

Adaptation and Resilience

Aim of the Credit

To encourage and recognise projects that are resilient to the impacts of a changing climate and natural disasters.

Credit Criteria

1	Implementation of a Climate Adaptation Plan	2 points are available where: <ul style="list-style-type: none"> • A project specific climate adaptation plan has been developed in accordance with a recognised standard; and • Solutions have been included into the building design and construction that specifically address the risk assessment component of the adaptation plan.
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Compliance Requirements

A suitably qualified professional is defined for the purposes of this credit as a professional with a formal environmental science, engineering or planning qualification.

1. Implementation of a climate adaptation plan

1.1 – Climate adaptation plan

The Climate Adaptation Plan must contain as a minimum the following information:

- Summary of project's characteristics (site, location, climatic characteristics);
- Assessment of climate change scenarios and impacts on the project using at least two time scales, relevant to the project's anticipated lifespan. This must include a summary of potential direct and indirect (environmental, social and economic) climate change impacts on the project;
- Identification of the potential risks (likelihood and consequence) for the project and the potential risks to people. This risk assessment is to be based on a recognised standard;
- A list of actions and responsibilities for all high and extreme risks identified; and
- Stakeholder consultation undertaken during plan preparation and how these issues have been incorporated.

In addition, the following requirements 1.1.1, 1.1.2, and 1.1.3 must be complied with in developing the climate adaptation plan.

1.1.1 Developing climate change scenarios

Prior to undertaking the initial assessment, the AGO Guide (Section 4.2) calls for climate change scenarios to be developed and reviewed. The scenarios used by the applicant must be sourced from IPCC endorsed Global Circulation Models (GCMs) and may:

- include CSIRO,
- State or Federal climate projections, or

- a more detailed climate modelling software.

The project must justify the selection of the climate scenario and emissions scenario used.

1.1.2 Risk assessment

Undertake the 'Initial Assessment' outlined in Section B (subsections 4-6) of the AGO Guide. The ISO 31000 standard must be used for further guidance in undertaking the risk analysis process prescribed in section 5.1-5.6 of Section B of the AGO Guide. The consequence/success criteria in the AGO Guide have been refined to be more applicable at the development scale and are provided in the 'Guidance' section below. Alternatively, organisations may use internal corporate success/criteria tables.

The assessment of climate change impacts must address a minimum of two time scales relevant to anticipated building lifespan for the primary effects of temperature, precipitation and sea-level rise. The plan must then consider the secondary effects of relative humidity, drought/flood, wind, cyclones and bushfire as a minimum.

The applicant must provide a draft of the plan to the local council and emergency management authority for comment.

1.1.3 Recognised Standards

For the purposes of this credit recognised standards are listed below.

- AS 5334:2013 Climate change adaptation for settlements and infrastructure. Or:

The below two standards when combined:

- ISO31000-2009– Risk Management – Principles and Guidance and
- AGO, Climate Change Risks and Impacts: A Guide for Government and Business.

Should projects wish to demonstrate compliance using an equivalent alternate standard or framework a CIR must be submitted.

1.2 Implementation of the climate adaptation plan

Implementation of the Climate Adaptation Plan must include:

- At least two risk items identified in the risk assessment component of the climate adaptation plan must be addressed by specific design responses. And
- All risk items identified as 'high' or 'extreme' must be address by specific design responses.

Are the requirements suitable for a building scale response to climate change adaptation and resilience?

Are the 'recognised standards' relevant and appropriate?

Guidance

Standards and References Noted in the Credit

- AS5334-2013 Climate change adaptation for settlements and infrastructure – A risk based approach.
- ISO31000-2009– Risk Management – Principles and Guidance
- Climate Change Impacts & Risk Management. A Guide For Business and Government, Australian Greenhouse Office (AGO), 2006
- Environmental Design Guide (EDG) 66 MSa 2011. Climate Change Adaptation for Building Designers: An Introduction

Documentation Requirements

'Design Review' Submission (Optional)

Project teams are required to submit information/documentation marked with an asterisk* for 'Design Review'

As Built Submission

Submission Template

- Details of the qualified professional who developed the Climate Adaptation Plan.
- Confirmation that a Climate Adaptation Plan has been developed
- Details of the two risk items that have been addressed by a specific design response
- Details of any 'high' or 'extreme' risks
- Details of design responses to the Climate Adaptation Plan

Project teams are required to provide documentation supporting credit compliance. The following documents may be used to demonstrate compliance:

- **Extracts from the Climate Adaptation Plan**
- **CV** of the professional that developed the Climate Adaptation Plan
- **Drawings and specifications** demonstrating design responses to the Climate Adaptation Plan
- **Commissioning report or other technical document** demonstrating design responses to the Climate Adaptation Plan

Please provide feedback on the technical content of this credit:

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