Opportunities from Solar Canopies



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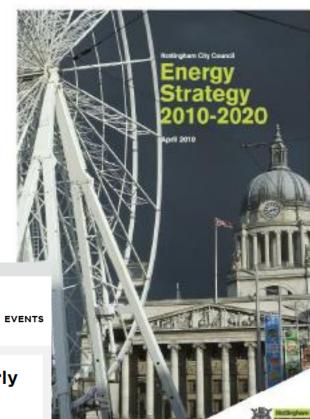
Nottingham Energy Strategy

Target:

26% reduction by 2020 against 2005 levels

Achieved:

33% reduction in 2016





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Nottingham smashes climate targets four years early

8 August 2016, source edie newsroom

Nottingham has surpassed its climate change targets four years early, according to Government data which shows a 33% reduction in the city's carbon emissions since 2005.



Energy Projects Service





Energy Projects Service

- Energy Performance Certificates (domestic and nondomestic)
- Display Energy Certificates
- Air Conditioning Surveys
- EE Monitor (for heat metering and billing)
- Renewable Energy project management
- Energy Efficiency project management
- Environment Management System consultancy
- Energy Saving Opportunity Scheme consultancy

http://nottmcommercialservices.co.uk/energy-projects-service/





1. Site selection

- 2. Business Case
- 3. Internal Approval
- 4. External Approval
- 5. Delivery
- 6. Monitoring and Maintenance

- Orientation
- Shading
- Car park layout
- On site energy user
- Site longevity



1. Site selection

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- 6. Monitoring and Maintenance

- Energy savings
- FiT income
- 5% ROI (after borrowing)
- Additional considerations
 - EV charging
 - Shared installation costs
 - Premium Parking
 - Advertising
 - LED lighting
 - Surface protection



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- Pre approved limits
- Exec Board



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- DNO grid connection
- Planning
 - Specification
 - Structural details
 - Drainage and surface-water management
 - Grid connection
 - Glint and glare
 - Details of construction
- Consultation



- 1. Site selection
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- Internal delivery
- Specialist Contractors
- Scheduled maintenance (in business plan)
- Visual displays













Further Developments

- Further
 commercial PV
 and Solar Carport
 rollout
- PV Framework

Lot number	Category	Estimated Value Range of Call-offs	Approx. value over four years	
			Nottingham City Council	Partner Organisations
1	Supply of Domestic Solar PV Panel Kits and Accessories	£0 - £500k	£3 million	£3 million
2	Supply of Commercial Solar PV Materials and Accessories	£0 - £500k	£10 million	£3 million
3	Supply & Installation of Domestic Solar PV	£0 - £3m	£3 million	£9 million
4	Supply & Installation of Commercial Solar PV	£0 - £5m	£7 million	£10 million
5	Installation of Solar PV	£0 - £100k	£4 million	£2 million
6	Design of Specialist Solar PV	£0 - £100k	£0.5 million	£0.5 million
Total			£27.5 million	£27.5 million



Further Developments

- Battery Trial
- EV charge point rollout through Go Ultra Low http://goultralownottingham.org.uk/theprogramme/public-charging-infrastructurenetwork/
- Vehicle to Grid trial through Interreg funding:
 http://www.nweurope.eu/projects/project-search/cleanmobilenergy-clean-mobility-and-energy-for-cities/





