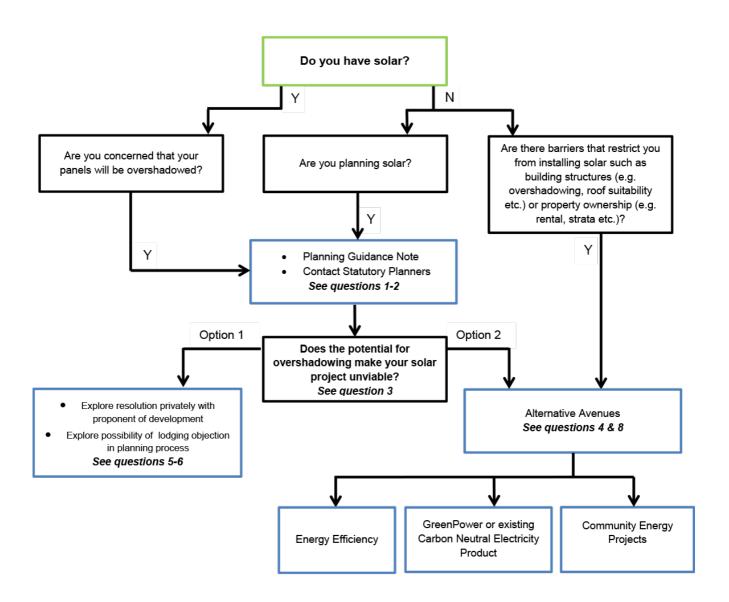


Assessing solar overshadowing potential

October 2017

Solar assessment flow chart

The flow diagram below can be used to identify key questions and resources when assessing overshadowing potential. It also points to the response options available if you identify that the potential for overshadowing impacts the viability of your solar project.



Assessing overshadowing potential

1. I'm thinking about installing solar, but there is a lot of development in my area that might overshadow my property. What can I do?

The first step in planning for solar is to understand the extent of overshadowing potential and its likely timing on your property. The following resources are available to guide you in this process:

- The City of Melbourne's Planning Guidance Note
 - This guides City of Melbourne residents and businesses through questions of due diligence and risk, including the type of development that is allowed in your area and whether this may present any overshadowing.
- Contact a statutory planner
 - If you live or operate a business in the City of Melbourne you can contact a statutory planner and speak to them directly about your property and how to assess the potential for overshadowing. Call (03) 9658 9658 and ask to speak with a development planner or send an email to planning@melbourne.vic.gov.au.
- Request an overshadowing diagram from the development proponent
 - If there are developments that are planned or underway that could create overshadowing on your property, you can request an overshadowing diagram based on the proponent's proposed design.
- Request a solar suitability assessment from a solar installer to examine your solar potential based on the structural suitability of the installation area and any existing overshadowing.

If you already have solar, the above resources can be used to explore the overshadowing potential from nearby development(s) on your existing panels.

2. What does the Planning Guidance Note provide? How does that help me?

The City of Melbourne's <u>Planning Guidance Note</u>¹ provides direction for due diligence when planning for solar or assessing possible impacts from nearby developments on your solar installation.

The Guidance Note provides information and references resources that can be used to assess the likelihood of development occurring nearby and the associated overshadowing potential. Development guidelines can identify where future overshadowing is possible and residents should be aware that development may or may not occur within the lifetime of their solar installation.

Responding to overshadowing risk

3. I've had a look at the information sources provided in the Planning Guidance Note and I think there's a risk I'll get overshadowed. Does that mean solar is not viable on my property?

Even if there is a risk of overshadowing, a solar system may still be viable for your property. When making a decision on whether to install solar (or when exploring the overshadowing impact of nearby development on your existing solar system), it's important to consider the following:

1. The size of your solar system (either your existing system or the one you would install).

¹ http://www.melbourne.vic.gov.au/sitecollectiondocuments/solar-overshadowing-guidance-note.doc

- 2. The associated payback period based on:
 - o system size;
 - o avoided energy costs; and
 - where applicable, the feed in tariff received for selling energy into the gird.
- 3. The level of overshadowing risk, in terms of the timeframe that overshadowing might occur and the proportion of the installation area that could be overshadowed at different times of the day or year.
- 4. The impact that these factors would have on your payback period.

If the viability of your solar installation (either existing or one you are planning) is significantly impacted by overshadowing potential, there are some alternatives to rooftop solar that residents and businesses can consider (see question 4)

4. I think a solar project on my property is unviable. What are my options?

- If **reducing your power bill** is your main motive for installing solar, energy efficiency measures are an effective alternative to achieving this benefit:
 - The <u>Sustainability Victoria website</u>² provides a range of energy efficiency information for residents, businesses, schools and the community:
 - If you are a business, you can also participate in the <u>1200 Buildings Program</u>³ and you may be able to access funding for an Environmental Upgrade through the <u>Sustainable Melbourne Fund</u>⁴
- If using renewable energy is your main motive for installing solar, you could purchase <u>GreenPower</u>⁵ through your retailer or contribute to a community energy project:
 - <u>Many energy retailers</u>⁶ currently offer a GreenPower option, which allows you to purchase electricity supplied from renewable sources.
 - A number of community energy projects are currently open to contributions from Victorians including investment schemes (see <u>ClearSky Solar Investments</u>⁷), revolving investment funds (see <u>CORENA</u>⁸) and retailer products that donate to community energy projects (see Powershop <u>Your Community Energy</u>⁹). However, most of these projects are located outside of the City of Melbourne.
- If **reducing your emissions** is your main motive for installing solar, you could purchase carbon neutral electricity:
 - Some retailers currently offer carbon neutral electricity, where the carbon emissions from generating your electricity are offset by carbon reduction projects.

Anybody who is at risk of becoming overshadowed by a new development also has the right to lodge a <u>planning application objection</u>¹⁰ as part of the planning process.

5. Can I explore a resolution (e.g. compensation, moving of panels etc.) with the developer of the overshadowing property?

It may be worthwhile approaching the proponent of the development to privately seek a resolution (e.g. reconfiguration of design, compensation, moving of panels etc.) to any overshadowing impacts. The City of

² http://www.sustainability.vic.gov.au/services-and-advice

³ http://www.melbourne.vic.gov.au/business/sustainable-business/1200-buildings/Pages/1200-buildings.aspx

⁴ http://www.melbourne.vic.gov.au/business/sustainable-business/Pages/sustainable-melbourne-fund.aspx

⁵ http://www.greenpower.gov.au/

⁶ http://www.greenpower.gov.au/Homes/Find-a-Provider/

⁷ http://www.clearskysolar.com.au/index.php

⁸ https://corenafund.org.au/

⁹ http://www.powershop.com.au/your-community-energy/

¹⁰ http://www.melbourne.vic.gov.au/building-and-development/planning-and-building-services/planning-applications/Pages/objecting-to-aplanning-application.aspx

Melbourne has no standing in these disputes and is unable to provide direction or guidance to parties involved.

6. Surely I'm not the only one with this issue. Why doesn't the City of Melbourne set up a tribunal or a compensation mechanism?

A compensation mechanism isn't possible within the planning scheme (i.e. the Melbourne Planning Scheme). Any compensatory system would require the Victorian Government to pass enabling legislation. To encourage the Victorian Government to create this enabling legislation, contact your State Member of Parliament and/or the office of the <u>Victorian Planning Minister</u>¹¹.

7. Why can't the new development put solar on its roof and provide me with the power?

The sharing of solar electricity across property boundaries may be possible under current state and federal regulations, however it requires the involvement of an electricity retailer and an electricity distributor and there have been no successful examples to date.

Solar opportunity restricted because of building structure or property ownership

- 8. I'm unable to put solar on my roof because...
 - (1) I live in an apartment and I would need to get agreement from all owners;
 - (2) I live in a rental property; or
 - (3) My property is already overshadowed. What can I do?

There are some alternatives to rooftop solar that you might want to consider:

- If **reducing your power bill** is your main motive for installing solar, energy efficiency measures are an effective alternative to achieving this benefit:
 - The <u>Sustainability Victoria website</u>² provides a range of energy efficiency information for residents, businesses, schools and the community.
 - If you are a business, you can also participate in the <u>1200 Buildings Program</u>³ and may be able to access funding for an Environmental Upgrade through the <u>Sustainable Melbourne Fund</u>⁴.
- If using renewable energy is your main motive for installing solar, you could purchase <u>GreenPower</u>⁵ through your retailer or contribute to a community energy project:
 - <u>Most energy retailers</u>⁶ currently offer a GreenPower option, which allows you to purchase electricity supplied from renewable sources.
 - A number of community energy projects are currently open to contributions from Victorians including investment schemes (see <u>ClearSky Solar Investments</u>⁷), revolving investment funds (see <u>CORENA</u>⁸) and retailer products that donate to community energy projects (see Powershop <u>Your Community Energy</u>⁹). However, most of these projects are located outside of the City of Melbourne.
- If **reducing your emissions** is your main motive for installing solar, you could purchase carbon neutral electricity:
 - Some retailers currently offer carbon neutral electricity, where the carbon emissions from generating your electricity are offset by carbon reduction projects.

¹¹ http://www.vic.gov.au/contactsandservices/directory/?ea0_lfz99_120.&roleWithSubordinates&1deea11c-53f3-429b-9dda-80a3d0318f5e

Depending on your roof suitability, and the electricity network within your apartment building, you may be able to install solar to service common areas and/or individual apartments. The <u>Smart Blocks website</u>¹² provides useful information on apartment sustainability, including solar.

Please also refer to the above mentioned <u>Planning Guidance Note</u>¹ for information on overshadowing risk for apartments.

¹² http://smartblocks.com.au/what-can-i-do/install-solar/