



Sustainable Freight: Creating Better Efficiencies in the Supply Chain

U.S. Environmental Protection Agency

SmartWay Partnership

SmartWay Freight Matters!

March 30, 2016

2-3 pm

Webinar Logistics



Open and close
your control
panel



Type in your questions here

Audio is available your
computer's
microphone and
speakers (VoIP) or
telephone:
+1 (415) 930-5321
ID: 683-805-952

Hit "send" to
submit your
questions

If you experience technical difficulties, please contact
Christine Cho at: Christine.Cho@erq.com



Linking Freight Efficiency & Supply Chain Performance

Denise Kearns
US EPA SmartWay Partnership
SmartWay Freight Matters!
March 30, 2016
2-3 pm

SmartWay Freight Matters Webinar Series

Panelists



Denise Kearns

U.S. ENVIRONMENTAL
PROTECTION AGENCY
SMARTWAY TRANSPORT PARTNERSHIP



Joe Tuteurice

ASSOCIATE DIRECTOR
TRANSPORTATION & LOGISTICS
MONDELEZ INTERNATIONAL



Steve Raetz

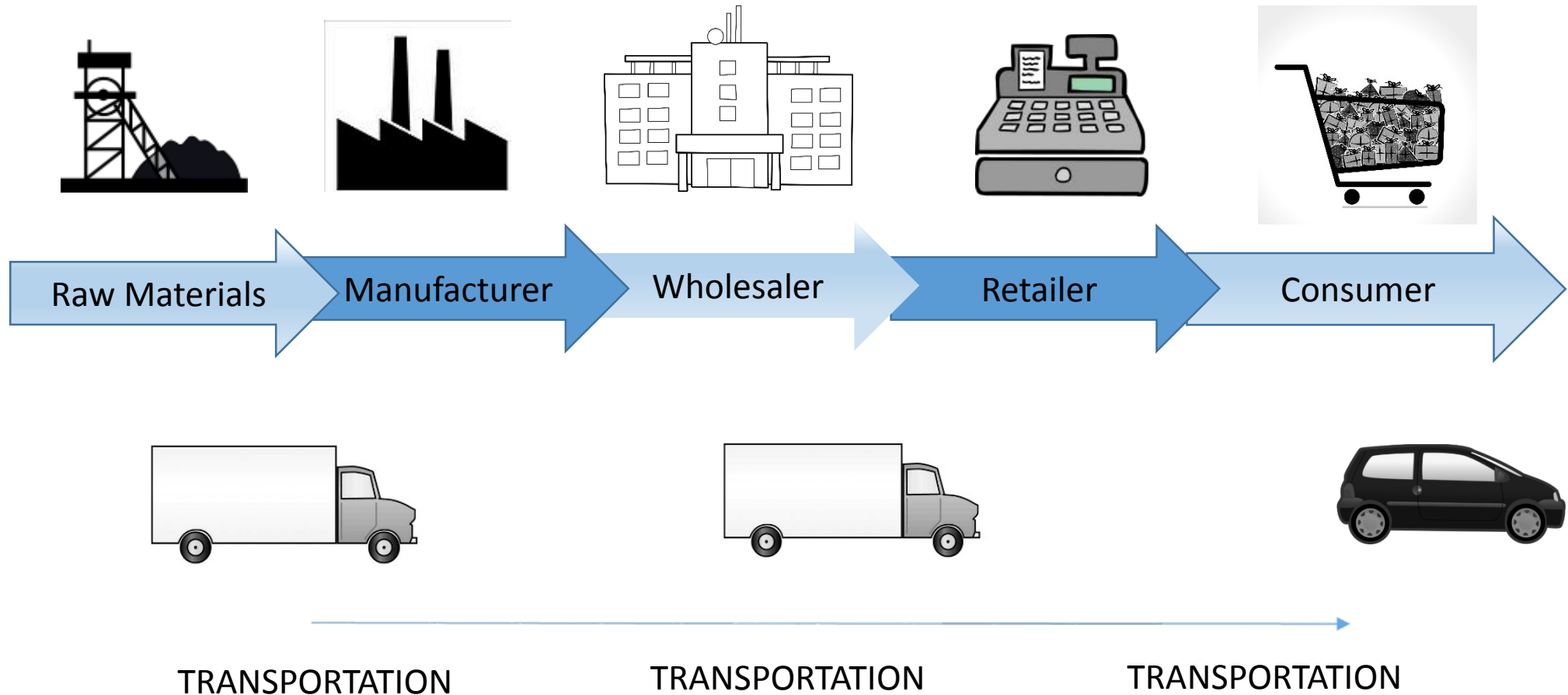
DIRECTOR
RESEARCH & MARKET INTELLIGENCE
C.H. ROBINSON

Freight in the Supply Chain



- The link between freight and the supply chain
 - Transportation in the traditional supply chain
 - Transportation in an integrated supply chain
- Challenges achieving sustainable freight transport
- How SmartWay helps

Transportation in a traditional supply chain



View of an integrated supply chain



Transportation in an integrated supply chain



Challenge in achieving sustainable freight transport



Product Demand & Retail Inventory Management

- Product flows, including volume, frequency, seasonality, physical characteristics, and special handling requirements

Escalating Customer Expectations

- Next or same day delivery, geographic locale, reduced environment impacts, carbon accountability

Delays & Delivery Constraints

- Congestion, delivery curfews, labor shortages, limited storage capacity at customer depots; inbound, interfacility and outbound lane coordination & outbound activity; restricted delivery windows

Internal company support

- Lack of support to include freight in long-term planning, focus on short term gains, inability to connect freight activity to customer service and inventory reduction

POLL: Which issue poses greatest challenge to improving freight sustainability in your organization?



**Product Demand & Retail
Inventory Management**

**Delays & Delivery
Constraints**

**Escalating Customer
Expectations**

Internal company support

How SmartWay helps achieve freight sustainability



- Raise awareness around changes
- Recognition
- Share best practices
- Tools to assess and communicate environmental performance
- Platform for collaboration



Transportation Sustainability





FROM FARM & FIELD TO YOU

Our 2020 Sustainability Goals in Action

Our 2020 Sustainability Goals focus our efforts on areas where we can have the greatest impact and deliver meaningful change: on the farm where our ingredients are grown and in our manufacturing facilities where our snacks are made and packaged.

**by 2020 vs. 2013 baseline*

the call for well-being)))

ISC 2015 Sustainability Platform

Beyond the global goals, we will tap the potential of Sustainability as a driver of waste reduction in MDLZ NA via a cross-functional E2E approach

1. E2E Resource Efficiency & Waste Reduction

- Total waste reduction In manufacturing
- An E2E approach will maximize our effectiveness, minimize downstream impacts of upstream efficiency

2. Industry & Supplier Leverage

- In the U.S., \$4 billion + is available in rebates & incentives, dedicated to energy efficiency projects
- Utilities offer +17,000 rebate / incentives for energy efficiency technologies for commercial businesses.

3. Employee Engagement

- 37% companies highlight sustainability in recruiting (MIT/'13)
- 57% private sector managers expect employee interest in sustainability (MIT/'13)
- 96% Gen-Y want environmentally aware workplaces (Johnson Controls/'10)



Transportation Strategic Initiatives

The NA Transportation Strategy is built on 3 Key Platforms

EFFICIENCY: *Utilization & Fewer Miles*

- Removing miles from the system through improved routing & load optimization

EFFECTIVENESS: *Technology & Cleaner Miles*










- Utilizing more fuel efficient transportation methods to route product to market

EXTERNAL LEVERAGE: *Expertise Thru Industry Engagement*

- Drive the sustainability platform both internally and with external partners and industry peers

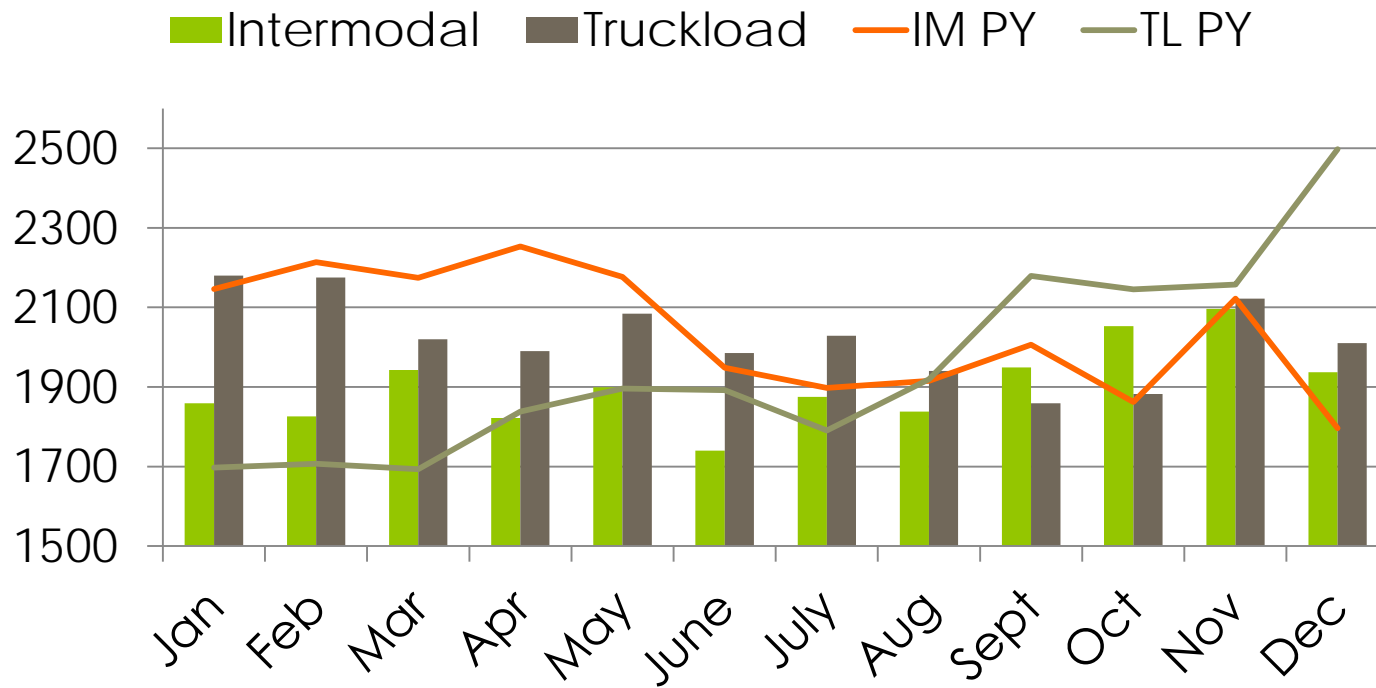
2015 Goal: reduce GHG emissions by 9,005MT

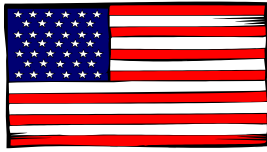
2015 CO₂ Savings Targets

	Initiative	CO ₂ Reduction Target (in metric tons)
	Trailer Utilization	325
	Pallet Specification - York & Monterrey	115
	Logistics Sourcing	1,126
	Seasonal Refrigeration	927
	Reefer Burn Rate Change	2,114
	Intermodal Utilization	3,123
	DSD Fleet Idling	239
	Modal Conversion - BDC	947
	Modal Conversion- Victoria & Puebla	89
	Total	9,005



Cube Performance*





Trailer Utilization

- Overview: Increase average trailer utilization to reduce total loads shipped
- Timing: February 2015

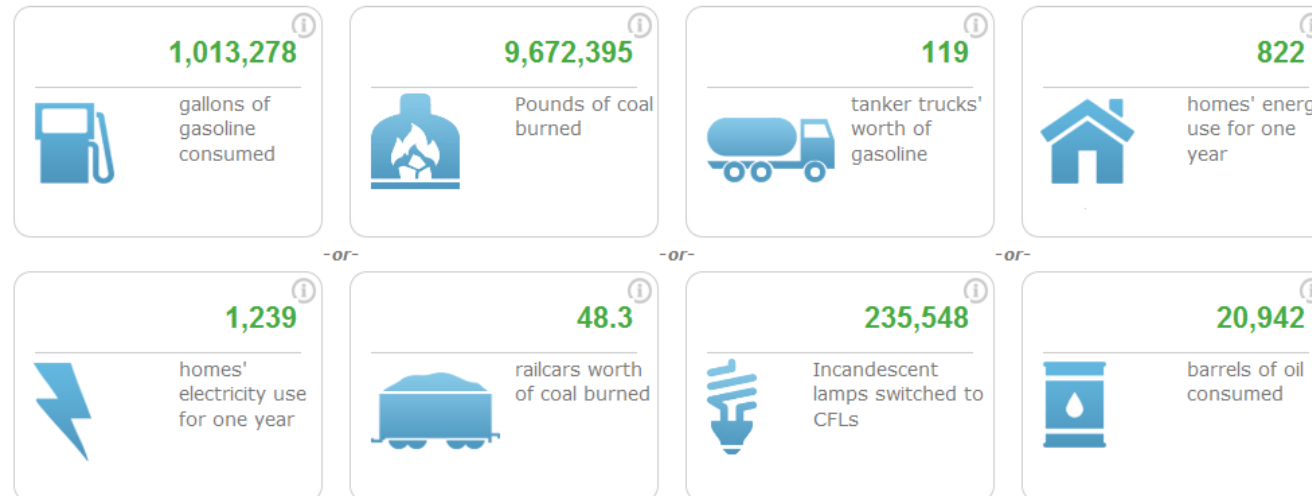
Mileage Savings (TL)	165,634
Mileage Savings (IM)	40,653
Fuel Savings (gal)*	31,839
CO2 Savings (m tons)	325

Just how much is 9,005 metric tons of CO₂?

Annual greenhouse gas emissions from



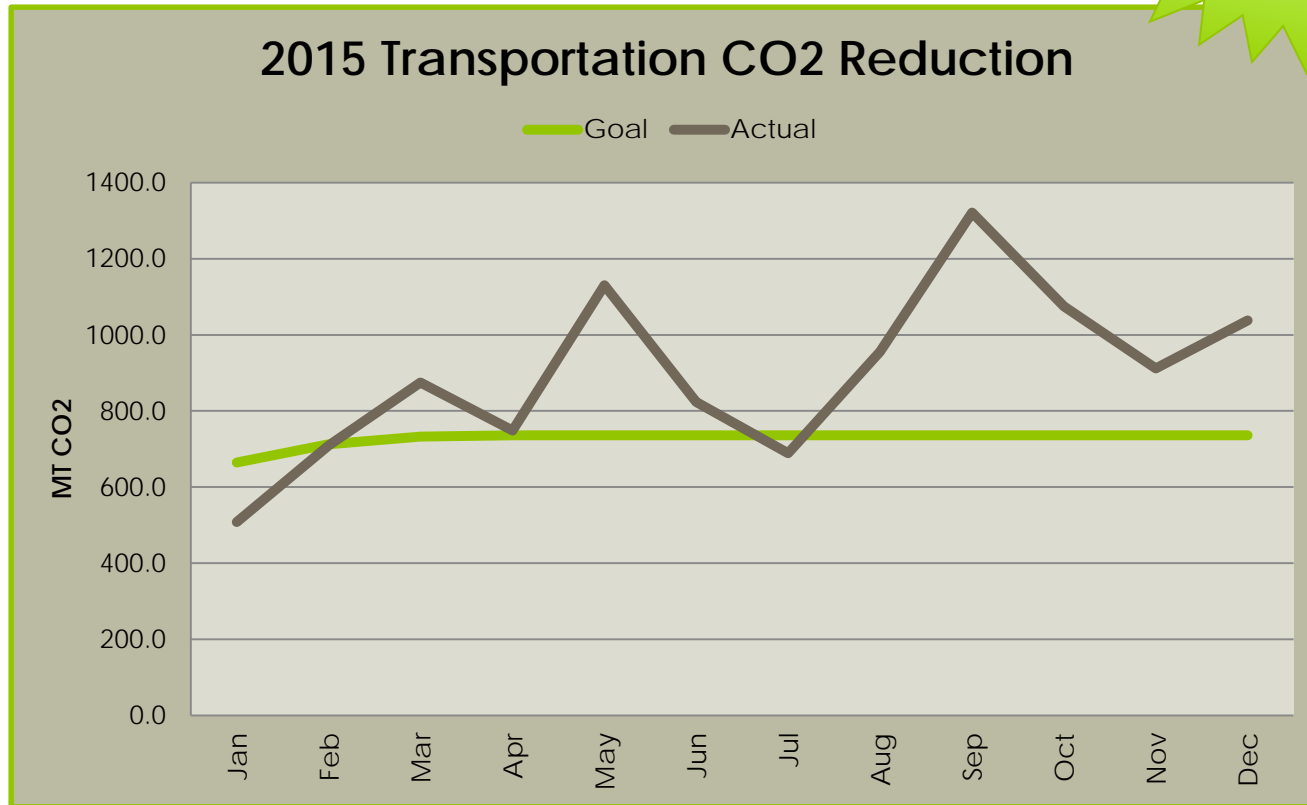
CO₂ emissions from



Source: [EPA GHG Equivalencies Calculator](#)

YTD Summary

Exceeded FY goal by 18% or over 1,000MTCO₂!



SmartWay Recertification

- Recertified as a SmartWay Shipper Partner for 2016
- Able to display SmartWay logo*
- Eligible for Smartway Excellence Award



*per Smartway guidelines

2015 NA Transportation Sustainability

Earth Week Intranet Communication



MYMDLZ Corporate Sites Functions Region/Country Sites

MONDELEZ NORTH AMERICA

content search | people search

Home About Us Employee Center Key Locations Our Transformation

Global > Mondelez North America > Switching Tracks

Recent
Transformation Change
Tools and Resources
FAQs
Alerts
video
Site Contents

Switching Tracks

22 Apr 2015 *The NA Transportation Team moves from road to rail to help the environment.*

Did you know?

In 2014, the NA Transportation Team shifted thousands of loads of Mondelez International product from the roads to the rails. Shipping via rail burns approximately 30% less fuel than shipping over-the-road. This shift to rail resulted in a reduction of over 1,100 Metric Tons of CO2. This is equivalent to the annual GHG emissions from over 232 passenger vehicles! Our goal for 2015 is to drive out an additional 3,000 Metric Tons of CO2 emissions through increased rail shipments.

External Engagement: Wal-Mart Reporting



Ranked #1 out of 36
CPG Companies on the
Wal-Mart Sustainability
Consortium Survey

Several contributing
factors, including
Transport GHG Emissions



External Engagement: Canadian National



One of 10 Companies
awarded as a Leader in
Sustainability by the
**Canadian National
EcoConnexions
Partnership Program.
2015 & 2014**



Organizations are being recognized as
leaders in sustainability as part of the
CN EcoConnexions Partnership Program.

CMA CGM
CSX
Hess
Hess
Hess
Hess
Hess

Mandate Canada
MPL
OOCL Canada
Sage Canada
Walmart Canada



Sustainable Freight: Creating Better Efficiencies in the Supply Chain

Steve Raetz

Director, Research & Market Intelligence

C.H. Robinson

EPA SmartWay Webinar

March 30, 2016

» *Accelerate Your Advantage*®



C.H. ROBINSON




\$13.5B
TOTAL GROSS REVENUE



68K
CARRIERS AND SUPPLIERS

#**225** ON
FORTUNE
500



17M
SHIPMENTS ANNUALLY



OVER
110K
CUSTOMERS

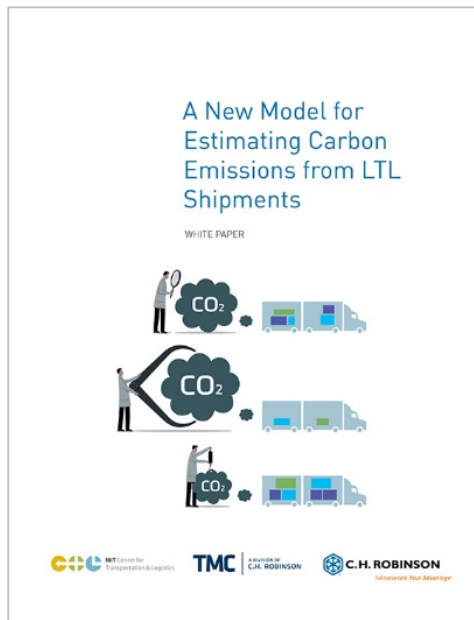
INBOUND LOGISTICS
TOP 3PL
5 YEARS IN A ROW
2011 2012 2013 2014 2015

»Accelerate Your Advantage®

» C.H. Robinson – Sustainability Overview

CSR Perspectives

We believe in being a good corporate citizen, using our resources wisely, and investing in programs and organizations that are making a positive, sustainable impact.



- C.H. Robinson Worldwide Foundation
- Corporate events
- Local events
- Volunteerism
- Sustainability



» Our Customer: A Natural Foods Company

- Global organic foods company
- A Leader in non-GMO verified foods in North America
- Products available in a wide variety of retailers
- ~80% of ingredients are sourced in North America
- Three manufacturing locations: 2 in United States, 1 in Canada
- ~400 employees



» Road Map to Success

PROCESS

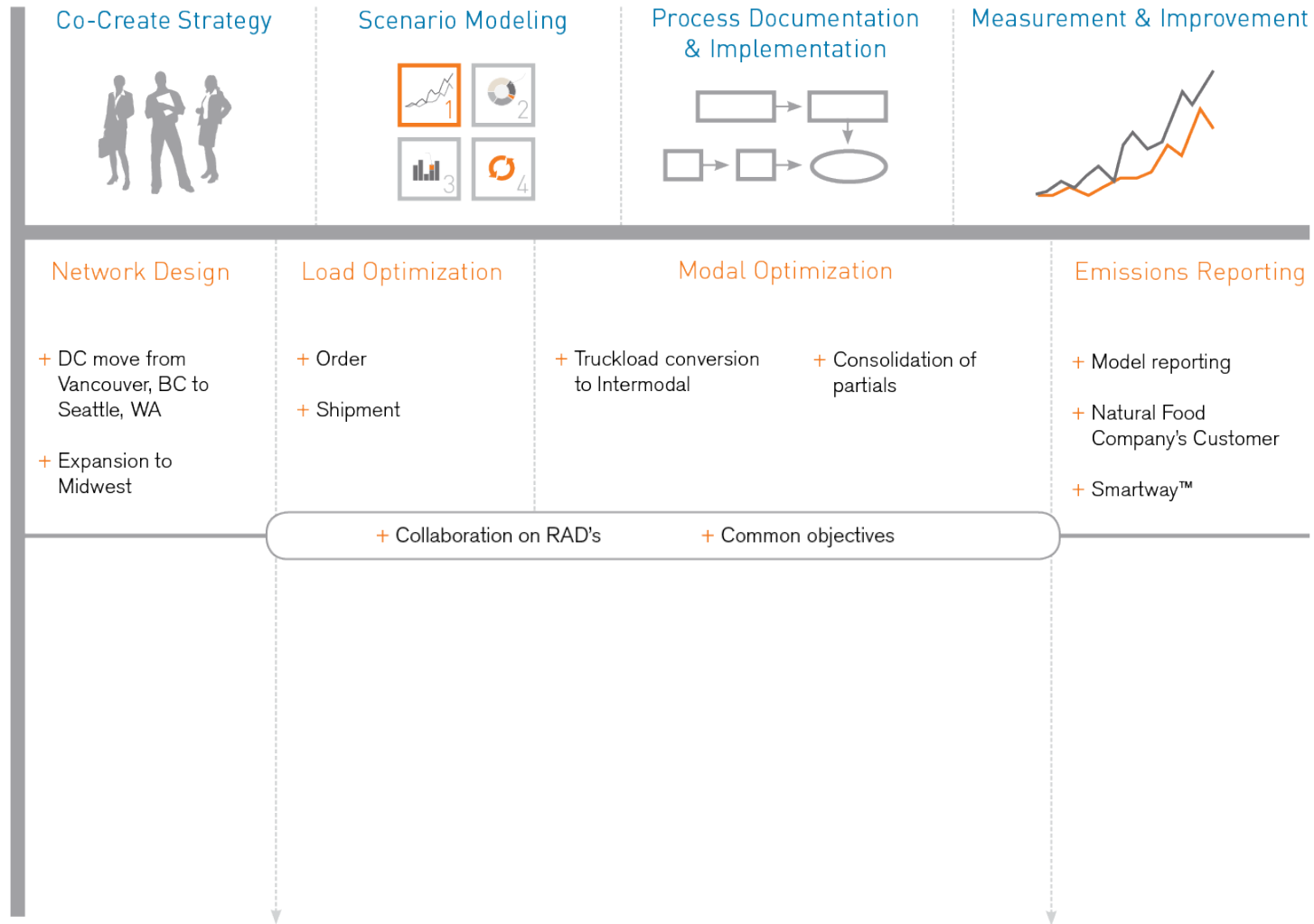


» Road Map to Success

PROCESS



SOLUTION



» Road Map to Success

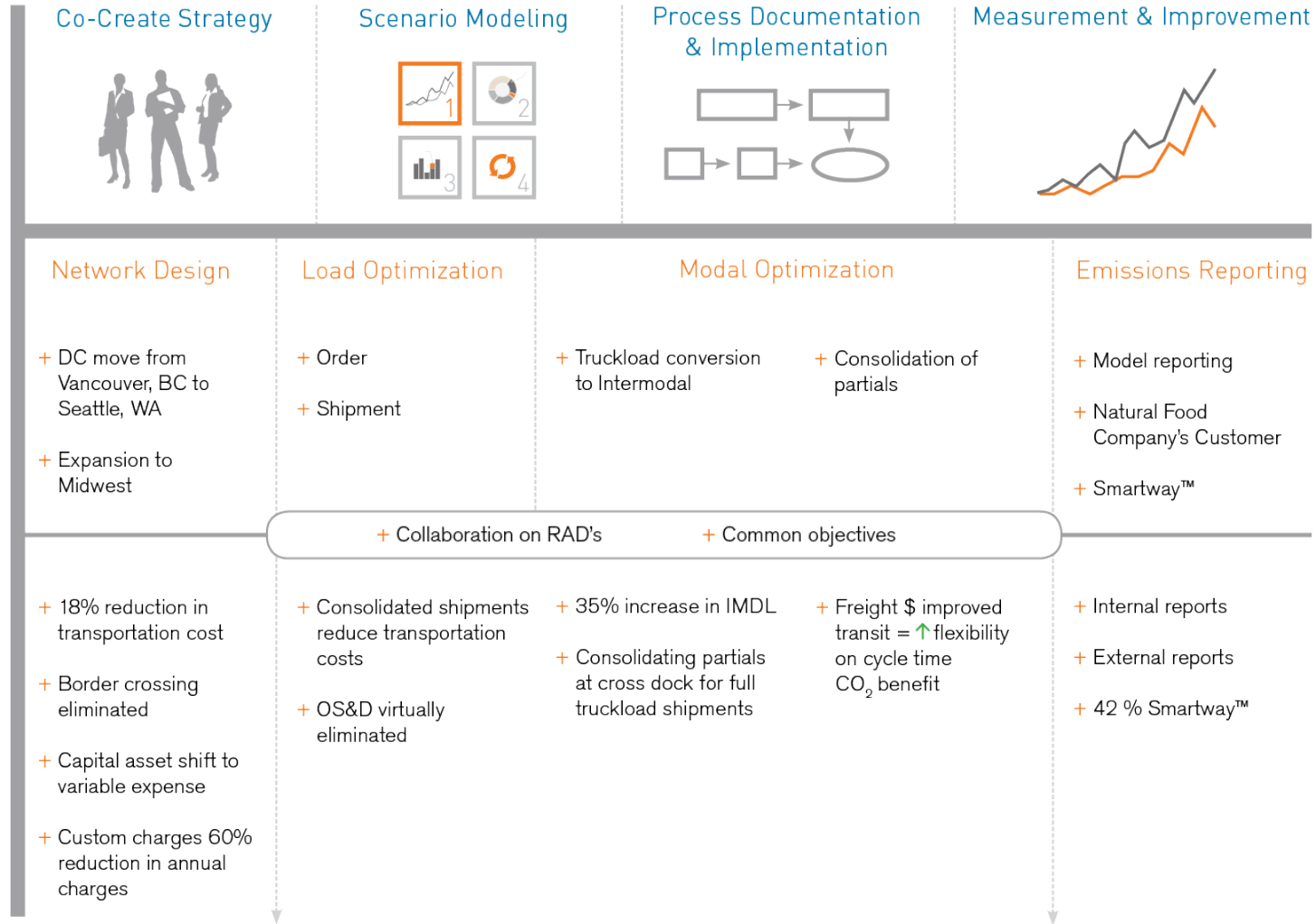
PROCESS



SOLUTION

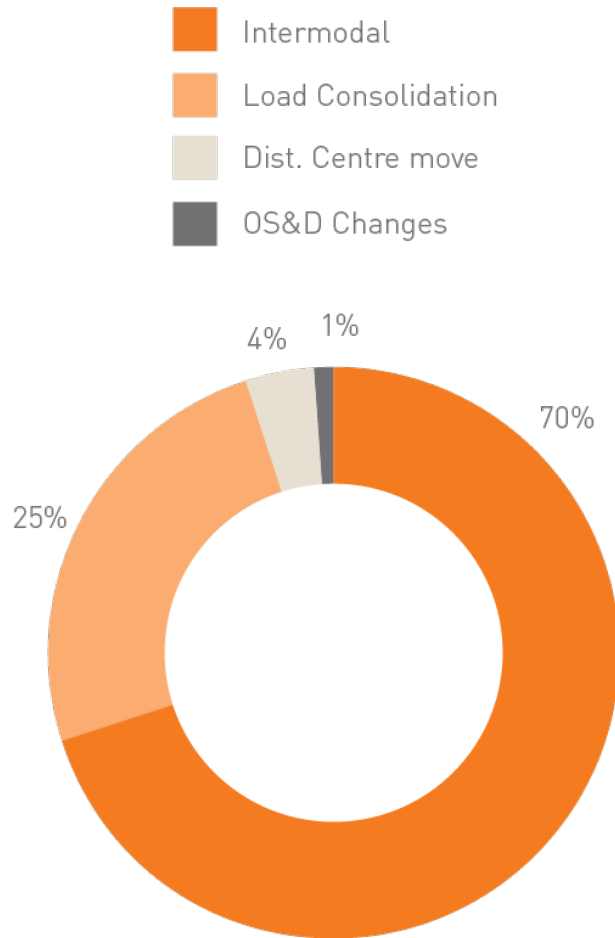


RESULT

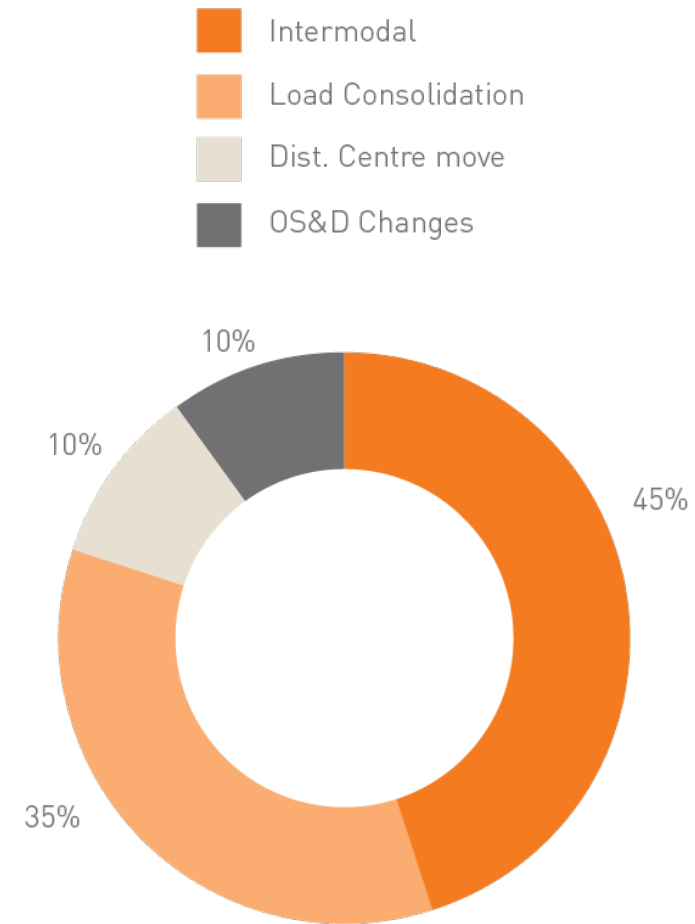


» Overview of Savings and CO2 Reductions

Percent of cost savings



Savings in total lbs CO₂



» Customer Types Using Emissions Reporting

- Automotive
- Transport and Warehouse Services
- Electronics
- Retail
- Food and Beverage
- Paper and Paper Products
- Chemicals



Thank You

» *Accelerate Your Advantage*®



C.H. ROBINSON



Questions?