

## Green Supply Chain

ICTC's WIL Digital Green Supply Chain e-Learning course is designed to provide a foundational understanding of green supply chain concepts, practices, and technologies. Participants will gain the ability to compare traditional and environmentally friendly approaches to the design, maintenance, and continuous improvement of supply chains, while accounting for appropriate business and environmental considerations. By discovering the steps of a supply chain and exploring the tools and innovative approaches of this field, participants will open themselves up to rapidly evolving career opportunities in which they will be able to stimulate a rich economy, while also contributing to a safer and healthier world.

| Modules  |  | Lessons  | Learning Objectives   |                                |
|----------|--|--|---|--------------------------------|
| Module 1 | Introduction to Green Supply Chains    | <ul style="list-style-type: none"> <li>• What does it mean to be green?</li> <li>• What is a supply chain?</li> <li>• What kind of environmental impacts can supply chains cause?</li> <li>• How are supply chains represented visually?</li> <li>• Discussion - Illustrating a supply chain</li> <li>• How can a supply chain be green?</li> <li>• How is the green performance of supply chains regulated?</li> </ul>  | <ul style="list-style-type: none"> <li>• Provide a definition of "green" that aligns with the standard definition</li> <li>• Use the GHG [Greenhouse Gas] protocol to measure the environmental impact of activities</li> <li>• Identify major carbon release contributors</li> <li>• Describe the components of a supply chain</li> <li>• Recognize the existence of laws and regulations (provincial and federal) that frame green supply chains</li> </ul>   | Padlet Discussion & Assessment |
| Module 2 | Environmental Impacts of Supply Chains | <ul style="list-style-type: none"> <li>• How to quantify environmental impact?</li> <li>• Ask a pro - Who analyses environmental impact data?</li> <li>• Introducing Plastitech's Supply Chain</li> <li>• How to measure the impact of Plastitech's supply chain?</li> <li>• Discussion - Reflecting on Plastitech's supply chain</li> <li>• Identifying Plastitech's major carbon contributors</li> <li>• How can data help us prioritize improvements?</li> <li>• Ask a pro - The realities of gathering data</li> </ul>                                       | <ul style="list-style-type: none"> <li>• Use different methods to quantify the environmental impact of a supply chain</li> <li>• Interpret quantitative data to identify key areas of action to reduce the global impact of a supply chain</li> </ul>   | Padlet Discussion & Assessment |
| Module 3 | Green Supply Chain Technologies        | <ul style="list-style-type: none"> <li>• How is technology used to reduce the environmental impact of supply chains?</li> <li>• Ask a pro - What's a black warehouse?</li> <li>• How is energy consumption managed in a supply chain?</li> <li>• Ask a pro - The art of cogeneration for green optimization</li> <li>• Discussion - How has technology helped you reduce your own environmental impact?</li> <li>• How can digital technologies help create a green supply chain?</li> <li>• How is technology used to optimize warehouse activities?</li> </ul> | <ul style="list-style-type: none"> <li>• Identify equipment, automation, and energy cogeneration approaches that can help reduce the environmental impact of a supply chain</li> <li>• Explain how energy consumption is managed in a supply chain</li> <li>• Recognize how ERP (enterprise resource planning) software is used when applied to supply chain activities</li> <li>• Explain the use of warehouse management systems in the context of green supply chains</li> <li>• Explain how green digital technologies can help reduce of the environmental impact of a supply chain</li> </ul> | Padlet Discussion & Assessment |

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|-----------------|--------------------------------------|--|---|---|
| <b>Module 4</b> | <b>Green Procurement</b>             | <ul style="list-style-type: none"> <li>• What happens at the procurement stage of a supply chain?</li> <li>• Ask a pro - Who works in procurement?</li> <li>• How can sourcing contribute to green performance?</li> <li>• Discussion - What approach would you use?</li> <li>• How can we contribute to green performance when executing procurement?</li> <li>• Can partnerships lead to greener supply chains?</li> </ul> | <ul style="list-style-type: none"> <li>• Define key concepts pertaining to procurement</li> <li>• Identify green sourcing practices (green charters, ethical charters, supplier assessment, etc.)</li> <li>• Identify green practices pertaining to procurement execution</li> <li>• Describe standard supply chain KPIs and explain their link to green performance</li> <li>• Describe a co-designed supply chain approach and explain its benefits to green performance</li> </ul> | <b>Padlet Discussion &amp; Assessment</b> |
| <b>Module 5</b> | <b>The Business of Supply Chains</b> | <ul style="list-style-type: none"> <li>• What is the life cycle of a supply chain?</li> <li>• Is green business good business?</li> <li>• Discussion - How would you optimize a supply chain?</li> <li>• How do organizations govern their green performance?</li> <li>• Ask a pro - Green roadmaps and change management</li> <li>• Can green performance continuously be improved?</li> </ul>                              | <ul style="list-style-type: none"> <li>• Describe the supply chain life cycle</li> <li>• Explain the link between green and business performance</li> <li>• Assess an organization's green governance practices (company objectives, roadmaps, etc.)</li> <li>• Identify barriers to the green optimization of supply chains</li> <li>• Apply standard continuous improvement methodologies to green optimization (Lean, 5 S, etc.)</li> </ul>  | <b>Padlet Discussion &amp; Assessment</b> |
| <b>Module 6</b> | <b>Supply Chains and Net Zero</b>    | <ul style="list-style-type: none"> <li>• What does Net Zero really mean?</li> <li>• Ask a pro - What does Net zero look like in action?</li> <li>• How does the Net Zero lens affect the green governance of organizations?</li> <li>• How can circular economy principals be applied to supply chains?</li> <li>• Discussion - Designing a circular green supply chain</li> </ul>   | <ul style="list-style-type: none"> <li>• Describe the real meaning of Net Zero</li> <li>• Define an organization's objectives and roadmap using a Net Zero lens</li> <li>• Explain how the circular economy principle can be applied to green supply chain management</li> <li>• Explain how science-based targets can be used to express Net Zero objectives and roadmaps</li> </ul>   | <b>Padlet Discussion &amp; Assessment</b> |