J.D. Irving, Limited

Written Testimony to the Senate Committee on Energy and Natural Resources

James D. Irving, Co-CEO J.D. Irving, Limited

James D. Irving
5-20-2021

About J.D. Irving, Limited

J.D. Irving, Limited (JDI) is a family-owned company based in Saint John, New Brunswick, Canada (bordering the northeastern boundary of the State of Maine). In sawmilling operations and other businesses since 1882 and with interests in forests and forest products, food and agriculture, retail store and services, construction and equipment, transportation and logistics (ships, trucking and railway) and shipbuilding, we deliver value to our customers through sustainable and superior quality products and services. The Company employs approximately 18,000 employees in Canada and the United States.

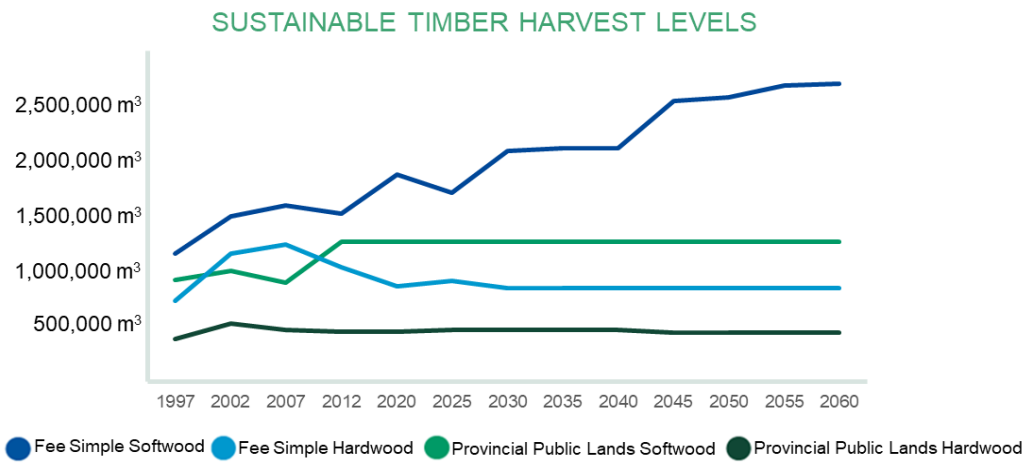
JDI owns 3.278 million acres of fee simple (private) timberland (of which 1.297 million acres is located in the State of Maine) and manages 2.625 million acres of Provincial Public Land (Crown Land) in the Province of New Brunswick. In Canada, forestry is a Provincial (state) responsibility. We are the second largest private forest owner in North America[1] and the largest private forest owner in the State of Maine. We have been planting trees since 1957 and to date have planted over one billion trees – a national record for a private company.

JDI is a fully integrated forest products company that manages all aspects of the supply chain from tree seedling to products on the retailer's shelf. Our forest products businesses comprise of: a seed orchard, a genetics lab, two production nurseries, 10 sawmills, one pulp mill, two paper mills and four tissue mills. Of this production capacity, two sawmills are located in the State of Maine, one tissue mill in New York State and one tissue mill in the State of Georgia – all state-of-the-art facilities.

Our Approach to Sustainability

Our forest products value chain is built on a healthy and growing forest. Unlike many jurisdictions, the available timber supply on the lands that we manage is growing and our objective on our fee simple (private) land is focused on doubling our wood supply over the next 50 years.

[1] 2020 Data, Forisk Consulting, May 21, 2020



A healthy and growing forest is good for:

1. Jobs and the economy: Our wood supply is growing, facilitating capital investment and growth in our forest products industries and providing and sustaining good paying jobs.
2. People and communities: A healthy forest and healthy industry provides shared benefit to the rural and urban communities where we live and work.
3. Conservation and carbon sequestration: Planting superior trees sequesters more CO2e than a naturally regenerated forest while helping to achieve conservation objectives.

Our approach to sustainability focuses on these three pillars and it all starts with the best trees.

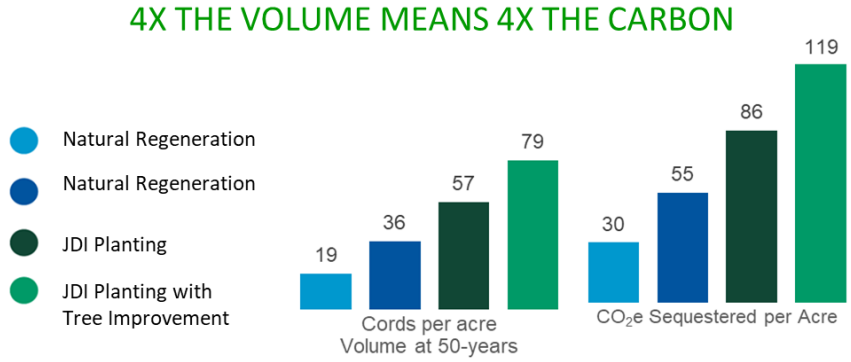
Forest Management at JDI

We manage 5.9 million acres of timberland and ensure that every acre is treated sustainably and ecologically. Since 1957 we have planted over one billion trees that are now contributing to a growing wood supply. Ensuring our forests are vigorous and healthy means lower occurrences of forest fires, disease and pests while meeting the highest environmental standards. All of the lands we manage are independently audited by third parties and certified to the recognized Sustainable Forestry Initiative (SFI) forest certification standard. In addition, our lands in Maine are certified to the Forest Stewardship Council (FSC) forest management standard.

While many consider the FSC Standard to be the highest bar, we consider SFI to an equivalent standard for forest certification. SFI has one standard of management in North America making regional comparisons equivalent, uses a science-based approach and requires continuous improvement in forest management. Currently, more acres are certified in North America under the SFI standard than FSC making it the brand of choice among producers and consumers.

Thanks to our long-standing commitment to the improvement of the trees we grow and plant, they will sequester more carbon than a tree that regenerates naturally. These trees are **not** Genetically Modified (GMO) but are the result of nearly 40 years of breeding and research. We call these "Superior Trees" where we have selected attributes like growth rate and tree form and naturally bred parents to produce faster growing, better formed trees. Because tree improvement is a continuous process, only our most recent trees grow 40% faster than an unimproved tree[2].

Our current planted stands will produce four times the volume and sequester four times the carbon (CO2e) over a 50-year period compared to a naturally regenerating forest in the north eastern US and Canada[3].



[2] JDI's tree improvement program has averaged approximately 1% yield improvement per year for close to 40 years. This is specific to the tree species that occur naturally in the north eastern US and Canada.
[3] Planted stands grow faster than naturally regenerated stands as they have better genetics (tree improvement), less competition and more resources (light, nutrients and water).

In 2021 we plan to plant 10.4 million trees (roughly 14,300 acres), pre-commercially thin[4] 18,500 acres and commercially thin[5] 10,600 acres on our fee simple (private) lands. This silviculture program on our fee lands is 100% privately funded by the Company.

Ensuring trees are thinned to the appropriate density and always "free to grow" (sufficient light, nutrients and water) not only maximizes the commercial value of the forest but reduces fuel load thereby lowering the risk of forest fires and carbon release. This "lifecycle tending" approach is critical to maintaining a healthy and vigorous forest.

In addition, we invest in fire and pest protection, meaning our forests are less prone to fires and pest outbreaks meaning less carbon is released.

The Company maintains a fleet of 4 fixed wing fire-bombing aircraft, 2 helicopters and 37 firetrucks as well as 7 fully functioning fire ready airstrips – all privately managed and funded.

In 2020, we experienced 0.001% defoliation on the lands we manage compared to the national Canadian average of 4.3% defoliation.

In 2020, we experienced 0.004% lands lost to fire on the lands we manage compared to the national US average of 1.185% and the national Canadian average of 0.49% lost to fire.

Our forest management approach centers around determining and measuring short, medium and long-term outcomes. We believe in being accountable to achieving the long-term objectives and outcomes we set forth in our management plans. This "outcome based" approach is in stark contrast to the more common and highly prescriptive approach many jurisdictions currently adopt. The prescriptive approach focuses on highly regulated practices that measure and monitor short term metrics. The risk with this approach is that forest managers can be compliant with regulation while degrading the forest resource.

[4] Pre-commercial thinning involves spacing the trees manually, but no commercial volume is extracted. This happens when the stand is between 10 and 15 years old.

[5] Commercial thinning involves spacing the trees mechanically and removing commercial products. This happens when the stand is between 20 and 25 years old.

The best example of achieving an outcome-based approach is on our lands in Maine. Prior to having an outcome-based agreement with the State of Maine, our lands were regulated by the Forest Practices Act (FPA), a highly prescriptive framework that controlled almost every aspect of forest management (opening size of harvest areas, treatments, roads, etc…). While JDI was always compliant with the Act, we did not consider it good forestry and the health of the forest was in decline.

Working with the State and the University of Maine over a 6 year period, we developed and pioneered the Outcome Based Forestry[6] framework in 2012 whereby we agree to implement forest management plans and be to be measured on the long-term success of these plans. This framework allows our foresters to have more flexibility in management based on the local conditions. This is a more robust framework whereby we are held accountable for the future and have more oversight including a panel of experts who inspect our operations and report annually to the Governor as well as the requirement for continuous forest certification.

Since implementing this approach, we have reduced new road construction and water course crossings by over 30%, significantly improved the efficiency of our operations and are salvaging imminent mortality which improves the overall health of our forest.

Jobs and the Economy

Thanks to our growing wood supply, JDI is investing in its mills and facilities and has invested over $1.4 US billion in its forest products operations between 2016 and 2020. Of this, over $700 US million was in US operations. In 2021, JDI is forecasting to invest an additional $435 US million in its operations of which 50% will be in the US.

Forestry and forest products jobs are good jobs. As an example, in 2020, JDI's average employment income paid to its approximately 1,070 US forest products employees was roughly $65,000 US per year.

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6 https://www.jdirving.com/uploadedFiles/Products_and_Services/Forestry_and_Forest_Products/Irving_Woodlands/WDLS%20-%20Maine%20OBF%20-%202019%20-%20V5-low.pdf

People and Communities

We have forest products operations in 18 communities (mostly rural) across Maine, New Brunswick and Nova Scotia and the direct, indirect and induced impact of these operations are felt in hundreds of surrounding communities. We understand the importance of investing in our people and the communities (both rural and urban) where we live and work.

From donations for community events, volunteering, sponsorships, scholarships for students and programs for the under employed, we know that investing in our people and communities pays dividends for the future.

Part of this includes investments in research and development to ensure our forest management practices are current with the latest science. We have long standing relationships with various conservation and academic organizations like the University of Maine where we have directly contributed over $2 million in the last 10 years towards forest research. We believe that academic institutions must remain well funded and can provide the best available, practical science that forest managers can implement.

We currently have four "premier" research projects we are sponsoring in partnership with the University of Maine and three Canadian universities.

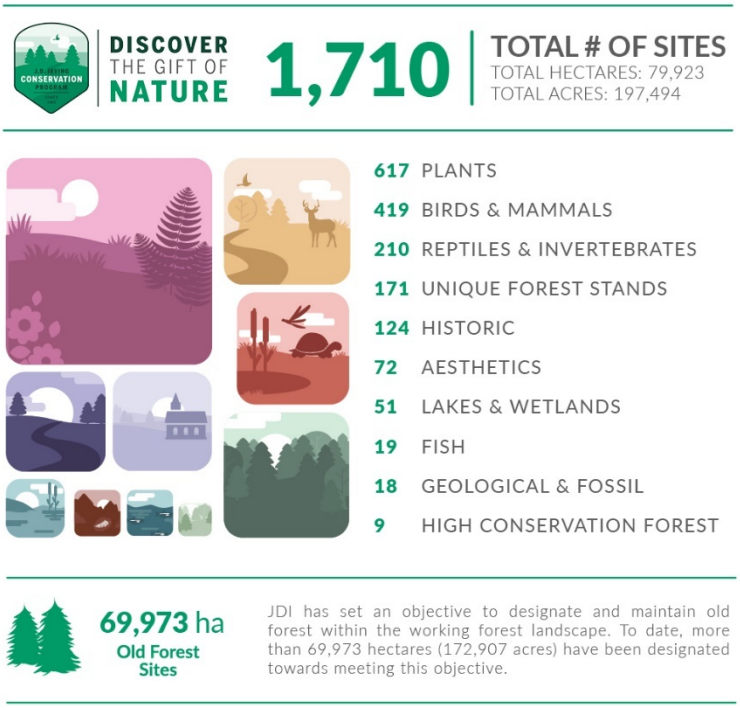
1. White Tailed Deer Habitat Study: Over 150 deer tagged with real time GPS collars to understand their range and habitat requirements. This is a five year study.
2. Moose Winter Tick Study: Over 50 moose tagged with real time GPS to understand their range and overwintering requirements. This is a five year study.
3. Songbird Habitat Study: This first of its kind study uses over 100 automated recording devices to count and measure songbird abundance and habitat.
4. Atlantic Salmon: This multi-year study is focused on understanding the declining Atlantic Salmon populations and re-introducing native Atlantic Salmon to their traditional spawning rivers.

In addition, we fund over $1 million per year in forest research, tree improvement and ecological projects, including sponsoring many graduate student projects each year.

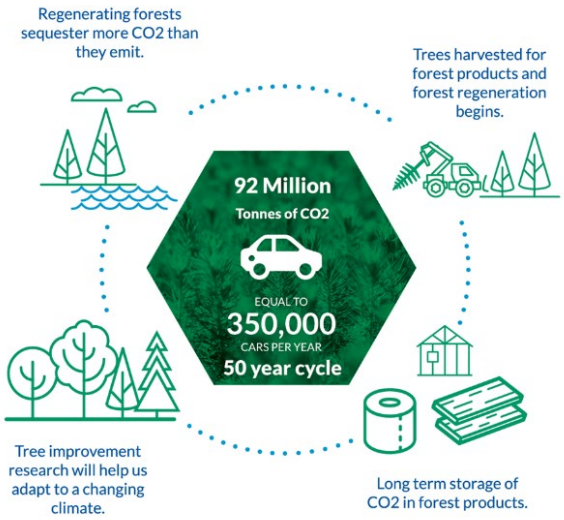
Carbon and Conservation

We take a holistic approach to forest management and know that conserving unique features across our lands as well as protecting water and providing habitat is critical to a healthy and vigorous forest. As a result, 24% of the lands we manage has the primary objective of conservation and biodiversity (habitat, watercourse buffers, old forest, etc…). This ensures that our forests are ecologically diverse and resilient.

A key element of our conservation work is JDI's Conservation Program, a voluntary and award-winning program which protects the unique features on approximately 1,700 sites across our forest holdings. Our foresters receive special training each year to identify specific habitat and rare plants. We maintain a database listing each site and its features and make this available to our conservation partners.



Because of our long-standing commitment to reforestation and tree improvement, our forests sequester an enormous amount of carbon each year. In fact, according to peer reviewed science published by Dr. Chris Hennigar of the University of New Brunswick in the Canadian Journal of Forestry, JDI's entire forest products value chain (from tree seedling to the retailer's shelf) is a carbon sink absorbing roughly 92 million tons of CO2e per year - equivalent to 350,000 cars per year off the road.



Innovation

Every acre counts and to ensure we are doing the best possible job, JDI invests heavily in innovation and technology to manage its forests and forest products businesses.

100% of our forest holdings has been surveyed with LiDaR (Light Detection and Ranging) – a hyper-accurate laser scan of the forest that provides us with a "digital twin" of every tree under management.

This technology means we have a very accurate inventory and ensures harvest levels are sustainable. In addition, we can detect tree vigor, pest outbreaks and more accurate schedule harvest timing and treatments far into the future.

In addition, every logging machine on our operations is equipped with real time Global Positioning Systems (GPS) and are connected to our head office wirelessly

to allow our foresters to monitor productivity, forest utilization, location as well as identifying all environment features for the operator, in real time, remotely.

Conclusion and Recommendations

We have made progress towards achieving a sustainable forestry cycle which benefits our communities, our employees and our customers. We invest in the best available science and leverage technology to continuously improve - not only the commercial value of our forest but also the benefit to the communities where we live and work.

However, the path has been long, and many forest products companies have divested their lands in favor of higher short-term returns. Below are some recommendations that could incentivize forest owners to increase their investments in silviculture, research and development and capital expenditures.

1. Consistent, credible and transparent carbon markets that recognize progressive forest owners as a means to support the costs associated with silviculture (tree planting and thinning).
2. Incentives for forest product companies to contribute funding to Universities to provide independent practical peer review forest-based research including the impacts of climate change on forest habitat and forest ecology as well as innovation on all types of forest products (e.g. Cross Laminated Timber, new paper based packaging, etc…).
3. Policies to encourage nurseries and seed producers to invest in additional capacity such as accelerated depreciation and long term, secure production contracts.
4. A clear Federal vision for forest management on Federal Lands which incorporates best forest management practices and serves as an example for state agencies, particularly for states which may have limited resources in this area.

While not within the purview of this Committee, we would encourage a review of the following recommendations by the appropriate body.

5. Due to the long rotation of reforested areas in the United States (25 years in the south east, 40 years in north east and 80 years in north west (commercial rotations in Brazil are 6 years)), investments in silviculture (tree planting and thinning) as well as forest protection (disease and fire), should be permitted to be 100% expensed in the year of expenditure.
6. Given that 70% of the timberland in the United States is privately-owned, inter-generation land transfers for well managed timberland should receive favorable tax treatment to ensure continued and uninterrupted management and ownership of the land.

We thank you for the opportunity to testify before the Committee and invite Committee members to visit our operations at any time at their convenience.