






# Optimize Freight Supply Chain Decision Making

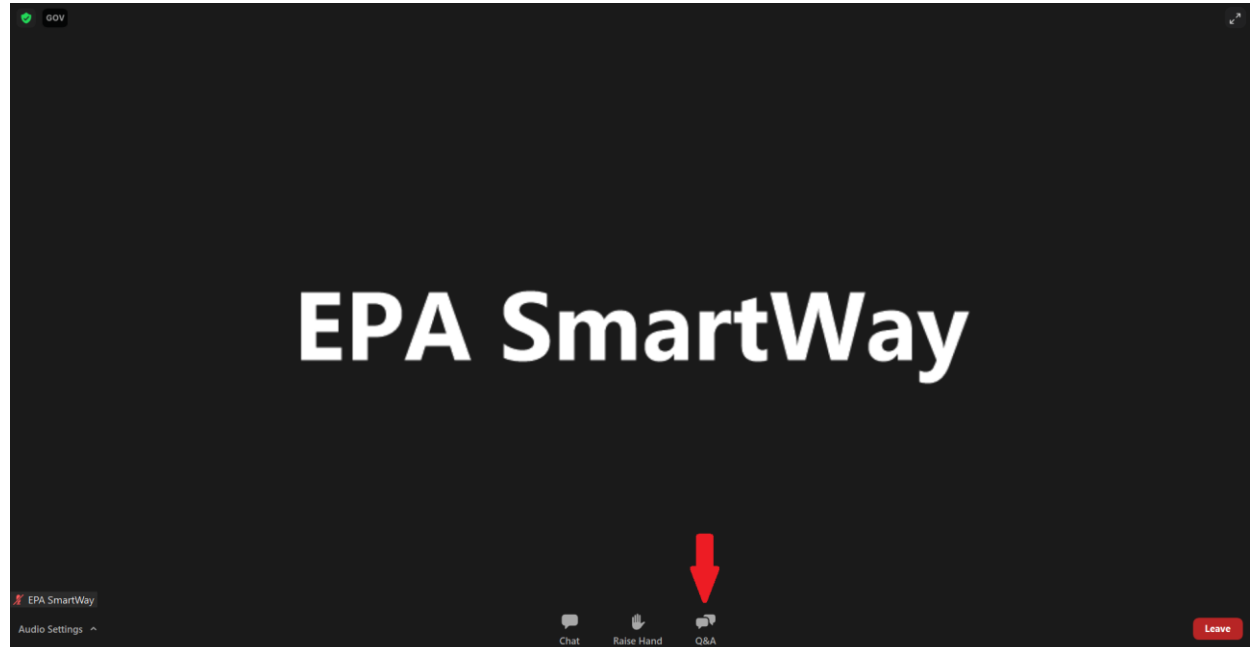
June 16, 2022



# Webinar Housekeeping



-  The presentation slides will be shared after the webinar
-  Today's webinar is being recorded
-  Submit a question or comment via the Q&A pane on your Zoom control panel
-  After the presentation, as time permits, our EPA hosts and presenters will answer questions submitted via the Q&A box
-  Please complete the survey at the end of today's webinar



## SmartWay

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## EPA SmartWay Partners go the extra mile – thank you!

In these extraordinary times, EPA SmartWay partners are working to produce and deliver essential supplies to help keep communities healthy and safe. THANK YOU!

- [Learn about COVID resources for trucking companies](#)

1 2 3 4

### SmartWay Latest News

- [April Affiliate Calendar](#)
  - [View the SmartWay Timeline](#)
  - [COVID-19 Resources for Trucking Companies](#)
  - [Launch your Freight Sustainability Strategy](#)
- More [SmartWay News](#)



## Learn about SmartWay



- [Overview of SmartWay](#)
- [Why Freight Matters](#)
- [CSR and Freight Logistics](#)
- [SmartWay Program Successes](#)
- [Trends, Indicators & Partner Statistics \(TIPS\)](#)

## Meet our Partners & Affiliates



## Participate in SmartWay



- [How to Participate in SmartWay](#)
- [How the SmartWay Partnership Works](#)
- Become a SmartWay:
  - [Shipper](#)
  - [Logistics Company](#)
  - [Carrier](#)
  - [Affiliate](#)
- [Tools & Resources for Partners & Affiliates](#)

## Use the SmartWay Brand



### Search SmartWay

What are you looking for?



### Upcoming Webinars & Events

- [4/22/2021: Webinar - The Benefits of Freight Railroad Transportation Capacity, Safety & Clean Air!](#)
- [5/20/2021: Webinar - SmartWay Shippers: Submitting Activity Data Gets You More Out of SmartWay!](#)

[View Scheduled Webinars and Past Webinar Recordings](#)

www.epa.gov/smartway

# SmartWay Webinars & Events

EPA hosts **free webinars** to help you learn how to get the most out of the SmartWay Program.



## On this page:

- [Upcoming Webinars](#)
- [Past Webinar Recordings](#)

## Register for Upcoming Webinars

- Participants must pre-register.
- Registration closes at 12:00 pm on the day of the webinar.
- Click the event name for a description and registration links.

[Event Type Legend](#)

Date	Type	Event Name
Thursday, April 22, 2021	Education	<a href="#">The Benefits of Freight Railroad Transportation Capacity, Safety &amp; Clean Air!</a>
Wednesday, May 20, 2021	Education	<a href="#">SmartWay Shippers: Submitting Activity Data Gets You More Out of SmartWay!</a>

Have an idea for a webinar? [Email your idea](#) to (smartway\_transport@epa.gov) with the subject line "SmartWay Webinar Suggestion."



[Learn more about SmartWay's Freight Matters! Webinar Series:](#) This series features leaders in the freight sector discussing trends and issues that matter to your business.

## Past Webinars

[Event Type Legend](#)

Webinar Type	Event Name	Primary Audience
Freight Matters!	<a href="#">Alternative Fuel Adoption Accelerates: Discussion with Penske and GNA</a>	All Partners, General Audience



[www.epa.gov/smartway/smartway-webinars-events](http://www.epa.gov/smartway/smartway-webinars-events)

## EPA SmartWay



**Patrice Thornton**

**Environmental Protection  
Specialist**

## EPA SmartWay Partners



**Matthew Collins**

**Distribution Coordinator**

SUNPOWER<sup>®</sup>

**Matthew Kavanagh**





**Sr. Manager, Logistics**

- SmartWay background
- How SmartWay works
- Benefits of reporting activity data
- SmartWay partner perspectives
  - Cabot Creamery
  - SunPower Corp

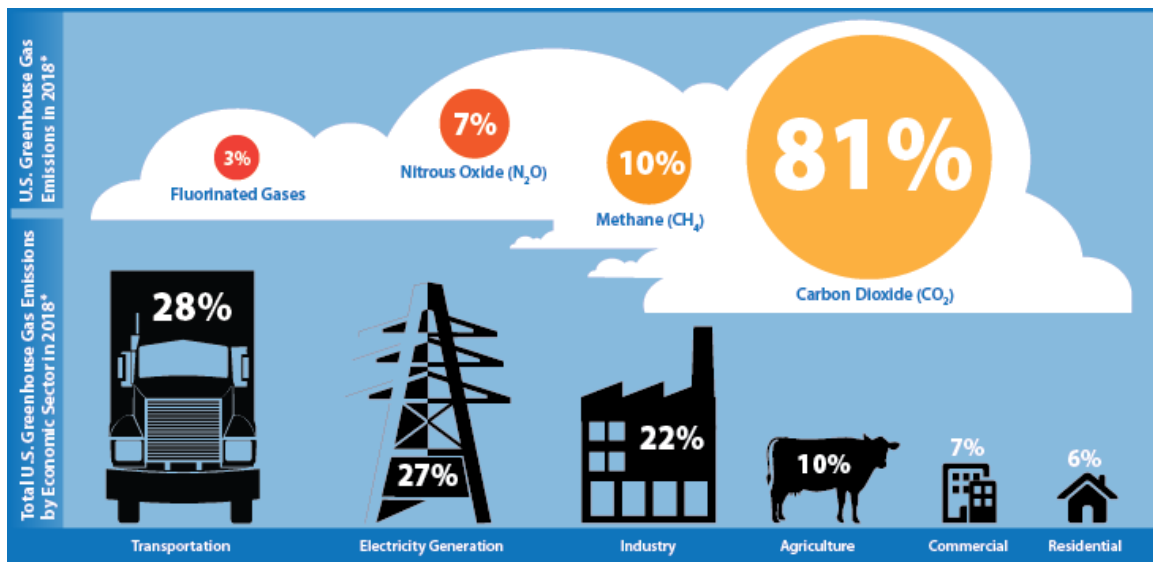


# SmartWay Background



-  Public-private partnership
-  Raise awareness around emission/sustainability benefits of freight efficiency
-  Strengthen industry efficiency, competitiveness
-  Collaboration
-  Save fuel, money, and the environment

# Why SmartWay Focuses on Freight





# How SmartWay Works



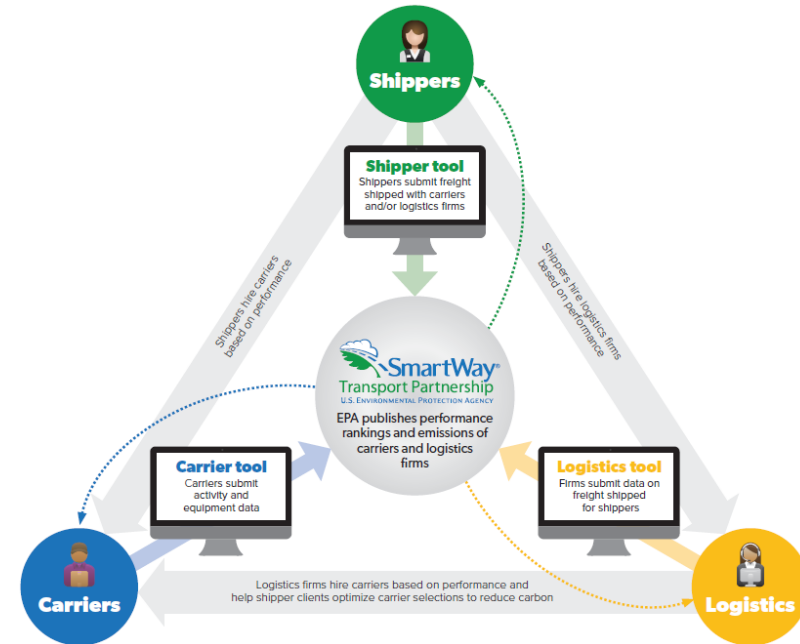
- Standardized approach that partners can use to assess supply chain efficiency and emissions
  - For any organization that ships, carries or receives goods
  - Adopted by private and public sector, vendors, providers, suppliers
- Designed with and for the freight sector
  - Delivers solutions to marketplace needs and challenges
  - Voluntary and no-cost



# How SmartWay Works



- Companies collect and submit freight activity information using EPA assessment and tracking tools
- EPA checks data then uploads to SmartWay database
- Database combines partner data with most recent EPA emission factors to calculate annual emissions reports from transporting goods
- EPA ranks freight service providers by environmental performance



**F O U R**  
WAYS TO JOIN  
**SmartWay**

**TAKE THE ON-RAMP  
TO SMARTER FREIGHT**

Learn SmartWay basics  
and partner with carriers  
to build your plan



**START MOVING  
TOWARDS BETTER  
PERFORMANCE**

Estimate freight  
transportation efficiency  
and set improvement  
targets



**MAP YOUR ROUTE WITH  
REAL ACTIVITY DATA**

Calculate activity-based  
metrics and uncover  
opportunities to cut  
waste



**DRIVE INNOVATION  
WITH ADVANCED  
STRATEGIES**

Analyze activity data  
with strategic benefit  
calculators



There are four (4) ways shippers can participate in SmartWay. Way 1, the SmartWay Candidate level, is only for companies who want to learn more about SmartWay before joining as a SmartWay Shipper Partner. To become a SmartWay Shipper Partner, select Way 2, Way 3, or Way 4 below, complete the tool inputs, check your results and submit your tool to EPA for approval.

Select your Participation Level by checking the button [ o ] next to your selected option. You can change your participation level at any time, but be careful as it may result in some loss of previous data input.

<input type="radio"/> Way 2: Basic Freight Assessment	<input type="radio"/> Way 3: Standard Freight Assessment	<input checked="" type="radio"/> Way 4: Advanced Freight Assessment
<b>Best For:</b> Shippers with limited data that want to start freight efficiency planning.	<b>Best For:</b> Shippers that want a freight emissions footprint to guide their freight decision making.	<b>Best For:</b> Shippers that want a more-detailed freight emissions footprint and added analysis.
<b>Inputs:</b> Carrier names and relative data (e.g., amount spent, number of shipments, volume shipped, or another custom metric)	<b>Inputs:</b> Carrier names; mileage, ton-miles and/or payload data per carrier	<b>Inputs:</b> Carrier names; mileage, ton-miles and/or payload data per carrier; and additional operational strategies and mode split data
<b>Input Methods:</b> Manual only	<b>Input Methods:</b> Manual or data import. You will decide your Data Input Method on the next screen.	<b>Input Methods:</b> Manual or data import. You will decide your Data Input Method on the next screen.
<b>Benefits of Way 2:</b> <ul style="list-style-type: none"> <li>Define a relative freight performance metric (% SmartWay)</li> <li>Be recognized as a Smartway Partner</li> </ul>	<b>Benefits of Way 3:</b> All the benefits of Way 2 plus the ability to: <ul style="list-style-type: none"> <li>Build a freight performance assessment based on per carrier mileage and payload</li> <li>Compete for recognition through the SmartWay Excellence Awards</li> </ul>	<b>Benefits of Way 4:</b> All the benefits of Way 3 plus the ability to: <ul style="list-style-type: none"> <li>Subdivide freight activity based on inbound vs outbound, domestic vs international, discrete business units, and/or other criteria</li> <li>Compare emissions savings from various mode and operational strategy changes retrospectively and prospectively</li> <li>Receive additional credit for SmartWay Excellence Award</li> </ul>



# Matthew Collins

Distribution Coordinator  
-Green Team Leader

- Transportation Budgeting and Analytics
  - Montpelier Green Team Leader
  - Transportation liaison for sustainability and development
  - Transportation Management Software Administrator
  - Over 10 years of Logistics Experience
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# Optimize Freight Supply Chain Decision Making

Matthew Collins

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# Table Of Contents

- Company Overview
- Freight Sustainability
- SmartWay Participation
- SmartWay - Way 4 Scenario Planning
- Conclusion

## HOW DOES REAL FARM POWER WORK? RESOURCES ARE COLLECTED...



## ARE DELIVERED TO...



## PROVIDING MORE RESOURCES TO START ALL OVER AGAIN AND AGAIN...



## Company Overview

### ***Our Pledge to Sustainability***

Living within our means & ensuring the means to live.

We work to accomplish this across the triple bottom line of social responsibility, environmental stewardship and economic prosperity



### **Green Team:**

A group of employees who voluntarily unite to drive company-aligned sustainability solutions

### **Green Team Network:**

7 Interdependent Green Teams that collaborate to advance our organization's sustainability





# Freight Sustainability

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## Equipment Specs

- Aerodynamic Body Modifications
- Low Rolling Resistance Tires
- Hybrid APU's (sleepers)
- Over 65% of our trailers are equipped with Hybrid electric Refrigeration units

## Equipment Replacement Schedule/Specs

- Reduced length of power unit ownership from 7 years to 5 years
- Phasing out non-hybrid trailers

## No Idle Policy

- Decreased Idle time 60% Y-O-Y



## SmartWay Participation

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2010 – Initiated involvement with SmartWay

2017 – Made the commitment to maintain SmartWay Certification

2018 – Grew partnership to include our internal Fleet

2019 – Committed to only onboard SmartWay Carriers

2021 – Received the EPA's Environmental Merit Award



# SmartWay - Way 4 Scenario Planning

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- Decreased Mileage
  - 1.6% less empty Miles
- Strategically located Consolidation Centers
  - CT
  - CA final mile



- Agri-Mark Distribution Center
- Consolidation Center

# Thank You!

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# Matt Kavanagh

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- Matt Kavanagh is the Senior Manager of Logistics for SunPower Corporation, a leading residential solar technology and energy services provider. His current role includes operational management of five primary distribution facilities across the US, inbound & outbound transportation, reverse logistics, 3PL/carrier management, fleet sustainability and end of life management for products. He leads transportation sustainability programs at SunPower and serves as part of the Environmental Social Governance (ESG) committee. In 2021 SunPower initiated a partnership program to utilize heavy duty EV trucks to replenish smaller warehouses from its primary distribution center with plans to expand this program in 2022. Matt is passionate about the solar industry, the environment, transportation decarbonization, optimization and expansion of alternate fuel options for freight.



SunPower is a leading solar, storage and energy services provider in North America.

Our mission is to change the way our world is powered.

We do this by building a great company, putting our customers first, and making solar the most compelling energy option. If we empower our people and communities to thrive, we'll build a sustainable future together.

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## A leader in U.S. solar for 35+ years

- More than 440,000 U.S. homes with SunPower rooftop solar
- Network of almost 800 dealers employing approx 17,000 workers



## Superior technology and innovation

- Most efficient systems you can put on your roof <sup>(1)</sup>
- SunVault™ storage can provide whole home with backup power during electric grid failures <sup>(2)</sup>
- >400+ patents



## Creating home energy ecosystem

- Expanding services to support EV charging, Virtual Power Plants and more
- Financial services platform making solar more accessible

1. Based on the top 20 panel manufacturers by market share in the US (per Wood Mackenzie US PV Leaderboard Q1 2022 report).

2. The ability to provide electricity during an outage will vary based on the amount of energy stored in the battery, wattage and duration of use of devices/appliances connected to the system, the battery's ability to recharge during daylight hours, and other factors. Additional hardware may be required for powering your HVAC system. Storage system should not be relied upon as a single source of power for critical medical devices.

# SunPower Releases Supply Chain Decarbonization Goals to 2030

Transportation Carbon emissions and carbon intensity have dropped YoY since 2019

## Decarbonizing Our U.S. Freight and Fleet

While our products and services make a tangible difference in the fight against climate change, we recognize the carbon emissions created in our company's regular operations. SunPower has established specific goals to reduce carbon emissions from our U.S. downstream freight and fleet vehicles to maximize the positive impact our company has on the environment. We will work to reduce carbon emissions for our U.S. downstream freight by establishing programs to achieve net zero by 2030. Additionally, we plan to convert at least 90% of our U.S. fleet vehicles to hybrid or electric vehicles by 2030.

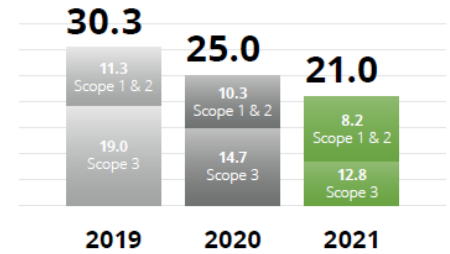
### June Press Release:

<https://newsroom.sunpower.com/2022-06-09-SunPower-Releases-2021-Environmental,-Social,-and-Governance-ESG-Report>



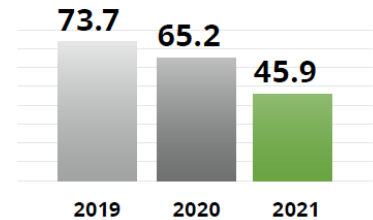
### Greenhouse Gas (GHG) Emissions

Scope 1, 2 and 3 Carbon Footprint  
(Metric Tons of CO<sub>2</sub>e, Thousands)



### GHG Emissions Intensity

Scope 1, 2 and 3 GHG Emissions Relative to Megawatt Deployed  
(Metric Tons of CO<sub>2</sub>e / Megawatt Deployed)





# SunPower to Reduce Carbon Emissions of Logistics, Freight and Vehicles

## Initiatives underway to decarbonize supply chain (end-to-end) by 2030

### Electric Fleet and Green Logistics

SunPower's commitment to sustainability and reduced carbon emissions includes its logistics, freight network and vehicle fleet. The company supports the requirements of the Environmental Protection Agency's SmartWay Shipper program and became a SmartWay Transport Partner in December of 2021. SunPower is actively seeking cost-effective and environmentally efficient freight transportation to reduce our freight carbon footprint and is also introducing green fleet technologies and EPA SmartWay carriers into our network.

SunPower's freight and distribution strategies are managed in collaboration with logistics company Kuehne+Nagel and Dependable Highway Express (DHE), a trucking transportation company. In the fall of 2020, DHE became one of the first fleet operators in North America to deploy Volvo VNR Electric trucks. DHE now uses a fleet of electric Volvo trucks to run warehouse distribution routes for SunPower from its facility in Ontario, California. SunPower plans to use additional Volvo VNR Electric trucks to transport solar products directly to its customers' homes throughout Southern California. Among the company's environmental targets is conversion of at least 90% of its U.S. fleet of vehicles to electric or hybrid vehicles by 2030.



**Derek Kuzak**  
Executive Vice President,  
Operations



**As a renewable energy company on a mission to change the way our world is powered, we can't ignore the energy needed to deliver solar and storage to customers' homes. By electrifying our vehicle fleet and reducing the use of fossil fuels in our supply chain, we are amplifying the benefits of residential solar power.**

# SunPower Joins SmartWay in 2021

## Way 4 Participation opens the doors to the greatest resources

### Benefits of Becoming a SmartWay Shipper

1. Provides a comprehensive and well-recognized system for tracking, documenting and sharing information about fuel use and freight emissions across supply chains
2. Helps companies identify and select more efficient freight carriers, transport modes, equipment, and operational strategies to improve supply chain sustainability and lower costs from goods movement
3. Supports global energy security and offsets environmental risk for companies and countries
4. Reduces freight transportation-related emissions by accelerating the use of advanced fuel-saving technologies
5. Supported by major transportation industry associations, environmental groups, state and local governments, international agencies, and the corporate community
6. Exhibit Leadership and Manage Risk





[www.epa.gov/smartway](http://www.epa.gov/smartway)  
[Smartway\\_transport@epa.gov](mailto:Smartway_transport@epa.gov)

**SmartWay Helpline**  
**(734) 214-4767**