

## Photovoltaic Installation on BREAM Excellent Building Energy | Manchester, UK



Photo source: Manchester Metropolitan University

A 584 solar panel array was installed on the BREAM Excellent certified academic Brooks building at the Manchester Metropolitan University Birley Campus. The roof was pre-constructed to allow for PV installation.

The peak electrical output of the PV array is 157 kWp. At its peak output it can supply approximately 30% of the Brooks Building electricity demand.

### Measured Impacts

**140,000** kWh per annum  
Saving **€18,500**  
Carbon saving **30,589 kg**



project scale

**Individual site**



development type

**Retrofit**

### Benefits

- Additional energy generation
- Carbon savings
- Enhance grid stability
- Reducing use of fossil fuel
- Reducing operational costs
- Reducing GHG emissions
- Decreasing energy consumption
- Decreasing energy costs
- Improving energy efficiency

### Lessons learned

- Ensuring building and roof integrity is suitable for PV – a number of buildings surveyed were not suitable

### Challenges

Project funding meant that an asset transfer was required

### Supporting factors



infrastructural

Grid capacity

Suitable building with structurally sound roof pre-constructed to be PV ready



financial

MMU provided additional funding to maximise the PV array



geographical

Corridor Manchester



social

Contributing to MMU as one of the top sustainable campus' in the UK  
Contribution to city's carbon reduction targets



partners

Manchester Metropolitan University, Manchester City Council

### Films

[https://www.youtube.com/watch?v=0zD9\\_HTairg](https://www.youtube.com/watch?v=0zD9_HTairg)

### Contacts

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