

# State code 26: Solar farm development

## Purpose statement

The purpose of this code is to ensure development for a **solar farm**:

1. is located, sited, designed, constructed, operated and maintained to mitigate any adverse impacts to individuals, communities, the **environment**, **high quality agricultural land**, adjacent **sensitive land uses** and **sensitive receptors**; and infrastructure and services.
2. ensures impacts arising from the construction, operation and decommissioning do not result in unacceptable adverse impacts on individuals, communities, the **environment**, agricultural land, adjacent **sensitive land uses** and **sensitive receptors**, and infrastructure and services.
3. is decommissioned in a timely and efficient manner that reuses, recycles and/or repurposes materials to the greatest extent possible and **rehabilitates the environment**.

### Using this code

The assessment benchmarks for this code comprise:

- a purpose statement which identifies the overall intent of the code
- performance outcomes which set benchmarks which must be complied with to achieve the purpose statement of the code.

Development complies with the code where:

- it complies with all relevant performance outcomes; or
- development does not meet relevant performance outcome(s) and SARA determines, on balance, that the development complies with the purpose statement.

There are no acceptable outcomes for this code.

This code also includes the glossary of terms for definitions relevant to this code and reference documents; including the guideline – **Planning guideline State code 26: Solar farm development**, which provides direction on how to address this code.

## Performance outcomes

Table 26.1 Material change of use

| Performance outcomes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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| <b>Areas of high ecological value</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>PO1</b> Development is located, designed, constructed, managed, operated and maintained outside areas of <b>high ecological value</b> and development that may be adjacent to a <b>high ecological value</b> area is to be designed, operated and managed to protect these areas and associated habitats from adverse impacts.                                                                                                                                                                                                                                                                                                                                           |
| <b>Agricultural land</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>PO2</b> Development is located and designed to ensure there is no significant loss of <b>high-quality agricultural land</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>PO3</b> Development is constructed to maintain the fertility and soil attributes of <b>high-quality agricultural land</b> and to enable decommissioning at the end of operations to return the land to its pre-construction agricultural land values.                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>PO4</b> Development does not fragment <b>high-quality agricultural land</b> to the extent of restricting the connectivity of agricultural land necessary to ensure its ongoing productivity and operation.                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>PO5</b> Development on or adjacent to the <b>stock route network</b> does not impact the network's primary use for moving stock on foot.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Protecting water quality and stormwater management</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>PO6</b> Development is located, designed and constructed to: <ul style="list-style-type: none"> <li>• minimise the disturbance of <b>high risk soils</b>, and</li> <li>• manage the release of acid, iron and other soil base contaminants.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>PO7</b> Development is located, designed and constructed to maintain or improve the water quality of receiving waters, <b>waterways</b> and wetlands by: <ul style="list-style-type: none"> <li>• avoiding <b>waterways</b> and wetlands;</li> <li>• minimising crossings of and interference with natural drainage lines, farm drainage and irrigation infrastructure;</li> <li>• minimising erosion and sediment run off;</li> <li>• managing drainage control;</li> <li>• preserving the bank stability of affected <b>waterways</b> and drainage lines; and</li> <li>• avoiding non-essential hardening or unnatural modification of the <b>waterway</b>.</li> </ul> |
| <b>PO8</b> Development is located, designed and constructed to minimise interference with overland flow paths.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

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| <b>Performance outcomes</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Natural hazards and disasters</b>                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>PO9</b> Development is located, designed, constructed and operated to be resilient and responsive to <b>natural hazards</b> and <b>disasters</b> .                                                                                                                                                                                                                                                                                                                       |
| <b>PO10</b> Development is located, designed, constructed and operated to protect the safety of people and animals in the event of <b>natural hazards</b> or <b>disasters</b> .                                                                                                                                                                                                                                                                                             |
| <b>Acoustic amenity</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>PO11</b> Development is located, designed, constructed and operated to meet the <b>acoustic quality objectives</b> for <b>sensitive receptors</b> on or adjoining the site identified in the Environmental Protection (Noise) Policy 2019.                                                                                                                                                                                                                               |
| <b>Visual amenity, glint and glare</b>                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>PO12</b> Development in an area identified by state or local government planning instruments as having high scenic amenity is located and designed to protect the <b>scenic amenity</b> and <b>landscape values</b> of the locality and region.                                                                                                                                                                                                                          |
| <b>PO13</b> Development is located and designed to minimise adverse glint and glare impacts on adjoining properties.                                                                                                                                                                                                                                                                                                                                                        |
| <b>PO14</b> Glint and glare from the development does not create an unacceptable safety risk to aviation, rail and drivers of vehicles on roads adjacent to the development.                                                                                                                                                                                                                                                                                                |
| <b>Social impacts</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>PO15</b> Development demonstrates that either: <ul style="list-style-type: none"> <li>• a <b>community benefit agreement</b> has been entered into; or</li> <li>• where a <b>community benefit agreement</b> has not been entered into, <b>social impacts</b> of the development, including workforce accommodation, local business and industry impacts, community health and well-being, are identified, managed, mitigated, counterbalanced and monitored.</li> </ul> |
| <b>Transport networks and access</b>                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>PO16</b> Development construction, operation and maintenance and decommissioning activities associated with the development do not adversely impact the efficiency and condition of <b>transport networks</b> and infrastructure nor compromise the safety of users of the <b>transport network</b> .                                                                                                                                                                    |
| <b>PO17</b> Development construction, operation and maintenance and decommissioning activities associated with the development do not compromise the safety of users of the <b>transport network</b> .                                                                                                                                                                                                                                                                      |
| <b>PO18</b> Development delivers necessary upgrades to the <b>transport network</b> to ensure construction activities and ongoing maintenance do not adversely impact <b>transport networks</b> and infrastructure.                                                                                                                                                                                                                                                         |
| <b>PO19</b> Development demonstrates that a safe, viable and practical haulage route can be secured to accommodate the movement of <b>oversize/overmass vehicles</b> during construction and ongoing maintenance activities.                                                                                                                                                                                                                                                |
| <b>PO20</b> Development provides safe, efficient, and sustainable vehicular access to the site for all vehicle types anticipated through the construction, operation, maintenance and <b>decommissioning</b> of the <b>solar farm</b> .                                                                                                                                                                                                                                     |
| <b>Decommissioning</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>PO21</b> Relevant components of development, both after completion of construction and at cessation of operations, are <b>decommissioned</b> in a timely and efficient manner.                                                                                                                                                                                                                                                                                           |
| <b>PO22 Decommissioning</b> ensures that materials removed from site destined for landfill are minimised while opportunities to reuse, recycle and /or repurpose are deployed to the greatest extent feasible.                                                                                                                                                                                                                                                              |
| <b>PO23 Decommissioning</b> at end of operations ensures disturbance footprints are <b>rehabilitated</b> , and <b>waterways</b> and drainage patterns are reinstated.                                                                                                                                                                                                                                                                                                       |
| <b>PO24 Decommissioning</b> plans are secured by bonds or financial guarantees or other mechanism/s to safeguard compliance.                                                                                                                                                                                                                                                                                                                                                |

# Reference documents

Department of State Development, Infrastructure and Planning, Planning Guideline State code 26: Solar farm development.

## Glossary of terms

**Acoustic quality objective** see the Environmental Protection (Noise) Policy 2019.

Note: **Acoustic quality objective**, for a sensitive receptor, means the maximum level of noise that should be experienced in the acoustic environment of the sensitive receptor.

**Community benefit agreement** see the Planning Act 2016.

Note: A **community benefit agreement** is an agreement, entered into under this division, about providing a benefit to a community in the locality of

development requiring social impact assessment the subject of a development application or change application, including, for example—

(a) providing or contributing towards infrastructure or another thing for the community; or

(b) making a financial contribution to the community.

**Decommissioning/decommissioned** means the removal, rehabilitation and remediation of the solar farm in part, after finalisation of construction, then in entirety at cessation of operations. Decommissioning will be in accordance with strategies prepared by proponents and all decommissioning activities undertaken at full cost to proponents/operators.

**Disaster** see the *Disaster Management Act 2003*.

Note: A **disaster** is a serious disruption in a community, caused by the impact of an event, that requires a significant coordinated response by the State and other entities to help the community recover from the disruption.

**Environment** see the *Environmental Protection Act 1994*, section 8.

Note: **Environment** includes—

(a) ecosystems and their constituent parts, including people and communities; and

(b) all natural and physical resources; and

(c) the physical characteristics of locations, places and areas, however large or small; and

(d) the physical surroundings of people, including the land, waters, atmosphere, climate, sound, odours and tastes; and

(e) the social, economic, aesthetic and cultural conditions that affect, or are affected by, things mentioned in paragraphs (a) to (d).

**High ecological value** means Matters of State Environmental Significance (MSES) as defined under Schedule 2 of the Queensland Environmental Offsets Regulation 2014. These matters can exist on publicly available resources such as Queensland Globe or be identified by a suitably qualified ecologist during a flora and/or fauna survey. Examples of MSES include, but are not limited to, threatened wildlife habitat and/or known populations under the *Nature Conservation Act 1992* (e.g. wildlife habitat for threatened or Special Least Concern (SLC) species, essential habitat, koala habitat etc.), protected areas such as National Parks and Endangered or Of Concern remnant regional ecosystems.

**High erosion risk** see glossary of terms in IECA Best Practice Erosion and Sediment Control

**Note:** A high likelihood of soil erosion resulting from rain, wind or flowing water relative to a given risk rating (such as the various erosion risk ratings presented in Section 4.4 of Chapter 4 of IECA Best Practice Erosion and Sediment Control).

**High-quality agricultural land**, means strategic cropping land, and priority agricultural areas, or Agricultural Land Classification (ALC) Class A and Class B land identified on the SPP interactive mapping system, Development assessment mapping system (DAMs) or local planning instruments.

**High risk soils** means areas with erosive, dispersive, sodic, saline and/or acid sulfate soils.

**Landscape values** means areas protected under a regional plan and/or local government planning scheme, such as biodiversity networks, natural economic resource areas (including rural production), **scenic amenity** areas and landscape heritage areas.

**Natural hazards** see Part F: Glossary of the State Planning Policy 2017

**Note:** **Natural hazard** means a naturally occurring situation or condition, such as a flood, bushfire, landslide, coastal erosion or storm-tide inundation, with the potential for loss or harm to the community, property or environment.

**Oversize/overmass vehicle** means a heavy vehicle or combination which alone, or together with its load, exceeds prescribed mass or dimension requirements, and is a heavy vehicle carrying, or designed for the purpose of carrying, a large indivisible item.

**Rehabilitate/Rehabilitated** means restoration of areas of disturbance created for the construction of and operations of a solar farm. Rehabilitate means the act of undertaking a range of activities that collectively endeavour to return the landscape (over time) back to its condition prior to the solar farm land use. These activities aim to achieve a safe, stable, non-polluting and sustainable landform (over time) through methods including, but not limited to:

1. **decommissioning** and removal of infrastructure;
2. remodifying some areas of civil works;
3. replanting with native vegetation species;
4. installation of habitat elements (e.g. fallen woody debris);
5. watering to enhance planting survival rates;
6. weed and pest management;
7. monitoring and reporting.

**Scenic amenity** means a measure of the relative contribution of each place in the landscape to the collective appreciation of open space as viewed from places that are important to the public.

**Sensitive land use/Sensitive land uses** see schedule 24 of the Planning Regulation 2017.

Note: **Sensitive land use** means any of the following as defined in the Planning Regulation 2017:

1. caretakers accommodation
2. child care centre
3. community care centre
4. community residence
5. detention facility
6. dual occupancy
7. dwelling house
8. dwelling unit
9. educational establishment
10. health care services
11. hospital
12. hotel
13. multiple dwelling
14. non-resident workforce accommodation
15. relocatable home park
16. residential care facility
17. resort complex
18. retirement facility
19. rooming accommodation
20. rural workers' accommodation
21. short-term accommodation
22. tourist park
23. workforce accommodation.

**Sensitive receptor** means an area or place where noise is measured as defined by schedule 1 of the Environmental Protection (Noise) Policy 2019.

**Social impact** see the *Planning Act 2016*.

Note: **Social impact**, in relation to development requiring social impact assessment, means the potential impact of the development on the social environment of a community in the locality of the development, including the potential impact of the development on—

- (a) the physical or mental wellbeing of members of the community; and
- (b) the livelihood of members of the community and
- (c) the values of the community; and
- (d) the provision of services to the community, including, for example, educational services, emergency services or health services.

**Solar Farm** see schedule 24 of the Planning Regulation 2017.

Note: **Solar Farm**—

- (a) means the use of premises for the generation of electricity or energy from a source of solar energy, other than electricity or energy to be used mainly on the premises; and
- (b) includes the use of premises for any of the following if the use relates, or is ancillary, to the use stated in paragraph (a)—
  - (i) a building or structure, including, for example, a site office or temporary workers' accommodation;
  - (ii) a storage area or maintenance facility, including, for example, a lay down area;
  - (iii) infrastructure or works, including, for example, site access, foundations, electrical works, substations, facilities or devices for storing and releasing energy, or landscaping.

**Stock route network** see the Stock Route management Act 2002, schedule 3.

Note: **Stock route network** means the network of stock routes and reserves for travelling stock in the State.

**Transport networks** mean the series of connected routes, corridors and transport facilities required to move goods and passengers and includes roads, railways, public transport routes (for example, bus routes), active transport routes (for example, cycle ways), freight routes and local, state and privately owned infrastructure.

**Waterway** see the *Fisheries Act 1994*.

Note: **Waterway** includes a river, creek, stream, watercourse, drainage feature or inlet of the sea.

