

Advisory Note – Assessing overshadowing impacts on solar panels

Over the past few years, many Moreland households and businesses have installed solar photovoltaic systems to reduce both greenhouse emissions and energy costs.

It is recognised that new development has the potential to impact on the performance of existing solar panels through overshadowing. There are currently no State-wide guidelines for assessing overshadowing impacts a proposed development may have on solar panels.

Council is committed to protecting photovoltaic solar panels from new development where appropriate, and has prepared this advisory note to provide guidance when dealing with planning permit applications that may impact on existing photovoltaic panels.

Overshadow impacts on solar panels are considered in the context of outside and adjoining activity centres and within activity centres:

Outside and adjoining Activity Centres

Council will assess the impact of development on existing solar panels having regard to Clause 54.03-5 and Clause 55.03-5 of the Moreland Planning Scheme (ResCode). These clauses state:

Energy Efficiency

Buildings should be:

- Oriented to make appropriate use of solar energy.
- Sited and designed to ensure that the energy efficiency of existing dwellings on adjoining lots is not unreasonably reduced.

An urban context report should identify any existing solar panels on adjoining buildings and the design response should include overshadowing diagrams showing whether the solar panels will be affected by the development. If this has not been addressed in the urban context report, Council may request this information to be provided under a further information request pursuant section 54 of the *Planning and Environment Act* 1987.

If an objection has been made expressing concern that the proposed building will affect the photovoltaic solar panels and no information was provided with the application, Council may request overshadowing diagrams to be provided to show how the solar panels could be affected.

In situations where proposed development results in substantial overshadowing on existing solar panels, Council may request a more detailed technical report that provides a more definitive assessment on the impact of the solar panels. If the technical report proves there is a significant impact in terms of energy performance, the applicant may be encouraged to enter into discussions with an objector to explore mutually agreeable alternatives such as re-designing the development to reduce the overshadowing impact on the solar panels, contributing to the supply of new panels or relocating existing panels. Such discussions are purely voluntary and any agreements reached between parties will be a private matter and not formally involve Council.

ResCode does not describe what an unreasonable impact on existing solar panels may be. In assessing the impact of buildings on existing solar panels, Council will apply the criteria established by the Victorian Civil and Administrative Tribunal (VCAT) which provides some useful guidance on determining the extent to which it is reasonable for new development to overshadow existing solar panels. The criterion includes:



- Acknowledging that the ultimate test is 'reasonableness', rather than avoiding any overshadowing altogether.
- Applying 'legitimate expectations' in light of the strategic planning controls and policies affecting the subject land and area.
- Whether the relevant solar panels have been placed in an unreasonably vulnerable position on the host building.

In addition, other relevant matters may include:

- Whether the position of the solar panels on the host building is due to constraints arising from heritage planning controls or a heritage covenant.
- The type or model of solar panels that are impacted eg. whether the individual panels are designed to work in parallel with each other or as a combined group.
- The supporting evidence any one party has provided (eg. photos, vertical shadow diagrams and/or a
 professional report by a solar consultant), to advance their case about the likely extent of
 overshadowing.
- The length of time the existing adjacent solar panels were installed on the host building.

The above criteria was established by the Tribunal in *Chen v Melbourne CC & Ors* (Red Dot) [2012] VCAT 1909 and *John Gurry & Associates Pty Ltd v Moonee Valley CC & Ors* (Red Dot) [2013] VCAT 1258.

Within Activity Centres

The Moreland Planning Scheme identifies three large activity centres of Brunswick, Coburg and Glenroy and 12 neighbourhood centres. Brunswick and Coburg activity centres allow development up to 10 storeys (excluding Pentridge which allows higher buildings) and development up to four storeys is possible in the 12 neighbourhood centres. Activity centres seek to achieve a more sustainable urban form by accommodating increased population with convenient access to jobs and services, including public transport.

Having regard to this policy context, Council acknowledges that the protection of existing photovoltaic solar panels on lower-scale buildings will be more difficult to achieve. This has been confirmed by VCAT in *Babaniaris v Greater Geelong CC* [2015] VCAT 1793 and *Bagnato v Moreland CC* [2016] VCAT 5. In *Babaniaris*, the Tribunal stated:

In my view the question of whether or not overshadowing of solar panels is unreasonable is to be determined by a consideration of the scale of buildings, and therefore the degree of overshadowing, that might reasonably be expected having regard to the planning policies and controls relevant to the locality and the existing and preferred character of development within the neighbourhood. It should not be the case that one property owner can unreasonably compromise what would otherwise be entirely reasonable development on a neighbour's land on the basis that, the development might overshadow solar panels installed by the property owner.

Accordingly, Council considers that in activity centres, residents and businesses in low-scale buildings:

- Have no reasonable expectation that their solar panels will be protected; and
- Should very carefully consider whether it is viable to install solar panels if any adjoining sites are likely to be developed in accordance with the activity centre guidelines.