



Case Study

Understanding Canada's urban tree value

Positioning the Greening the Landscape Research Consortium for success through an extensive value chain analysis

It takes many players and steps to get from a seedling to a mature, thriving tree in an urban setting. Many factors influence this process from species selection, planting and soil specifications to municipal needs and budgetary realities. In essence, an entire value chain of participants is needed.

To help better understand the scope of value chain membership and encourage greater collaboration on industry specific research priorities, Vineland's Consumer, Sensory and Market Insights team led by Amy Bowen conducted stakeholder consultations to discern and reveal connections along the supply chain and address gaps and opportunities to strengthen collaboration, planning and knowledge mobilization.

Results from this value chain sector analysis supported the need for a new collaboration model to best support the industry. This led to the creation of Vineland's Greening the Landscape Research Consortium.



Amy Bowen, PhD, Director, Consumer, Sensory and Market Insights

"Our research results informed the needs of the Greening the Landscape Research Consortium and laid a foundation for the right model — the consortium approach — to understand who needs to be involved and how they can work together," says Amy Bowen, PhD, Director, Consumer, Sensory and Market Insights at Vineland.

The need

Urban tree plantings play a crucial role in building vibrant green spaces, bringing benefits to the environment, economy and society while offering natural solutions to climate challenges.

Plant growers, municipalities, nurseries and other stakeholders have all been working towards the same goal of urban tree development, just not as a concerted effort.

During its analysis, Vineland's team found there was a common need for all value chain participants wanting to achieve thriving, long-lasting urban tree plantings to promote a more collaborative approach to support the development and implementation of truly innovative and impactful solutions.

What was needed:

- Identify members of the urban tree value chain
- Establish how they work and communicate together
- Define their needs, priorities and challenges
- Develop a model for collaboration between stakeholders





**Tree Establishment
Process Map**

The opportunity

The Consumer, Sensory and Market Insights team initiated its value chain analysis by building an understanding of who was or could be involved and what it takes for a tree planted in an urban Canadian environment to thrive. This meant mapping out every step, every participant and every activity surrounding tree planting in municipal settings while identifying the opportunities and challenges faced by stakeholders along the value chain.

To do so, the Vineland team conducted 20 in-depth interviews with representatives from nine different segments of the value chain: municipality, nursery, consultant, soil supplier, contractor, landscape architect, non-government organization, property developer and conservation authority.

The outcome

Overall, the analysis identified three common themes among all value chain participants that can lead to more successful urban planting outcomes: communication, education and planning.

As well, the team discovered there are two different ways to best understand how young saplings transform into fully grown trees in Canada's urban environments: how plant products are transported, and how knowledge and ideas spread.

"Although municipalities have the knowledge and both growers and soil suppliers also have the knowledge, they don't always talk to each other, so we understood the importance of consultants, contractors and landscape architects in keeping the chain connected. In every case, everybody was in alignment with how plant products move through the supply chain but information about the right plant species to choose and the correct time to plant weren't as clear," adds Bowen.

These two streams were combined to develop the Tree Establishment Process Map (click on QR code above to view) which highlights the members and actions involved in growing, planting and maintaining healthy urban trees. It illustrates the communication pathways that exist and the missing pathways that members felt were beneficial and essential to successful tree establishment.

As a result of the value chain analysis conducted by the Vineland team, a consortium model was identified as the ideal way to address an increased need for communication, training and standardization for the sector.

The impact

Vineland launched in 2021, the Greening the Landscape Research Consortium, a public-private sector collaboration that sets research priorities based on industry needs, address common challenges across industry sectors and find ways to advance the entire urban landscape industry and boost its economic success.

The model developed via Vineland's value chain sector analysis focuses on collaboration and connectivity between value chain members with the goal to increase and improve the flow of communication. The Consortium's activities fall into four pillars:

- Science and innovation
- Collaboration
- Knowledge and mobilization
- Operations and delivery

The Consortium began with 15 members, whose priority areas included soil standards for tree establishment, soil health and root management, tree maintenance during establishment and species selection. By year two, the membership had grown to 22 members and priorities had shifted to climate change, collaboration with other partners and soil health and root management.



... we understood the importance of consultants, contractors and landscape architects in keeping the chain connected.”

Vineland worked with initial Consortium members to develop five case study projects for the pilot phase of research and created a monitoring and evaluation plan to benchmark the Consortium’s impact and effectiveness.

“Our research has helped create buy-in by all members of the industry making the partnership/consortium/collaboration stronger. It’s an approach that can be used across the sector to help understand value chains, their members and how products move through them — but most importantly, it shows people that if we work together, we can solve these issues and be successful,” says Bowen.

A member survey conducted in year two showed the level of satisfaction with how the Consortium is performing:

90% of members are satisfied with the level of collaboration

81% feel the Consortium is fulfilling its roles and responsibilities

81% believe the quality of products is aligned with expectations

77% feel the Consortium has enhanced the knowledge, awareness and skills of the urban tree value chain

Looking to the future

A value chain analysis tool is a highly effective mechanism to inform future business decisions by providing research that can be positioned for future success.

Vineland’s analysis focused on discovering members along the value chain, such as potential customers, suppliers or other important stakeholders and also the opportunities and challenges that require a business solution.

This critical tool has helped determine the appropriate model required to align the communication and connection needs within the sector and also attained the broader optimization and mobilization of urban tree survivorship knowledge. Vineland’s Greening the Landscape Research Consortium has put these goals into action with positive feedback from its membership.

In addition to the value chain analysis tool, the Consumer, Sensory and Market Insights team offers a number of business intelligence services aimed at empowering organizations with future planning needs. These services can de-risk future decision-making by providing industry data and stakeholder feedback to ensure future activities are effective in attaining the desired results.

This research was supported by Agriculture and Agri-Food Canada through the Canadian Agricultural Strategic Priority Program (CASPP).

