Wood products from natural forests provide more environmental benefits than wood products from forest plantations. Natural forests in Canada, which are managed sustainably in accordance with robust systems of forest governance, strict laws and third-party forest certification standards, have healthier ecosystems than plantations. Natural forests score higher when it comes to providing environmental benefits such as maintaining biodiversity, ecosystem resilience, water purification, carbon storage, and habitat for a variety of species. Natural forests also offer ecotourism and other recreational opportunities.

In simple terms, a plantation is a stand composed primarily of trees established by planting or artificial seeding. They include semi-natural forests with indigenous species and plantation forests with exotic species. Typically, a plantation forest can be distinguished from a natural forest through its very limited species composition and diversity.

When a plantation is established where there was no forest before, it can provide many benefits. It can constitute a local source of timber, fuelwood, and non-timber forest products. Depending on how well a plantation is managed, it can also prevent soil degradation and erosion and enhance water and air quality. But a plantation cannot perform these services as well as a sustainably managed natural forest.
Planted as agriculture

From an ecological perspective, monoculture plantations of exotic species should be considered agriculture, not forestry. Unlike the situation with Canada’s natural forests, plantations use arable land which could be used for food crops to help feed a growing population. The negative environmental effects of plantations are especially pronounced where natural forests or other valuable ecosystems have been razed to make plantations. These effects, which have been documented around the world, include:

- Diminishment and loss of biodiversity because natural ecosystems are replaced with monocultures
- Depletion of water sources because of changes in the hydrological cycle
- Degradation of rivers and streams from erosion and runoff
- Water pollution from pesticides and other agrochemicals

The creation of large-scale tree plantations can also have damaging social effects. In the worst cases, plantations have been established through the displacement, often violent, of entire Indigenous or local communities.

Proponents of forest plantations argue that plantations play an important role in reducing the harvesting pressure on natural forests. The problem is that plantations are often established by the conversion of a natural forest. Natural forests should never be converted into plantations, even with the objective of producing a new range of forest products.

Tree planting in Canada

Although tree planting is one of the silviculture techniques used in Canada, it doesn’t lead to the establishment of plantations. The seedlings planted are of the correct mix of tree species that were harvested and come from the same specific region. As a result, the harvested stand is regenerated (as required by law), and the forest keeps its natural characteristics. Tree planting is not required in all forest types. Some areas regenerate naturally without any tree planting.

Whenever possible, lumber, pulp, and paper should be sourced from sustainably managed natural forests.