EPA's Clean Diesel Programs

The SmartWay Transport Partnership, National Clean Diesel Campaign, Ports Initiative, and Midwest Clean Diesel Initiative



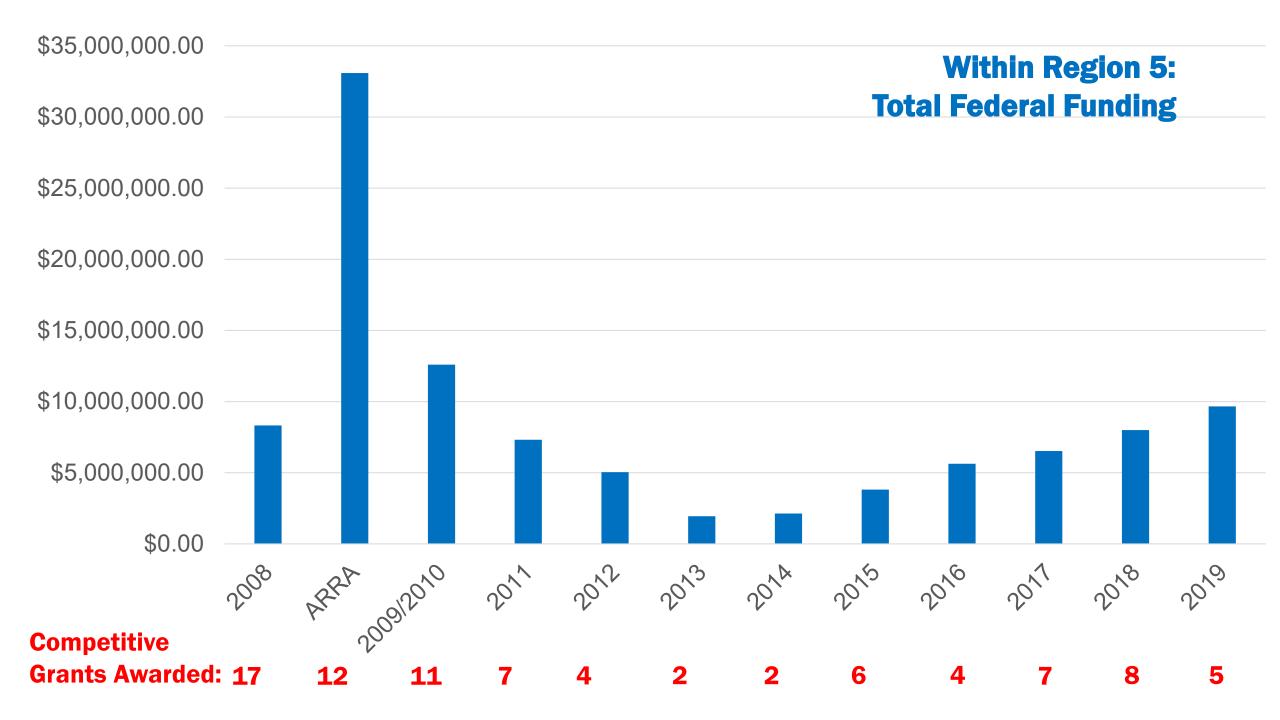


- Why clean diesel programs?
 - Transportation-related pollutants and their impacts
- How EPA can help
 - National Clean Diesel Campaign, Midwest Clean Diesel Initiative, Ports Initiative
- What you can do
 - EPA's SmartWay Transport Partnership

Diesel Emissions Reduction Act (DERA)

- Provides funding, on a competitive basis, to eligible entities, to achieve significant reductions in diesel emissions in terms of pollution produced and diesel emissions exposure, particularly from fleets operating in areas designated by the Administrator as poor air quality areas
- Funds projects using an EPA or CARBcertified engine configuration or a verified technology (aka retrofit)





DERA Funding Still Increasing

Funding Year	R5 Competitive \$	Awarded Grants
2019	\$5,135,800	5
2020	\$7,249,896	9
2021	\$7,669,083	8

Regulatory Approaches

- Criteria Pollutant Regulations (PM and Ozone)
- Fuel Regulations
- Engine Standards



Voluntary Approaches:

 Midwest Clean Diesel Initiative (MCDI) National Clean Diesel Campaign (NCDC): administer Diesel Emission Reduction Act (DERA) funds

The Midwest Clean Diesel Initiative: History

EPA Region 5's clean diesel coalition, a part of EPA's National Clean Diesel Campaign

A public-private partnership formed in 2004 with a goal to address 1 million 'legacy' diesel engines by 2010 (we did!)

MCDI Steering Committee: State Coalition-based structure, meet yearly (next meeting Nov. 2-4, 2021 [virtual])

Midwest Clean Diesel Initiative

www.epa.gov/midwestcleandiese

The Midwest Clean Diesel Initiative: History

(continued)

Communication tools:

- www.epa.gov/midwestcleandiesel
- Monthly Steering Committee Calls
 - Members then provide info to their partners/networks
- Webinars
 - Invites come from Tony via Steering Committee members
- Frank Acevedo and I present information and help promote programs at partners' meetings/conferences



www.epa.gov/midwestcleandiese

What We Will Do Together In 2022

Continue our Focus on Ports and Goods Movement

- Vehicles, equipment, and vessels that operate at and serve ports, and the nodes that are connected to them
- Goods movement centers of activity in priority areas, including:
 - Rail yards
 - Distribution centers
 - Intermodal Facilities

Continue to Reduce Diesel Emissions In Urban Areas and Areas of High Diesel Activity Near Adversely-Affected Populations

- Transit, local/public services and utilities, construction, school buses, etc
- Increased focus on community-level view of project areas, not just the county itself
- Increased focus on community interaction throughout the process

Continue to Utilize All Available Funding for Clean Diesel Projects

- EPA, CMAQ, VW, DOE, SEP, other alphabetical and non-alphabetical sources

EPA's Ports Initiative



Funding

Helping Ports Capitalize on Funding for Clean Technologies Technical Resources

Providing Tools to Help Identify Smart Infrastructure Investments

Collaboration

Coordination

Promoting Port Community Collaboration for Effective Planning

Increasing Efficiency in Federal Government and Port Operations



Communications

Creating a Knowledge Clearinghouse

Promoting clean air best practices at ports



Creating a Knowledge Clearinghouse

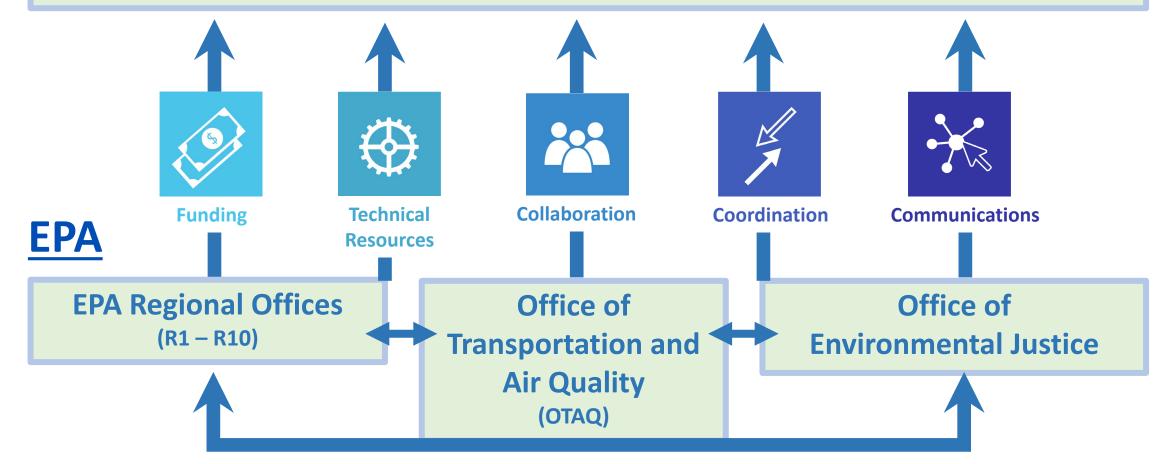
Through EPA tools and assistance in the five program areas, we aim to accelerate adoption of:

- Cleaner technologies and other strategies
- Clean air planning practices (emissions inventories, clean air plans, community engagement) that inform strategic clean air investments

External Stakeholders

- Port industry
- Local/state/federal agencies

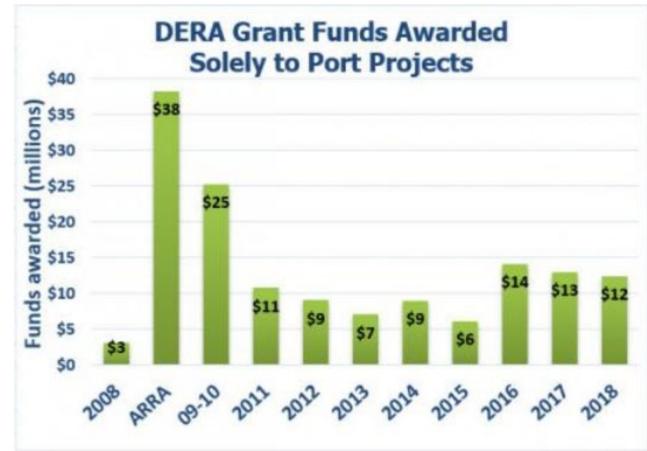
- Community groups
- Environmental NGOs
- And more!



Helping ports capitalize on funding for clean technologies



- DERA
 - Priority for port and other goods movement projects.
 - Extra points for inventories, clean air plans, community engagement.
 - DOT funding programs now includes similar criteria
- EPA Regional staff helping to make connections to other funding sources.

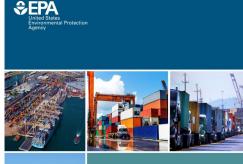


• Searchable table of local, state, federal, and other funding opportunities on our website:

www.epa.gov/ports-initiative/funding-opportunities-ports-and-near-port-communities

Providing tools to help identify smart infrastructure investments





NATIONAL PORT STRATEGY ASSESSMENT: Reducing Air Pollution and Greenhouse Gases at U.S. Ports



National Port Strategy Assessment: Reducing Air Pollution and Greenhouse Gases at U.S. Ports September 2016

www.epa.gov/ports-initiative/national-portstrategy-assessment-reducing-air-pollutionand-greenhouse-gases-us Shore Power Technology Assessment at U.S. Ports





Shore Power Technology Assessment at U.S. Ports*

April 2017 www.epa.gov/ports-initiative/shore-powertechnology-assessment-us-ports

*Update planned for later this year

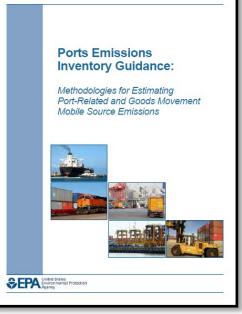
EPA AND PORT EVERGLADES PARTNERSHIP: Emission Inventories and Reduction Strategies



Office of Transportation Air Quality EPA-420-R-18-013 June 2018

EPA, Port Everglades Report Shines Light on New Methods for Analyzing Potential Air Pollution Reductions June 2018

www.epa.gov/ports-initiative/epa-and-porteverglades-partnership-emission-inventoriesand-reduction-strategies



Port Emissions Inventory Guidance: Methodologies for Estimating Port-Related and Goods Movement Mobile Source Emissions, September 2020 https://www.epa.gov/ports-initiative/port-

New: Port Operational Strategy Fact Sheets

- Port Gate Management Strategies
- Management Information Systems
- Marine Vessel Speed Reduction
- Virtual Vessel Arrival Systems



Office of Transportation and Air Quality EPA-420-F-21-008 March 2021

Technical

Resources

Port Operational Strategies: Vessel Speed Reduction

This fact sheet is one of a series of documents produced by the EPA Ports Initiative to inform port stakeholders about potential emission reduction strategies.¹ Each fact sheet contains basic information about the strategy, emission impacts, cost components, and example programs. While each strategy can achieve benefits on its own, implementing them together could create synergies.²

Strategy Summary

Description: Vessel speed reduction (VSR) consists of establishing a zone around a port within which vessels operate at or below a defined speed—typically less than normal cruise speed. This reduces propulsion engine emissions and fuel consumption, decreasing pollution in and around the port. Ports such as Los Angeles, San Diego (Figure 1), and New York/New Jersey have established VSR zones ranging from 20 to 40 nautical miles, with typical speed limits between 10 and 15 knots.



Figure 1. Port of San Diego VSR Zone³

https://www.epa.gov/ports-initiative/technical-resources-ports#operational

Promoting community-port collaboration for effective planning





Port of Savannah Tour



Collaboration Training

- Tools and training:
 - Ports Primer for Communities
 - Community Action Roadmap
 - EJ Primer for Ports, including Good Neighbor Roadmap
- Case studies on pilot projects in Providence (R1), Savannah (R4), New Orleans (R6), Seattle (R10)
- Regional staff convening stakeholders, supporting use of above EPA resources at ports and railyards across the country.

• **New**: FY21 EJ Small Grants RFA emphasis on Ports Initiative projects

www.epa.gov/community-port-collaboration

Creating a Knowledge Clearinghouse

Communications

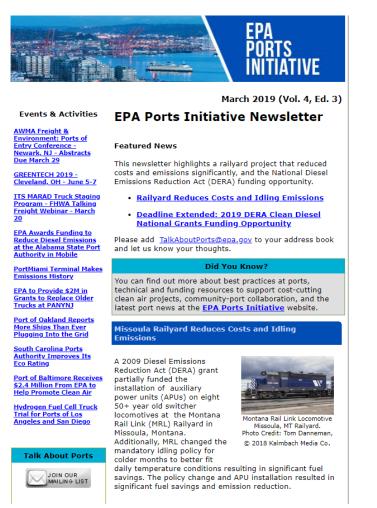
Headquarters and Regions developing web resources, hosting public events, and engaging stakeholders to promote clean air projects.

Examples:

- Updated website, enhancements ongoing *new resources highlighted on following slides.*
- Real-world examples/snapshots.
- Regular e-newsletters.

www.epa.gov/ports-initiative





Best Practices Web Area Update



- Best clean air practices generally and for each mobile source sector:
 - Port-wide planning
 - Linking to interactive map
 - Drayage Trucks
 - Rail Facilities
 - Ocean Going Vessels
 - Coming soon:
 - Cargo Handling Equipment
 - Harbor Craft
- Information:
 - Overview of practice
 - Technical resources
 - Tips on performance targets and data collection
 - Real world examples





Interactive Map Highlighting Clean Air Practices at Ports



Clean Air Practices at Ports

This <u>EPA Ports Initiative</u> tool brings together real-world examples of emissions reduction activities as well as key practices highlighted in the <u>Best Port-Wide Planning Practices to Improve Air Quality</u> webpage. These data were gathered from a review of public websites and EPA's <u>Diesel Emissions Reduction Act (DERA) grant funding</u> for the ports featured in the Bureau of Transportation Statistics' Port Performance Freight Statistics: Annual Report to Congress from <u>2018</u> and <u>2019</u>. To see examples of where each practice is in place, select a button below the map. To learn details about a specific port's practices, select a port on the map and then click on the "Go to Port Profile" button. Questions or comments? Contact us at <u>talkaboutports@epa.gov</u>.



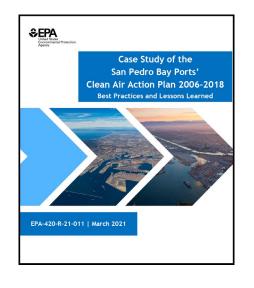
www.epa.gov/ports-initiative/best-port-wide-planning-practices-improve-air-quality



Case Study of San Pedro Bay Ports Clean Air Action Plan (CAAP)



- Highlighting aspects of the Ports of Los Angeles and Long Beach plan that can inform other port authorities and near-port communities across the country.
- Includes summary of 2006-2018 CAAP's background and history, and three focused discussions:
 - Environmental justice and levers of community influence
 - Technologies and practices for development and deployment
 - The 2017 Clean Truck Program
- Report and fact sheets: <u>www.epa.gov/ports-initiative/san-pedro-bay-ports-clean-air-action-plan-best-practices-and-lessons-learned</u>





Case Study: Air Pollution Reductions for the NY/NJ Harbor Deepening Project



- Federal, state, and local coordination to offset emissions over the life of the New York/New Jersey Harbor Deepening Project.
 - Regional Air Team formed before ground was broken.
 - Project emissions were offset by upgrading old engines on ferries and tugboats.
 - Proper tracking, analysis, and mitigation ensured project complied with Clean Air Act and provided lasting clean air benefits.
- Lessons learned:
 - Build in flexibility to accommodate changes to project schedules and vessel activity.
 - High level of coordination is key to success.
 - Technical work is critical to identify most cost-effective emissions reduction strategies.



www.epa.gov/ports-initiative/new-york-new-jersey-harbor-deepening-project-combines-infrastructure-improvements

Federal Government Justice40 Initiative

- Executive Order 14008 created government-wide Justice40 Initiative with goal of delivering 40% of overall benefits from federal investments in climate and clean energy to disadvantaged communities.
- Interim Guidance directs federal agencies to:
 - Develop a plan to engage with communities and other stakeholders
 - Identify benefits of programs
 - Propose methods to calculate and report on program benefits for disadvantaged communities
- DERA/Ports Initiative is one of six pilot programs at EPA.
- More information on Justice40 at EPA: <u>https://www.epa.gov/system/files/documents/2021-</u> 09/slides-epa-natl-ej-engagement-call-aug-31_0.pdf
- Interim Guidance: https://www.whitehouse.gov/wp-content/uploads/2021/07/M-21-28.pdf

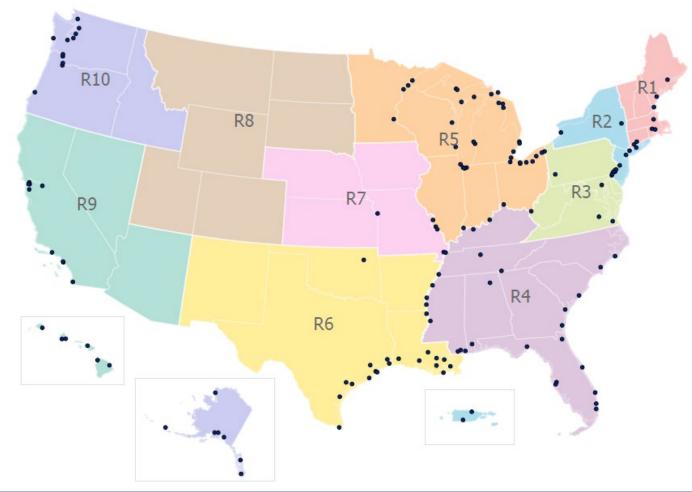
Justice40 – We Want Your Input!

- EPA is seeking input on ways we can maximize benefits from the **DERA and Ports Initiative programs** in disadvantaged communities, including:
 - How should EPA determine benefits to a particular community for mobile source projects when vehicles travel between communities?
 - Are disadvantaged communities aware of DERA funding and its potential to help communities, and if not, how can EPA reach more communities and support them in partnering with eligible DERA applicants?
 - Are there additional ways EPA can help encourage meaningful community engagement and diesel emissions reductions in disadvantaged communities – both as part of DERA projects, and beyond the life of DERA projects (e.g. additional outreach, technical assistance, training, or other information resources)?

Keep in touch



Army Corps "Principal Ports" and EPA Regions



Sarah Froman

Ports Initiative Team Lead EPA Office of Transportation and Air Quality 202-343-9652 <u>froman.sarah@epa.gov</u>

EPA's SmartWay Transport Partnership



What is SmartWay?

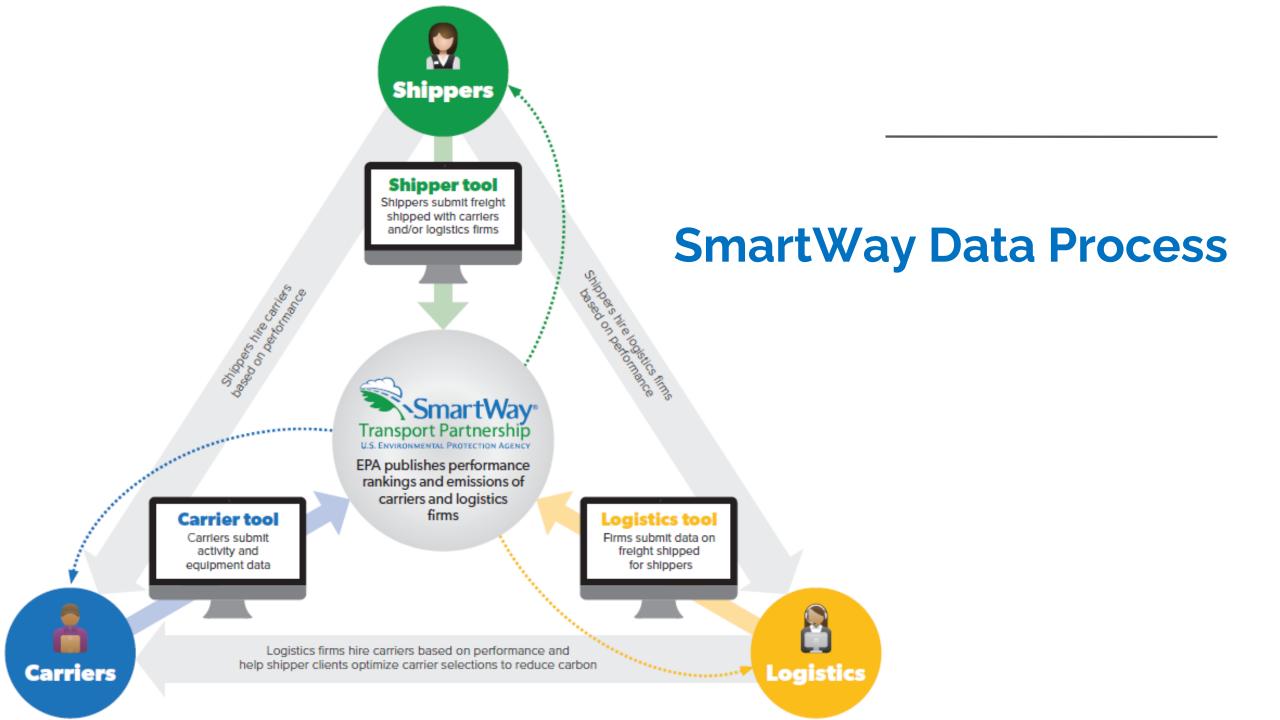
- Launched by freight industry leaders in 2004 as a voluntary, win-win, market-based program aiming to:
 - Improve U.S. freight efficiency
 - Highlight the freight industry's efforts to reduce emissions
 - Reduce dependence on foreign oil
 - Provide a standardized benchmarking and reporting system
 - Clean America's air

Why Freight Matters

Soods and materials moved via truck, rail, water, and air are core to businesses and communities across America

- \$51.8 billion of goods shipped daily; \$18.9 trillion annually
- 18.6 billion tons annually
- 56.9 tons per capita
- Logistics contributes to U.S. jobs livelihoods
 - 13 M U.S. jobs related to freight
 - 8% of U.S. GDP (\$1.6 trillion)





What Data Do I Need

To participate in SmartWay, **carriers** need to gather the following essential information to complete the Carrier Tool:

Actual activity data for each fleet using one of the following data sets:

- Total fuel used
- Ton-miles and miles
- Ton-miles and average payload
- Total miles and average payload
- Description of data sources used to compile the activity data



What Data Do I Need

To participate in SmartWay, **shippers** need to gather the following essential information to complete the Shipper Tool:

Actual activity data for each carrier using one of the following data sets:

- Ton-miles and miles
- Ton-miles and average payload
- Total miles and average payload
- Description of data sources used to compile the activity data



Public Carrier Performance Data

	B Truck Car	C		E Barge Ca	F Carrier Data	G Vear: 2018	H Bail Carr	rier Data	J Vear: 20	K 18- N	L	M Al Carrier	N Data V	0	P 7: Logi	Q stics Ca	R R	s a Year: 2	7017	
	Truck Car					Tear: 2018	s; Rall Car	rier Data	a Year: 201	18; N	unimoda	arcamer	er Data r	ear: 201	7; Logi	SUCS Ca	mer Data		2017;	
Performance Rankings		TL/Dry	van																	
Click down arrows 💌 to filter data by column catego	ries. Select o	one or more it	ems in the	dropdown	checklists.														-	
Note: g/m=grams/mile and g/tm=g/ton-mile										Per	forman	ice Ran	nking	s and	Emissi	on Fa	ctors			
										Grams	per Mile			Grams per Ton-mile						
		SmartWay	-		_	-	-	g/m		g/m				g/tm		g/tm				
		Ranking	Fleet				Canadian	C02		NOx	g/m	g/m PM		CO2	g/tm	NOx		g/tm PM		
Carrier Fleet Name	Mode	Category *	Туре 🐣	SCAC 🔻	MCN 🚩	US DO 🝸	NSC 💌	Rank 👻	CO2 👻	Rank 👻	NOx 🔻	Rank 👻 g	/m F 👻	Rank 🔻	CO2 🔻	Rank 👻	NOx 🔻	Rank 💌	g/tr	
101 Transport, Inc.	Truck	TL/Dry Van	For-Hire	OZOT	625894	1705392	N/A	4	1675	5	5.3	5	0.042	3	86.5	5	0.31		0.	
1527530 Ontario Inc./M&M Carriers	Truck	TL/Dry Van	For-Hire	MNMR	N/A	1159500	142970520	2	1495	5	5.3	5	0.042	2	79.5	4	0.25	5	0.	
1541335 Ontario Inc./Road Link Xpress	Truck	TL/Dry Van	For-Hire	ROAD	442882	1063823	143440740	5	1765	4	4.3	5	0.042		100.5	4	0.25	5	0.	
1542300 Ontario Inc. dba ASR Transportation Inc.	Truck	TL/Dry Van	For-Hire	OFTT	442369	1057019	N/A	1	1405	2	2.3	2	0.018	1	72.5	2	0.13	2	0.	
1628939 Ontario Ltd. o/a P&D Freightlines	Truck	TL/Dry Van	For-Hire	PDGH	521737	1360591	N/A	4	1675	2	2.3	2	0.018	5	100.5	2	0.13		0.	
1st Express Inc.	Truck	TL/Dry Van			181440	284589	N/A	2	1495		3.3	5	0.042	2	79.5	3	0.19	5	0	
2119118 Ontario Inc. DBA Triple G Trucking	Truck	TL/Dry Van	For-Hire	ТРКВ	957820	2859549	N/A	3	1585	5	5.3	5	0.042	2	79.5	4	0.25		0	
2210310 Ontario Inc./Dynamic Freight Haulers	Truck	TL/Dry Van	For-Hire	DFHR	691346	1937937	N/A	4	1675	4	4.3	5	0.042	3	86.5	4	0.25	5	0	
2241552 Ontario Inc / Skyway Carrier	Truck	TL/Dry Van	For-Hire	SWYC	N/A	230633	N/A	3	1585	3	3.3	2	0.018	4	93.5	3	0.19	2	0	
2322819 Ontario Inc./Right Service Right Choice	Truck	TL/Dry Van	For-Hire	TTWT	783320	2294033	173-333-054	4	1675	3	3.3	5	0.042		79.5	3	0.19	4	0	
3NT, LLC.	Truck	TL/Dry Van	For-Hire	THLL	716290	2042543	N/A	4	1675	5	5.3	3	0.026	5	100.5	5	0.31	á	0	
5/D Express, Inc.: fdrp	Truck	TL/Dry Van	For-Hire	FDRP	488737	1243083	N/A	5	1765		3.3	4	0.034	5	100.5	4	0.25	4	0	
6233317 Canada Inc. DBA Rockwell Truck Line	Truck	TL/Dry Van			797845	2333669	148783160	1	1405		4.3		0.042	1	72.5	3	0.19		0	
9108-1950 Quebec inc dba Via Trans International		TL/Dry Van		VTIL	471471	1175764	60331659	1	1405		1.3		0.01		72.5		0.07		0	
A & A Delivery LLC	Truck	TL/Dry Van			N/A	3013453	N/A	1	1405		1.3		0.01		100.5		0.19		0	
A&M Transport, LLC: Dry Van Fleet	Truck	TL/Dry Van			217072	344894	N/A	3	1585		3.3		0.034		86.5		0.19		0	
A&R Express Lines, Inc.	Truck	TL/Dry Van			035208	3022746	N/A	5	1765		2.3		0.018		100.5		0.13		0	
A&S Services Group, LLC	Truck	TL/Dry Van				1880751	N/A	5	1495		4.3		0.034		100.5		0.31		0	
A.C. Trucking, Inc.: 12073707	Truck	TL/Dry Van			196190	281881	N/A	4	1675		3.3		0.026		72.5		0.19		0.	
A.D. Transport Express, Inc.	Truck	TL/Dry Van			195625	0269605	N/A	3	1585		3.3		0.018		100.5		0.19		0	
A.N. Webber, Inc.	Truck	TL/Dry Van			147008	76507	N/A	3	1585		3.3		0.018	5	79.5		0.13		0	
A/T Transportation, LLC.	Truck	TL/Dry Van			N/A	1486485	N/A	2	1495		2.3		0.026		93.5		0.13		0	
AC Leasing Company Inc.	Truck	TL/Dry Van			156691	264128	N/A	5	1495		4.3		0.028		72.5		0.13		0	
ACE Leasing company inc. ACS Logistics Transportation Inc.	Truck	TL/Dry Van			548067		129295853	5	1765		4.3		0.042		93.5		0.19		o	
					479749	1204798	129295855 N/A	2	1/65		1.3		0.042		93.5		0.25		0	
AGM Transport Inc	Truck	TL/Dry Van			642324	1755933	N/A N/A	4	1405		5.3		0.026		93.5	_	0.07			
AGX Freight Carriers, LLC	Truck	TL/Dry Van				2348464	N/A N/A	1	16/5		2.3		0.042	4			0.31		0	
ALB Express Inc.	Truck	TL/Dry Van			803750		N/A N/A	2	1/65				0.018		86.5		0.07	4	0	
ALTL Inc	Truck	TL/Dry Van			154127	169025	N/A 61668976	1	1495		1.3		0.018		79.5 79.5		0.07		0	
AM International (TFI 11, S.E.C.): AM International	Truck	TL/Dry Van			488546			5			2.3		0.018						0	
AMC Express, Inc.	Truck	TL/Dry Van			789656	2313051	N/A	3	1765	5	5.3				86.5		0.31		0	
ARD Express Inc.	Truck	TL/Dry Van			588686	1590621	N/A	3	1585	5	5.3		0.042	3	86.5		0.31		0	
ASL Transportation Group, Inc.	Truck	TL/Dry Van			644828	1764745	N/A	2	1495		2.3		0.018		79.5		0.13		0	
AT & R Transport	Truck	TL/Dry Van		AYAE	830510		N/A	1	1405		4.3		0.026		72.5		0.19		0	
ATS 1, Inc.	Truck	TL/Dry Van			767159	2210783	N/A	3	1585		1.3		0.018		100.5		0.19	4	0.	
ATC INC	Taxata	TUDANIA	Free Line	100014	Sacoac	Feacada	A1/A	14	1405	- a	<u>-</u>	1	0.01	<u>.</u>	70.5	1 4	0.07	•	-	

What is a SmartWay Affiliate?

- While organizations that ship, carry or manage freight can become SmartWay Partners, organizations that do not control freight can still participate in SmartWay as SmartWay Affiliates.
- SmartWay Affiliates are organizations that agree to educate and support their members' efforts to improve freight sustainability.

What does SmartWay have to offer?

Senchmarking tools

Data that can be used for reporting
Technical guidance, webinars, reports
Expert assistance from PAMs & staff
Action Plan and Goal Setting guidance
Leadership guidance



Partner Results

- Since 2004, the number of companies that rely upon SmartWay has grown from 15 to over 3,700
- SmartWay Partners have saved over \$41 billion in fuel costs and reduced harmful air pollutants by
 - 133 million tons of CO2
 - 2.6 million tons of NOx
 - 109,000 tons of PM
- SmartWay Partner energy savings are equivalent to 312 million barrels of oil OR eliminating annu energy use in 18 million homes

"EPA's SmartWay Transport Partnership is an example of how the trucking industry can work in a way that improves the environmental sustainability of the global supply chain." - Chris Spear, President and CEO,

American Trucking Associations



EPA's Clean Diesel Programs





EPA's SmartWay Transport Partnership

http://www.epa.gov/smartway

Midwest Clean Diesel Initiative

http://www.epa.gov/midwestcleandiesel

EPA Ports Initiative

http://www.epa.gov/ports-initiative

National Clean Diesel Campaign

http://www.epa.gov/dera

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