

# COMMERCIAL STRATA: SOLAR PV FACTSHEET

## IT'S TIME FOR STRATA TO JOIN THE RENEWABLE ENERGY TRANSITION

Installing onsite solar is a smart business decision that will protect your organisation from price hikes and volatility.<sup>1</sup> After completing energy efficiency upgrades, rooftop solar photovoltaic (PV) is the best choice to slash electricity bills and work towards net zero emissions.<sup>2</sup> Working with other owners offers the greatest efficiency, optimum value, cost savings and sustainability benefits. Power common areas, install individual systems or consider an embedded network. This factsheet offers a guide to start your clean energy transition today.



**Australia has the highest solar radiation per square meter of any continent in the world<sup>3</sup>**

### ONSITE SOLAR PV MAKES SENSE FOR COMMERCIAL STRATA:



Cheaper electricity bills with a **reliable and cost-effective** technology<sup>4</sup>



The sun shines during the day and most businesses use the bulk of their power during the day



Diverse funding options, such as operational leases, make it an **accessible opportunity**



Owner-occupiers stay in buildings longer than commercial tenants – providing **more time to reap the benefits** (e.g. up to a 15–20% return)<sup>5</sup>



Reduce costs by powering common areas like carparks, foyers and lifts. **Reinvest savings** into future building projects<sup>6</sup>



Clean power is a clean conscience; renewable energy positively impacts community health<sup>7</sup>



Increased **marketing opportunities** and stronger property value<sup>1</sup>



Acts as a **risk mitigation plan** for the built environment and helps meet **corporate social responsibility** requirements

### CONSUMERS CARE WHERE YOU GET YOUR ENERGY

“80% of Australian consumers believe big business should be using more renewable energy”<sup>5</sup>

“76% would choose a product or service made with renewable energy over a comparable one that wasn't”<sup>5</sup>

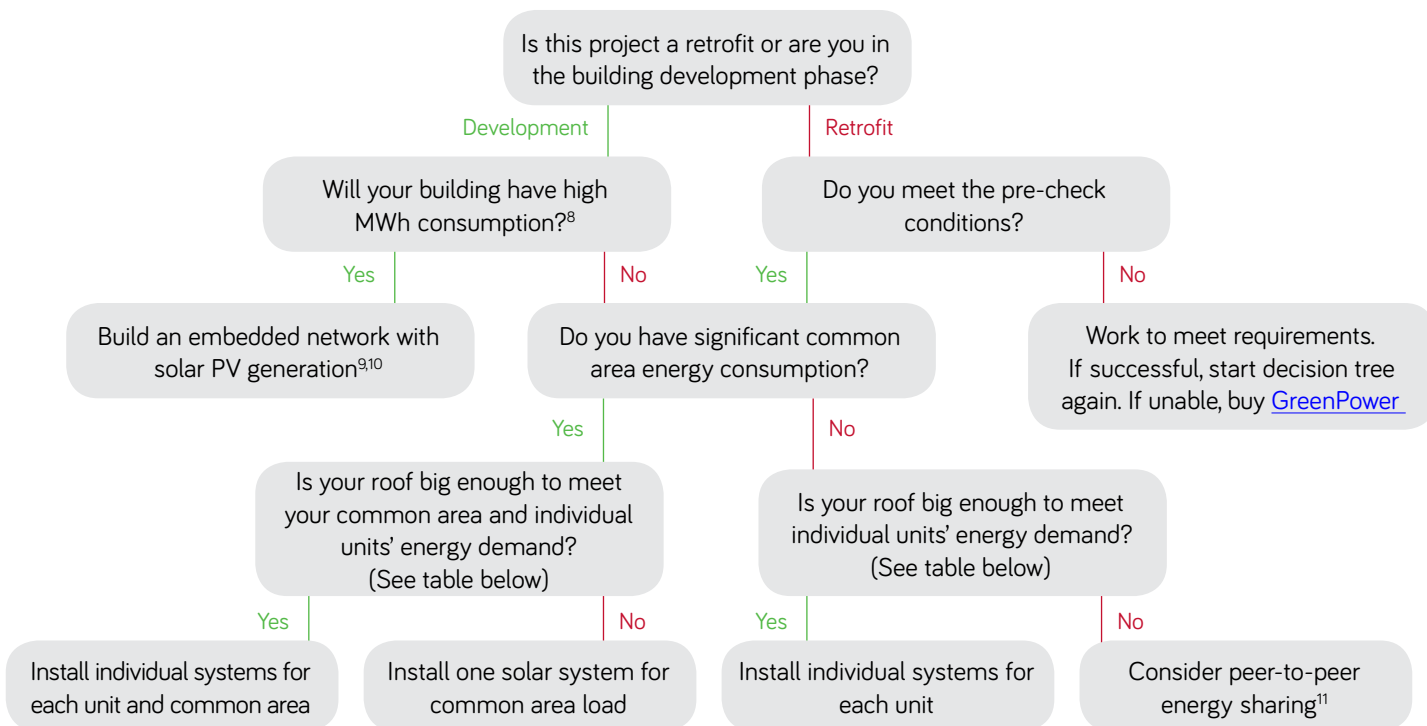
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Follow this flow-chart to assess the feasibility of your solar PV project and which technical model may be the best candidate for your building.

### Pre-check

- ✓ Our roof is strong and does not need repairs in the next 10 years
- ✓ Our roof has minimal shading and is not obstructed by trees or buildings
- ✓ Owners are interested in this PV retrofit
- ✓ We have implemented energy efficiency initiatives
- ✓ We know our units' and common property daily energy consumption



For retrofits, to install a common area solar system, a special resolution by the owners corporation is required. Individual systems require a common property rights by-law.<sup>8</sup> Visit [Green Strata](#) or see [UNSW's Guide for Implementing Sustainable Retrofits](#) for more details.

### PV system sizes and average output, panels and roof space

Find out your unit's or building's average daily kWh energy needs by looking at your last 12 months of power bills. Compare that number with the data listed in the second row to get a ballpark estimate of the system size and roof space you would need to meet your energy requirements.<sup>11</sup>

System Size	1.5kW	5kW	10kW	20kW	30kW	40kW	50kW	60kW	80kW	100kW
Average Daily Solar Production (Sydney)	5.85kWh	19.5kWh	39kWh	78kWh	117kWh	156kWh	975kWh	2340kWh	3120kWh	7800kWh
Number of Panels	6	20	40	80	120	160	200	240	320	400
Roof Space	10m <sup>2</sup>	32m <sup>2</sup>	64m <sup>2</sup>	128m <sup>2</sup>	192m <sup>2</sup>	256m <sup>2</sup>	320m <sup>2</sup>	384m <sup>2</sup>	512m <sup>2</sup>	640m <sup>2</sup>

The average daily solar production was calculated with data accessed through the Clean Energy Council. For other Australian cities' average daily solar production [click here](#). The number of panels assumes using 250watt panels.

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### Financing your system

Options:	Summary	Pros	Cons
<b>Operational Lease</b>	Rent the system from a solar leasing company and make monthly payments to use the panels. Ownership remains with the supplier, and the system is removed upon conclusion of the contract. Buy out options may be available. <sup>13</sup>	<ul style="list-style-type: none"> <li>➢ Gradual payment</li> <li>➢ Supplier is responsible for maintenance</li> <li>➢ System does not show on balance sheet<sup>13</sup></li> </ul>	<ul style="list-style-type: none"> <li>➢ Interest rates and fees make the system more expensive than if you paid for it outright</li> <li>➢ Risk and maintenance falls on financier, however you often end up paying for this through your monthly fees<sup>16</sup></li> </ul>
<b>Financial Lease</b>	Similar to an operational lease described above, except when the contract ceases you gain ownership of the PV system. A residual payment may apply. <sup>13</sup>	<ul style="list-style-type: none"> <li>➢ Accessible payment option</li> <li>➢ Supplier usually handles maintenance</li> <li>➢ Ownership at the end of the contract allows you to continue to save on electricity bills<sup>13</sup></li> </ul>	<ul style="list-style-type: none"> <li>➢ Interest rates and fees make the system more expensive than if you paid for it outright</li> <li>➢ System shows on balance sheet, possibly limiting your ability for any other business loans</li> </ul>
<b>Purchase System Outright</b>	Pay cash upfront to buy the system.	<ul style="list-style-type: none"> <li>➢ Greatest control</li> <li>➢ Cheaper electricity with lack of third party</li> <li>➢ Fastest and largest return on investment</li> <li>➢ Electricity savings occur immediately<sup>13</sup></li> <li>➢ Collect government incentives</li> </ul>	<ul style="list-style-type: none"> <li>➢ Maintenance and any repairs on system fall on you<sup>15</sup></li> <li>➢ High immediate cost</li> </ul>
<b>Loan</b>	Take out conventional loan to cover expenses of your solar PV system.	<ul style="list-style-type: none"> <li>➢ Obtain full control and ownership without having to pay cash upfront.</li> <li>➢ Avoid fees from third party involvement</li> </ul>	<ul style="list-style-type: none"> <li>➢ Maintenance and any repairs are your responsibility</li> <li>➢ Interest rates apply</li> </ul>
<b>PPA</b>	With a Power Purchase Agreement (PPA) you host the system and pay predetermined monthly payments based on the kWh the panels generate <sup>14</sup>	<ul style="list-style-type: none"> <li>➢ The supplier is responsible for maintenance and upkeep<sup>15</sup></li> <li>➢ Fixed cost reduces risk of energy price volatility</li> </ul>	<ul style="list-style-type: none"> <li>➢ You may have to forgo your rights to incentives such as the feed-in-tariffs and small-scale technology certificates (<a href="#">STCs</a>)</li> <li>➢ You pay the same amount no matter if you use all the energy</li> <li>➢ Longer contracts than leases</li> </ul>

Most of the information above was sourced from the Office of Environment & Heritage's [Solar Finance Guide](#) and [Energy Efficiency and Renewables Finance Guide](#).



### Together is better

Owners installing individual PV units at the same time can receive **reduced installation and equipment prices** through **bulk purchasing**.

If not all owners are ready now, write the common property rights by-law in a way that makes it easier for them in the future. For example, the by-law providing approval for some owners to install individual PV systems now, can also state that any owners in the future can do so as long as set requirements are met.

Have a mixed-use building? **Consider including tenants and avoiding the split incentive** with third party organisations.<sup>17</sup>

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### Source data

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