State of Supply Chain Sustainability
MIT CTL – CSCMP 1st Annual Report

Alexis Bateman with Yin Jin Lee, Laura Allegue, Ashley Barrington, Suzanne Greene, & Carson Collard (MIT)

Donna Palumbo-Miele – Sustainability Committee Lead (CSCMP)
Presentation Agenda

• Welcome and impetus for this work
• Exploring the State of Supply Chain Sustainability
• Main Learnings
• Covid-19 & Supply Chain Sustainability
• Q&A

But first, why are you here? Poll #1
State of Supply Chain Sustainability

- Joint MIT CTL – Council of Supply Chain Management Professionals (CSCMP) initiative
  - Exploring supply chain sustainability annually
  - Survey, interviews, content analysis
  - Conducted annually

- What is the state of supply chain sustainability in 2019?
- Contribution: annual gauge to better understand key issues and directions in supply chain sustainability; track change over time
  - Official release July 1, 2020
  - New data collection to begin September 2020

- What will sustainability look like post Covid-19?
Direct and indirect pressures on supply chain
Sustainability highlighted as a key focus moving forward

Companies are increasingly under pressure to become more green. Moving past waste, water, and CO2 reduction, they have begun searching for renewable energy sources, different forms of packaging, and increased efficiency overall. More and more

5 Trends Set To Disrupt Global Supply Chains In 2020

The reality of climate change and consumer demand for ethically sourced products will drive sustainable supply chains

Poll #2
Data Collection & Methods
Primary and Secondary Data

State of Supply Chain Sustainability

Thank you to all respondents for your contributions. Stay up to date on results at ctl.mit.edu/sscs

State of Supply Chain Sustainability Interview

Thank you for taking the time to speak with us to contribute insight to a forthcoming report on supply chain sustainability. This report, a cooperation between the MIT Center for Transportation and Logistics and the Council of Supply Chain Management Professionals (CSCMP), examines the latest trends and challenges in sustainable supply chain management.

<table>
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<tr>
<th>Source</th>
<th>Article Title</th>
<th>Source Type</th>
<th>Link</th>
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<th>Carbon Emissions and Climate Change</th>
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<td>Core</td>
<td>The Top Ten Trends in CSR Reporting in 2019</td>
<td>News Article</td>
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<td>Starting at the Source: Sustainability in Supply Chain Sustainability</td>
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<td>U.S. Greenhouse Gas Emissions</td>
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<td>The Fifth Estate</td>
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<td>University of Naples</td>
<td>Environmental Sustainability and Energy: Concepts to Supply Chains for Sustainability</td>
<td>Research (Meta-Analysis)</td>
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<td>Forbes</td>
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<td>Core Issues in Sustainable Supply Chain Management: The Future of Sustainability, Re-Thinking Environment and Development</td>
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<td>IUCN</td>
<td>Essays on Sustainability &amp; Supply Chain Management: Measuring the Sustainability of Global</td>
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Surveyed Participants

- 1,128 responses
- 71 countries
- Over 15 industries
- Covering markets in the 5 continents
- 65% privately held and 35% publicly held companies
- Firm size ranges from 10 – 50,000 employees
Survey Participants

Gender

- Male: 74.9%
- Female: 24.6%
- Other: 0.5%

Age Range of Respondents

- 18-24: 32%
- 25-34: 26%
- 35-44: 20%
- 45-54: 13%
- 55-64: 5%
- 65 or older: 4%

Industry Sector

- Manufacturing: 14%
- Transportation and Warehousing: 13%
- Retail: 12%
- Mining, Quarrying, and Oil and Gas Extraction: 9%
- Health Care and Services: 8%
- Agriculture, Forestry, Fishing, and Hunting: 7%
- Wholesale: 5%
- Utilities: 5%
- Construction: 5%
- Accommodation and Food Services: 5%

Number of Employees

- 0-19: 5%
- 20-99: 6%
- 100-499: 8%
- 500-999: 9%
- 1,000-4,999: 10%
- 5,000-9,999: 10%
- 10,000-49,999: 11%
- 50,000 or more: 3%
Snapshot of Learnings
Pressure is diffuse across stakeholders

### Level of Pressure Received by Industry Sector

<table>
<thead>
<tr>
<th>Industry Sector</th>
<th>Africa</th>
<th>Asia</th>
<th>Europe</th>
<th>Latin America and Caribbean</th>
<th>North America</th>
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</thead>
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<tr>
<td>Corporate Buyers</td>
<td>2.2</td>
<td>2.1</td>
<td>1.6</td>
<td>2.1</td>
<td>2.3</td>
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<tr>
<td>Employees</td>
<td>2.1</td>
<td>2.1</td>
<td>1.7</td>
<td>1.6</td>
<td>1.9</td>
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<td>End Consumers</td>
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<td>2.3</td>
<td>2.3</td>
<td>1.9</td>
<td>2.2</td>
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<tr>
<td>Executives</td>
<td>2.6</td>
<td>2.6</td>
<td>1.7</td>
<td>1.8</td>
<td>2.3</td>
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<tr>
<td>Government</td>
<td>2.8</td>
<td>2.4</td>
<td>1.7</td>
<td>2.2</td>
<td>1.6</td>
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<tr>
<td>Industry Associations</td>
<td>2.4</td>
<td>2.1</td>
<td>1.5</td>
<td>1.4</td>
<td>1.7</td>
</tr>
<tr>
<td>Investors</td>
<td>2.6</td>
<td>2.2</td>
<td>1.4</td>
<td>1.8</td>
<td>2.0</td>
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<tr>
<td>Local Communities</td>
<td>2.4</td>
<td>2.0</td>
<td>1.3</td>
<td>2.2</td>
<td>1.5</td>
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<td>Mass Media</td>
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<td>2.0</td>
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<td>NGO</td>
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<td>2.1</td>
<td>1.4</td>
<td>1.4</td>
<td>1.9</td>
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</table>
Perspectives on Pressure

“I think pressure (for supply chain sustainability) has definitely increased significantly in the last two years... key customers have higher expectations than what's in the regulatory schemes.” -VP of Sustainability, Fortune 500 Electronics Firm

“Awareness of where environmental impact rests in the apparel supply chain is increasing.”
-VP Sustainability for Fortune 500 Apparel Co.

“Used to be name and shame from NGOs, journalists exposing companies in the 1990s and early 2000s. Pressure has increased but it is a different type of pressure... (coming from multiple sources).” –VP Supply Chain & Manufacturing, Apparel Startup

“We have seen a significant increase in consumer and retailer engagement around citizenship and sustainability over the last 5 years.” Supply Chain Sustainability Leader, Fortune 500 CPG Co.
Goals & Investments

| Goals                                      | Subgoals                          | Investment
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>No Child Labor</td>
<td></td>
<td>40%</td>
</tr>
<tr>
<td>No Forced Slave Labor</td>
<td></td>
<td>45%</td>
</tr>
<tr>
<td>Fair Trade Fair Pay</td>
<td></td>
<td>50%</td>
</tr>
<tr>
<td>Worker Welfare Employment Quality</td>
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<td>45%</td>
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<tr>
<td>Impact Communities</td>
<td></td>
<td>42%</td>
</tr>
<tr>
<td>Supplier Diversity Inclusion</td>
<td></td>
<td>47%</td>
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<tr>
<td>Energy Management</td>
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<td>45%</td>
</tr>
<tr>
<td>Carbon Emissions Reduction</td>
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<td>42%</td>
</tr>
<tr>
<td>Waste End of Life Management</td>
<td></td>
<td>44%</td>
</tr>
<tr>
<td>Water Management</td>
<td></td>
<td>45%</td>
</tr>
<tr>
<td>Natural Resource Biodiversity Conservation</td>
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<td>40%</td>
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<tr>
<td>Air Pollution Mitigation</td>
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<td>45%</td>
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</table>

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### Most Common Practices Across Industries

<table>
<thead>
<tr>
<th>Industry</th>
<th>Number One Practice Category</th>
<th>Number Two Practice Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodation and Food Services</td>
<td>Sustainability Standards Certifications</td>
<td>Supplier Benchmarking Environmental Impact Assessment Audit</td>
</tr>
<tr>
<td>Agriculture, Forestry, Fishing, and Hunting</td>
<td>Code of Conduct</td>
<td>Sustainability Standards Certification Supply Chain Mapping Supplier Audit</td>
</tr>
<tr>
<td>Construction</td>
<td>Audit Material Traceability</td>
<td>Code of Conduct Sustainability Standards Certification</td>
</tr>
<tr>
<td>Health Care and Services</td>
<td>Code of Conduct Due Diligence</td>
<td>Supplier Collaboration Sustainability Standards Certification</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>Code of Conduct</td>
<td>Supplier Audit</td>
</tr>
<tr>
<td>Mining, Quarrying, and Oil and Gas Extraction</td>
<td>Code of Conduct</td>
<td>Supplier Audit</td>
</tr>
<tr>
<td>Retail</td>
<td>Code of Conduct</td>
<td>Sustainability Standards Certification</td>
</tr>
<tr>
<td>Transportation and Warehousing</td>
<td>Code of Conduct Due Diligence</td>
<td>Supplier Training Environmental Impact Assessment Supplier Benchmarking Supplier Audit</td>
</tr>
<tr>
<td>Wholesale</td>
<td>Code of Conduct Due Diligence</td>
<td>Supplier Collaboration</td>
</tr>
</tbody>
</table>
The role of supply chain professional is changing

- Over ¾ of surveyed supply chain professionals are directly or indirectly involved in sustainability

- “Supply chain professionals are really on the front lines... And so just from the standpoint of effective management, they are really the individuals who should be pursuing many of these types of initiatives.” VP of Sustainability, Fortune 500 Electronics Co.
Supply Chain increasingly “owns” sustainability @ exec levels

“More supply chain executives “own” sustainability than ever before.”
Client Executive, Supply Chain Research Group

“Most of the Executives from Supply Chain, Logistics or Transportation that we work with have Sustainability as one of their top items on the development agenda.” Executive Recruiter

“Some of the best sustainability leaders come from within the supply chain.” Supply Chain Sustainable Leader, Fortune 500 CPG Co.
Entering 2020 and the era of Covid-19
What will Covid-19 mean for supply chain sustainability?

- BBC News
  Will Covid-19 have a lasting impact on the environment?

- Financial Times
  Coronavirus poses ‘acid test’ for conscious capitalism; climate pressure continues

- Forbes
  Pandemic, Plastics And The Continuing Quest For Sustainability

- POLITICO
  Emissions are down thanks to coronavirus, but that’s bad
Supply Chain Sustainability: From Peak to Purpose

**A NEW PEAK**
- **2019**
  - Growing sustainability recognition adoption

**DISRUPTION**
- **2020**
  - Pivoting supply chain for response and mitigation

**RECOVERY & REDESIGN**
- **2021**
  - Redesigning supply chains for recovery and future

**A NEW PURPOSE**
- **2022+**
  - From recovery to purpose
Key Findings

• Pressure is growing
  • Pressure is diffuse across areas
  • Media plays a role

• Clear differences across industries in commitment, investment, and approach
  • Loftier goals that don’t match perceived investment

• Practices are limited in supply chain scope
  • Code of Conduct is standard, further engagement is still limited

• The role of the supply chain professional and executive is changing
  • Professionals not engaged fully but growing role
  • Supply chain owning sustainability at senior levels

• 2020 will look much different than 2019
  • Likely a greater focus on safe, fairly paid, and equitable labor
  • Traceability & transparency to enable both risk management and sustainability
State of Supply Chain Sustainability 2020 – Q&A with Donna

With what we have seen in the data, why is it important to track change in supply chain sustainability over time?

Knowing that the role of the supply chain professional is changing, how can professionals equip themselves moving forward?

How do you think supply chain sustainability will change in a period of recovery from COVID-19?
Thank you! Questions?