TACKLE CLIMATE CHANGE USE WOOD

CANADIAN EDITION

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WELL-MANAGED FORESTS HELP MITIGATE CLIMATE CHANGE

HEALTHY, GROWING FORESTS RECYCLE CARBON

WOOD PRODUCTS CAN STORE CARBON FOR DECADES

EXTERIOR DETAIL OF THE CANADA PAVILION AT EXPO 2010 SHANGHAI, CHINA

FOREST PRODUCTS A SOUND ENVIRONMENTAL CHOICE

Well-managed forests yield immense environmental and economic benefits. They provide important habitats, clean air, drinking water, recreational opportunities and outstanding products. They also play a key role in mitigating climate change by absorbing and storing carbon in trees, soil and biomass.

MITIGATING CLIMATE CHANGE

Policies and procurement processes that encourage the use of wood and paper products from well-managed forests help mitigate climate change because healthy, growing forests recycle carbon naturally. When biomass is used instead of fossil fuels, it can reduce emissions generated by non-renewable resources. When trees are used for forest products, the carbon remains stored in the products for the life of the product. These and other benefits are recognized by the UN's Intergovernmental Panel on Climate Change (IPCC).

Enhancement of carbon sequestration in soils, biota, and long-lived products through increases in the area of carbon-rich ecosystems such as forests (afforestation, reforestation), increased carbon storage per unit area, e.g., increased stocking density in forests, carbon sequestration in soils, and wood use in construction activities.

Climate Change 2014: Mitigation of Climate Change, Intergovernmental Panel on Climate Change[1]

We would like to thank CEI-Bois, the European Confederation of Woodworking Industries, for allowing us to take inspiration from the original "Tackle Climate Change, Use Wood," www.cei-bois.org.

CLIMATE CHANGE WILL AFFECT FORESTRY PRACTICES

IT COULD TAKE DECADES OR LONGER FOR FORESTS TO ADJUST

INCREASING FOREST RESILIENCY IS A KEY GOAL

FOREST ADAPTATION | A RESPONSE TO CLIMATE CHANGE

The climate in Canada's forests is shifting northward and to higher elevations at a rate that exceeds the ability of many tree species to naturally adjust. Long-term field trials, like the Government of British Columbia's Assisted Migration Adaptation Trial, suggest that the changing climate will lead to them being maladapted, or less resistant to stress and less healthy and productive.

Precise predictions of climate change impacts are not possible at this point but constantly improving climate models and ever more sophisticated understanding of ecosystem processes are improving the forecasting ability of researchers. Regardless, of what the forecasts tell us specifically, maintaining or increasing forest resiliency is a worthwhile goal.

Long-term forest planning that considers climate change can help protect wildlife species from the harmful effects of climate change. A strong case can be made for planned adaptation, in which future changes are anticipated and forestry practices (e.g., silviculture, harvesting, fire protection) are adjusted accordingly.

With the future in mind, Canada's resource managers are implementing adaptation and mitigation strategies today to reduce the vulnerability of forests.

FOREST FIRE IMAGE OF A BURNED TREE

THE GROWING IMPACT OF CLIMATE CHANGE

The Earth's climate is changing, and scientists agree this is largely due to increasing emissions of greenhouse gases, especially carbon dioxide, from burning fossil fuels. There will be an impact on the world's forests. They may become more vulnerable and face a greater risk from invasive species and natural disturbances such as disease, fire and insect infestations.

NEGATIVE TRENDS POINT TO GROWING CHALLENGES

While it is difficult to forecast specific effects of climate change because of the complexity of the interactions of the Earth's ecosystems, according to the Canadian Forest Service, several significant trends are evident:

- Forest composition may change, favouring those populations of tree species best able to adapt to new climate conditions and altered disturbance regimes. In some cases forests may be converted to grasslands.
- Forest productivity may increase in some regions and decrease in others as rates of tree growth and tree mortality fluctuate.
- Some habitats may disappear and some may shift northwards or to higher elevations.
- Most areas may experience novel climate. This means that tree species may be increasingly maladapted to new climate regimes and will therefore undergo stress.
- Fire activity may increase, with the area burned each year potentially doubling by the end of this century.

Scientists have already documented changes in our forests linked to recent climate changes. Recent examples include:

- **the major infestation by the mountain pine beetle in British Columbia**
- **increased fire activity in the western boreal forest**
- **increased aspen dieback in the Prairies**

The State of Canada's Forests, Annual Report 2016, Natural Resources Canada[2]

From global climate models and scenarios, researchers are interpreting how climate change and climate variability may alter patterns of lightning, fuel moisture, temperature, precipitation and vegetation—all factors that can affect fire occurrence.

Climate change and fire, Natural Resources Canada[3]

HUMAN ACTIVITIES ARE RELEASING TOO MUCH CO_2

THIS HAS UPSET THE EARTH'S NATURAL CARBON BALANCE

FORESTS CAN HELP TO RESTORE THE CARBON BALANCE

CARBON STORED IN TREES

Photosynthesis is a chemical process that takes place in the green leaves and needles of trees and plants. During the day, trees take in carbon dioxide and release oxygen.

A chemical reaction converts the carbon dioxide into glucose, the sugar the tree uses to grow. Growing trees add a new ring of wood every year made up of cellulose, hemicellulose and lignin. Wood is a complex chemical compound that is about half carbon by dry mass.

This carbon remains in the wood, even after the tree is harvested. It is released only if the tree or wood or paper product produced from that tree burns or decomposes.

In the first 10 to 20 years after disturbance, forests often can be carbon sources because decomposition of residues and dead organic matter releases more carbon than is taken up through photosynthesis. With time, growth rates increase, decay of residues decreases, and maturing forests become net carbon sinks. As forests grow older their growth potential and associated carbon uptake decreases.

Climate Change Mitigation Options in British Columbia's Forests: A Primer, 2016
Guillaume Peterson St-Laurent and George Hoberg[8]

MAPLE TREES

HOW GREENHOUSE GASES, CARBON + FORESTS FIT TOGETHER

THE GREENHOUSE EFFECT

The glass panels of a greenhouse let in light and keep heat from escaping, providing warmth for the plants growing in them. A similar process occurs when the sun's energy reaches the Earth — some is absorbed by the Earth's surface, some radiates back into space, and some is trapped in the Earth's atmosphere, keeping our planet warm enough for life to flourish. This is called the greenhouse effect.

THE CARBON CYCLE

The carbon cycle affects the amount of energy trapped in the atmosphere. As more CO_2 enters the atmosphere it, along with increased water vapor concentration, traps heat in the atmosphere. Plants absorb carbon dioxide and emit oxygen during photosynthesis; oceans also absorb carbon dioxide. Humans and other animals inhale oxygen and exhale carbon dioxide. Carbon dioxide is emitted when substances decompose or burn.

ENERGY USE DRIVES EMISSIONS

According to Environment and Climate Change Canada, the scientific evidence is clear: climate change is one of the greatest threats of our time. The biggest human-related cause is the amount of carbon dioxide being released into the atmosphere through the burning of non-renewable fossil fuels, such as oil, natural gas and coal. Data from the International Energy Agency shows energy accounts for two-thirds of total greenhouse gas emissions and 80% of CO_2 emissions.[4]

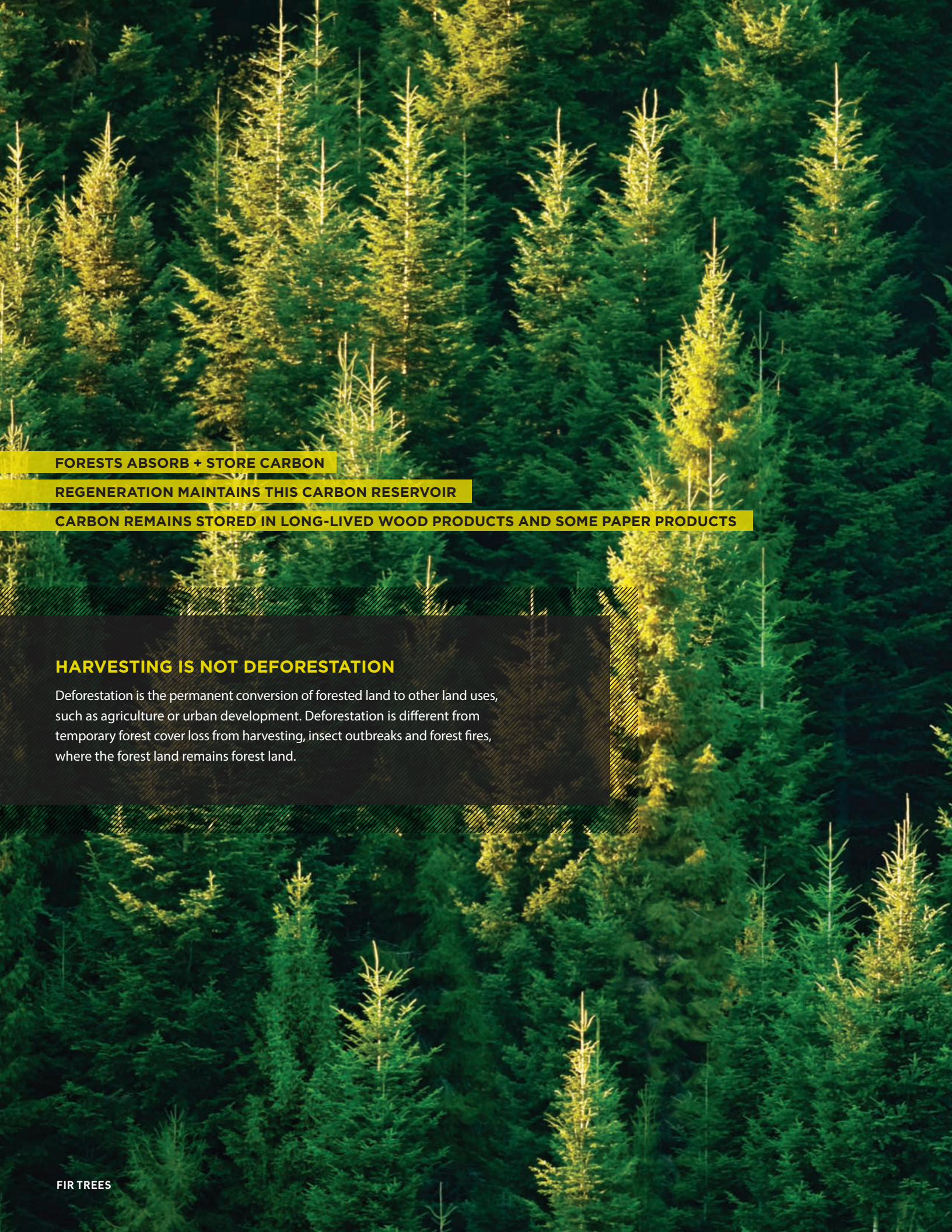
CARBON EMISSIONS ARE GROWING

Close to 10 billion tonnes of carbon dioxide was emitted in 2014 according to UN data — most of this through fossil fuel combustion and deforestation in tropical regions. Some was absorbed by water bodies, some was absorbed by forests and biomass, and some was emitted into the atmosphere. In 2014, the ocean and land carbon sinks respectively removed 27% and 37% of total CO_2, leaving 36% of emissions in the atmosphere.[5]

FORESTS AND THE CARBON CYCLE

As trees grow, they absorb carbon dioxide and store carbon. When they decompose or burn, much of the stored carbon is released back into the atmosphere, mainly as carbon dioxide, and some of the carbon remains in the forest debris and soils. Roughly half of the total carbon in forests is found in forest biomass and dead wood, with the other half in soils and forest debris.

A forest is considered a carbon sink when it absorbs more carbon than it emits. According to Natural Resources Canada, for the past century, Canada's managed forests have been a significant carbon sink, steadily adding carbon to that already stored. In recent decades, however, the situation has reversed. In some years, Canada's forests have become carbon sources, releasing more carbon into the atmosphere than they are accumulating in any given year.[6] In its Global Forest Resources Assessment 2015, the United Nation's Food and Agriculture Organization says carbon stocks in forest biomass have decreased by almost 11 gigatonnes, mainly as a result of converting forests to other land uses in developing countries.[7]



FORESTS ABSORB + STORE CARBON

REGENERATION MAINTAINS THIS CARBON RESERVOIR

CARBON REMAINS STORED IN LONG-LIVED WOOD PRODUCTS AND SOME PAPER PRODUCTS

HARVESTING IS NOT DEFORESTATION

Deforestation is the permanent conversion of forested land to other land uses, such as agriculture or urban development. Deforestation is different from temporary forest cover loss from harvesting, insect outbreaks and forest fires, where the forest land remains forest land.

FIR TREES

HOW FORESTS MITIGATE CLIMATE CHANGE

To mitigate climate change, it is necessary to reduce greenhouse gas emissions and store more carbon. Canada's forests represent a significant carbon reservoir, and the country's leadership in sustainable forest management ensures these forests will continue to play an important role in responding to climate change.

REGENERATION IS KEY

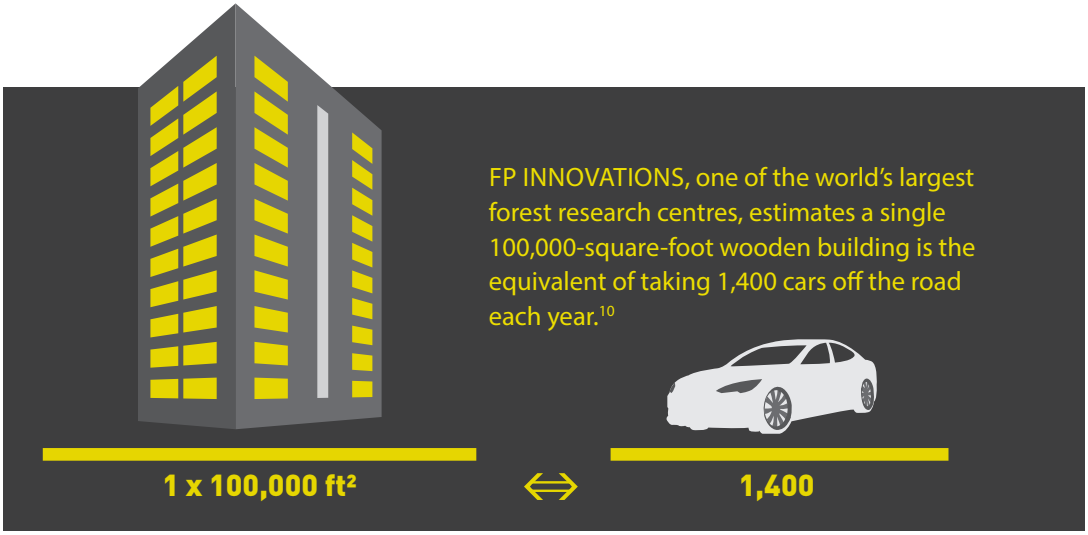
Well-managed forests are efficient carbon sinks and regeneration plays a key role. Canadian law requires prompt regeneration after public lands are harvested. Every year, half a billion seedlings are planted in Canada. As a result, Canadian forests continue to sequester carbon over successive rotations and when they recover after natural disturbances.

MITIGATION IS AN URGENT PRIORITY

The *2014 Fifth Assessment Report* from the Intergovernmental Panel on Climate Change says many climate change impacts can be reduced, delayed or avoided through mitigation, and that efforts and investments in the next 20 to 30 years will have a large impact. If action is delayed, it increases the risk of more severe climate change impacts.[9]

Many forest-related activities can help to mitigate climate change. They include:

- reducing deforestation globally
- converting non-forested areas to forests
- managing forests so they absorb and store more carbon
- replacing fossil fuels with bioenergy
- substituting wood products for more emissions-intensive materials



WHEN A TREE IS CUT DOWN, 40% TO 60% OF THE CARBON STAYS IN THE FOREST

HARVESTING IN CANADA RELEASES LESS CO_2 THAN NATURAL DISTURBANCES

DEFORESTATION INCREASES GREENHOUSE GAS EMISSIONS

CO_2 AND HARVESTING VERSUS NATURAL DISTURBANCES

The amount of carbon dioxide released through harvesting is small compared with what is typically experienced through forest fires and other natural disturbances.

Adaptation efforts help forest ecosystems, the industry and forest-dependent communities across Canada reduce their vulnerability to the negative effects of climate change.

The State of Canada's Forests, Annual Report 2016, Canadian Forest Service[13]

YOUNG SPRUCE SEEDLINGS

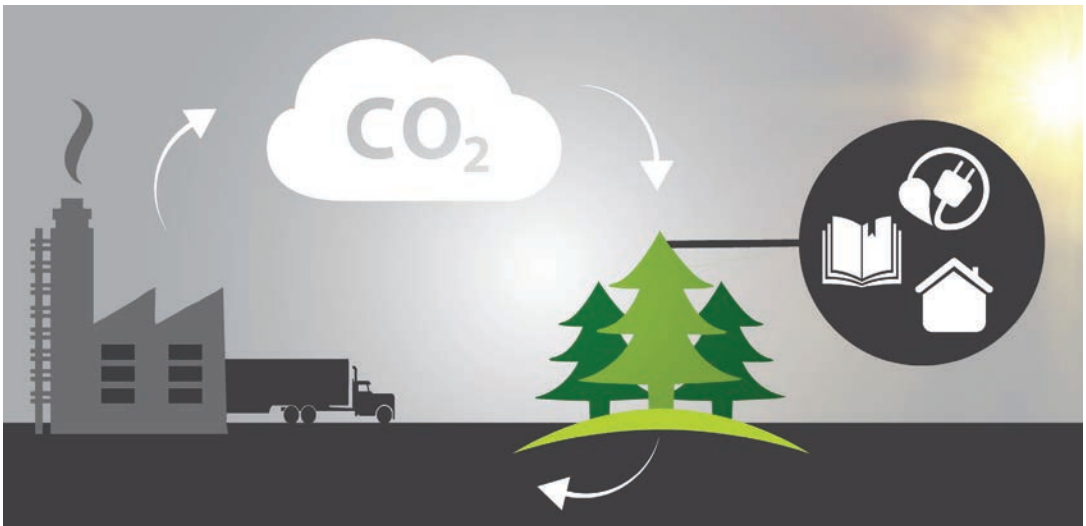
MANAGING FORESTS TO MITIGATE CLIMATE CHANGE

When a tree is cut down, 40% to 60% of the carbon stays in the forest, and the rest is removed in the logs, which are converted into forest products.[11] Some carbon is released when the forest soil is disturbed during harvesting, and the roots, branches and leaves left behind release carbon as they decompose.

The amount of carbon dioxide released through harvesting is small compared with what is typically experienced through forest fires and other natural disturbances such as insect infestations or disease. In extreme fire years, emissions from wildfires have represented up to 45% of Canada's total greenhouse gas emissions, according to the Canadian Forest Service.[12]

Once the harvested area is regenerated, either naturally or by planting seedlings, the forest begins to store carbon again. This combination of harvest and regrowth, along with the fact that most wood products are less emissions-intensive than competing materials and store carbon for the life of the product and then can be recycled or used for energy, means that sustainable forest management practices can lower greenhouse gas emissions.

It is far better for climate change mitigation if the world's growing demand for building and paper products relies on fibre from sustainably managed forests rather than turning to products that require more fossil fuels.



FORESTS AND THE CARBON CYCLE

WOOD BUILDING PRODUCTS ARE AN EXCELLENT ENVIRONMENTAL CHOICE

FOREST PRODUCTS CAN BE REUSED, RECYCLED OR RECOVERED FOR ENERGY

WOOD BUILDINGS ARE ENERGY EFFICIENT, DURABLE AND ADAPTABLE

LIFECYCLE ASSESSMENT LOOKS AT THE COMPLETE PICTURE

Lifecycle assessment is an internationally accepted, science-based method of estimating a product's environmental impact from cradle-to-grave. It delivers a scientific measure of the environmental impact of resource extraction and processing the raw materials through production, distribution and use of the product to reuse or recycling, and eventual disposal.

Lifecycle assessment studies, such as A Comparative Life Cycle Assessment of Two Multistory Residential Buildings, from researchers at FPInnovations, show that wood building products have a lower environmental footprint than alternative materials and offer clear environmental advantages.[14]

CONSTRUCTION OF BROCK COMMONS TALLWOOD HOUSE · JUNE 2016
PHOTO CREDIT: WWW.NATUALLYWOOD.COM

SOLID WOOD + CLIMATE CHANGE

Using wood products that store carbon instead of building materials that are more emissions-intensive to manufacture can help mitigate climate change. Trees grow with solar energy, and the little waste generated during processing is often used to meet the energy needs of the mill. At the end of their first life, forest products can be reused, recycled or recovered for energy.

As environmental awareness grows, architects, engineers and builders are finding wood is an excellent choice for buildings that contribute to sustainable development by minimizing the use of energy, water and materials, and reducing impacts on human health and the environment. Around the world, 13 tall wood buildings (seven storeys or taller) are currently underway while 19 have been completed over the past five years.[15]

Wood is a high-performance and versatile choice for any new construction or renovation. Wood is light in weight yet strong. It has excellent load-bearing and thermal properties, is easy to work with and is well suited for large or small projects. Wood adds warmth and beauty to any building, enhancing the well-being of occupants.

DECARBONIZING THE BUILDING SECTOR

Concerns about climate change are encouraging the building sector to consider its carbon impact. This includes the use of construction materials that emit fewer carbon CO_2 emissions and improvements in building performance throughout its lifecycle.[16]

ENERGY EFFICIENT

Wood products require less energy to extract, process and transport, and wood buildings can require less energy to construct and operate over time. If less fossil fuel energy is consumed, fewer greenhouse gases are emitted.

Wood's cellular structure, with lots of tiny air pockets, improves its natural thermal efficiency, making it 400 times better than steel and 10 times better than concrete in resisting the flow of heat. Steel and concrete structures need more insulation to achieve the same thermal performance as wood framing.[17]

DURABLE AND ADAPTABLE

Products that last longer reduce environmental demands. Wood is durable, and wood-frame buildings can be easily adapted to meet new needs and extend their life. After decades or even centuries of use, wood can be reused in new buildings — and this requires little or no energy.

Brock Commons Tallwood House is a student residence at the University of British Columbia (UBC). At 18 storeys, it is the tallest modern mass timber hybrid building in the world which also incorporates concrete and steel.

- **North American forests grow enough wood to build a Brock Commons every six minutes.**
- **The building will save enough energy to operate 222 homes for a year.**
- **It will save enough greenhouse gas emissions to take 511 cars off the road for a year.**

BIOENERGY HAS LOW NET GREENHOUSE GAS EMISSIONS

WOOD IS A CLEAN, RENEWABLE ENERGY SOURCE

CANADA'S FOREST SECTOR USES BIOMASS ENERGY

BIOENEGERY PLAYS AN IMPORTANT ROLE IN CANADA'S ENERGY SUPPLY CHAIN

Bioenergy is a renewable energy resource derived from living organisms or their byproducts. It currently accounts for approximately 6% of Canada's total energy supply. Bioenergy is an extensive sustainable energy resource that can supply energy to Canada while emitting low CO_2 and reducing waste. Government of Canada scientists and engineers at CanmetENERGY are at the forefront of innovative technology developments that will enhance the sustainability of bioenergy for Canada's energy supply chain.

FOREST HARVESTING RESIDUE

BIOENERGY + CLIMATE CHANGE

Bioenergy is clean renewable energy derived from biomass that can include forest harvesting and sawmill residues, agricultural residues, urban and industrial organic waste, or dedicated energy crops. It is an environmentally friendly and sustainable alternative to traditional energy because the carbon dioxide bioenergy produces is recycled by plants, which absorb it for photosynthesis and cellular respiration.

BIOMASS HAS MANY APPLICATIONS

Biomass can be used to produce heat and electricity, liquid and gaseous fuels (such as ethanol from grain and cellulose, biodiesel from oilseed and waste greases and biogas from anaerobic digestion), solid fuels (pellets and briquettes) and other products.

Cellulose fibres, from the bark, wood or leaves of plants, are an excellent choice for heat and electricity because they have higher energy efficiency than conventional agricultural feedstocks. The advantages of wood over other sources of biomass include a longer storage life and lower storage costs, higher bulk density (lower transport costs), less intensive use of water and fertilizers, and an established collection system.

BIOMASS IS BETTER FOR FUEL THAN AGRICULTURAL CROPS

Using biomass from wood and forest residues is a better choice for fuel than using agricultural crops for fuel because it doesn't put pressure on food prices. A report from the United Nations Food and Agriculture Organization Summit on soaring food prices in 2008 said it is essential to address the challenges and opportunities posed by biofuels in view of the world's food security, energy and sustainable development needs.[18]

Canada's pulp and paper sector currently meets 60% of its energy demands with biomass derived from forest industry byproducts such as bark, wood shavings and sawdust. The Canadian forest sector has cut its reliance on fossil fuels by more than half through the reuse of wood chips and residues as biomass energy. In doing so, the Canadian forest sector has been a leader in the reduction of greenhouse gas emissions.

CANADA HAS 91% OF ITS ORIGINAL FOREST COVER

CANADA HAS 9% OF THE WORLD'S TOTAL FOREST COVER

CANADA'S FORESTS PLAY AN IMPORTANT ROLE IN MITIGATING CLIMATE CHANGE

In general, Canada's forest laws do not yet address climate change. However, SFI, CSA and FSC BC specifically address climate change in their forest certification standards.

International Comparison of Forest Management Legal Frameworks and Certification Standards, Indufor North America, 2016[20]

CANADA'S FORESTS + CLIMATE CHANGE LEADERSHIP

Canada has 9% of the world's total forest cover, which means the country plays an important role in mitigating climate change.[19] The Canadian forest industry operates under some of the toughest environmental laws and regulations in the world, backed by comprehensive compliance and enforcement.

Canada has more forestland protected from harvesting than any other country. Less than 1% of Canada's managed forest is harvested each year, and areas that are logged must be promptly regenerated. Canada has 91% of its original forest cover,[21] more than any other country, and its rate of deforestation has been virtually zero for more than 20 years.

CANADA IS A LEADER IN FOREST CERTIFICATION

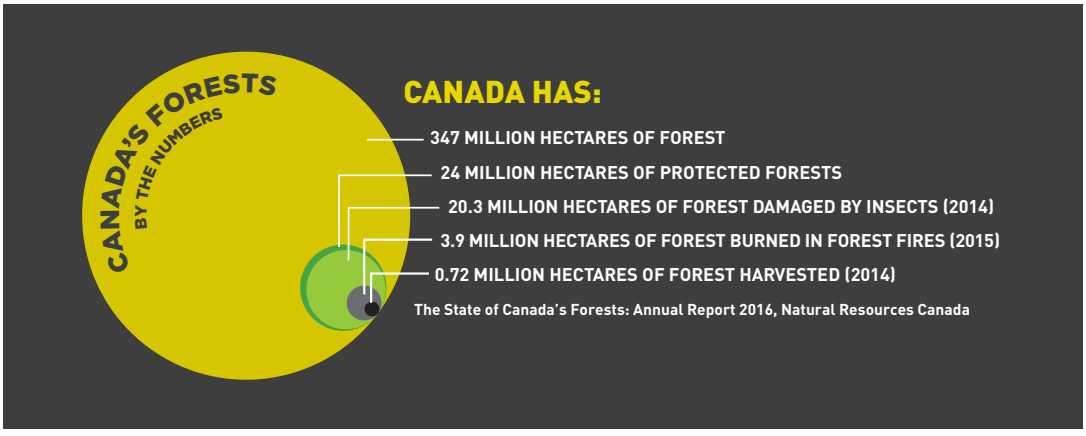
Third-party forest certification is an excellent tool to verify that forest products are from legal, sustainable sources. Canada is a world leader in the independent certification of forest management practices, and has more certified lands than any other country. At a time when just 10% of the world's forests are certified, Canada is home to more than 37% of all certified lands.

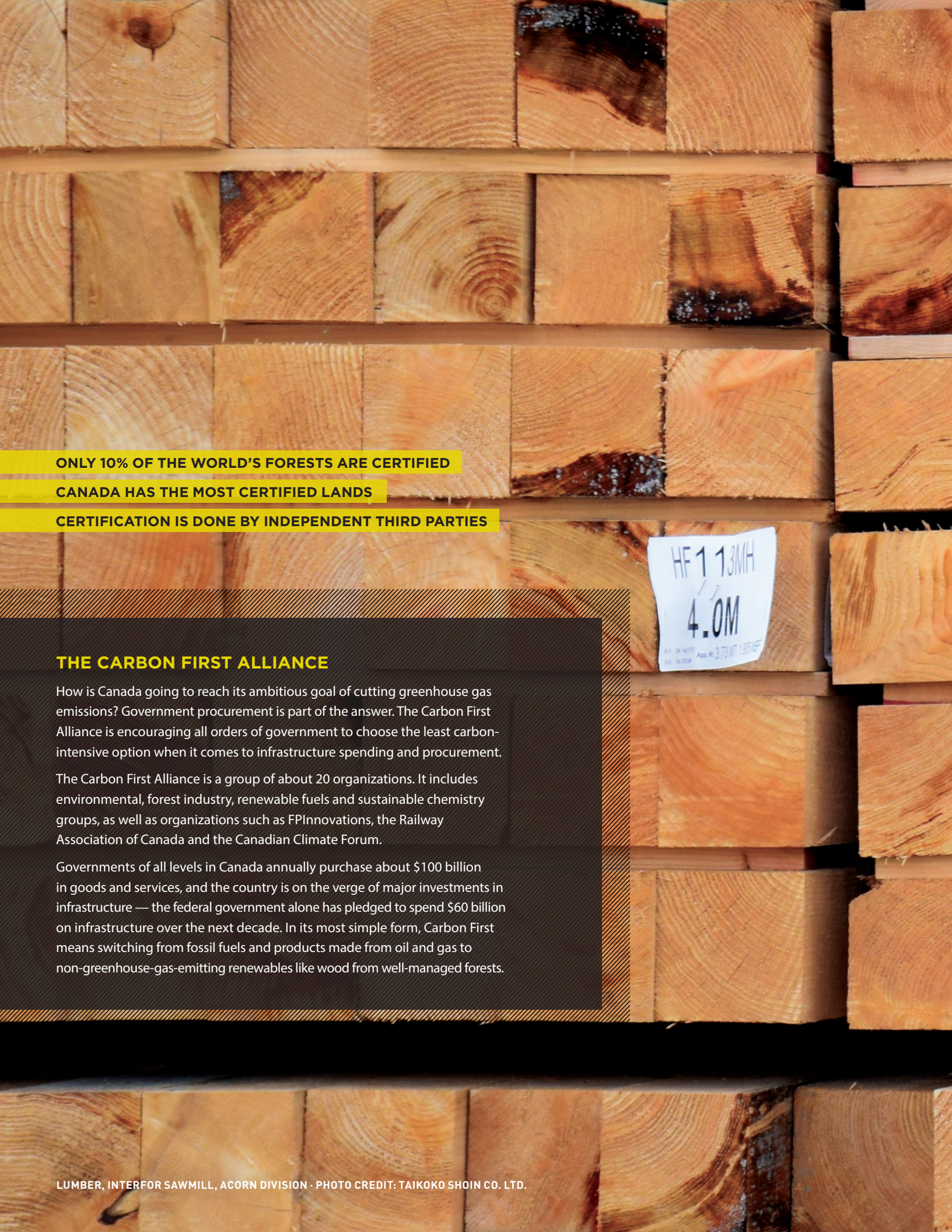
The three independent forest certification programs used in Canada — the Canadian Standards Association's (CSA) Sustainable Forest Management Standard, the Forest Stewardship Council (FSC) and the Sustainable Forestry Initiative (SFI) — all offer assurance that harvested areas are reforested, that laws are obeyed and that there is no unauthorized or illegal logging.

The portion of harvested wood volume entering primary processing mills in North America that is converted to marketable products, or converted to useful energy, is nearly 100%.[22] The first choice is lumber and other wood products. However, fibre is also used as chips to make composite products and paper, and as sawdust for bioenergy.

CANADA IS A FOREST RESEARCH LEADER

Canada's forest products sector invests in research and development to improve forest management practices, production and processing technology, paper manufacturing, and construction techniques. It has reduced energy consumption in harvesting and transportation through more efficient material handling and fuel reduction measures.





ONLY 10% OF THE WORLD'S FORESTS ARE CERTIFIED

CANADA HAS THE MOST CERTIFIED LANDS

CERTIFICATION IS DONE BY INDEPENDENT THIRD PARTIES

THE CARBON FIRST ALLIANCE

How is Canada going to reach its ambitious goal of cutting greenhouse gas emissions? Government procurement is part of the answer. The Carbon First Alliance is encouraging all orders of government to choose the least carbon-intensive option when it comes to infrastructure spending and procurement.

The Carbon First Alliance is a group of about 20 organizations. It includes environmental, forest industry, renewable fuels and sustainable chemistry groups, as well as organizations such as FPInnovations, the Railway Association of Canada and the Canadian Climate Forum.

Governments of all levels in Canada annually purchase about $100 billion in goods and services, and the country is on the verge of major investments in infrastructure — the federal government alone has pledged to spend $60 billion on infrastructure over the next decade. In its most simple form, Carbon First means switching from fossil fuels and products made from oil and gas to non-greenhouse-gas-emitting renewables like wood from well-managed forests.

LUMBER, INTERFOR SAWMILL, ACORN DIVISION · PHOTO CREDIT: TAIKOKO SHOIN CO. LTD.

FOREST CERTIFICATION + FIBRE SOURCING PRINCIPLES

FOREST CERTIFICATION STANDARDS

Independent forest certification provides a stamp of approval that shows customers they are buying products from forests managed to comprehensive environmental, social and economic standards. A certificate is issued only after a thorough review by third-party auditors determines that, among other things, long-term harvests are sustainable, there is no unauthorized or illegal logging, wildlife habitat is preserved, and soil and water quality is maintained.

All three set high thresholds that forest companies must clear. Both the CSA and SFI standards are accepted globally under the Programme for the Endorsement of Forest Certification (PEFC), the world's largest forest certification system. FSC is accepted globally using regional standards. SFI is the largest forest certification system in North America.

FIBRE SOURCING PRINCIPLES

When choosing and using paper and wood, look for products that come from responsible sources that embrace these principles:

- harvest legally
- regenerate promptly
- reduce waste, and support recovery and recycling
- reduce greenhouse gases and help fight climate change
- welcome independent scrutiny of how they manage forests

GLOBALLY GOVERNMENT POLICIES ARE ENCOURAGING USING WOOD

MANY COMPANIES HAVE POLICIES TO SHOW PREFERENCE FOR WOOD PRODUCTS

CONSUMERS ARE LOOKING FOR ECO-FRIENDLY CERTIFICATION LABELS

THE GOVERNMENT OF CANADA "MY TREE" APP

This app lists native trees of Canada and their hardiness zones to allow Canadians to select a suitable tree for their local environment. Users can identify their Canadian hardiness zone using a smartphone's GPS.

They can also use a touch screen and determine which native trees are adapted to the climate in their location and other hardiness zones within Canada. Users can access photos, illustrations and basic information on each native tree of Canada profiled in the app.

Available on the iPhone App Store | ANDROID APP ON Google play

"30 BY 30" CLIMATE CHANGE CHALLENGE

Canada's forest products sector is committed to removing 30 megatonnes of CO_2 a year by 2030. This represents more than 13% of the federal government's 2030 climate change mitigation goal. FPAC has formalized this pledge in the "30 by 30" Climate Change Challenge report: fpac.ca/30by30.

EARTH SCIENCES BUILDING, UBC, BC · PHOTO CREDIT: WWW.NATURALLYWOOD.COM

BE PART OF THE SOLUTION

When it comes to mitigating climate change, the world's forests are part of the solution. Government and business leaders can help by developing policies and procurement processes that encourage the use of more forest products from well-managed forests.

Individuals and community groups also have a role to play by choosing products from well-managed forests. They can also support policies and programs that encourage everything from tall wood buildings to tree planting in local communities.

GOVERNMENTS ARE TAKING ACTION

In many European countries, legislation aimed at reducing greenhouse gas emissions is leading to increased use of wood. Classifying and considering wood as a preferred building material is also on the rise. Changes in national building regulations are encouraging multi-storey wood buildings.

In Canada, the governments of British Columbia and Quebec have policies that encourage the use of wood in public buildings.

The 18-storey Brock Commons Tallwood House student residence at UBC opens in 2017. It is a mass timber hybrid building that incorporates cement and steel. That same year, Quebec becomes home to an eight-storey and a 13-storey building. The U.K. boasts four wood buildings that are at least eight storeys high. Sweden is also home to an eight-storey wood building, and there are plans to build a 19-storey building.

As part of its promotion of a carbon-neutral public service, the government of New Zealand requires that wood or wood-based products be considered as the main structural materials for new government-funded buildings up to four storeys.

Members of the European Union have agreed on a binding target to reach a 20% renewable energy sources (i.e., biomass, biogas, wind, solar, hydro and geothermal energy) in their total energy output by 2020.

CORPORATIONS ARE TAKING ACTION

How companies respond to issues related to climate change is an indication of their commitment to corporate social responsibility. Many major companies have procurement policies with a preference for forest products certified to the three independent certification programs used in Canada. Increasing consumer demand for certified wood and paper products is being addressed by growth in chain-of-custody certification, which tracks fibre from a certified, well-managed forest to the end user.

The Chicago Climate Exchange has endorsed independent certification as evidence of sustainable forest management. The Exchange serves the needs of companies around the world. It integrates voluntary, legally binding emissions reductions with emissions trading and offset projects for greenhouse gases, including carbon dioxide.

Resource managers are taking climate change into account in their forest planning activities, selecting species that increase the resilience of the forest and are more likely to survive in future climates.

CONSUMERS ARE CHOOSING PRODUCTS FROM WELL-MANAGED FORESTS

From furniture and building supplies to printer paper to labels and packaging, consumers are looking for eco-friendly certification labels on a wide range of items they buy for the home, office and everyday life. These labels are a sign that products come from well-managed forests that are part of the solution to fighting climate change.

WE NEED URGENT ACTION ON CLIMATE CHANGE

USING FOREST PRODUCTS IS PART OF THE ANSWER

CANADA'S FOREST PRODUCTS PRODUCERS ARE READY TO HELP

While many of the solutions to mitigate climate change are difficult, an easy one is to find more ways to use forest products we know come from legal, sustainable sources.

RICHMOND OLYMPIC OVAL, B.C. · PHOTO CREDIT: WWW.NATURALLYWOOD.COM

TACKLE CLIMATE CHANGE TODAY

USE WOOD

Today more than ever before, we must find ways to reduce the pressure on our planet's environment and finite resources. By choosing products with a light carbon footprint and by reducing waste, we can have a real impact on climate change now and into the future.

The need for action is especially urgent as the world's population grows and the standard of living rises in many regions. We must act before the concentration of carbon dioxide in the atmosphere causes irreversible climate-related changes that lead to water shortages, reduced crop yields and extinction of more plant and animal species.

While many of the solutions are difficult, an easy one is to find more ways to use forest products we know come from legal, sustainable sources.

Canada is uniquely positioned to meet the world's demand for products from sustainably managed forests. Our forest industry regenerates harvested areas, it is committed to legal logging, it invites outside scrutiny of its practices, and it is committed to carbon neutrality across the supply chain. Canada's forest sector has already reduced its climate change footprint substantially since the early 1990s, with emissions from pulp and paper mills dropping by 66%.

The demand for resources continues to escalate as populations grow and the standard of living climbs in many regions of the world. We can lighten the world's environmental load by relying more on renewable resources such as Canadian wood products sourced from responsibly managed forests.

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