

The Rooftop Project

Project information

These datasets show where there may be opportunities to retrofit existing building rooftops for green roofs (intensive and extensive), cool roofs and solar panel installations.

Method

The method of analysis that was used for this project was a spatial multi-criteria analysis (MCA) developed by GHD known as InDeGO (Infrastructure Development – Geospatial Options).

The outcome of the analysis was a spatial representation of the rooftop adaptation opportunities for the whole of the City of Melbourne. That is, each rooftop was assessed via an automated method (i.e. spatial analysis) and the results are represented in spatial polygon layers.

Additional dataset information can be found in the dataset sections below.

Disclaimer

The information published on this site is a community service provided by the City of Melbourne to highlight potential and disseminate information in regards to The Rooftop Project. Building owners will need to undertake their own feasibility studies and obtain independent advice if proceeding with a project.

The City of Melbourne is not responsible to you or anyone else for any loss, damage or injury incurred or sustained by any person as a result of use or reliance on the information published on this site. This includes, but is not limited to, the transmission of any computer virus.

Dataset: Green Rooftop Intensive

Intensive green roofs are heavier vegetated landscapes with a deeper layer of growing substrate (more than 20cm deep). They generally support a wider variety of plant types, need irrigation and are accessed by people for recreation.



Dataset information

Layer name: mga55_gda94_green_roof_intensive_poly.shp

Geometry Type: Polygon

Projected Coordinate System: GDA_1994_MGA_Zone_55

Field	Description	Value information
OBJECTID	System generated unique polygon identification number	-
Shape	Geometry field used in spatial applications	-
RATING	The value indicating the potential ability to support an intensive green roof	Values are one of: Very Poor, Poor, Moderate, Good, Excellent

Dataset example:



Dataset: Green Rooftop Extensive

Extensive green roofs are lightweight vegetated landscapes with a shallow layer of growing substrate (less than 20cm deep). They generally have lower water requirements and use small, low growing plants. Green roofs help to cool the city, improve building thermal performance of buildings, increase urban ecology and biodiversity, provide amenity, increase property values and reduce stormwater volumes.



Dataset information

Layer name: mga55_gda94_green_roof_extensive_poly.shp

Geometry Type: Polygon

Projected Coordinate System: GDA_1994_MGA_Zone_55

Field	Description	Value information
OBJECTID	System generated unique polygon identification number	-
Shape	Geometry field used in spatial applications	-
RATING	The value indicating the potential ability to support an extensive green roof	Values are one of: Very Poor, Poor, Moderate, Good, Excellent

Dataset example:



Dataset: Rooftop Solar Adaptation

Locally generated renewable energy plays an important part in delivering on the City of Melbourne's zero net emissions vision and is valuable for business and households alike. Installing solar panels lowers electricity bills, demonstrates your commitment to sustainability, and reduces reliance on the carbon-intensive electricity grid.



If you are a business or resident in the City of Melbourne, installing solar panels on your roof is a great way to generate clean electricity and reduce greenhouse gas emissions from your property.

Dataset information

Layer name: mga55_gda95_green_roof_solar.shp

Geometry Type: Polygon

Projected Coordinate System: GDA_1994_MGA_Zone_55

Field	Description	Value information
OBJECTID	System generated unique polygon identification number	-
Shape	Geometry field used in spatial applications	-
RATING	The value indicating the potential to go solar on the building's rooftop	Values are one of: Very Poor, Poor, Moderate, Good, Excellent

Dataset example:



Dataset: Cool Rooftop Adaptation

Cool roofs reflect the sun's heat and emit radiation back into the atmosphere at a higher rate than standard materials. They reduce the amount of heat held and transferred to the building below, keeping the building cooler and at a more constant temperature.



Dataset information

Layer name: mga55_gda94_green_roof_cool.shp

Geometry Type: Polygon

Projected Coordinate System: GDA_1994_MGA_Zone_55

Field	Description	Value information
OBJECTID	System generated unique polygon identification number	-
Shape	Geometry field used in spatial applications	-
RATING	The value indicating the potential your roof has to be turned into a cool roof.	Values are one of: Very Poor, Poor, Moderate, Good, Excellent

Dataset example:

