

# Cities Taking Freight Action A Canadian urban freight forum

## Summary

April 2020



#### Cities Taking Freight Action: A Canadian urban freight forum

Compiled by: Kelly O'Connor, Sean Minogue, Maddy Ewing Photos: Jesse Lim Production Design: Roberta Franchuk

©2020 The Pembina Institute

The Pembina Institute 600 - 920 Yonge Street Toronto, ON Canada M4W 3C7

www.pembina.org

The Pembina Institute is a national non-partisan think tank that advocates for strong, effective policies to support Canada's clean energy transition. We employ multi-faceted and highly collaborative approaches to change. Producing credible, evidence-based research and analysis, we consult directly with organizations to design and implement clean energy solutions, and convene diverse sets of stakeholders to identify and move toward common solutions.

### **Urban Delivery Solutions Initiative**

#### **Founding partners**



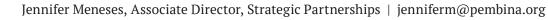






#### An initiative of

For more information on how to join:





www.pembina.org/UDSI

## Introduction

On March 3, 2020, the Pembina Institute hosted Cities Taking Freight Action, a national urban freight forum. To support the national dialogue on urban freight and frame the forum's conversations, the Pembina Institute published *The next frontier for climate action: Decarbonizing urban freight in Canada*, highlighting trends and actions in Vancouver, Calgary, Edmonton, the Greater Toronto and Hamilton Area, Ottawa, Montreal, and Halifax. This document provides a summary of event discussions on March 3, 2020, including feedback from attendees, a select sample of our live-tweets, and next steps.

## Background

In light of growing populations and a rapidly growing e-commerce sector, Canadian cities are developing strategies to electrify cars and trucks, implementing new tactics to manage growing curbside demand from commercial delivery vehicles, partnering with businesses to test new delivery technologies and practices, and investigating best practices from around the world to manage goods movement.

However, the current ad hoc city-by-city approach to solving the urban freight problem means that municipal bureaucrats and politicians are reinventing the wheel, so to speak, all across Canada. By coming together and sharing learnings, cities can move faster on solving this growing problem in concert with businesses and other levels of government, saving precious municipal resources at the same time.

Businesses, particularly those that have multi-province and/or national operations, stand to gain substantially from a national approach,. Businesses need solutions that can be scaled up economically across the country. As with any other clean economy policy, clarity and consistency are needed to achieve efficiencies and economies of scale.

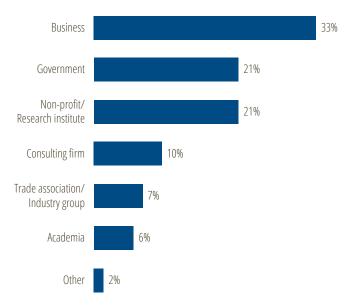


Pembina Institute 🥑 @Pembina

Good morning, **#urbanfreight** fans. We'll soon be livetweeting from our Cities Taking Freight Action event in Toronto, featuring speakers from businesses & Canadian municipalities. More info here: pembina.org/event/cities-t Consistent, coherent and coordinated policy approaches make sense for all parties involved and will benefit the majority of Canadians who live in urban centres.

#### **Event participation**

The event included 20 speakers and moderators, and over 110 participants from across Canada (British Columbia, Alberta, Ontario, and Quebec), representing municipal, provincial and federal governments, industry, businesses, consulting firms, non-profit organizations, and academia. See Figure 1 for a breakdown of the organizations in attendance by sector.





#### Major themes

Several major themes emerged throughout the day, including:

#### Data availability and access

Data on freight and goods movement must be better collected and monitored, and made easily accessible.

#### Support for demonstration pilots

A culture to test/pilot alternative delivery models and technologies at a small scale must be invested in and cultivated. Successful new approaches for urban deliveries can then be identified and scaled up.

## Flexible and adaptive policies and regulations

Adaptable and flexible policies and regulations are needed to support a changing freight and goods movement landscape. To respond to major disruptions/ trends, businesses are increasingly testing and adopting alternative solutions to meet increased demands to move goods.

#### Strengthened collaboration

An ongoing national dialogue on urban freight and mobility in Canada is needed, which will require collaboration and partnerships across regions and sectors.

## **Opening remarks**

#### Welcome: Josha MacNab, National Strategy Director, Pembina Institute

The world is at a climate tipping point. Youth-led climate marches, as well as the near 500 municipalities across Canada that have declared climate emergencies have made this clear. With this urgency comes the need for action and solutions that bring everyone to the table. At Pembina, we focus on a variety of climate policy issues, including transportation, and within that, freight. Freight is an increasingly important source of GHG emissions — by 2030, it's predicted that GHG emissions from freight will surpass those of passenger vehicles. To help combat this, the Pembina Institute has launched the Urban Delivery Solutions Initiative, a national network of businesses and organizations working to decarbonize urban freight operations in Canadian cities. *[See information next page]* 



#### Replying to @Pembina @Transport\_gc and 17 others

.@JMacNab announces the official launch of @Pembina's Urban Delivery Solutions Initiative.

#### Remarks: Louis-Paul Tardif, Director, Multimodal Transportation Performance & Capacity Analysis, Transport Canada

As the landscape of urban freight changes, it is important to determine the role that each level of government must play. At the federal level, Transport Canada is focused on infrastructure funding, road safety, innovation and trade, and transportation information systems. To support these goals, the Council of Transport Ministers recently released a series of reports that highlight challenges, trends and opportunities associated with urban mobility in Canada. These reports cover four themes: innovation and technology, financing and funding, governance and land use. Transport Canada is developing data governance partnerships across three nodes of the Ontario supply network (Toronto/Peel Region, Golden Horseshoe/Niagara Region and Toronto-Windsor/Sarnia Corridors). Meanwhile, the Canadian Centre on Transportation Data was developed to share aggregated data with select partners.



Louis-Paul Tardif, Transport Canada



The Pembina Institute's Urban Delivery Solutions Initiative with representatives of founding partners Canada Post, Fresh City Farms, UPS Canada and Purolator.

## **Urban Delivery Solutions Initiative**

The Urban Delivery Solutions Initiative is a national network of businesses and organizations working to decarbonize urban freight operations in Canadian cities. At the forum, the Pembina Institute was proud to introduce its founding partners: Canada Post, Fresh City Farms, Purolator and UPS. Through this network, the Pembina Institute aims to identify ways by which freight can be better managed in our cities.

By coming together, businesses can share, engage and champion for efficient and sustainable urban freight activities. This Initiative aims to:

- Lead needs-based research to fill knowledge and information gaps in urban freight planning.
- Showcase successful clean freight business practices in Canada through profiles and storytelling.
- Identify best practices and pursue pilot projects to test effective near-zero and zero-emissions delivery solutions.
- Co-ordinate industry's recommendations and jointly advocate for modernization of policies, standards, or regulations.
- Share industry expertise and foster ideation and educational initiatives to socialize change.

#### **Founding partners**







#### An initiative of



## **Keynote address**



Eric Beckwitt, Freightera

#### Eric Beckwitt, Founder and CEO, Freightera

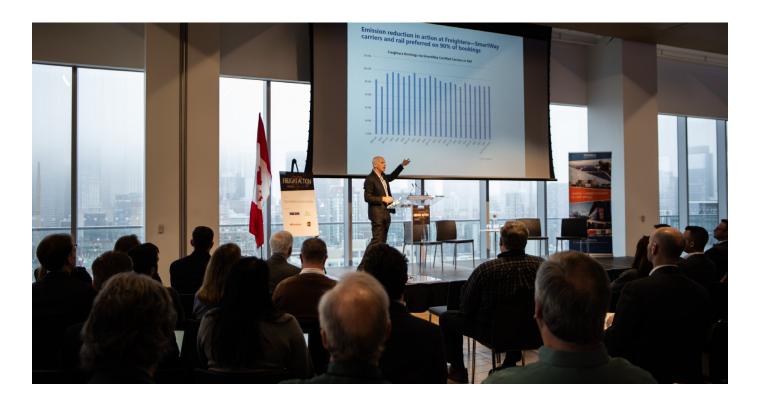
The current level of atmospheric CO2 is unprecedented. The dangers posed by climate change are numerous, include rising sea levels, and threaten communities and infrastructure. Of particular importance is the freight sector, which accounts for 10.3% of Canada's GHG emissions. To support GHG emission reductions now, the industry must first avoid unnecessary trips, shift to lower-emitting modes (such as marine or rail) and lastly, improve the efficiency of the trips that they are carrying out. Electrification promises great GHG emissions reductions to the freight sector — but the electricity source must be renewable. Zero-emission vehicle technologies exist today and are already in high demand.

Freightera is an online marketplace designed to connect shippers to the most efficient carrier possible in the business-to-business (B2B) portion of the supply chain. Freightera is seeing a demonstrated preference for lower-emission SmartWay carriers over non-SmartWay carriers. Shippers are selecting carriers based on cost. In general, operations that emit less, cost less.



Replying to @Pembina @Transport\_gc and 17 others

Next up: Eric Beckwitt, the Founder and CEO of @Freightera. He begins with discussing a "fundamental problem" between freight activity and human health, and the pathways we're discovering now for a better future.



## The business of urban freight: Where are we now and where are we going?

*Chen Goel*, *Chief Logistics Officer*, *Fresh City Farms Matthew Leibowitz*, *General Partner*, *Plaza Ventures* 

*Aylin Lusi*, Vice President, Public Affairs, UPS Canada

Moderator: **Chad Schella**, General Manager, Government and Community Affairs, Canada Post

Businesses with fleet operations today are facing a number of unique challenges. For one, businesses are required to respond to the consumer's increasing demand for convenience. Urban density has also created some opportunities and challenges for urban freight activity. While density is important for clustering delivery destinations, it can also create congestion, which slows down delivery operations.



@Pembina

Replying to @Pembina @Transport\_gc and 19 others

Aylin Lusi: "In our experience so far, bikes work best when paired with a microhub-type setup."

Curbside management has emerged as an important issue for businesses with fleet operations. However, it is clear that no single solution will address all these issues. Instead, addressing curbside competition will require many integrated solutions. Businesses are also investigating ways to improve the final mile, which is logistically one of the most difficult segments of the supply chain. Some businesses are aiming to avoid the final mile completely by letting customers pick up their own packages at pickup points. Amidst these challenges and considerations, safety remains one of the top priorities for businesses.



Chen Goel (Fresh City Farms), Matthew Leibowitz (Plaza Ventures), Aylin Lusi (UPS), Chad Schella (Canada Post).

The panelists agreed that it is important that governments consult and work closely with businesses when developing policies or regulations. Businesses are able to: i) provide insight on how potential policies or regulations will impact day-to-day operations and evaluate the effectiveness of new policy proposals, and ii) anticipate and plan for change. It is expected that smaller businesses will experience the same urban freight challenges as the larger players. However, policies and regulations to address urban freight challenges may impact businesses differently depending on their size (e.g. curbside pricing). This is an important consideration when developing policies and regulations around urban freight.



Replying to @Pembina and @UPS\_Canada

Audience Q&A kicks off with concerns about curbside usage in different municipalities.

Chad: It's important to acknowledge competing interests when it comes to bike lanes, loading zones, stopping zones. Gives it @cityoftoronto for developing a curbside management plan.

## The role of municipal and regional freight planning in a changing world



Howaida Hassan (City of Edmonton), Agathe Besse-Bergier (Ville de Montreal), Elyse Parker (City of Toronto) and Clarence Woudsma (University of Waterloo).

#### Agathe Besse-Bergier, Coordination de

partenariats et projets du centre-ville, Ville de Montreal

- *Howaida Hassan*, General Supervisor -Transportation, City Plan, City of Edmonton
- *Elyse Parker*, Director, Policy and Innovation, City of Toronto

Moderator: Clarence Woudsma, Director, School of Planning, University of Waterloo

Municipalities see transportation as a critical sector in tackling climate change. Like businesses, municipalities are tackling a number of emerging issues in urban freight, such as better coordination within the last mile of goods distribution, as well as increasing curbside competition. As a solution to these issues, several municipalities, including Montreal and Toronto, have expressed interest in off-peak delivery pilot projects. The lack of data on urban freight is one of the biggest barriers for municipalities. Not only does this make it difficult for municipalities to evaluate and understand what is going on in their cities regarding goods movement, it also inhibits their ability to plan. Unfortunately, data collection is a costly and lengthy process for municipalities. Despite this, there is a clear appetite to improve data collection and accessibility. Local governments are keen to work with industry to access data, while industry has indicated that they are willing to work with governments.



Agathe: "We need to adapt #mobility, but still keep in mind that our city needs to be economically viable and competitive with the rest of the province, with the rest of

the country, and with the rest of the world."

In order for municipalities to efficiently move people and goods and support economic growth, they must rethink the design of policies, partnerships, pricing, and incentives. Municipal governments need to be bold and unafraid to try new things. It's important to communicate key learnings from pilot projects with municipalities across the country. Fortunately, there are many examples of synchronicity between public, private, and academic institutions, such as Peel Region's Smart Freight Centre.



Replying to @Pembina @envwaterloo and 2 others

Q: What's the most persistent issue you face right now?

Elyse: "What we need is more & better data. Only when we have the data can we decide & evaluate how to intervene and communicate what is going on. Without being able to quantify anything, we're just talking." #urbanfreight

## **Emerging innovations in urban freight**

Amir Sayegh, Data Enablement Manager, Geotab
Brian Shantz, General Manager, Canadian
Operations, Mitsubishi Fuso Trucks Canada
Jim Estill, CEO, ShipperBee
Brandon Lynch, District Manager, Purolator
Moderator: Kathryn Blaze Baum, National and
Environment Reporter, Globe and Mail

Data collection technology can help us move things faster and more safely, and reduce the environmental impact of urban freight. The panelists talked about the key challenge: data is collected in silos. Everyone in the industry has data, but lack of access, sharing, and standardization prevents users and organizations, large and small, from properly unlocking the power of the data. To better inform policy and planning efforts, all levels of government can help with the collection, aggregation, and anonymization of urban freight data.



Kathryn Blaze Baum (Globe and Mail), Jim Estill (Shipperbee), Brandon Lynch (Purolator), Brian Shantz (Mitsubishi Fuso) and Amir Sayegh (Geotab)



**Pembina Institute** 

Replying to @Pembina @envwaterloo and 4 others .@JimEstill of @ShipperBee:

Instead of using a hubs-and-spoke model, where the hubs are large, our hives are small and parcels go from hive to hive to hive. #urbanfreight

It is critical to adopt multiple tactics to reduce the environmental impacts of urban freight activity as we work to address climate change — there is no silver bullet. It was noted that businesses are also being pushed by the end user — consumers are demanding faster and more flexible delivery, but also more environmentally friendly solutions. To address these demands and the environmental impacts of urban freight, businesses are partnering with other stakeholders (e.g. transit agencies, industry, universities, and local governments) to test a variety of new technologies and delivery models to improve urban freight operations. Some businesses already offer different delivery time windows at varying prices, while others explicitly communicate the environmental impacts of different delivery options. Moreover, electric vehicles for urban delivery trips are available on the market (however, the supply of these vehicles is still relatively low). Businesses are looking to governments to support innovation in the urban freight sector through incentives, consistent regulations, policies, and financial supports.

Pembina Institute @ @Pembina

Replying to @Pembina @envwaterloo and 6 others .@PurolatorInc's Brandon Lynch:

"We recognize the boom in **#ecommerce**: e-commerce has changed the way that customers expect deliveries."

## Implementing urban freight solutions

#### Mickael Brard, Urban Mobility Consultant, Jalon MTL

Victor Char, Urban Mobility Consultant, Jalon MTL Cristiano Façanha, Global Director, CALSTART Matt Roorda, Chair, Smart Freight Centre Moderator: Carolyn Kim, Ontario Regional Director, Pembina Institute

As previously mentioned, a variety of solutions are being implemented to address GHG emissions from the goods movement sector. These solutions involve new modes for deliveries, such as zero-emission vehicles including cargo bikes, as well as new operating models for deliveries, such as off-peak deliveries and microhubs.

Pembina Institute @Pembina

Carolyn: what are the tangible next steps to implement new #urbanfreight solutions?

Matt: We need coordination. Pilot projects require finding like-minded people from different kinds of organizations.

Victor: Regulation is really important.



Carolyn Kim (Pembina Institute), Cristiano Façanha (CALSTART), Victor Char (Jalon MTL), Mickael Brard (Jalon MTL) and Matt Roorda (Smart Freight Centre)

The panelists identified collaboration across sectors and jurisdictions as critical to the successful implementation of alternative delivery solutions. Panelists noted that it is crucial to include relevant stakeholders in the early stages of projects in order to ensure success. With pilot projects, performance monitoring and evaluation are critical to planning for scale. It is imperative to share lessons learned across jurisdictions.



Thank you to Curbside Cycle for bringing in cargo bikes for the day

## **Considerations and the path forward**

Based on the presentations and feedback from participants, there was broad agreement for the need to modernize goods distribution in urban centres. Throughout the forum, it was clear that goods movement strategies need to be integrated with existing climate, land use, road safety and transportation strategies with which they are already inherently interconnected. The most successful strategies will be those developed through the collaboration of policy makers, industry, private sector, and non-governmental organizations.

In the closing session, an informal poll of the room confirmed the need to conduct additional research and analysis to inform urban freight planning and policies. For example, regulations of emerging technologies need to be addressed, and new technologies must continue to be tested. A national effort must be made to implement consistent municipal-level freight data collection programs that inform effective goods movement strategies. Ultimately, while regional conversations are important, a national dialogue on urban freight is needed to improve the environment and livability of cities across Canada.

#### Key takeaways

- Continue to support a national dialogue on urban freight, such as the Council of Transport Ministers' work surrounding Urban Mobility in Canada.
- Promote data availability and access; for example, support the Canadian Centre on Transportation Data by exploring opportunities to share data or engage in data governance partnerships.
- Explore the feasibility of a shift to loweremitting modes and find opportunities to deploy zero-emission vehicles where this makes sense.
- Develop adaptable and flexible policies and regulations to resolve issues emerging from a changing goods movements sector, including increased curbside competition.
- Strengthen collaboration by forming partnerships across regions and sectors. This collaboration is critical to the successful implementation of alternative delivery solutions.





