy sites Largest publicly owned in the country and award winning.
- 2 sites utilizing batteries to increase benefit and for us to study further.
- Multiple award winners.







Ken Martin Leisure Centre

Case Study: 001

- □ Total kWp: 88.5
- □ Number of panels: 354
- Area: 400 m² coverage: 520
- **Gamma Estimated generation: 710,000 kWh**
- □ Carbon savings (tonnes): 376
- □ Percentage reduction in imported electricity: up to 35%







Harvey Hadden Sport Village

Case Study: 002

- □ Total kWp: 267
- □ Number of panels: 1163
- **Area: 1600 m²**
- **Gamma Estimated generation: 220,000 kWh**
- **Carbon savings (tonnes): 77**
- □ Percentage reduction in imported electricity: up to 40%







Leisure Centre images













Innovation – What we are doing

- Battery integrated Solar PV.
- Large scale batteries for grid services.
- Solar carports and canopies with or without e-vehicle chargers.
- Vehicle 2 Grid (V2G).
- Export limited Solar PV systems.
- Post FiT domestic PV with integrated batteries and grid services.
- Energy as a Service.
- Fuel cell trials.
- PPA.
- Procurement framework.





Lessons Learned

- Companies/Contractors cutting corners on public buildings to maximise their profits – lead to future maintenance issues
- Developed our own MCS accredited internal delivery and maintenance teams
- Cyclical assessments of building stock
- Finger on the pulse fast moving tech industry
- Better investment than predicted excellent generation





How can we help you/others?

- Open days of our innovative sites
- Power purchase agreement.
- OJEU compliant framework access to market.
- Open and honest advice.
- Public Body complete confidence that we will be here to honour service agreements.
- Vast industry experience and technical ability.
- Tailored service what do you want to achieve and we can help you get there.





