

WM Solar Procurement Partnership

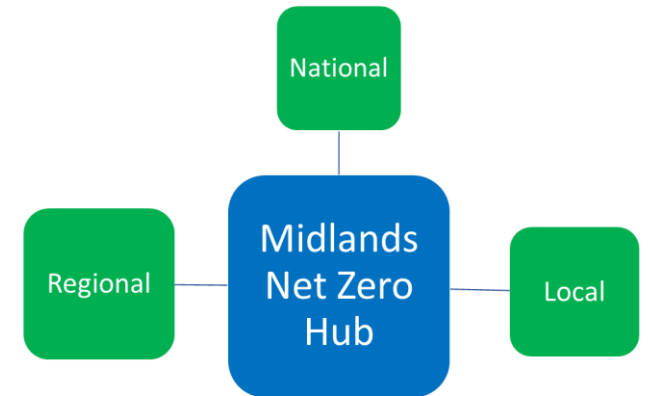
Serena Bacuzzi

Regional Principal Net Zero Projects Officer



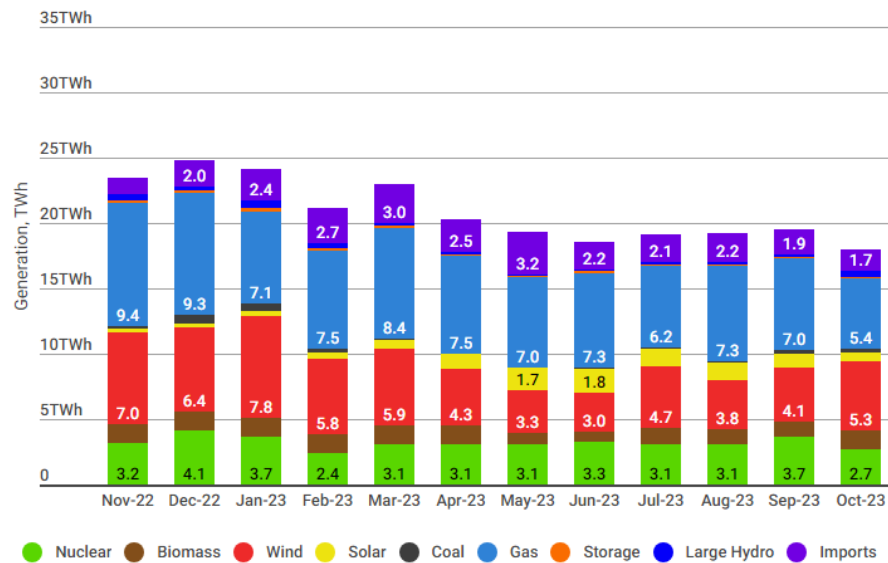
Midlands Net Zero Hub

- DESNZ (formerly BEIS) funded initiative: Local Net Zero Programme
 - Aim to support local decarbonisation and clean growth
 - Provide capacity and capability support to LEPs, Local Authorities and local communities to identify and deliver net zero projects
- 5 x Net Zero Hubs nationally
- Nottingham City Council is the accountable body for MNZH
- 9 x LEP areas with a locally based Net Zero Projects Officer

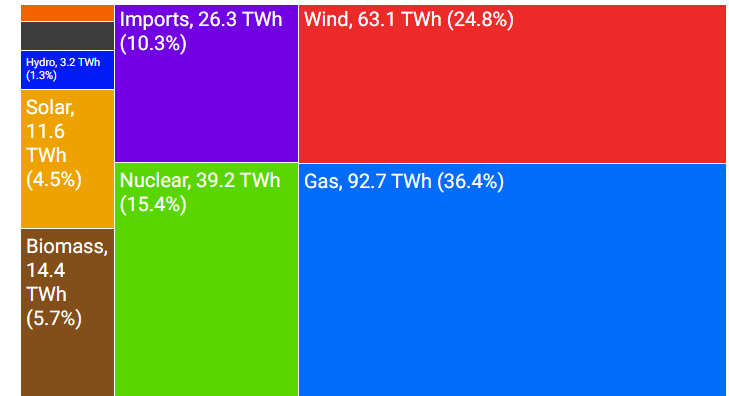


Project scope

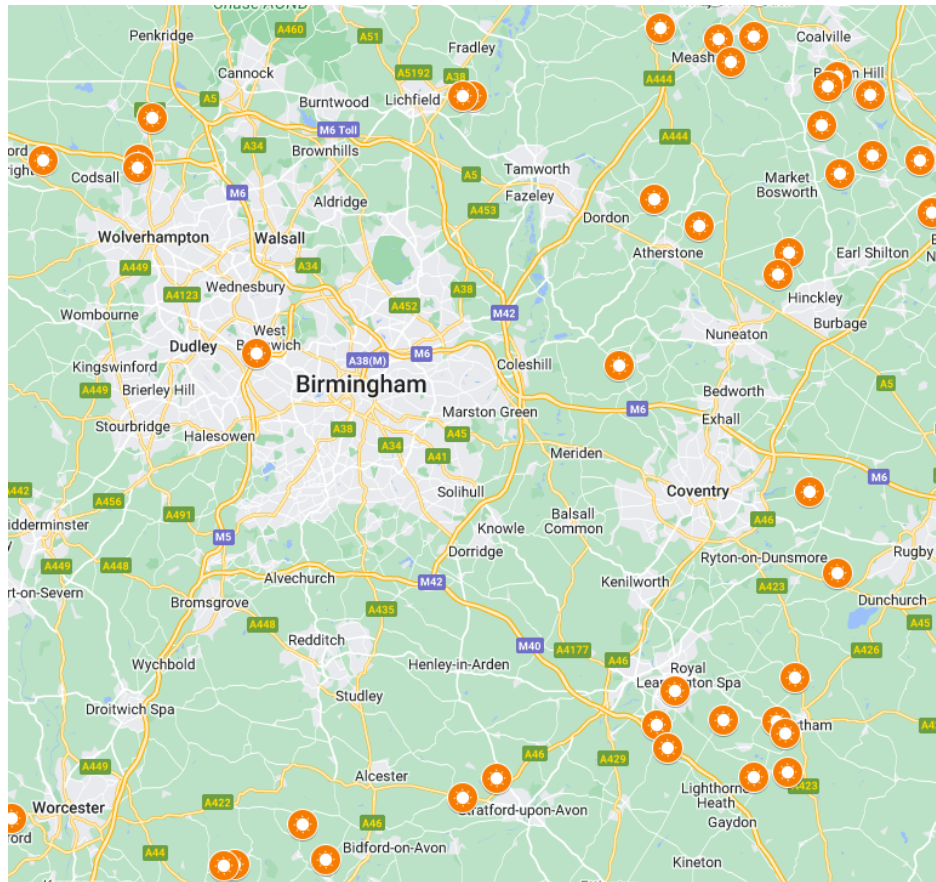
1. Support national five-fold increase in solar capacity by 2035 from the current 14GW, in line with the UK Energy Security Strategy.
2. Accelerate finance and deployment of commercial and industrial rooftop solar PV projects in the West Midlands.



Sources: [MyGrid GB](#)



Project scope



Source: [DBEIS Renewable energy planning database monthly extract](#)

Scale of Opportunity

The West Midlands Combined Authority (WMCA) area is home to 170,475 active enterprises contributing to 6,575 ktCO₂ emissions ([State of the Region 2020 Full Report](#))

Project questions

- How to increase deployment of rooftop solar projects in the West Midlands?
- What are the barriers to delivery of commercial solar installations?
- What interventions can be introduced to remove those barriers?

Main barriers

Financial

- Businesses and commercial building owners lack of capacity and capital
- Limited public funding to support business decarbonisation
- Lack of consistent/sustainable finances to deliver projects at scale
- Lack of understanding of financing options available

Technical

- Electricity grid constrains across the Midlands
- Building ownership
- Structural integrity of the building/roof

Commercial

- Business models available and contractual barriers
- Availability of supply chain
- Timing mismatch between leases and project lifetime

Project outcomes

- Determine viable financing options and delivery vehicle to install rooftop solar PV on commercial and industrial buildings.
- Facilitate commercial and industrial partnerships for rooftop solar PV deployment to:
 - Reduce transaction costs & administrative time associated to the purchase, installation and management of the solar PV systems.
 - Share project costs and resources between partners.
 - Implement solutions ‘behind the meter’ to avoid dependency on grid connection.
 - Establish direct power agreement between generator and offtaker to provide financial stability and avoid volatile fluctuations of the energy market
 - Achieve economy of the scale and make solar projects attractive for developers and investors.
 - Demonstrate the effectiveness of group buying for solar.
- Establish an exemplar of collaborative renewable energy project for commercial properties in WMCA region.

Project stages

Phase 1: Sites identification and Option appraisal - **Active**

- Mapping of the Solar Potential within the WMCA region.
- Stakeholder engagement activities aimed at the recruitment of suitable commercial and industrial building owners into the partnership and promotion of the collective purchasing model.
- Explore viable procurement and financing options through the Net Zero Delivery Vehicle (NZDV) and ESCO-in-a-box models to facilitate aggregation and support delivery at scale.

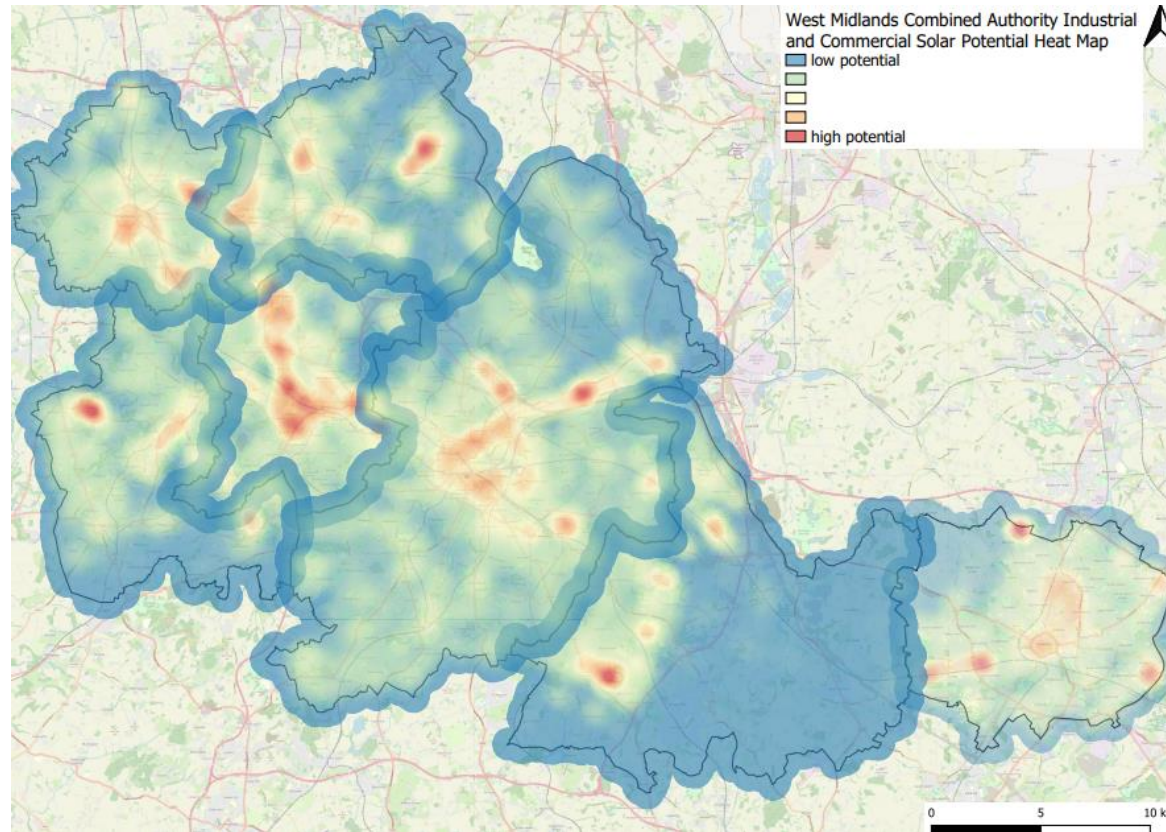
Phase 2: Business case development - **Future**

- Develop a business case for a collective commercial Solar PV demonstrator project which have a combined rooftop solar PV potential greater than 1MW.
- Looking for partners and funding to progress.

Delivery partners



Solar mapping



This mapping exercise, supported by the building data, is helping identify the most suitable clusters of collocated commercial and industrial buildings with a combined solar capacity greater than 1MW.

Key metrics:

- Commercial and industrial building (class C)
- Individual roof solar potential greater than 100kW or 250kW
- IRR above 5%

Delivery model

Increase the volume and rate of solar PV installations

Identify a pipeline of bankable rooftop solar projects across the WMCA area

Enable aggregation of projects to reach the scale required to attract investment

Provide a standardise procurement process and introduce risks management measures

Secure project finance and co-investment (private / public sector)

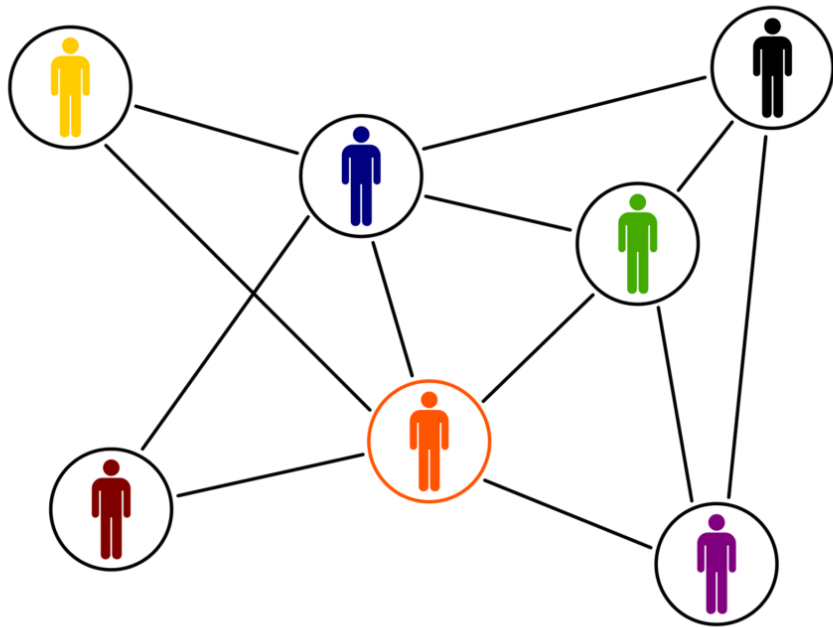
Ensure continued monitoring and evaluation of investments

Outline quality assurance methods and local governance requirements to deliver projects

Provide access to technical expertise and local supply chain

Stakeholder engagement

As part of the project we are looking to engage with:



- Businesses and commercial buildings occupiers that want to:
 - Reduce energy costs and carbon emissions
 - Minimize exposure to electricity price volatility
 - Increase business resilience and competitiveness
- Building owners that want to:
 - Increase the value of their property
 - Increase occupancy rate and retention
 - Generate revenue through sale of electricity
 - Meet Regulatory Compliance (MEES)
- Investors, finance providers and developers
- Local Authorities

Thank you



Email:

serena.bacuzzi@nottinghamcity.gov.uk