### **ETCH SPARK SERIES**



At ETCH Sourcing, we're creating connections between sourcing and an open-sourced toolbox full of sustainable procurement (SP) opportunities that can guide supply chain and sustainability professionals through each step of the procurement process, with a respective UN Sustainable Development Goal in mind.

Organized by spend category and in line with the UN Standard Products and Services Code, our SPARK Series highlights some of the most innovative opportunities in Supply Chain.



# **Category Focus: Building Construction & Maintenance**

Building Support Services · Roofing and Siding and Sheet Metal Work · Exterior Cleaning · Interior Finishing · Coating and Caulking and Weather and Water and Fireproofing · Pest Control · Electrical Services · Plumbing and Heating and Air Conditioning · and More

## Industry Quick Facts - click on each icon to navigate to the relevant industry source

**Buildings & construction** account for 39% of the worlds CO2 emissions

The volume of construction waste will double to 2.2. billion tons by 2025

In 2018, the construction industry had the highest fatality rate in Canada



# **Quick Win SP Opportunities**



# **Actionable Opportunity**

### 1 Conduct waste audits to determine if materials are correctly disposed of & work with disposal provider to increase efficiency

# **Tangible Benefits**

- Save on waste hauling
- Divert waste from landfills
- Meet certification standards (LEED)

# Measure Success

- % waste diversion rate
- Operating cost per bin
- Avg. bin volume at collection
- Re-salvaged material ratios

- 2 Procure compactors and trash chutes for more efficient operational site waste management
- ↓ indirect cost of waste management labour
- Save on waste hauling
- transportation emissions
- Waste cost per project footprint
- Labour efficiency indicators
- · Emissions per kg of waste

### 3 Request supplier certifications

regularly to ensure ethical purchase of lumber

- Decrease carbon footprint
- Enhanced public image
- Reduce risk of reputation damage
- % of Forest Stewardship Counsel (FSC) certified purchases
- Customer interest in ethically sourced lumber





# Procurement Disruption in Action: Modular Construction



Modular construction is a process in which a building is constructed off-site, under controlled plant conditions, using the same materials, codes and standards as conventionally built facilities – but in about half the time.

## **SP Process Guide**

## **Category Management**



- 1. Find modular construction companies in your area
- 2. Assess if modular construction is feasible for your site (site dimensions)
- Assess transportation access for modules to the construction site



<u>Commercial Value</u> - Time and cost savings, quality control, weather consistency.

<u>Sustainability Value</u> - Reduced material waste & carbon footprint, longer product lifetime.

## **Strategic Sourcing**

Supplier Negotiation & Contract

Align on shipping terms & inspection schedule & subcontractor policies. Require a proactive, thorough safety plan, check certifications. Leverage bulk purchases, milestone payments and delay penalties

## Strategy Build & Execution

- Obtain alignment with stakeholders on scope and package, the perform strategic RFP
- 2. Award points for sustainable sourcing and disposal of construction materials
- 3. Negotiate & award contract
- 4. Align on contacts and escalation points
- 5. Execute on awarded strategic plan

#### **Sustainment**

## Supplier Performance & Relationship Management:

- 1. Monitor milestone achievement throughout scope of work
- 2. Require annual proof of compliance with legislation, safety and subcontractor certifications (if applicable)
- 3. Integrate GHG reporting, raw materials sustainability reporting, and waste audits as KPIs

## In Practice: A Case Study

A 2-Story Hotel in Eastern Canada was built with modular and prefabricated units. Data from the construction process, project specifications, and relevant location factors was used to compare the approach to traditional methods. As a result, **68.4 tons of GHG and 646 tons of waste were avoided & project saved 26,498 worker hrs.**