

Local Weather Data Supports Optimal Building Energy Design

Designing and delivering high performance, low carbon buildings is a real challenge for design professionals. Tightening planning guidance and building standards must be met, building operating costs reduced, and stakeholder concerns addressed, while achieving good design and aesthetics. Despite emerging good practice, such as the use of building simulation software, evidence shows that many low energy buildings fail to live up to design expectations.

Without detailed site data and information, designers' ability to accurately model and assess building energy performance is inherently limited. Clients and building operators are liable to be left disappointed by low energy yields and efficiency gains, and unexpectedly long paybacks. The key to avoiding this is gaining an accurate measure of weather conditions at specific sites - to calculate the available renewable energy resources, and fully understand building energy performance. We address this need.

Mirspot approach

- Captures and analyses any site specific weather data set
- Integrates real weather data with detailed topographical site mapping
- Provides an accurate assessment of site energy resources
- Provides an assessment of weather-related building energy performance
- Accurately identifies best Low and Zero Carbon (LZC) options for highest ROI

Current industry practice

- Does not recognise the link between the weather, energy availability and building energy performance
- Often relies largely on generic Met Office data
- Does not account for localised effects of weather on building energy performance
- As data is not site-specific ROI calculations are inaccurate

Services Components

- State of the art and integrated capture and modelling of local weather and building energy data
- Detailed analysis and recommendations based on site-specific opportunities and constraints, and clients' operational needs
- Customised reporting, supported by graphical and / or raw data, suitable for planning evidence, loan applications or sales / promotional materials

Benefits to Your Business

- Accurate assessment of site-specific renewable energy resources
- Weather-related building energy performance assessment
- Fully integrated Low and Zero Carbon (LZC) design strategies
- Better quality data brings more confident decisions and designs
- Better data informs design solution discussions with planners
- Lower carbon assets and more reliable renewables fulfils client goals
- Service differentiation, competitive edge and marketing potential

