

**PROPOSED AMENDMENTS TO EXHIBITED
DRAFT LEICHHARDT LOCAL ENVIRONMENTAL PLAN 2012**

PLANNING PROPOSAL

ITEM 5

**Complying Development controls for the installation of
photovoltaic panels**

Part 1 – Objectives or Intended Outcomes

On the 21st May 2013 Council resolved (C2012/13) to endorse the changes required to the exhibited *Draft Leichhardt Local Environmental Plan 2012* and initiate the plan making process (Planning Proposal) for the inclusion of Complying Development provisions for the installation of photovoltaic electricity generating systems (photovoltaic panels).

This amendment proposes to amend Schedule 3 Complying Development of the exhibited *Draft Leichhardt Local Environmental Plan 2012* to include controls for the installation of photovoltaic electricity generating systems on the primary street frontage of buildings on or in a heritage item or draft heritage item and in heritage conservation areas or draft conservation areas.

The installation of photovoltaic panels has been identified as one way in which Council and the community can work towards achieving its vision for a more sustainable and liveable community by reducing non-renewable fuel usage and greenhouse gas emissions.

The proposed amendment will enable the installation of photovoltaic panels on a greater proportion of buildings within the municipality, subsequent to obtaining a Complying Development Certificate.

Part 2 – Explanation of the Provisions

The proposed amendments to Schedule 3 - Complying Development provisions within the *Draft Leichhardt Local Environmental Plan 2012* are detailed below.

The proposed new clause will read as follows:

Schedule 3 – Complying Development provisions

Photovoltaic electricity generating systems on the primary street frontage of buildings on or in a heritage item or draft heritage item and in heritage conservation areas or draft heritage conservation areas

- (1) *Must not be installed on slate roofs with decorative features.*
- (2) *Must be installed to all relevant Australian Standards, manufacturer's specifications and by a person accredited by the Clean Energy Council.*
- (3) *Must be installed so that the system is oriented true north or achieves at least 75% of the specified potential power output, as stated by the designer of the system.*
- (4) *Must not exceed a maximum area of 40% of the total roof surface of the primary street frontage.*
- (5) *Must be installed on roofs that have a pitch of between 20° and 45°.*
- (6) *Must be mounted in accordance with the following requirements:*
 - (a) *parallel to the main roof surface,*
 - (b) *with space between the surface of the roof and the underside of the photovoltaic panels to allow for natural ventilation - maximum 0.25m*
 - (c) *the installation of brackets to support the photovoltaic electricity generating system must not adversely affect the structural integrity of the building or require structural changes to the building,*
 - (d) *must not overhang the roof hip or guttering, and*
 - (e) *must not cause irreversible damage to original roof tiles.*
- (7) *The roof must be insulated and ventilated to minimise heat build up in the roof cavity or apex.*
- (8) *Must have a trim which complements and does not contrast with the colour of the roof.*
- (9) *Must be wired to the grid in such a way that in the event of overshadowing of part of the system, the overshadowed portion is isolated from the rest of*

Schedule 3 – Complying Development provisions

- the system, and power output is not interrupted.*
- (10) *Must not be installed on sub roof elements such as sub-gables, dormers or verandahs. Must not be installed where the removal or pruning of a tree or other vegetation is necessary to satisfy (2) and where the removal or pruning of the vegetation will require a permit or development consent.*

Part 3 – Justification

Section A – Need for planning proposal

Q1. Is the planning proposal a result of any strategic study or report?

This planning proposal is a result of a Council resolution in August 2011 (detailed below) to support the installation of photovoltaic panels on the primary street frontages of buildings located within heritage conservation areas and heritage items.

Leichhardt Council resolution (C452/11) states:

1. *The new DCP make photovoltaic panels on the primary frontage in heritage areas exempt and complying, provided that the design and installation guidelines developed by the staff are followed*
2. *Council prepare a pro forma development application for photovoltaic panels on the primary street frontage to allow residents to prepare and submit the DA without the need for assistance from a professional planner.*

Council's Strategic Planning and Environmental Strategy teams prepared discussion papers and reviewed the relevant planning legislation relating to photovoltaic panel installation. It was determined that controls relating to photovoltaic panels should be included within the *Draft Leichhardt Local Environmental Plan 2012* as complying development controls. For more information see **Appendix A & B**.

The controls enable greater opportunities for the installation of photovoltaic panels for property owners of buildings affected by heritage provisions, whilst enabling the Council (or certifying authority) an opportunity to consider the heritage merits of the proposal prior to issuing the Complying Development Certificate.

Council has developed the controls with the aim of balancing heritage provisions against environmental outcomes. The controls permit certain development that is complementary to heritage streetscapes, yet work towards reducing non-renewable fuel usage and greenhouse gas emissions.

The change involved in this planning proposal is required before the final plan is made.

Q2. Is the planning proposal the best means of achieving the objectives or intended outcomes, or is there a better way?

The proposal involves an amendment to the exhibited *Draft Leichhardt Local Environmental Plan 2012*. The proposed amendment the *Draft Leichhardt Local Environmental Plan 2012* is considered to be of significance and therefore requires re-exhibition and community consultation. The planning proposal is the best way of achieving the proposed changes to the plan and ensuring the community is notified of these changes.

Section B – Relationship to strategic planning framework.

Q3. Is the planning proposal consistent with the objectives and actions contained within the applicable regional or sub-regional strategy (including the Sydney Metropolitan Strategy and exhibited draft strategies)?

The planning proposal is consistent with the State Government's current Metropolitan Plan for Sydney to 2036, the Draft Metropolitan Strategy for Sydney 2031 (currently on exhibition) and the Inner West Draft Subregional Strategy. The following actions and objectives outlined in the tables below are of particular relevance.

State Government's Metropolitan Plan 2036 (current)
Objective
D4 – To improve the quality of new housing development and urban renewal
G1 – To reduce Sydney's greenhouse gas emissions
G5 – To achieve sustainable water use
G7 – To improve Sydney's air quality
G8 – To minimise and recycle waste

Draft Metropolitan Strategy 2031 (currently on exhibition)
Objective
18 – Use energy, water and resources efficiently
19 – Build resilience to natural hazards
20 – Minimise the impacts of climate change in local communities
21 – Improve air quality
22 – Achieve a healthier water environment

Inner West Draft Subregional Strategy
Action
C5.1 – Improve the design quality of new development
E2.2 – Protect Sydney's unique diversity of plants and animals
E2.3 – Improve Sydney's air quality
E3.3 – Use energy efficiently and reduce greenhouse intensity of energy supply
E3.4 – Minimise and recycle waste
G1.2 – Improve local planning and assessment

Q4. Is the planning proposal consistent with the local council's Community Strategic Plan, or other local strategic plan?

The planning proposal is consistent with the following objectives within Council's Community Strategic Plan 'Leichhardt 2020+' and 'Draft Leichhardt 2025+'.

Leichhardt 2020+
• 1.1 – Develop and implement an integrated community planning framework; • 3.1 – Our town plan and place plans optimise the potential of our area through integrating the built and natural environment with a vision of how we want to live as a community and how areas should develop to meet future needs. • 3.2 – Develop a clear, consistent and equitable planning framework and process that enables people to develop our area according to a shared vision for the community. • 4.1 – Develop our commitment & capacity to consistently support environmental sustainability. • 4.2 – Minimise our impacts on the environment. • 4.3 – Protect, restore and enhance our natural environment and native biodiversity

Leichhardt 2020+

within our urban context.

- 5.1 – Develop integrated planning to promote thriving and diverse businesses that build on the demands and characteristics of local communities.
- 5.2 – Develop accessible and environmentally sustainable businesses that help to build local communities and reduce our dependence on private cars.
- 5.4 – Plan for business & employment growth that allows greater opportunities for our residents to work locally.
- 6.1 – Apply our values to deliver transparent, consistent, efficient and effective participative processes.

Draft Leichhardt 2025+*Place where we live and work*

- Our town plan and place plans optimise the potential of our area through integrating the built and natural environment with a vision of how we want to live as a community and how areas should develop to meet future needs.
- A clear, consistent and equitable planning framework and process is provided that enables people to develop our area according to a shared vision for the community.
- An integrated planning process is promoted to make planning easier for the community and to establish a service that people want to use.

A Sustainable Environment

- Our commitment capacity to consistently support environmental sustainability is developed.

Business in the Community

- Places are created that attract and connect people.
- The new economy is embraced.
- Economic assets are protected and leveraged.

Sustainable Service and Assets

- Transparent, consistent, efficient and effective participative processes are delivered.

Q5. Is the planning proposal consistent with applicable state environmental planning policies?

The planning proposal is consistent with the applicable State Environmental Planning Policies see table below.

Consideration of State Environmental Planning Policies (SEPPs)

State Environmental Planning Policies (SEPPs)	Applicable	Consistent
1. Development Standards	No	N/A
4. Development without Consent and Miscellaneous Complying Development	No	N/A
6. Number of Storeys in a Building	No	N/A
14. Coastal Wetlands	No	N/A
15. Rural Landsharing Communities	No	N/A
19. Bushland in Urban Areas	No	N/A
21. Caravan Parks	No	N/A
22. Shops and Commercial Premises	No	N/A
26. Littoral Rainforests	No	N/A
29. Western Sydney Recreation Area	No	N/A
30. Intensive Agriculture	No	N/A
32. Urban Consolidation (Redevelopment of Urban Land)	No	N/A
33. Hazardous and Offensive Development	No	N/A
36. Manufactured Home Estates	No	N/A

State Environmental Planning Policies (SEPPs)	Applicable	Consistent
39. Spit Island Bird Habitat	No	N/A
41. Casino Entertainment Complex	No	N/A
44. Koala Habitat Protection	No	N/A
47. Moore Park Showground	No	N/A
50. Canal Estate Development	No	N/A
52. Farm Dams and Other Works in Land and Water Management Plan Areas	No	N/A
53. Metropolitan Residential Development	No	N/A
55. Remediation of Land	No	N/A
59. Central Western Sydney Regional Open Space and Residential	No	N/A
60. Exempt and Complying Development	No	N/A
62. Sustainable Aquaculture	No	N/A
64. Advertising and Signage	No	N/A
65. Design Quality of Residential Flat Development	No	N/A
70. Affordable Housing (Revised Schemes)	No	N/A
71. Coastal Protection	No	N/A
SEPP Affordable Rental Housing 2009	No	N/A
SEPP Building Sustainability Index: BASIX 2004	Yes	Consistent with the provisions contained within the SEPP.
Exempt and Complying Development Codes) 2008	Yes	Consistent. Does not include provisions contained within the SEPP.
Housing for Seniors or People with a Disability 2004	No	No
SEPP Infrastructure 2007	Yes	Consistent. Does not include provisions contained within the SEPP.
SEPP Kosciuszko National Park – Alpine Resorts 2007	No	N/A
SEPP Major Development 2005	No	No
SEPP Mining, Petroleum Production and Extractive Industries 2007	No	N/A
SEPP Penrith Lakes Scheme 1989	No	N/A
SEPP Rural Lands 2008	No	N/A
SEPP Sydney Region Growth Centres 2006	No	N/A
SEPP Temporary Structures 2007	No	No
SEPP Urban Renewal 2010	No	No
SEPP Western Sydney Employment Area 2009	No	N/A
SEPP Western Sydney Parklands 2009	No	N/A

Consideration of deemed State Environmental Planning Policies (SEPPs) (former Regional Environmental Plans (REPs))

Regional Environmental Plans (REPs)	Applicable	Consistent
8. Central Coast Plateau Areas	No	N/A
9. Extractive Industry (No 2—1995)	No	N/A
16. Walsh Bay	No	N/A
18. Public Transport Corridors	No	N/A
19. Rouse Hill Development Area	No	N/A
20. Hawkesbury-Nepean River (No 2—1997)	No	N/A
24. Homebush Bay Area	No	N/A
25. Orchard Hills	No	N/A
26. City West	No	N/A
28. Parramatta	No	N/A
30. St Marys	No	N/A
33. Cooks Cove	No	N/A
SREP Sydney Harbour Catchment 2005	No	N/A

Q6. Is the planning proposal consistent with applicable Ministerial Directions (s.117 Directions)?

The planning proposal is consistent with the applicable Ministerial Directions (s.117 Directions) see table below.

s.117 Direction Title	Applicable	Consistent	Comments
1. Employment & Resources			
1.1 Business and Industrial Zones	Yes	Yes	It is considered that there is no change to existing policy.
1.2 Rural Zones	No	NA	
1.3 Mining, Petroleum Production and Extractive Industries	No	NA	
1.4 Oyster Aquaculture	No	NA	
1.5. Rural lands	No	NA	
2. Environment & Heritage			
2.1 Environment Protection Zones	No	N/A	
2.2 Coastal protection	No	N/A	
2.3 Heritage Conservation	Yes	Yes	The provisions aim to conserve the heritage aspects while providing flexibility for installation of photovoltaic panels.
2.4 Recreation Vehicle Areas	No	N/A	
3. Housing Infrastructure & Urban Development			
3.1 Residential Zones	Yes	Yes	It is considered that there is no change to existing policy.
3.2 Caravan Parks and Manufactured	No	N/A	

s.117 Direction Title	Applicable	Consistent	Comments
Home Estates			
3.3 Home Occupations	No	N/A	
3.4 Integrating Land Use & Transport	No	N/A	
3.5 Development near licensed aerodromes	No	N/A	
3.6 Shooting Ranges	No	N/A	
4. Hazard & Risk			
4.1 Acid Sulphate Soils	No	N/A	
4.2 Mine Subsidence and Unstable land	No	N/A	
4.3 Flood Prone Land	No	N/A	
4.4 Planning for Bush Fire Protection	No	N/A	
5. Regional Planning			
5.1 Implementation of Regional Strategies	No	N/A	
5.2 Sydney Drinking Water Catchments	No	N/A	
5.3 Farmland of State and Regional Significant on the NSW Far North Coast	No	N/A	
5.4 Commercial and Retail Development along the Pacific Highway, North Coast	No	N/A	
5.5 Development in the vicinity of Ellalong, Paxton and Millfield (Cessnock LGA)	No	N/A	
5.6 Sydney to Canberra Corridor (Revoked 10 July 2008. See amended Direction 5.1)	No	N/A	
5.7 Central Coast (Revoked 10 July 2008. See amended Direction 5.1)	No	N/A	
5.8 Second Sydney Airport: Badgerys Creek	No	N/A	
6. Local Plan Making			
6.1 Approval and Referral Requirements	Yes	Yes	Consistent with the terms of this direction.
6.2 Reserving Land for Public Purposes	No	N/A	
6.3 Site Specific Provisions	Yes	Yes	It is considered that there is no change to existing policy.
7. Metropolitan Planning			
Implementation of the Metropolitan Strategy	Yes	Yes	Consistent with the terms of this direction see Q3.

Section C – Environmental, social and economic impact

Q7. *Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?*

The proposal does not apply to land that has been identified as containing critical habitat or threatened species, populations or ecological communities, or their habitats. Should it be discovered through community consultation, or by another means, that species, populations, communities or habitats may be adversely affected, this will be taken into consideration and the planning proposal will be modified if necessary.

Q8. *Are there any other likely environmental effects as a result of the planning proposal and how are they proposed to be managed?*

Given the nature of the proposal it is not anticipated that there will be any adverse environmental effects.

Q9. *How has the planning proposal adequately addressed any social and economic effects?*

Given the nature of the proposal it is not expected that the proposal will have any adverse social or economic effects.

Section D – State and Commonwealth interests

Q10. *Is there adequate public infrastructure for the planning proposal?*

Given the nature of the proposal the above question is not considered relevant.

Q11. *What are the views of State and Commonwealth public authorities consulted in accordance with the Gateway Determination?*

Consultation was carried as part of the exhibition of the *Draft Leichhardt Local Environmental Plan 2012*. This section of the planning proposal is completed following the gateway determination which identifies which State and Commonwealth Public Authorities are to be consulted.

It is likely that the NSW Heritage Office will be consulted following the gateway determination given the proposed change has the potential to affect heritage items and conservation areas.

Part 4 – Mapping

Table 1: The proposed changes to Schedule 3 – Complying Development as part of Draft Leichhardt Local Environmental Plan 2012

Clause	Draft LEP 2012 (Exhibited)	Proposed Change	Reason for Change
	Standard Instrument, Standard instrument direction and Council included	Deleted wording New wording	
	Schedule 3 Complying development		
	Note. <i>State Environmental Planning Policy (Exempt and Complying Development Codes) 2008</i> specifies complying development and the complying development conditions for that development under that Policy. The Policy has State-wide application. This Schedule contains additional complying development not specified in that Policy.	No change.	
	Part 1 Types of development Structural works to existing buildings (1) No visible external works. (2) Must not be carried out on or in, or in relation to, a heritage item or a draft heritage item. (3) Works shall not provide for an additional dwelling/s. (4) No works are to be carried out on a shared wall, floor or ceiling without the affected owners written approval. (5) If works affect a property that is part of a strata plan or commercial title then written approval is required from the Strata or Body Corporate.	Part 1 Types of development Structural works to existing buildings (1) No visible external works. (2) Must not be carried out on or in, or in relation to, a heritage item or a draft heritage item. (3) Works shall not provide for an additional dwelling/s. (4) No works are to be carried out on a shared wall, floor or ceiling without the affected owners written approval. (5) If works affect a property that is part of a strata plan or commercial title then written approval is required from the Strata or Body Corporate. Photovoltaic electricity generating systems on the primary street frontage of buildings on or in a heritage item or draft heritage item and in heritage conservation areas or	Submission #267 – Internal

Clause	Draft LEP 2012 (Exhibited)	Proposed Change	Reason for Change
	Standard Instrument, Standard instrument direction and Council included	Deleted wording New wording draft heritage conservation areas	
		(1) Must not be installed on slate roofs with decorative features. (2) Must be installed to all relevant Australian Standards, manufacturer's specifications and by a person accredited by the Clean Energy Council. (3) Must be installed so that the system is oriented true north or achieves at least 75% of the specified potential power output, as stated by the designer of the system. (4) Must not exceed a maximum area of 40% of the total roof surface of the primary street frontage. (5) Must be installed on roofs that have a pitch of between 20° and 45°. (6) Must be mounted in accordance with the following requirements: (a) parallel to the main roof surface, (b) with space between the surface of the roof and the underside of the photovoltaic panels to allow for natural ventilation - maximum 0.25m (c) the installation of brackets to support the photovoltaic electricity generating system must not adversely affect the structural integrity of the building or require structural	

Clause	Draft LEP 2012 (Exhibited)	Proposed Change	Reason for Change
	Standard Instrument, Standard instrument direction and Council included	Deleted wording New wording	
		(d) changes to the building, must not overhang the roof hip or guttering, and (e) must not cause irreversible damage to original roof tiles. (7) The roof must be insulated and ventilated to minimise heat build up in the roof cavity or apex. (8) Must have a trim which complements and does not contrast with the colour of the roof. (9) Must be wired to the grid in such a way that in the event of overshadowing of part of the system, the overshadowed portion is isolated from the rest of the system, and power output is not interrupted. (10) Must not be installed on sub roof elements such as sub-gables, dormers or verandahs. (11) Must not be installed where the removal or pruning of a tree or other vegetation is necessary to satisfy (2) and where the removal or pruning of the vegetation will require a permit or development consent.	

Part 5 – Community Consultation

This component of the planning proposal is considered to be low impact, in that:

- it is consistent with the pattern of surrounding land uses,
- it is consistent with the strategic planning framework,
- presents no issues with regards to infrastructure servicing,
- is not a principle Local Environmental Plan, and
- does not reclassify public land.

It is outlined in “*A guide to preparing local environmental plans*” that community consultation for a low impact planning proposal is usually 14 days. However, it is Councils preference that the planning proposal be exhibited for a minimum of 28 days.

Part 6 – Project Timeline

Anticipated Project Timeline	Proposed Date (s)
Commencement date (date of Gateway determination)	21 June 2013
Timeframe for the completion of required technical information	Not required
Timeframe for government agency consultation (pre and post exhibition as required by Gateway determination)	To be determined
Commencement and completion dates for public exhibition period	Minimum 28 Days
Dates for public hearing (if required)	To be determined post exhibition
Timeframe for consideration of submissions	August 2013
Timeframe for the consideration of a proposal post exhibition	September 2013
Date of submission to the department to finalise the Local Environmental Plan	October 2013

APPENDIX A

Discussion Paper

Complying Development Provisions – Photovoltaic Panels

Draft Leichhardt Local Environmental Plan 2012

INSTALLING PHOTOVOLTAIC PANELS

1.0 Introduction

The installation of photovoltaic (PV) panels has been identified as one way in which Council and the community can work towards achieving its vision for a more sustainable and liveable community by reducing non-renewable fuel usage and greenhouse gas emissions.

One of four types of development controls will apply to the installation of PV panels:

- State Environmental Planning Policy Infrastructure 2007 – Exempt development
- State Environmental Planning Policy Infrastructure 2007 – Complying development
- Leichhardt Local Environmental Plan – Complying Development
- Leichhardt Development Control Plan – Development Consent

Council has identified a set of Principles to guide the design and installation of photovoltaic panels (Refer Section 2.0). The Principles and controls outlined in this fact sheet have been developed as a result of research undertaken during the preparation of a Discussion Paper about Photovoltaic Panels for the Development Control Plan (refer to Appendix A below) and may be read in conjunction with the applicable development controls.

1.1 Exempt development under the *Infrastructure SEPP*

PV panels can be installed under the Exempt Development provisions of the *State Environmental Planning Policy Infrastructure 2007* known as the [*Infrastructure SEPP*](#) if the installation meets the requirements of that legislation.

‘Exempt development’ is development that does not require consent however other approvals or licences may be required. Such development is considered to be ‘exempt’ because it is of a minor nature and is expected to have minimal environmental impact.

In general, development, including the installation of PV panels, cannot be considered to be ‘Exempt Development’ where:

- It does not comply with the Building Code of Australia
- It does not comply with the Blue Book “*Managing Urban Stormwater: Soils & Construction* (4th edition, Landcom, 2004)”
- It is *designated development*. *Designated development* is development that is declared to be designated development by an environmental planning instrument or the regulations.
- It has more than minimal impact upon the heritage significance of a State or local heritage item or a heritage conservation area or
- where the installation of the PV panels is proposed on the primary street frontage of a heritage conservation area or heritage item
- It involves pruning or removal of vegetation that requires a permit or DA consent is required (unless approval by way of a permit or consent has been granted),
- the system is not installed in accordance with the manufacturer’s specifications or by a person who is accredited by the Clean Energy Council for the installation of PV systems
- the system involve mirrors or lenses to reflect or concentrate sunlight

It is the applicant’s responsibility to ensure that the proposed development achieves all of the requirements stipulated under the [*Infrastructure SEPP*](#).

1.2 Complying development under the *Infrastructure SEPP*

PV panels can be installed under the Complying Development provisions of the [*Infrastructure SEPP*](#) if the installation meets the requirements of that legislation. Complying Development is development that is considered to be of a moderate nature, the impacts of which need to be managed accordingly. Complying Development requires consent through the issuing of a Complying Development Certificate (CDC) which must be from Council or an accredited certifier.

Council and Accredited Certifiers have no discretionary authority in relation to complying development which means that if a proposed development does not satisfy the criteria for being Complying Development the applicant must obtain Development Consent from Council.

In general, the installation of PV panels cannot be considered to be 'Complying Development' where:

- It is *designated development*. *Designated development* is development that is declared to be designated development by an environmental planning instrument or the regulations.
- The building or structure is listed on the State Heritage Register or that is subject to an interim heritage order under the Heritage Act 1977,
- It does not comply with the Building Code of Australia,
- Pruning or removal vegetation that requires a permit or DA consent is required (unless approval by way of a permit or consent has been granted),
- the installation is proposed to be carried out within 1m of a public sewer unless written approval (applies to ground mounted systems unlikely in LGA),
- It is located within a heritage conservation area,
- It is located on land that comprises, or which there is an heritage item identified in an environmental planning instrument,
- the system is not installed in accordance with the manufacturer's specifications or by a person who is accredited by the Clean Energy Council for the installation of photovoltaic electricity generating systems,
- the system generates more than 100kW if the land is in a prescribed residential zone

It is the applicant's responsibility to ensure that the proposed development achieves all of the requirements stipulated under the *Infrastructure SEPP*.

1.3 **Leichhardt Local Environmental Plan – Complying Development**

Council has identified the need to encourage the implementation of PV panels whilst ensuring that heritage buildings and distinctive streetscapes of the municipality are not adversely impacted. As such Council has developed Complying Development provisions which will be incorporated into the new, comprehensive Leichhardt Local Environmental Plan 2012. The controls will, in most instances, enable the installation of photovoltaic panels on the primary street frontage of heritage items and buildings located within heritage conservation areas subsequent to obtaining a Complying Development Certificate rather than applying for Development Consent. The controls are intended to make it easier to install PV panels whilst ensuring that the fabric and character of heritage areas in not adversely affected.

Local Complying Development Controls specific to this municipality will be incorporated into the Leichhardt Local Environmental Plan 2012 and will apply where:

- Installation of PV panels to the primary street frontage of buildings in Heritage Conservation Areas as mapped by the Leichhardt Local Environmental Plan 2011 *or*
- Installation of PV panels to the primary street frontage of buildings on properties listed as Heritage items in Schedule 2 of the Leichhardt Local Environmental Plan 2012.

Documentary evidence that the following Controls have been satisfied must be provided when lodging an application for a Complying Development Certificate for the installation of PV panels.

Where all of these Complying Development Controls cannot be implemented a Development Application must be lodged with Council. Note that the Local Complying Development Controls **do not apply** to Heritage items that have original, decorative slate roof tiles.

Controls

These Complying Development Controls apply only to the installation of PV panels on the primary street frontage of buildings in heritage conservation areas and heritage items.

1. PV panels are prohibited on slate roofs with decorative features;
2. PV panels are to be installed to all relevant Australian standards, manufacturers specifications and by a person accredited by the Clean Energy Council;
3. PV panels are to be installed so that the system is oriented true north or achieves at least 75% of the specified potential power output, as stated by the designer of the system;
4. a maximum of 40% of the total roof surface of the primary street frontage can be covered by PV panels;
5. PV panels may only be installed on roofs that have a pitch of between 20° and 45°;
6. PV panels are to be mounted as follows:
 - a. parallel to the main roof surface
 - b. with adequate space between the surface of the roof and the underside of the PV panels to allow for natural ventilation of the PV panels
 - c. with a maximum projection of 0.25mm from the roof surface
 - d. the installation of brackets to support the PV panels must not adversely affect the structural integrity of the building or require structural changes to the building
 - e. so that the system does not overhang the roof hip or guttering
 - f. so that there is no irreversible damage to original roof tiles
7. Where PV tiles act as the roof surface itself heat build up in the roof cavity or apex is to be controlled by insulation or adequate venting;

8. The trim of the PV panels is to complement and not contrast with the colour or roof;
9. PV systems are to be wired to the grid in such a way that in the event of overshadowing of part of the system, the overshadowed portion is isolated from the rest of the system and power output is not interrupted;
10. PV panels are not to be installed on sub roof elements such as sub-gables, dormers or verandas;
11. PV panels are to be installed where the removal or pruning of a tree or other vegetation is necessary to satisfy (2) and where the removal or pruning of the vegetation will require a permit or development consent.

1.4 Development Consent

If the installation of PV panels on a particular property does not meet the requirements of either exempt or complying under the Infrastructure SEPP or the Complying Development provisions of the Leichhardt Local Environmental Plan a Development Application (DA) must be lodged with Council. The provisions of the Leichhardt Development Control Plan will apply to a DA. A pro forma DA has been prepared by Council which clearly identifies the information that must be submitted to Council.

2.0 Principles guiding the design and installation of Photovoltaic Panels

2.1 Background

Cutting energy demand is the first and most affordable step towards reducing carbon emissions. These guidelines outline a number of steps that property owners can implement to reduce energy consumption. Property owners are also encouraged to reduce energy consumption by implementing behavioural changes such as turning off appliances and opening windows and doors to allow cross ventilation of rooms.

Conservation areas and heritage items bring significance to an area which is often reflected in visual appearance. Heritage aspects can often not be replaced and should be preserved. It is therefore very important that where PV panels are installed that there is minimal visual impact on the building itself and the streetscape generally. The impacts of the installation of PV panels on building fabric are also an important consideration and irreversible damage should be avoided. In considering any Development Application for the installation of photovoltaic panels the following guiding principles should be implemented wherever possible.

2.2 General Principles guiding design and installation of PV Panels

1. Energy efficiency measures are to be implemented in the first instance to reduce energy consumption – these measures are to include but should not be limited to:
 - a. the installation of low energy light bulbs;
 - b. heating controls;
 - c. improved insulation;
 - d. repairing damaged windows, doors and seals;
 - e. unblocking boarded over window openings;
 - f. removing introduced glazing over openable windows;
 - g. unblocking ceiling vents and flues;

- h. opening windows and doors to reinstate air movement for cooling.
- 2. PV panels are to be located where:
 - a. potential for overshadowing by adjacent trees, buildings or general infrastructure is minimal;
 - b. orientation (direction and angle) will ensure an optimum power output.
- 3. The installation of the PV system should not reduce the structural integrity of or involve structural alterations to any building to which it is attached.
- 4. Integrated PV solutions are encouraged. Council encourages the implementation of new technologies where they will not have negative impacts on streetscape and building fabric.
- 5. The installation of PV panels will not be a consideration to limit the future development potential of adjacent properties.
- 6. PV Panels should be cleaned and serviced regularly to ensure optimal power output.
- 7. PV panels should be removed from the roof and, where possible, sent to a recycling facility when obsolete.

2.3 Additional design and installation Principles for Heritage items and conservation areas

In addition to the General Principles identified above the following apply to Heritage Items and Heritage Conservation areas:

- 1. The design of the PV system including colour and siting must be sympathetic to the character of the building and streetscape and have minimal visual impact;
- 2. The installation of the PV system is not to result in any irreversible alteration or damage to the building fabric of a heritage item or building in a heritage conservation area.

APPENDIX B

Leichhardt DCP Discussion Paper - Photovoltaics on Residential Development

Energy - Photovoltaics