

# Montréal Process criteria and indicator framework (Fourth edition, 2015)



## Criterion 1: Conservation of biological diversity

### 1.1. Ecosystem diversity

- 1.1.a Area and percent of forest by forest ecosystem type, successional stage, age class, and forest ownership or tenure
- 1.1.b Area and percent of forest in protected areas by forest ecosystem type, and by age class or successional stage
- 1.1.c Fragmentation of forests

### 1.2. Species diversity

- 1.2.a Number of native forest-associated species
- 1.2.b Number and status of native forest-associated species at risk, as determined by legislation or scientific assessment
- 1.2.c Status of on site and off site efforts focused on conservation of species diversity

### 1.3. Genetic diversity

- 1.3.a Number and geographic distribution of forest-associated species at risk of losing genetic variation and locally adapted genotypes
- 1.3.b Population levels of selected representative forest-associated species to describe genetic diversity
- 1.3.c Status of on site and off site efforts focused on conservation of genetic diversity

## Criterion 2: Maintenance of productive capacity of forest ecosystems

- 2.a Area and percent of forest land and net area of forest land available for wood production

- 2.b Total growing stock and annual increment of both merchantable and non-merchantable tree species in forests available for wood production
- 2.c Area, percent, and growing stock of plantations of native and exotic species
- 2.d Annual harvest of wood products by volume and as a percentage of net growth or sustained yield
- 2.e Annual harvest of non-wood forest products

## Criterion 3: Maintenance of forest ecosystem health and vitality

- 3.a Area and percent of forests affected by biotic processes and agents (e.g., disease, insects, invasive alien species) beyond reference conditions.
- 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

### 4.1. Protective function

- 4.1.a Area and percent of forest whose designation or land management focus is the protection of soil or water resources

### 4.2. Soil

- 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

### 4.3. Water

- 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.a Total forest ecosystem carbon pools and fluxes
- 5.b Total forest product carbon pools and fluxes
- 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

### 6.1. Production and consumption

- 6.1.a Value and volume of wood and wood products production, including primary and secondary processing
- 6.1.b Value of non-wood forest products produced or collected
- 6.1.c Revenue from forest based ecosystem services
- 6.1.d Total and per capita consumption of wood and wood products in round wood equivalents
- 6.1.e Total and per capita consumption of non-wood forest products

- 6.1.f Value and volume in round wood equivalents of exports and imports of wood products
- 6.1.g Value of exports and imports of non-wood forest 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
- 6.1.i Recovery or recycling of forest products as a percent of total forest products consumption

### 6.2. Investment in the forest sector

- 6.2.a Value of capital investment and annual expenditure in forest management, wood and non-wood forest product industries, forest-based environmental services, recreation, and tourism
- 6.2.b Annual investment and expenditure in forest-related research, extension and development, and education

### 6.3. Employment and community needs

- 6.3.a Employment in the forest sector
- 6.3.b Average wage rates, annual average income and annual injury rates in major forest employment categories
- 6.3.c Resilience of forest-dependent communities
- 6.3.d Area and percent of forests used for subsistence purposes
- 6.3.e Distribution of revenues derived from forest management

### 6.4. Recreation and tourism

- 6.4.a Area and percent of forests available and/or managed for public recreation and tourism
- 6.4.b Number, type, and geographic distribution of visits attributed to recreation and tourism and related to facilities available

## 6.5. Cultural, social, and spiritual needs and values

- 6.5.a Area and percent of forests managed primarily to protect the range of cultural, social, and spiritual needs and values
- 6.5.b The importance of forests to people

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

- 7.1.a Legislation and policies supporting the sustainable management of forests
- 7.1.b Cross sectoral policy and programme coordination
- 7.2.a Taxation and other economic strategies that affect sustainable management of forests
- 7.3.a Clarity and security of land and resource tenure and property rights
- 7.3.b Enforcement of laws related to forests
- 7.4.a Programmes, services and other resources supporting the sustainable management of forests
- 7.4.b Development and application of research and technologies for the sustainable management of forests
- 7.5.a Partnerships to promote the sustainable management of forests
- 7.5.b Public participation and conflict resolution in forest-related decision making
- 7.5.c Monitoring, assessment, and reporting on progress towards sustainable management of forests