



Alignment of Australia's indicators of sustainable forest management with the international Montreal Process indicators

In reporting on the state of its forests, Australia uses the seven criteria developed in 1995 by the international [Montreal Process Working Group on Criteria and Indicators for the Conservation and Sustainable Management of Temperate and Boreal Forests](#). Indicators are nested under each of these criteria.

In 1998, the national Montreal Process Implementation Group for Australia (MIG), comprising representatives of the Australian Government and state and territory governments, adapted the international Montreal Process indicators to better suit reporting on Australia's unique forests. In 2006, the MIG reviewed the indicators and reduced the number to 44 to improve reporting in Australia. These 44 indicators have underpinned reporting in the [Australia's State of the Forests Report series](#) since then.

The table below shows, for each of the seven criteria, the alignment of [Australia's 44 national indicators of sustainable forest management](#) with the 54 international indicators of the Montreal Process. Almost all of Australia's indicators have a 'strong' alignment with the Montreal Process indicators, with most of the other indicators having a 'partial' alignment. One of Australia's indicators was developed specifically for the Australian context and as such is not represented in the Montreal Process indicators.

Alignment of Australia's indicators of sustainable forest management with the international Montreal Process indicators of sustainable forest management

Alignment: ● Strong alignment ● Partial alignment ● No alignment

Australia's indicators	International Montreal Process indicators	Alignment
Criterion 1 Conservation of biological diversity		
1.1a - Area of forest by forest type and tenure	1.1.a - Area and percent of forest by forest ecosystem type, successional stage, age class, and forest ownership or tenure	●
1.1b - Area of forest by growth stage	1.1.a - Area and percent of forest by forest ecosystem type, successional stage, age class, and forest ownership or tenure	●
1.1b - Area of forest by growth stage	1.1.b - Area and percent of forest in protected areas by forest ecosystem type, and by age class or successional stage	●
1.1c - Area of forest in protected area categories	1.1.b - Area and percent of forest in protected areas by forest ecosystem type, and by age class or successional stage	●
1.1d - Fragmentation of forest cover	1.1.c - Fragmentation of forests	●
1.2a - Forest dwelling species for which ecological information is available	1.2.a - Number of native forest associated species	●

Criterion 1 Conservation of biological diversity cont.

1.2b - The status of forest dwelling species at risk of not maintaining viable breeding populations, as determined by legislation or scientific assessment	1.2.b - Number and status of native forest associated species at risk, as determined by legislation or scientific assessment	●
1.2c - Representative species from a range of habitats monitored at scales relevant to regional forest management	1.3.b - Population levels of selected representative forest associated species to describe genetic diversity	●
1.3a - Forest associated species at risk from isolation and the loss of genetic variation, and conservation efforts for those species	1.3.a - Number and geographic distribution of forest associated species at risk of losing genetic variation and locally adapted genotypes	●
1.3a - Forest associated species at risk from isolation and the loss of genetic variation, and conservation efforts for those species	1.3.c - Status of on site and off site efforts focused on conservation of genetic diversity	●
1.3b - Native forest and plantations of indigenous timber species which have genetic resource conservation mechanisms in place	1.3.c - Status of on site and off site efforts focused on conservation of genetic diversity	●
	1.2.c - Status of on site and off site efforts focused on conservation of species diversity	●

Criterion 2 Maintenance of productive capacity of forest ecosystems

2.1a - Native forest available for wood production, area harvested, and growing stock of merchantable and non-merchantable tree species	2.a - Area and percent of forest land and net areas of forest land available for wood production	●
2.1a - Native forest available for wood production, area harvested, and growing stock of merchantable and non-merchantable tree species	2.b - Total growing stock and annual increment of both merchantable and non-merchantable tree species in forests available for wood production	●
2.1b - Age class and growing stock of plantations	2.c - Area, percent, and growing stock of plantations of native and exotic species	●
2.1c - Annual removal of wood products compared to the volume determined to be sustainable for native forests and future yields for plantations	2.d - Annual harvest of wood products by volume and as a percentage of net growth or sustained yield	●
2.1d - Annual removal of non-wood forest products compared to the level determined to be sustainable	2.e - Annual harvest of non-wood forest products	●
2.1e - The area of native forest harvested and the proportion of that effectively regenerated, and the area of plantation harvested and the proportion of that effectively re-established		●

Criterion 3 Maintenance of ecosystem health and vitality

3.1a - Scale and impact of agents and processes affecting forest health and vitality	3.a - Area and percent of forest affected by biotic processes and agents (e.g. disease, insects, invasive species) beyond reference conditions	●
3.1a - Scale and impact of agents and processes affecting forest health and vitality	3.b - Area and percent of forest affected by abiotic agents (e.g. fire, storm, land clearance) beyond reference conditions	●
3.1b - Area of forest burnt by planned and unplanned fire	3.b - Area and percent of forest affected by abiotic agents (e.g. fire, storm, land clearance) beyond reference conditions	●

Criterion 4 Conservation and maintenance of soil and water resources

4.1a - Area of forest land managed primarily for protective functions	4.1.a - Area and percent of forest whose designation or land management focus is the protection of soil or water resources	●
4.1b - Management of the risk of soil erosion in forests	4.2.a - Proportion of forest management activities that meet best management practices or other relevant legislation to protect soil resources	●
4.1c - Management of the risks to soil physical properties in forests	4.2.a - Proportion of forest management activities that meet best management practices or other relevant legislation to protect soil resources	●
	4.2.b - Area and percent of forest land with significant soil degradation	●
4.1d - Management of the risks to water quantity from forests	4.3.a - Proportion of forest management activities that meet best management practices, or other relevant legislation, to protect water related resources	●
4.1e - Management of the risks to water quality in forests	4.3.a - Proportion of forest management activities that meet best management practices, or other relevant legislation, to protect water related resources	●
	4.3.b - Area and percent of water bodies, or stream length, in forest areas with significant change in physical, chemical or biological properties from reference conditions	●

Criterion 5 Maintenance of forest contribution to global carbon cycles

5.1a - Contribution of forest ecosystems and forest industries to the global greenhouse gas balance	5.a - Total forest ecosystem carbon pools and fluxes	●
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Criterion 5 Maintenance of forest contribution to global carbon cycles cont.

5.1a - Contribution of forest ecosystems and forest industries to the global greenhouse gas balance	5.b - Total forest product carbon pools and fluxes	●
5.1a - Contribution of forest ecosystems and forest industries to the global greenhouse gas balance	5.c - Avoided fossil fuel carbon emissions by using forest biomass for energy	●

Criterion 6 Maintenance and enhancement of long-term multiple socio-economic benefits to meet the needs of societies

6.1a - Value and volume of wood and wood products	6.1.a - Value and volume of wood and wood products production, including primary and secondary processing	●
6.1b - Values, quantities and use of non-wood forest products	6.1.b - Value of non-wood forest products produced or collected	●
6.1c - Value of forest based services	6.1.c - Revenue from forest based environmental services	●
6.1d - Production and consumption and import/export of wood, wood products and non-wood products	6.1.d - Total and per capita consumption of wood and wood products in round wood equivalents	●
6.1d - Production and consumption and import/export of wood, wood products and non-wood products	6.1.e - Total and per capita consumption of non-wood products	●
6.1d - Production and consumption and import/export of wood, wood products and non-wood products	6.1.f - Value and volume in round wood equivalents of exports and imports of wood products	●
6.1d - Production and consumption and import/export of wood, wood products and non-wood products	6.1.g - Value of exports and imports of non-wood products	●
6.1d - Production and consumption and import/export of wood, wood products and non-wood products	6.1.h - Exports as a share of wood and wood products production and imports as a share of wood and wood products consumption	●
6.1e - Degree of recycling of forest products	6.1.i - Recovery or recycling of forest products as a percent of total forest products consumption	●
6.2a - Investment and expenditure in forest management	6.2.a - Value of capital investment and annual expenditure in forest management, wood and non-wood product industries, forest-based environmental services, recreation and tourism	●
6.2b - Investment in research, development, extension and use of new and improved technologies	6.2.b - Annual investment and expenditure in forest-related research, extension and development, and education	●

Criterion 6 Maintenance and enhancement of long-term multiple socio-economic benefits to meet the needs of societies cont.

6.3a - Area of forest available for public recreation/tourism	6.4.a - Area and percent of forests available and/or managed for public recreation and tourism	●
6.3b - Range and use of recreation/tourism activities available	6.4.b - Number, type, and geographic distribution of visits attributed to recreation and tourism and related to facilities available	●
6.4a - Area of forest to which Indigenous people have use and rights that protect their special values and are recognised through formal and informal management regimes	6.5.a - Area and percent of forests managed primarily to protect the range of cultural, social and spiritual needs and values	●
6.4b - Registered places of non-Indigenous cultural value in forests that are formally managed to protect those values	6.5.a - Area and percent of forests managed primarily to protect the range of cultural, social and spiritual needs and values	●
6.4c - The extent to which Indigenous values are protected, maintained and enhanced through Indigenous participation in forest management	6.5.a - Area and percent of forests managed primarily to protect the range of cultural, social and spiritual needs and values	●
6.4d - The importance of forests to people	6.5.b - The importance of forests to people	●
6.5a - Direct and indirect employment in the forest sector	6.3.a - Employment in the forest sector	●
6.5b - Wage rates and injury rates within the forest sector	6.3.b - Average wage rates, annual average income and annual injury rates in major forest employment categories	●
6.5c - Resilience of forest dependent communities to changing social and economic conditions	6.3.c - Resilience of forest-dependent communities	●
6.5d - Resilience of forest dependent Indigenous communities to changing social and economic conditions	6.3.d - Area and percent of forests used for subsistence purposes	●
	6.3.e - Distribution of revenues derived from forest management	●

Criterion 7 Legal, institutional and economic framework for forest conservation and sustainable management

7.1a - Extent to which the legal framework supports the conservation and sustainable management of forests	7.1.a - Legislation and policies supporting the sustainable management of forests	●
7.1a - Extent to which the legal framework supports the conservation and sustainable management of forests	7.3.a - Clarity and security of land and resource tenure and property rights	●

7. Legal, institutional and economic framework for forest conservation and sustainable management cont.

7.1a - Extent to which the legal framework supports the conservation and sustainable management of forests	7.3.b - Enforcement of laws related to forests	●
7.1b - Extent to which the institutional framework supports the conservation and sustainable management of forests	7.1.a - Legislation and policies supporting the sustainable management of forests	●
7.1b - Extent to which the institutional framework supports the conservation and sustainable management of forests	7.1.b - Cross-sectoral policy and programme coordination	●
7.1b - Extent to which the institutional framework supports the conservation and sustainable management of forests	7.4.a - Programmes, services and other resources supporting the sustainable management of forests	●
7.1b - Extent to which the institutional framework supports the conservation and sustainable management of forests	7.5.b - Public participation and conflict resolution in forest-related decision making	●
7.1c - Extent to which the economic framework supports the conservation and sustainable management of forests	7.2.a - Taxation and other economic strategies that affect the sustainable management of forests	●
7.1d - Capacity to measure and monitor changes in the conservation and sustainable management of forests	7.5.c - Monitoring, assessment and reporting on progress towards sustainable management of forests	●
7.1e - Capacity to conduct and apply research and development aimed at improving forest management and delivery of forest goods and services	7.4.b - Development and application of research and technologies for the sustainable management of forests	●
	7.5.a - Partnerships to support the sustainable management of forests	●