

Local Planning Policy No. 46

Sustainable Development

Adopted: 15 July 2025 Amended: N/A

1.0 Citation

This Local Planning Policy is prepared under Schedule 2, Part 2, Division 2 of the Planning and Development (Local Planning Schemes) Regulations 2015. This Policy may be cited as Local Planning Policy 46 – Sustainable Development.

2.0 Introduction

This policy outlines sustainability-related requirements for the development of land in the Town. This policy aims to deliver outcomes consistent with the Local Planning Strategy (Objective 5.2 - To encourage best practice ecologically sustainable development relative to the opportunities and constraints associated with the scale and siting of the development) and the Town's Climate Emergency Plan.

Whilst sustainable development may (in some instances) incur a greater cost up front, the resultant utility cost savings from energy and water efficiencies compensate this over time. Many new buildings already provide some or many of the sustainability measures provided by this Policy, however this Policy provides additional guidance on sustainability outcomes for applicants to consider and implement. There are a variety of options to comply with the Policy provided in Table 1, which accommodate a range of site contexts and budgets.

The Australian Government has put together an independent guide to designing, building or renovating homes to ensure they are energy efficient, comfortable, affordable and adaptable for the future. For further information on sustainable home-design, please visit:

https://www.yourhome.gov.au/

The Town hopes that by highlighting the benefits of sustainable design, that landowners and developers will be motivated to pursue and investigate sustainable design out of their own interest, rather than purely responding to the *Table 1 -Sustainability Measures* in a compliance-based mindset.

3.0 Objectives

- a) To realise the Town's sustainable built form strategic objectives as identified in the Strategic Community Plan, Local Planning Strategy and Scheme.
- b) To provide a framework of sustainability measures to be integrated into development to achieve sustainable built form, for the life of the development.
- c) To protect the natural environment by minimising energy and water use, and the generation of greenhouse gases.
- d) To provide flexible design options for landowners to develop sustainable buildings that are fit for purpose and appropriate for their specific site context.
- e) To encourage environmentally sustainable design in the Town.



4.0 Application of this policy

Scope

Part A of Clause 5.0 of This policy applies to applications for development approval for the following development types :

- All new single houses;
- All new grouped dwellings;
- Significant additions and/or alterations to a single house or grouped dwelling; (excluding Ancillary Dwellings)
- Multiple Dwellings in areas coded R60 and below.

except where the development is the subject of a Structure Plan or Local Development Plan that contains alternative sustainability requirements.

Part B of Clause 5.0 of this Policy applies to all applications for new non-residential buildings (including the non-residential component of a mixed use development) with a gross floor area (GFA) of 1000m2 or more, but excluding buildings in an Industrial zone.

In the case of Multiple Dwellings in areas coded R80 and above, the provisions of the R-Codes Volume 2 'Apartments' apply.

This policy does not apply to development that is exempt from development approval.

Relationship to state and local framework(s)

Should there be any inconsistencies between the provisions of this policy and other local planning policies the provisions of this policy prevail.

This policy is not intended to inhibit or prevent the achievement of any National Construction Code requirement. Similarly, the implementation of a sustainability measure to satisfy this policy does not constitute approval nor affect any requirement under for separate Acts or Regulations including (but not limited to) Health and Building requirements.

Deemed clause 67(2) of the Planning and Development (Local Planning Schemes) Regulations 2015 outlines that, in considering an application for development approval, local government is to have due regard to a number of matters. Those matters listed include (but not limited to) (g) "any local planning policy for the Scheme Area"; and (o) "the likely effect of the development on the natural environment or water resources and any means that are proposed to protect or mitigate impacts on the natural environment or the water resource". This policy is intended to provide stakeholders with a clear and consistent framework in which they can demonstrate that sustainability related matters are addressed.



5.0 Policy Requirements

<u>Part A – For applicable residential developments</u>

- All new single houses, all grouped dwellings and multiple dwellings in areas coded R60 and below must reach a minimum of 100 points under Table 1 below.
- A2 Proponents are required to submit the Sustainability Checklist (Form 46-1) when lodging a development application to indicate which sustainability measures have been incorporated into the development. If there is more than one dwelling, a Form 46-1 must be provided for each dwelling.
- A3 Each item under Table 1 will be scored/counted a maximum of once per dwelling. le, instances of the same initiative being applied multiple times will not be scored/counted multiple times.
- A4 Sustainability measures must also be reflected on the development plans and will be reinforced through condition(s) of development approval.
- A5 Significant additions and/or alterations to an existing dwelling are required to reach a minimum 60 points under Table 1 below.
- A6 In the case of significant additions and/or alterations, where proponents can demonstrate that an item(s) under Table 1 is already included in the design of an existing dwelling, discretion to the point value allocation of the sustainability measure(s) may be reduced to the minimum points required under clauses 5(A1) and 5(A5). The sustainability measure(s) must:
 - Be of a minimum standard as per Table 1; and
 - Be able to be maintained for the life of the development.
- A7 The Town may consider request(s) for alternative sustainability measure(s) to be included in the proposal. Where a proponent wishes to pursue this option:
 - All requests must be made to the Town of Victoria Park in writing seeking approval as part of the development application. The request must include:
 - (i) A description of the sustainability measure(s); and
 - (ii) Unit of measure (if applicable); and
 - (iii) Manufacturer (if applicable); and
 - (iv) A description of the proposed tangible sustainability benefit that would be provided.



Table 1 – Sustainability measures

ltem	Theme	Sustainability Measure	Points
1	ency	Solar PV system with a minimum 3kW inverter(s)	20
2	Solar Efficiency	Solar battery storage of a minimum 8kWh	30
3	Solar	A minimum 150L: • Solar hot water system with a minimum 2 panels of solar collector area; or • Heat pump hot water system. This system is not to be gas boosted (i.e. electric heat pump boosted).	10
4		Roof colour to have a solar absorptance value of not more than 0.45. Note: this value is usually listed on the material specification sheet/data sheet available from the manufacturer Note: this sustainability measure is an option for new single houses and grouped dwellings, and applicable detached additions and/or alterations only i.e. will not be accepted for significant additions and/or alterations to an existing dwelling	10
5		100% of windows to habitable rooms double glazed with • Conductive (metal/aluminium) frames • Insulative (timber/PVC/'thermally broken') frames Note: this sustainability measure is an option for new single houses and grouped dwellings, and applicable detached additions and/or alterations only. i.e. will not be accepted for significant additions and/or alterations to an existing dwelling.	20 30
6	ý	Rainwater tank(s) of minimum 3,000L capacity that is plumbed into a toilet and/or laundry. Note: refer to Local Planning Policy 32 (table 1, row 15) for guidance on water tanks	10
7	A grey water reuse system that collects grey water from the laundry and bathroom and redirects it for garden irrigation. Note: Refer to the Code of Practice for the Reuse of Greywater in Western Australia 2010, which specifies the		20
8	Wate	minimum areas of garden or lawn required for greywater disposal. Permeable paver driveway(s) Note: Please be advised that for the purposes of calculating stormwater retention requirements (eg for strip drains and soakwell's etc) the Town will assume that permeable paver driveways act as an impervious surface.	10
9	Vegetation	Waterwise plants as defined by the Water Corporation comprise 75% of the total landscaped area. The landscaped area must be a minimum of 20m². A landscaping plan must be provided with the development application, to the satisfaction of the Town of Victoria Park. Note: See https://www.watercorporation.com.au/ for further information on waterwise plants	20
10		Within the dwelling site, retain one healthy living tree that is— a. is of a species that is not included on State or local area weed register; and i. Is between 4m and 8m high;	
		OR i. Is 8m or more high; and/or	30
		ii. has an average canopy diameter of at least 6m; and/or iii. has a truck circumference of at least 1.5m, measured 1.4m above the ground.	50
		An arborist report must be provided with the development application to verify the ongoing health of the tree(s). The Town of Victoria Park will determine whether the proposed tree satisfies the requirement of this sustainability measure	
11		Within the dwelling site, provide a new tree and associated planting area in addition to/in excess of what is required under the R-Codes. The tree must be a local native species with a planting size of at least 35L and must be retained for the life of the	



		development.	
		For dwellings assessed under: - Part B of the R-Codes, this entails an additional tree with minimum 2mx2m planting area. - Part C of the R-Codes, then this would entail an additional 'small tree' with minimum 9m² deep soil area and minimum dimension 1.5m² (ie, 3mx3m would comply, but so would 6mx1.5m)	20
		NOTE: an applicant must provide the following information regarding the proposed tree for this sustainability measure to be considered - supplier, botanical name, common name, planting size (in litres, at time of planting), height at maturity (average) and life expectancy (average)	
12	Transport	At least one car parking bay provided (<1m from) with -a General Power Outlet (GPO) in proximity to a dwelling parking bay -a minimum 7kW electric vehicle charger with dedicated switchboard circuit. Note: the sustainability measure for a 7kW electric vehicle charger requires a 'vehicle ready' set of electric vehicle supply equipment to be installed, including power supply, control module and cable attachment/charging socket.	10- 20
13	ign	Ceiling fans provided to all bedrooms	20
14	Energy Efficient Design	A major opening to the primary living space is oriented between north-west and east in accordance with Figure 1, with an adjoining uncovered open area with: i. a minimum dimension 3m x 3m¹ in accordance with Figure 2; and ii. the exception of shading devices up to 2m depth. ¹The centre line of the minimum 3m x 3m area must be contained within the glazed area of the major opening (Figure 3). ¹The centre line of the minimum 3m x 3m area must be contained within the glazed area of the major opening (Figure 3). The centre line of the minimum 3m x 3m area must be contained within the glazed area of the major opening (Figure 1). The centre line of the minimum 3m x 3m area must be contained within the glazed area of the major opening (Figure 3).	40
		adjoining uncovered open adjoining uncovered open area to be clear of walls eave or shading device up to 2m in depth major opening adjoining uncovered open area to be clear of lot boundaries adjoining uncovered open area may extend beyond street boundary street boundary opening adjoining uncovered open area may extend beyond street boundary opening adjoining uncovered open area may extend beyond street boundary opening	



		Note: A deemed-to-comply dwelling designed under Part C of R-Codes Volume 1 will meet this provision by default. This provision is intended to encourage dwellings designed under Part B of the R-Codes to <i>also</i> be designed in accordance with solar passive design principles.	
15		Achieve a Nationwide House Energy Rating Scheme (NatHERS) star rating of not less than: -eight stars -nine stars	80 100
		The energy efficiency rating for the dwelling shall be certified by a suitably qualified and accredited energy assessor using accredited software and shall be provided at the development application stage.	
		The Town will also consider an alternative evidenced through an equivalent rating tool. Where an alternative certification is being sought, seek prior approval from the Town.	
16		Commitment to, prior to occupation, an inspection being undertaken by an independent accredited building inspector to confirm that the dwelling has been constructed in accordance with the energy assessment provided.	20
17		Commitment to, prior to occupation, an airtightness test being undertaken by a suitably qualified professional to confirm the dwelling achieves an air leakage rate between 5 (min) and 10 (max) ACH50 (Air changes per hour at 50 pascals).	20
18	Additional Sustainability Measure(s)	A Lifecycle assessment undertaken in accordance with ISO 14040 and 14044 demonstrating at least 60% less Global Warming Potential and 50% less net use of fresh water against a reference design to the satisfaction of the Town.	100
19	nability	The proposal is an accessible dwelling designed to gold level universal design in accordance with R-Codes Volume 1 Part B, 5.5.4 C4 or R-Codes Volume 1 Part C, C2.7.2	20
20	al Sustai	The proposal is a 'Small Dwelling' as defined by the R-Codes Volume 1 - this being a single house or grouped dwelling with an internal floor area no greater that 70m ²	20
21	Addition	No natural gas is to be used for cooking, dwelling or water heating.	20
22	4	Refer to clause 5(A7) of this policy. Note: Should a proponent wish to use an alternative sustainability measure in accordance with clause 5(A7)/ir it is recommended they contact the Town of Victoria Park for advice on the suitability of the measure plodgement of the development application. The Town of Victoria Park will advise if further sustainability measure addition to the alternative sustainability measure is required to achieve the points required in accordance with 5(A1) and 5(A5)	orior to sures in



<u>Part B – For applicable non-residential developments</u>

- All development is to be designed and constructed to achieve a rating not less than 4 star Green Star using the relevant Green Building Council of Australia Green Star rating tool, or equivalent, demonstrated through a report provided by a suitably qualified professional.
- B2 Council may exercise discretion to waive or vary the requirements of the policy in the case where:
 - a) Development involves refurbishment of a building included on the Heritage List or in a Heritage Area where, in the opinion of the Council, adherence to the requirements of clause 5 would detrimentally impact on the heritage values of the building or area; and/or
 - b) No suitable sustainability rating tool has yet been developed for assessment of the type of development proposed but it demonstrates a higher than standard energy and water efficiency.
- An application for development approval is to be accompanied by a written report from a suitably qualified professional stating that that based upon the drawings and information provided as part of the development application, the building is capable of achieving the requirement at part B1 of this Policy.
- B4 Unless the Council waives any particular requirement, an application subject to this policy may be made subject to a condition of approval that:
 - a) Prior to the issue of a building permit, the applicant/owner is to submit a copy of documentation from the Green Building Council of Australia or a suitably qualified professional stating how the development will achieve a Green Star rating of at least 4 Stars or equivalent, to the satisfaction of the Town. and
 - b) Prior to occupation, the applicant/owner is to submit a copy of documentation from the Green Building Council of Australia or a suitably qualified professional stating that the development as constructed achieves a Green Star rating of at least 4 Stars or equivalent, to the satisfaction of the Town.



6.0 Definitions

Where not defined below, words and terms used in this policy are as defined in the Scheme, the *Planning and Development Act 2005*, the Regulations or the Residential Design Codes (the R-Codes):

NatHERS means the Nationwide House Energy Rating Scheme.

Passive House means a design standard that achieves thermal comfort with minimal heating and cooling by using insultation, airtightness, appropriate window and door design, ventilation systems with heat recovery, and elimination of thermal bridges.

Permeable Driveway means a driveway that allows for water to naturally pass through its surface.

Significant Additions and/or Alterations means an addition and/or alteration with an internal floor area greater than 50 per cent of the existing internal floor area.

Solar Absorptance means the fraction of the total incident solar radiation that is absorbed by the roofing material, with the remainder being reflected.

Solar PV means solar photovoltaic (PV) system

Waterwise Plants has the same meaning as classified in the Water Corporation's Waterwise Plant Search for the Town of Victoria Park.

Related Documents

Local Planning Policy No. 32 'Exemptions from Development Approval'
Planning and Development (Local Planning Schemes) Regulations 2015

Version Control

Date Initially Adopted :	15 July 2025, deferred implementation to commence 8 January 2026				
Date(s) Amended :					



Form 46-1 - Sustainability Checklist

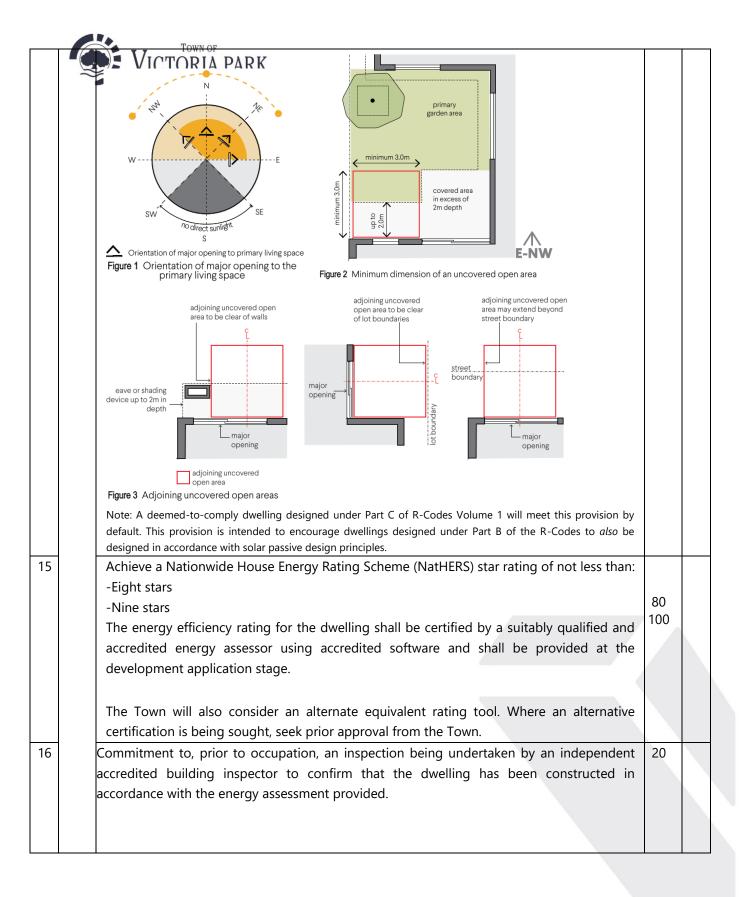
Name:	
Address of Development:	

Notes:

- 1. In accordance with clause 5(A2), if more than one dwelling is proposed on-site, one Form 1 checklist is required for each dwelling
- 2. In accordance with clause 5(A4), sustainability measure(s) must also be reflected on development plans (including site, floor, roof and elevation plans)

Item	Theme	Sustainability Measure	Points	Check
1	iciency	Solar PV system with the following minimum 3kW size inverter(s)	20	
2	Solar Efficiency	Solar battery storage of a minimum 8kWh	30	
3		 A minimum 150L: Solar hot water system with a minimum 2 panels of solar collector area; or Heat pump hot water system. This system is not to be gas boosted (i.e. electric heat pump boosted). 	10	
4		Roof colour to have a solar absorptance value of not more than 0.45. Note: this value is usually listed on the material specification sheet/data sheet available from the manufacturer Note: this sustainability measure is an option for new single houses and grouped dwellings, and applicable detached additions and/or alterations only i.e. will not be accepted for significant additions and/or alterations to an existing dwelling	10	
5		100% of windows to habitable rooms double glazed with • Conductive (metal/aluminium) frames • Insulative (timber/PVC/'thermally broken') frames Note: this sustainability measure is an option for new single houses and grouped dwellings, and applicable detached additions and/or alterations only i.e. will not be accepted for significant additions and/or alterations to an existing dwelling	20 30	
6	_	Rainwater tank of minimum 3,000L capacity that is plumbed into a toilet and/or laundry. Note: refer to Local Planning Policy 32 (table 1, row 15) for guidance on water tanks	10	
7	Water Efficiency	A grey water reuse system that collects grey water from the laundry and bathroom and redirects it for garden irrigation. Note: Refer to the Code of Practice for the Reuse of Greywater in Western Australia 2010, which specifies the minimum areas of garden or lawn required for greywater disposal.	20	
8	 	Permeable paver driveway(s) Note: Please be advised that for the purposes of calculating stormwater retention requirements (eg for strip drains and soakwell's etc) the Town will assume that permeable paver driveways act as an impervious surface.	10	

		TOWN OF		
9	Vegetation	Waterwise plants as defined by the Water Corporation comprise 75% of the total landscaped rea. The landscaped area must be a minimum of 20m². A landscaping plan must be provided with the development application.	20	
	\ V	Note: See https://www.watercorporation.com.au/ for further information on waterwise plants		
10		Within the dwelling site, retain one healthy living tree that is— a. is of a species that is not included on State or local area weed register; and • Is between 4m and 8m high; OR • Is 8m or more high; and/or • has an average canopy diameter of at least 6m; and/or	30 50	
		 has a truck circumference of at least 1.5m, measured 1.4m above the ground. An arborist report and Form 46-2 must be provided with the development application to verify the ongoing health of the tree. The Town of Victoria Park will determine whether the proposed tree satisfies the requirement of this sustainability measure. 		
11		Within the dwelling site, provide a new tree and associated planting area in addition to/in excess of what is required under the R-Codes. The tree must be a local native species with a planting size of at least 35L and must be retained for the life of the development. For dwellings assessed under: Part B of the R-Codes, this entails an additional tree with minimum 2mx2m planting area. Part C of the R-Codes, then this would entail an additional 'small tree' with minimum 9m² deep soil area and minimum dimension 1.5m² (ie, 3mx3m would comply, but so would 6mx1.5m) NOTE: an applicant must provide the following information regarding the proposed tree for this sustainability measure to be considered - supplier, botanical name, common name, planting size (in litres, at time of planting),	20	
12		height at maturity (average) and life expectancy (average) At least one car parking bay provided (<1m from) with		
14	Transport	-a General Power Outlet (GPO) -a minimum 7kW electric vehicle charger with dedicated switchboard circuit. Note: the sustainability measure for a 7kW electric vehicle charger requires a 'vehicle ready' set of electric vehicle supply equipment to be installed, including power supply, control module and cable attachment/charging socket	10 20	
13		Ceiling fans provided to all bedrooms	20	
14	Energy Efficiency Design	A major opening to the primary living space is oriented between north-west and east in accordance with Figure 1, with an adjoining uncovered open area with: i. a minimum dimension 3m x 3m ¹ in accordance with Figure 2; and ii. the exception of shading devices up to 2m depth. The centre line of the minimum 3m x 3m area must be contained within the glazed area of the major opening (Figure 3).	40	





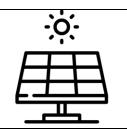
17		Commitment to, prior to occupation, an airtightness test being undertaken by a suitably qualified professional to confirm the dwelling achieves an air leakage rate between 5 (min) and 10 (max) ACH50 (Air changes per hour at 50 pascals).	20			
18		A Lifecycle assessment undertaken in accordance with ISO 14040 and	100			
		14044 demonstrating at least 60% less Global Warming Potential and				
		50% less net use of fresh water against a reference design to the				
		satisfaction of the Town.				
19		The proposal is an accessible dwelling designed to gold level universal design in accordance with R-Codes Volume 1 Part B, 5.5.4 C4 or R-Codes Volume 1 Part C, C2.7.2	20			
20		The proposal is a 'Small Dwelling' as defined by the R-Codes Volume 1	20			
		- this being a single house or grouped dwelling with an internal floor area no greater that 70m ²				
21		No natural gas is to be used for cooking, dwelling or water heating.	20			
22						
	(s)					
	sure					
	Леаз					
	ty №					
	ilide					
	Additional Sustainability Measure(s)	[state sustainability measure(s)] Refer to clause 5(A7) of this policy.				
	lal S	Note: Should a proponent wish to use an alternative sustainability measure in accordance				
	itior	5(A7)/item 22, it is recommended they contact the Town of Victoria Park for advice on the the measure prior to lodgement of the development application. The Town of Victoria Park				
	lppγ	further sustainability measures in addition to the alternative sustainability measure is require				
C		the points required in accordance with clauses 5(A1) and 5(A5).	TOTAL			
1	inability ure(s)	[list item numbers]	TOTAL:			
Chose						
Applicant declaration:						
I[print name], will implement the sustainability measure(s) as identified above and understand that relevant conditions will be contained as part of any development approval for						
	e and under oplication.	rstand that relevant conditions will be contained as part of any developme	nt approvai	101		
l are at	pheation.					
Signa	ture:					



Local Planning Policy 46 – Sustainable Development Supplementary information

Purpose

The purpose of this document is to provide additional information to help explain the 21 sustainability measures proposed in Part A of draft Local Planning Policy 46 – Sustainable Development. Sustainability measures from this list can be chosen to achieve a minimum of 100 points for a new dwelling or minimum of 60 points for sustantial additions/alterations to a dwelling.



Sustainability measure #1

Solar Panels

Theme: Solar Efficiency

Policy requirement:

"Solar PV system with a minimum 3kW inverter(s)"

[20 Points]

Solar panels capture the energy of sunlight which is converted into electricity. This is known as a solar photovoltaic (PV) system, usually called solar PV.

Solar PV technology is a source of price-competitive, zero greenhouse gas emission energy for homes and businesses across Australia. Reducing (or eliminating) the need for fossil-fuel based sources of electricity is a central part of taking action on climate change.

It is noted that 3kW is listed as a <u>minimum</u> target/threshold. Subject to roof space and budget, developers and landowners may wish to exceed that target.

Some useful/relevant website links (such as <u>how to check the accreditation status</u> of a solar installer) are as follows.

- Choose your solar retailer and installer | energy.gov.au
- <u>Photovoltaic systems | YourHome</u>
- Household Renewable Energy Overview
- Solar power WA Solar power systems, panels and more | Horizon Power
- Synergy Distributed Energy Buyback Scheme (DEBS)





Solar battery storage

Theme: Solar Efficiency

Policy requirement:

"Solar battery storage of a minimum 8kWh"

[30 Points]

Batteries enable you to store energy to be used later, and can be a useful part of a dwelling's solar PV system.

Reducing (or eliminating) the need for fossil fuel-based sources of electricity is a central part of taking action on climate change

It is noted that 8kWh is listed as a <u>minimum</u> target/threshold. Developers and landowners may wish to exceed that target.

Some useful/relevant website links are as follows.

- Photovoltaic systems | YourHome
- Australian PV Institute
- Best practice guide: battery storage equipment
- Choice How to buy the best solar battery storage.
- Clean Energy Council Buying battery storage.
- Choose your solar retailer and installer | energy.gov.au



Sustainability measure #3

Solar or Heat pump hot water system

Theme: Solar Efficiency

Policy requirement:

[10 Points]

"A minimum 150L:

- Solar hot water system with a minimum 2 panels of solar collector area; or
- Heat pump hot water system.

This system is not to be gas boosted (i.e. electric heat pump boosted)."

Solar hot water systems use solar collectors or panels to absorb energy from the sun. Water is heated by the sun as it passes through the collectors. It then flows into an insulated storage tank for later use.

Heat pumps use electricity to move heat from one place to another instead of generating



heat directly. Energy use for heat pump hot water systems is much less than for electric systems that directly heat the water.

Both systems often cost more to buy than conventional hot water systems but save energy and can reduce both energy bills and greenhouse gas emissions.

It is noted that 150L capacity is listed as a <u>minimum</u> target/threshold. Developers and landowners may wish to far exceed that target.

Some useful/relevant website links are as follows.

- Choice How to buy the best hot water system
- <u>Department of Climate Change and Energy Efficiency Solar & Heat Pump Hot Water Systems</u>



Sustainability measure #4

Roof Colour

Theme: Solar Efficiency

Policy requirement:

Roof colour to have a solar absorptance value of not more than 0.45.

Note: this sustainability measure is an option for new single houses and grouped dwellings, and applicable detached additions and/or alterations only i.e. will not be accepted for significant additions and/or alterations to an existing dwelling

Lighter colour roofs typically have a low solar absorptance compared to darker coloured roofs. Solar absorptance is a measure of how much solar radiation the roof absorbs (0 indicates no roof absorbance and 1 indicates the roof absorbs 100%).

[10 Points]

Houses with a low solar absorptance roof heat up less in summer months and thus require less air conditioning.

This value is usually listed on the material specification sheet/data sheet available from the manufacturer.

Please note <u>Local-Planning-Policy-25-Streetscape</u> also includes requirements pertaining to roof colour and materials. Generally speaking, it is required that roof colours be complimentary to the existing residential streetscape (or in the case of additions, match the existing building)





Double glazed windows

Theme: Solar Efficiency

Policy requirement:

100% of windows to habitable rooms double glazed with

- Conductive (metal/aluminium) frames, or
- Insulative (timber/PVC/'thermally broken') frames

Note: this sustainability measure is an option for new single houses and grouped dwellings, and applicable detached additions and/or alterations only i.e. will not be accepted for significant additions and/or alterations to an existing dwelling

[20 Points]

Double glazing (also known as insulated glass units or IGUs), is the combination of 2 layers of glass sealed into a frame with a gap between the layers. Multiple layers can be assembled with sealed cavities between each sheet of glass.

Up to 40% of a home's heating energy can be lost and up to 87% of its heat gained through windows. Improving the thermal performance of your glazing will increase your home's comfort and reduce energy consumption, therefore lowering costs and greenhouse gas emissions.

Frames have a significant impact on the thermal performance of windows and doors, because energy can be gained and lost through the frame, as well as through the glass. Different types of frame will allow different levels of heat gain and loss, so careful choice of frame is important for effective passive design.

If nominating that 'insulative' frames are proposed, please include specific product details including, but not limited to, the 'Uw' conductivity value/rating. Please note the Town is unlikely to accept that a frame is 'insulative' if the window has a 'Uw' value greater than 3.

For further information on this topic, please see Glazing | YourHome





Rainwater tank(s)

Theme: Water Efficiency

Policy requirement:

and/or laundry."

"Rainwater tank(s) of minimum 3,000L capacity that is plumbed into a toilet

[10 Points]

Rainwater storage systems are a simple method of capturing rainwater, traditionally from roofs, for use as an alternative water supply source and to reduce consumption of scheme water.

When installed and maintained in accordance with recommended guidelines, these can provide a high-quality source of water. Substituting the use of tap water with rainwater for a variety of uses around the house can reduce the demand on drinking water supplies.

Some useful/relevant website links are as follows.

- <u>Draft Alternate Water Supply Guidelines Stormwater and Rainwater</u>
- Rainwater storage and reuse systems
- Water Corporation Waterwise
- Australian guidelines for water recycling
- The cost effectiveness of residential rainwater tanks in Perth

Please note that the Town will not support water tanks being installed in all locations. Please refer to <u>Local Planning Policy 32</u> (table 1, row 15) for guidance on locating water tanks so as to minimise impacts on the streetscape.





Grey water re-use system

Theme: Water Efficiency

Policy requirement:

[20 Points]

"A grey water reuse system that collects grey water from the laundry and bathroom and redirects it for garden irrigation."

Greywater is wastewater from non-toilet plumbing fixtures such as showers, basins and taps. Appropriately treated greywater can be reused for a variety of different end uses, such as irrigating gardens and flushing toilets.

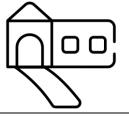
Decline in reliable rainfall in Australia, combined with the continued population growth, has resulted in increasing pressure on drinking water supplies in most large cities and many regional areas of Australia. Substituting the use of potable (drinking) water with greywater for the above-mentioned end uses will reduce the demand on drinking water supplies. Additionally, it will also reduce the amount of wastewater discharged to the environment.

Please refer to the Government of Western Australia Department of Health <u>Code of Practice</u> <u>for the Reuse of Greywater in Western Australia 2010</u>, which specifies the minimum areas of garden or lawn required for greywater disposal.

Some useful/relevant website links are as follows.

- <u>Department of Health Greywater</u>
- Australian guidelines for water recycling
- Greywater and Wastewater Industry Group





Permeable paving to driveways

Theme: Water Efficiency

Policy requirement:

[10 Points]

"Permeable paver driveway(s)"

Permeable paving is the use of materials and designs to allow water to pass through the pavement and infiltrate into the ground below.

This helps to mimic natural hydrological processes, reducing the impact of urbanization on the water cycle.

Please ensure that if proposing permeable paving to a development that adequate information is provided to enable if to be checked for compliance against the Town's driveway material standards.

For further information, please see - <u>Crossover and Driveways » Town of Victoria Park</u>

Please note that only **pavers** are supported. Loose material (eg pebble gravel) that may scatter or wash onto public footpaths is not suitable and is not supported.

Additionally, please note that permeable pavers are still less effective at infiltrating water than garden areas and lawn. Regular maintenance is required for permeable paving systems to maintain their efficacy at infiltrating water into the ground.

For the purposes of calculating stormwater retention requirements the Town will conservatively assume that permeable paver driveways act as an impervious surface. Permeable paving is therefore best thought as being provided <u>in addition</u> to standard stormwater retention systems (eg strip drains, soakwell's etc) rather than <u>instead of</u>.

Some useful/relevant website links are as follows.

- Department of Water and Environmental Regulation Pervious paving brochure
- Crossover and Driveways » Town of Victoria Park
- Drainage » Town of Victoria Park





Waterwise landscaping

Theme: Vegetation

Policy requirement:

[20 Points]

"Waterwise plants as defined by the Water Corporation comprise 75% of the total landscaped area. The landscaped area must be a minimum of 20m2. A landscaping plan must be provided with the development application, to the satisfaction of the Town of Victoria Park."

Waterwise plants, also known as drought-tolerant or water-efficient plants, are species that require minimal water to thrive.

Once the plant is established in improved soil it should only need watering once a week during summer and less frequently, if at all, during cooler months. Waterwise landscaping can therefore reduce the demand on drinking water supplies.

NOTE: A landscaping plan must be provided upfront with the development application. Deferring this via condition of development approval will generally not be supported.

Some useful/relevant website links are as follows:

- https://www.watercorporation.com.au/Waterwise/Waterwise-plants
- https://begroundwaterwise.wa.gov.au/



Sustainability measure #10

Tree retention

Theme: Vegetation

Policy requirement:

- " Within the dwelling site, retain one healthy living tree that is-
- a. is of a species that is not included on State or local area weed register; and
 - i. Is between 4m and 8m high;

----- OR-----

[30 Points]

- i. Is 8m or more high; and/or
- ii. has an average canopy diameter of at least 6m; and/or
- iii. has a truck circumference of at least 1.5m, measured 1.4m above the ground.

[50 Points]

Tree retention in the context of development refers to the practice of preserving existing trees on a site during and after the construction process.

Retention of mature trees can be highly valuable for local microclimates, ecology and



residential amenity.

Please be advised that an arborist report must be provided with the development application to verify the ongoing health of the tree. The arborist report should include the following details:

Address of development:	Development type:
Arborist report completed by:	Arborist contact details:
Location map and photo of tree:	Location:
Name (Botanical and Common):	DBH* range/
Height:	Canopy Diameter (average):
Age Class:	Canopy Area (π x r²):
Health / Vitality:	Structural Condition:
Useful Life Expectancy:	Comments:
Amenity Valuation (Helliwell):	Total Points:
Monetary Value:	
General Significance:	Historical Significance:

The Town of Victoria Park will determine whether the proposed tree satisfies the requirement of this sustainability measure.

Some useful/relevant website links are as follows:

- Urban Forest Strategy » Town of Victoria Park
- Town-of-victoria-park-preferred-tree-species



Sustainability measure #11

New native tree

Theme: Vegetation

Policy requirement:

"Within the dwelling site, provide a new tree and associated planting area in addition to/in excess of what is required under the R-Codes. The tree must be a local native species with a planting size of at least 35L and must be retained in perpetuity.

[20 Points]

NOTE: an applicant must provide the following information regarding the proposed tree for this sustainability measure to be considered - supplier, botanical name, common name, planting size (in litres, at time of planting), height at maturity (average) and life expectancy (average)"

A native tree is a tree species that is indigenous to the region and has evolved to thrive in the local climate and soil conditions.

Additional trees can positively contribute to local microclimates, ecology and residential amenity. It is noted that the <u>R-Codes</u> already requires the provision of trees. This



sustainability measure is only achieved if an additional tree is provided above and beyond the 'Deemed-to-Comply' requirement

For dwellings assessed under:

- Part B of the R-Codes, this entails an additional tree with minimum 2mx2m planting area
- Part C of the R-Codes, then this would entail an additional 'small tree' with minimum 9m2 deep soil area and minimum dimension 1.5m² (i.e. 3mx3m would comply, but so would 6mx1.5m)

The Town of Victoria Park will review the information provided determine whether the proposed tree satisfies the requirement of this sustainability measure. If a tree 'Species Origin' is listed as 'Local Native' under the <u>ToVP-preferred-tree-species</u> list, then that species is guaranteed to be accepted as local.

Some useful/relevant website links are as follows:

- Town-of-victoria-park-preferred-tree-species
- R-Codes Volume 1 Explanatory Guidelines



Sustainability measure #12

Electric vehicle charger

Theme: Transport

Policy requirement:

"At least one car parking bay provided (<1m from) with

-a General Power Outlet (GPO) in proximity to a dwelling parking bay

-a minimum 7kW electric vehicle charger with dedicated switchboard circuit." Note: the sustainability measure for a 7kW electric vehicle charger requires a 'vehicle ready' set of electric vehicle supply equipment to be installed, including power supply, control module and cable attachment/charging socket.

[10 Points]

Electric vehicles (EVs) have either a primary or secondary electric motor. Those that are 'plug in' can have their battery recharged using mains electricity and may be charged at home, depending on the availability and access to a suitable place to charge.

Transport is a major user of energy in the form of fossil fuels. Transport is Australia's third-largest source of greenhouse gas emissions and cars are responsible for half of the country's transport greenhouse gas emissions. Whether the vehicle charged is purely electric or a 'plug in hybrid', electrically powered vehicles emit less carbon and particle pollution than those that use just fossil fuels (that is, petrol or diesel).

It is noted that the 20 point option for a 7kW electric vehicle charger requires a 'vehicle ready' set of electric vehicle supply equipment to be installed, including power supply, control module and cable attachment/charging socket.



According to this WA state government <u>webpage</u> - In Australia, most EVs (except for Japanese models) can charge using Type 2 (for AC charging) and CCS2 (for DC charging) connector types.

Some useful/relevant website links are as follows:

- Transitioning to Electric Vehicles (EVs) WA gov
- Transport | YourHome



Sustainability measure #13

Ceiling fans

Theme: Energy Efficient Design

Policy requirement:

"Ceiling fans provided to all bedrooms"

[20 Points]

A ceiling fan is an electrically powered device mounted on the ceiling of a room, designed to circulate air using rotating blades.

Ceiling fans provide air movement which helps us feel cool. They are cheap to run and use substantially less energy than air-conditioners. With good design and insulation, fans can often supply adequate cooling for acclimatised residents in all Australian climates. Fans can also supplement air-conditioners – reducing the duration and/or frequency of air-conditioner use in summer months.

When compared with air-conditioner use – installation of ceiling fans reduces energy consumption, therefore lowering costs and greenhouse gas emissions.

It is noted that provision of ceiling fans in all habitable rooms can increase thermal comfort across the household. For the purposes of achieving this sustainability measure, however, only ceiling fans to bedrooms are required.

Ceiling fans must be depicted in the Development Application plans (on floor plans and/or lighting plans) for this sustainability measure to be considered.

Some useful/relevant website links are as follows:

- Heating and cooling | YourHome
- Design for your climate and keep cool | energy.gov.au





Solar passive orientation

Theme: Energy Efficient Design

Policy requirement:

"A major opening to the primary living space is oriented between north-west and east in accordance with Figure 1, with an adjoining uncovered open area with:

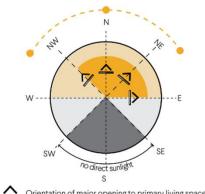
[40

Points]

i. a minimum dimension $3m \times 3m^1$ in accordance with Figure 2; and

ii. the exception of shading devices up to 2m depth.

 1 The centre line of the minimum 3m x 3m area must be contained within the glazed area of the major opening (Figure 3)."



Orientation of major opening to primary living space

Figure 1 Orientation of major opening to the primary living space

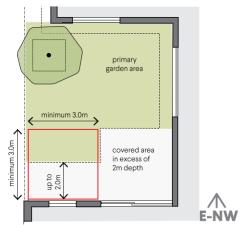
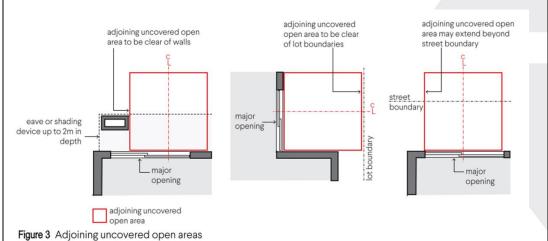


Figure 2 Minimum dimension of an uncovered open area



In the context of Perth Western Australia, Solar passive orientation means siting, orienting and designing dwellings to optimise winter solar gain whilst limiting summer sunlight into living spaces.

Approximately 40% of household energy is used for heating and cooling. This could be cut to almost zero in new houses through effective, climate-appropriate design.



Aligned with this goal, Part C of the Residential Design Codes (R-Codes) has introduced (as of April 2024) a Deemed-to-Comply requirement (C2.2.4) for one major opening to the Primary Living Area of the dwelling to be oriented between north-west and east in accordance with the above depicted figure.

Many dwellings, however, are assessed under Part B of the R-Codes – and therefore bypass that requirement. To encourage/incentivise solar passive design in dwellings this Deemed-to-Comply requirement (C2.2.4) has been effectively duplicated into LPP46. A dwelling designed in accordance with the Part C deemed-to-comply requirements of the R-Codes will, by default, achieve this. This provision is intended to encourage dwellings designed under Part B of the R-Codes to also be designed in accordance with solar passive design principles.

Applicants for dwellings assessed under Part B of the R-Codes are strongly encouraged to give active consideration to this sustainability measure. As of 1 May 2025 the National Construction Code requires new Australian Houses to meet an energy efficiency standard of 7 Stars. Good solar passive orientation is a highly cost-effective way of achieving this 7 star (or a higher star) NatHERS rating.

It is noted that for Part C dwelling assessments, that the Town will not accept provision of other sustainability measures as a substitute for (and function independently from) actually satisfying the R-Codes design principles of optimising winter solar gain and minimising summer sun. Eg grey water reuse does not excuse poor dwelling orientation.

Some useful/relevant website links are as follows.

- R-Codes Volume 1 Explanatory Guidelines
- Design for climate | YourHome



Sustainability measure #15

8 to 9 Star NatHERS rating

Theme: Energy Efficient Design

Policy requirement:

"Achieve a Nationwide House Energy Rating Scheme (NatHERS) star rating of not less than:

-eight stars

-nine stars

[80 Points]

The energy efficiency rating for the dwelling shall be certified by a suitably qualified and accredited energy assessor using accredited software and shall be provided at the development application stage.



The Town will also consider an alternative evidenced through an equivalent rating tool. Where an alternative certification is being sought, seek prior approval from the Town."

The Nationwide House Energy Rating Scheme (NatHERS) provides energy ratings for new dwellings.

An 8 or 9 Star NatHERS rated house would have high comfort, remaining cool in summer and warm in winter, with minimal need for artificial heating or cooling. This reduces energy consumption, therefore lowering costs and greenhouse gas emissions.

Some useful/relevant website links are as follows.

- https://www.nathers.gov.au/
- Energy assessments for new homes | Nationwide House Energy Rating Scheme (NatHERS)



Sustainability measure #16

Building inspection

Theme: Energy Efficient Design

Policy requirement:

"Commitment to, prior to occupation, an inspection being undertaken by an independent accredited building inspector to confirm that the dwelling has been constructed in accordance with the energy assessment provided."

[20 Points]

A dwelling that has been designed to a high level of energy efficiency can be 'let down' and have lower than expected performance if the building isn't constructed in accordance with its specification. In the context of a new build, a building inspector can check that the thermal efficiency measures that were designed into a dwelling have been correctly sourced and installed.

Building inspections can occur at different stages of the construction process, from initial site preparation to final completion.

If an applicant nominates this sustainability measure, the Town would apply a condition of Development Approval requiring evidence be submitted to the Town that an inspection has been undertaken and that the assessor is satisfied, prior to (or concurrent with) the submission of a BA7 notice of completion. Ideally, applicants should demonstrate that they have sought quotes & budgeted for a relevant service provider at the development application stage.

Some useful/relevant website links are as follows.

• Energy assessments for new homes | Nationwide House Energy Rating Scheme (NatHERS)





Air tightness test

Theme: Energy Efficient Design

Policy requirement:

"Commitment to, prior to occupation, an airtightness test being undertaken by a suitably qualified professional to confirm the dwelling achieves an air leakage rate between 5 (min) and 10 (max) ACH50 (Air changes per hour at 50 pascals)."

[20 Points]

Blower door tests are used to measure the airtightness of the building. In such a test, a calibrated fan is mounted in a flexible panel positioned in an external door. The fan measures airflow into and out of the building as it is pressurised and depressurised. In addition, thermal imaging cameras and smoke tests may be used to locate the leaks.

Most Australian houses would benefit from improved airtightness. Some old houses are very leaky, with total air changes in excess of 30 per hour at 50 pascals (Pa). The current average new Australian home has an airtightness of 15.4 air changes per hour at 50 pascals (Pa) (that is, 15.4ACH50) (CSIRO 2015).

If an applicant nominates this sustainability measure, the Town would apply a condition of Development Approval requiring evidence be submitted to the Town that an inspection has been undertaken and that the assessor is satisfied, prior to (or concurrent with) the submission of a BA7 notice of completion.

Ideally, applicants should demonstrate that they have sought quotes & budgeted for a relevant service provider at the development application stage.

It is noted that this sustainability measure seeks a <u>range</u> of airtightness between 5 to 10 ACH50. Greater airtightness (<5ACH50) *can* be an intentional design feature, it requires greater consideration of ventilation systems and condensation controls – such as those detailed in Passivhaus standards. Higher airtightness without those controls could risk leading to condensation, mould and high internal levels of carbon dioxide.

If an applicant wishes to propose a Passivhaus certified dwelling or a similar high-airtightness design, they are welcome to detail this proposal under clause 1.6/item#22.

Some useful/relevant website links are as follows:

- Ventilation and airtightness | YourHome
- ATTMA | Registered Air Tightness Testers Australia





Lifecycle assessment

Theme: Energy Efficient Design

Policy requirement:

[100

"A Lifecycle assessment undertaken in accordance with ISO 14040 and 14044 demonstrating at least 60% less Global Warming Potential and 50% less net use of fresh water against a reference design to the satisfaction of the Town."

Points]

A Life Cycle Assessment (LCA) is an end-to-end analysis technique that measures the environmental impacts associated with all stages of a product's life.

In the context of a dwelling, this could include the energy required to manufacture the materials to build it (embodied energy), the operational energy used to keep occupants in thermal comfort (E.g. air conditioning) and the energy and impact of demolition and disposal of building. The assessment could also examine the total expected use of fresh water.

Traditionally, lifecycle assessments were expensive and time consuming to undertake. Accordingly, they were only seen as appropriate to employ for large scale developments. More recently, software tools and then apps (capable of being used on a phone) have been developed that make the process swift, simple and affordable.

One recent and local instance of this was a pilot program that led to ongoing engagement between the City of Vincent and RapidLCA by Cerclos. The Town, following the City of Vincent's example, has reached out to Cerclos to set up a reference design that can be used to benchmark the performance of buildings.

A Lifecycle assessment in accordance with ISO 14040 and 14044 prepared by any reputable and suitably qualified service provider to demonstrate performance against a reasonable reference design may be sufficient for the purposes of this sustainability measure. For simplicity's sake, however, use the RapidLCA tool may be preferred by Town officers as the documentation submitted to the Town would be in a consistent format and manner.

It should be noted that one of the required inputs for the Rapid LCA tool (and presumably other LCA tools) is an assumed NatHERS rating. Please ensure that this NatHERS rating is discussed with your builder prior to committing to an LCA report. Depending on building type and orientation, achieving the NatHERS rating could be trivial OR it could be impossible.

Some useful/relevant website links are as follows.

- Built Environment Sustainability Scorecard Life cycle assessments
- <u>City of Vincent RapidLCA</u>
- <u>Embodied energy | YourHome</u>
- Zero energy and zero carbon homes | YourHome
- NABERS Embodied Carbon | NABERS





Universal design accessible dwelling

Theme: Additional Sustainability Measure(s)

Policy requirement:

[20 Points]

"The proposal is an accessible dwelling designed to gold level universal design in accordance with R-Codes Volume 1 Part B, 5.5.4 C4 or R-Codes Volume 1 Part C, C2.7.2"

Accessible dwellings are intended to be safer homes that are easier to access for everybody.

Provision of key structural and spatial elements as outlined in the <u>R-Codes</u> ensures future flexibility and adaptability of the home. Incorporating these features avoids more costly home modifications if required at a later date.

A livable and adaptable house can more readily accommodate aging in place or unexpected reduced mobility though injury. It primarily relates to social and economic aspects of sustainability, but can also contribute towards environmental benefits through generally greater housing efficiency.

Some useful/relevant website links are as follows:

- R-Codes Volume 1 Explanatory Guidelines
- <u>livablehousingaustralia.org.au</u>
- The liveable and adaptable home | YourHome



Sustainability measure #20

Small Dwelling

Theme: Additional Sustainability Measure(s)

Policy requirement:

[20 Points]

"The proposal is a 'Small Dwelling' as defined by the R-Codes Volume 1 - this being a single house or grouped dwelling with an internal floor area no greater that $70m^2$ "

The R-Codes define a Small Dwelling as having an internal floor area no greater than 70m²

Building a smaller home uses fewer materials and resources, which decreases the environmental footprint associated with construction. Smaller homes also require less energy to heat, cool, and power, leading to lower overall energy use and reduced greenhouse gas emissions.



Australian dwellings are noted as greatly larger that international averages, even other OECD countries such as the USA and UK. Average household sizes have, in contrast, decreased over the decades – coinciding with an increase in sole-occupant dwellings.

Increasing housing diversity to provide for a smaller-dwelling market segment may also positively contribute towards tackling the housing affordability crisis. It can therefore be considered as touching on social and economic aspects of sustainability rather than just environmental.

Some useful/relevant website links are as follows.

- R-Codes Volume 1 Explanatory Guidelines
- How Big is a House? Average House Size by Country 2025 Shrink That Footprint
- The-housing-wed-choose-planning-study



Sustainability measure #21

No natural gas

Theme: Additional Sustainability Measure(s)

Policy requirement:

[20 Points]

"No natural gas connection to the dwelling. No natural gas is to be used for cooking, dwelling or water heating."

Eliminating natural gas from a dwelling design means using alternate means of power for cooking (eg electric induction cooktops), heating water and dwelling heating.

Natural gas combustion contributes to greenhouse gas emissions. Additionally, Natural gas appliances can emit pollutants like nitrogen dioxide and carbon monoxide, which can affect indoor air quality and occupant health. Using alternatives, and eliminating use of natural gas, reduces a household's carbon footprint and can improves indoor air quality.

Some useful/relevant website links are as follows:

• Gas stoves and asthma in children - National Asthma Council Australia



Sustainability measure #22

Alternate sustainability initiative

Theme: Additional Sustainability Measure(s)

Policy requirement:

"The Town may consider request(s) for alternative sustainability measure(s) to be included in the proposal. Where a proponent wishes to pursue this option:

All requests must be made to the Town of Victoria Park in writing seeking approval as part of the development application. The request must include:

- (i) A description of the sustainability measure(s); and
- (ii) Unit of measure (if applicable); and



- (iii) Manufacturer (if applicable); and
- (iv) A description of the proposed tangible sustainability benefit that would be provided."

With respect to (iv), ideally such a sustainability benefit would be quantified.

Examples of initiatives that could be explored and detailed include the following:

- Lifecycle assessment as per measure 18, but with differing Global Warming Potential % reduction and proportionate adjustment to sustainability points.
- Passivehaus and/or other certification standards.
- Reuse and recycling of building materials.
- Repurposing of existing building fabric (eg Heritage/Adaptive reuse)
- Low thermal mass and embodied energy construction methods
- Roof-batts, thermacon blankets and/or other forms of roof insulation
- Micro wind turbines electricity generation
- Reduction in car parking spaces
- Water filtration for entire house (Extends lifespan of all appliances, including hot water systems)
- Building waste minimisation (eg design for disassembly)

NOTE: The listing of the above does not constitute pre-endorsement of any kind. Most items listed above were suggested by submitters during community consultation on this policy. The burden of proof/onus will sit with the applicant to demonstrate how and why the alternate sustainability initiative proposed is appropriate and deserving of a certain number of points under Part A of the Policy



Sustainability measures in practice

The 100 points required under part A of LPP46 can be achieved using any combination of the 21 categories. This could be through as single category or as many as seven, as exemplified below.

Meeting/exceeding 100 points could look like:



9 Star NatHERS [100]

Or:



8 Star NatHERS [80]



Building inspection [20]

Or:



Solar passive orientation [40]



Solar panels [20]



Solar battery [30]



Ceiling fans [20]

Or:



EV charger [10] (Trickle charger)



Rainwater tank [10]



Roof colour [10]



Solar or heat pump hot water system [10]



Permeable pavers to driveway [10]



No natural gas connection [20]



Tree retention [30]

Or countless other combinations that applicants could choose.