



Sustainable Freight Workshop DOE's NREL



EPA SmartWay Partnership Program

May 29, 2024

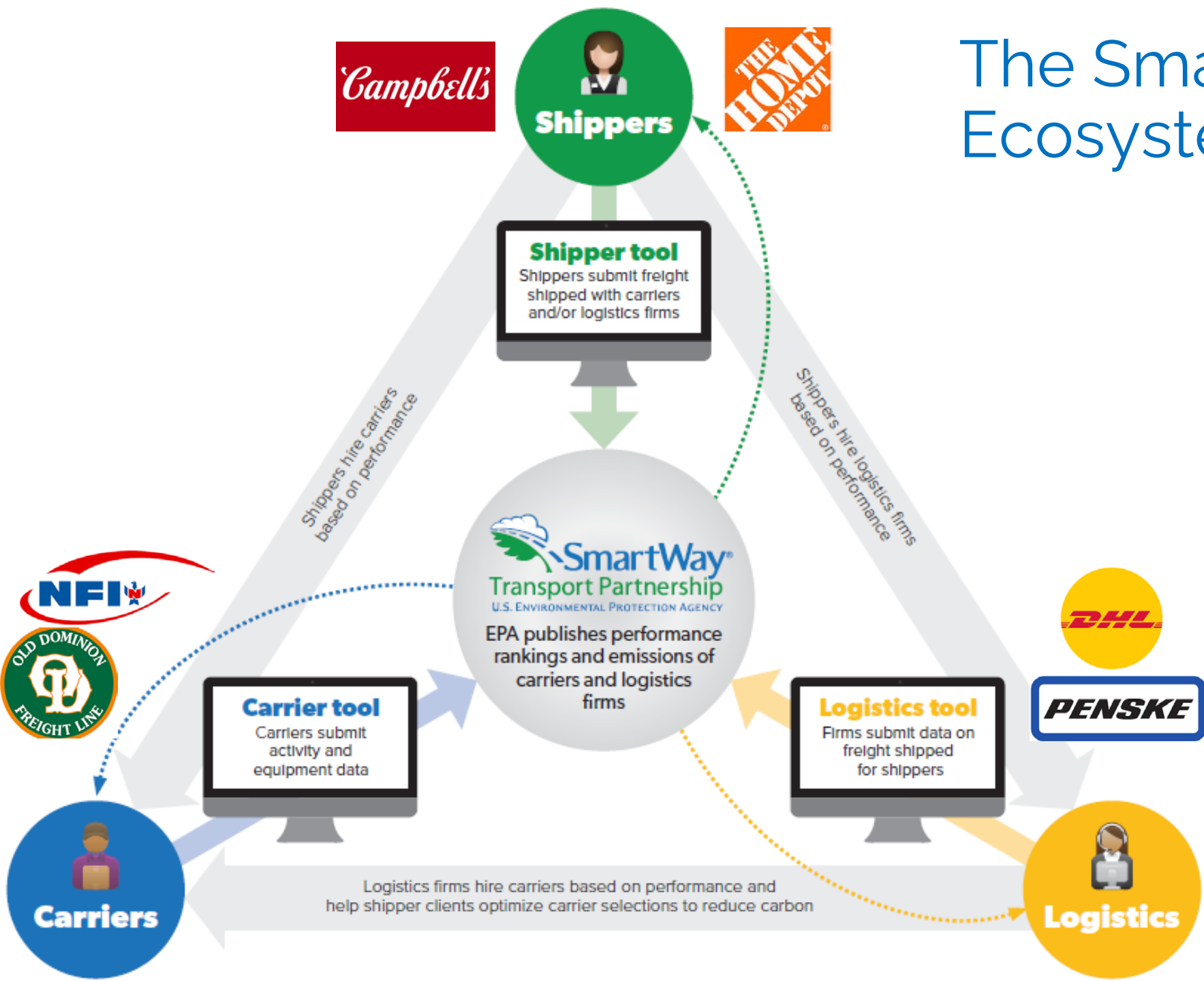
What is SmartWay?



- Developed with industry leaders in 2004 as a voluntary, market-based program aiming to:
 - Improve U.S. freight efficiency and enhance our Nation's energy security
 - Reduce GHGs and other air pollutants (NOx, PM)
 - Spotlight the freight industry's efforts to reduce emissions
 - Advance technology and operational efficiency strategies
 - Provide a standardized benchmarking and reporting system
- Adopted by Canada (2012), piloted in Mexico and replicated around the globe
- About 4,000 Carriers, Shippers, Logistics Providers and Affiliates
 - Key economic sectors and modes (truck, rail, air, barge)
 - Small business, Owner-operators, Fortune 500 firms
 - About 2/3 of total US ton-miles of freight accounted for in SmartWay



The SmartWay Ecosystem



Shippers
Hire carriers and 3PLs; interested in sustainability and costs

3rd Party Logistics (3PL)
Can help shipper clients with carrier selection, operations

Carriers
Can help shippers & logistics customers improve environmental performance

SmartWay by the Numbers



- Since 2004, the number of companies that rely upon SmartWay has grown from 15 to over 4,000
- SmartWay Partners saved over \$52.3 billion in fuel costs (\$4.7B in 2023) and reduced harmful air pollutants by
 - 162 million tons of CO₂
 - 2.7 million tons of NO_x
 - 112,000 tons of PM (includes black carbon)
- SmartWay Partner energy savings are equivalent to 357 million barrels of oil OR eliminating annual energy use in 23 million homes



Two Decades of SmartWay Evolution



2002



The SmartWay Concept Is Born
EPA and 15 "Charter Partners" collaborate to develop a voluntary green freight program.

2004



The Starting Line
EPA launches the SmartWay program pioneering freight carbon accounting & emissions reduction strategies for carriers and shippers.

2005



Getting Technical
SmartWay establishes EPA's first-ever in-use assessment of commercial truck efficiency.



SmartWay Welcomes Logistics and Rail
EPA adds these important freight service providers to the program.



Affiliates Step Up
Key industry and trade organizations launch the SmartWay Affiliate program to support freight sustainability.

2006



Beyond Freight
SmartWay criteria for passenger cars and trucks are established, helping consumers compare cleaner, more efficient vehicles.



Going for the Gold
SmartWay Excellence Awards begin to recognize Partners with best-in-class freight efficiency and lowest emissions.

2007



I Spy SmartWay on the Road

EPA establishes a SmartWay designation for new tractors and trailers. The "SmartWay Elite" trailer level in 2015 is followed by a day cab designation in 2020.

2008



Greening the Globe

Over a dozen countries gather for the SmartWay International Summit, setting the stage for global green freight collaboration.

2010



Second Generation SmartWay

EPA enhanced the SmartWay benchmarking methodology to allow Partners to benchmark their performance against their industry peers.

2017



SmartWay Introduced to Latin America

SmartWay co-hosts the first LATAM Green Freight Summit in Buenos Aires, Mexico pilots SmartWay.

2016



Tri-Lateral MOU with U.S., Mexico, and Canada

The three countries sign a memorandum of understanding to help each other enhance and expand SmartWay throughout North America.



SmartWay Gains Global Recognition

The World Resources Council awards SmartWay the "Built-On GHG Protocol" mark. GLEC recommends SmartWay for freight emissions calculation and reporting.



Air Freight Lands the SmartWay

Air carriers join SmartWay, complete SmartWay supply chain emissions report.

2015



SmartWay Global Training

EPA launches a comprehensive curriculum to help countries develop green freight programs modeled on SmartWay.



SmartWay Envisions Cleaner Freight Future

EPA charts a course for cleaner freight, publishes SmartWay Vision 2020.

2014



SmartWay Turns 10

SmartWay celebrates 10 years of cleaner, more efficient goods movement with its 3,000+ carriers, shippers, logistics and affiliates.



Barge Steams Ahead

EPA adds this important freight mode to the program.

2013



A Global Model

UNEP's Climate & Clean Air Coalition adopts SmartWay as a model for global replication.



Driving Data Integrity

SmartWay publishes data management guidelines to support the quality of freight-related data.

2012



Canada Adopts SmartWay

Natural Resources Canada and EPA create a seamless cross-border program for Partners operating in both countries.

2019



Green Supply Chain Case Study

ICCT and EPA assess a SmartWay Partner's supply chain, studying emissions savings from advanced technologies and strategies.

2020



Trucking Meets Unprecedented Challenges

SmartWay Partners unite to deliver essential goods in the face of the pandemic.

2021



Electric Trucks Energize Freight

SmartWay Partners and NACFE complete the Run on Less Electric demonstration to demonstrate the potential for truck electrification.

2022



Third Generation SmartWay

Partner reporting is enhanced with streamlined platforms and options for small carriers and owner-operators. Partner numbers top 4,000 across U.S. and Canada.



SmartWay Listening Year

EPA hosts Partner listening sessions on ways to enhance SmartWay awards and recognition programs, GHG benchmarking methodologies and data exchange.

2023



Emissions Disclosures Get a Boost

Partners prepare for new GHG reporting mandates from California by ramping up use of SmartWay data for public GHG reporting, goal-setting and climate targets.



A New Global Standard

EPA helps develop and launch ISO 14083 as the first global standard for freight (and passenger) GHG calculation.

2024



Two Decades of Progress!

EPA thanks SmartWay Partners and Affiliates for creating a more sustainable freight future. EPA refreshes the SmartWay Excellence Awards and recognition programs with Profiles in Leadership.

SmartWay and the Transportation Decarbonization Blueprint



-  SmartWay and other partnership programs can play an important role in building support from stakeholders at each node and mode in the supply chain

-  SmartWay fleets can create momentum for decarbonizing tech and strategies
 - SmartWay Partners **support a “community of practice”** for developing infrastructure initiatives
 - **Spotlighting fleet leadership** in deploying advanced technology
 - SmartWay builds fleet confidence in new technologies
 - *Peer-to-Peer* sharing and collaboration
 - *Trusted-Third-Party* information (metrics, tech, strategies)

-  Influencing today's fleet decisions
 - **SmartWay Technology Verification** of fuel-saving technologies informs equipment choices regardless of the engine, motor, or cell
 - **SmartWay Partnership** benchmarking informs today's goods movement decisions across multiple modes

For more information



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smartway_transport@epa.gov

SmartWay Helpline

1-734-214-4767

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The screenshot shows the EPA SmartWay website interface. At the top, there is a navigation bar with links for Environmental Topics, Laws & Regulations, Report a Violation, and About EPA. Below this is a main banner for 'SmartWay' featuring a large image of a bridge and a headline: 'EPA Renews SmartWay Collaboration in Canada'. The main content area is divided into three columns: 'Learn about SmartWay' with links to Overview, Why Freight Matters, Corporate Social Responsibility, SmartWay Program Successes, and Freight Sustainability Leadership; 'Participate in SmartWay' with links to How to Participate, How the Partnership Works, Become a SmartWay (with sub-links for Shipper, Logistics Company, Carrier, and Affiliate), and Tools & Resources for Partners & Affiliates; and 'Meet our Partners & Affiliates' with a grid of partner logos and links to Learn About Partners and Affiliates, Partners List, Affiliates List, Charter Partners, SmartWay Excellence Awards, High Performer Lists, Other Partner Achievements, Featured Partner Profiles, and Carrier Performance Rankings. To the right of these columns is a search bar and a 'SmartWay Recent News' section with links to Electrification Resources, SmartWay Affiliate Editorial Calendar, COVID-19 Resources, and Launch your Freight Sustainability Strategy. Below the news section is an 'Upcoming Webinars & Events' section with a link for a 6/22/2023 webinar on fuel-saving strategies. At the bottom right, there is a yellow box for 'Global Collaboration & SmartWay' and a white box for 'Stay Connected: Get the E-Update'.

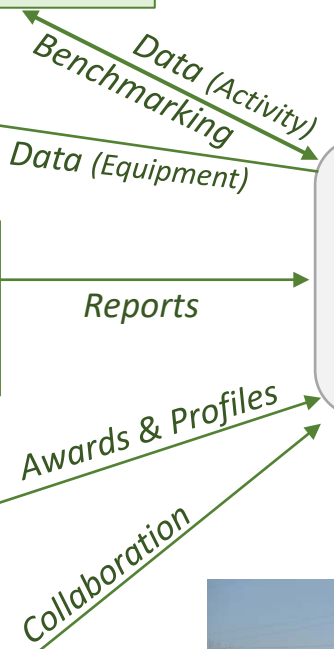
Appendix

SmartWay Support for an Electrifying Partner – What are the Touch Points?



SmartWay Partnership

- SmartWay Metrics & Benchmarking**
Improved by fuel choice
- Partner Portal**
Optional equipment tab
- Partner “Intel” Reports**
Reports support Scope 1, 2 & 3 reporting
- Recognition Programs**
Leadership recognized and incentivized
- Website Alt-Fuel Page**
Facilitating peer-to-peer collaboration



Meijer Foods
Regional grocery store with private fleet



Meijer First Retailer to Run All-Electric Semitrucks in Cold Weather Environment
Retailer's first delivery using Freightliner eCascadia semi is a 44,000-pound+ food donation to Gleaners Community Food Bank
Dec 15, 2022

EVgo and Meijer Expand Fast Charging Partnership through EVgo eXtend
Through its white label service offering, EVgo will install and operate fast chargers owned by Meijer to serve EV drivers in the Midwest
Nov 29, 2023

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LOS ANGELES - November 29, 2023 - EVgo Inc. (NASDAQ:EVGO) ("EVgo" or the "Company"), one of the nation's largest public fast charging networks for electric vehicles (EVs), today announced it will install new fast charging stations in the Midwest in an expanded partnership with Meijer, a regional grocery retailer. The new EVgo stations will be built in Ohio and feature up to six stalls at select Meijer locations, equipped with high-power 250kW chargers so that EV drivers can quickly charge and get back on the road.

SmartWay Technology

- Performance Protocols**
Improved EV on-road and systems understanding
- Research**
Myth Busting and publicly available research
- Performance Verification**
Short-hand communicating EV performance
- Technology Bulletins**
Informing fleets on strategies that reduce emissions
- EV Use Cases**
Sharing EV success across the supply chain



SmartWay Engagement – Fleets Deploying EV in Freight Movement



Fleets perceive risks in the transition to EVs – Even the fleets that are starting early

Fleet perceived risks

1. Getting the vehicles and not being able to get the power.
2. Charging cycles and can 1 EV replace 1 diesel truck.
3. What are the “soft impacts” for the drivers and community?
4. How do I compare the total-cost-of-ownership or the system (vehicle and charger) efficiency?
5. Right vehicle, wrong application.
6. How will EV tire management and maintenance costs differ from diesel vehicles?

 Many fleets are advancing the understanding, privately and in collaborative forums.

BRIDGESTONE



US. FOODS



EPA support for Transportation Decarbonization Blueprint



- EPA actively participating in the development of implementation plans
- EPA has multiple mechanisms for advancing decarbonization goals
 - Regulation of new vehicles and engines.
 - Public funding of fleet turnover
 - Market-based, industry-government partnerships
 - Research
- SmartWay influencing today's fleet decisions and supporting advanced technologies