AMERICA'S MOST MODDERN GATEVAL 2024 SUSTAINABILITY REPORT





MESSAGE FROM OUR **CHIEF EXECUTIVE OFFICER**

At America's Most Modern Gateway, we are focused on delivering firstclass operations, strategic advantages, and resilience for our customers and partners. Central to this commitment is our focus on sustainability, which is deeply embedded in both our long-term strategy and day-to-day operations.

In 2024, we achieved several significant milestones that reflect the depth of our dedication and our vision for a resilient, efficient, and sustainable supply chain. This year, we handled more than 3.5 million TEUs and did so while powering all our terminals with 100 percent clean energy. We are equally proud to announce a 75 percent overall reduction in total carbon emissions, compared with our 2017 baseline. These accomplishments are the result of years of strategic investments and a focused effort to reach Net-Zero emissions by 2040.

Compared with our 2017 baseline, our progress includes:

- 45% reduction in fuel usage • 75% reduction in overall carbon emissions

These achievements are driven by our ongoing investment in operational efficiency, modern infrastructure, and the replacement of legacy equipment. As a result, we are strengthening our position as a global gateway capable of handling the world's largest vessels—while also helping our customers reduce their environmental impact.

At The Port of Virginia, we don't just respond to the future of trade—we shape it. Sustainability is embedded into the blueprint of our operations and the foundation of the supply chain we are building. Together with our partners, we're advancing real, scalable solutions that benefit both business and the environment.

Sincerely,

STEPHEN A. EDWARDS CEO AND EXECUTIVE DIRECTOR, THE PORT OF VIRGINIA

- 100% clean energy operations across all terminals

BY THE NUMBERS

THE LOWEST CARBON EMISSIONS PER TEU ON THE U.S. EAST COAST

Even as our cargo volumes have increased since 2017, our fuel use and carbon emissions have both decreased as a result of our dedication to integrating electric equipment and assets¹.



THE EAST COAST'S LARGEST FLEET OF ELECTRIC AND HYBRID EQUIPMENT



INDUSTRY-LEADING PERFORMANCE IN 2024



1 - All data compared to our 2017 baseline.

2 - Fuel includes diesel and gasoline

3 - Carbon dioxide equivalent (CO2e): the number of metric tons of CO2 emissions with the same global warming potential as one metric ton of another green house gas (U.S. Environmental Protection Agency)

- 4 Turn time denotes the time it takes a truck to enter our gate, pick up cargo, and exit our gate.
- 5 Rail ready dwell denotes the time needed to move cargo from vessel to a train for transport.

6 - Crane moves per hour is defined as the average number of containers our cranes can move in one hour.

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exit our gate. r transport. can move in one hour



SUSTAINABILITY IN ACTION **NET-ZERO BY 2040**

The Port of Virginia has challenged convention by integrating new technology and alternative energy solutions into operations, resulting in a 75 percent reduction in total carbon emissions from our 2017 baseline.

NET-ZERO BY 2040 PROGRESS



Scope 1

Shown as total carbon emissions (CO2e) from fuel, are exhaust emissions from the equipment we use.



Scope 2

Shown as total carbon emissions (CO2e) from electricity, are the emissions generated from the electricity used to power and charge electric equipment and operate port buildings.

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AMERICA'S MOST MODERN GATEWAY

SUSTAINABILITY INSIDE OUR GATES

Being America's Most Modern Gateway means The Port of Virginia is more than a traditional port or terminal network. We are your gateway to any market, powered by world-class operations and continuous investments that set the standard for sustainable operations.

Scope 1: Carbon Emissions

Carbon Emissions from Operations

Scope 1 emissions are directly controlled by our port since we own and operate the equipment. The Port of Virginia has identified diesel and gas-powered equipment used in cargo operations as the primary sources of these emissions. In 2024, we continued to replace traditional terminal equipment with cleaner, more efficient alternatives.

Stacking Up Sustainability

The Port of Virginia utilizes semi-automated stacking cranes (ASCs) to efficiently manage container stacks with precision and speed. These cranes continuously reposition import containers for faster pick-up by motor carriers and move export containers closer to the berth in preparation for vessel loading. This strategic investment helped replace 122 diesel powered pieces of equipment with clean-running electric models. The result has been 1M gallons of diesel fuel saved.

SEMI-AUTOMATED STACKING CRANES (ASC) TIMELINE



PHOTO OF EQUIPMENT	EQUIPMENT NAME & FLEET SIZE	DATE(S) OF IMPLEMENTATION
	SEMI-AUTOMATED STACKING CRANES (ASCs) Fleet Size: 134	 VIG: 2018 NIT South: 2019-2020 NIT North: 2024-2027
	HYBRID SHUTTLE TRUCKS Fleet Size: 103	 VIG: 2015-2023 NIT: 2018-2023
	ELECTRIC FORKLIFTS Fleet Size: 16	• VIG: 2024
	ELECTRIC UTILITY TRUCKS (UTR) Fleet Size: 4	• NIT: 2022-2023
	CANTILEVER RAIL-MOUNTED GANTRY CRANES (CRMGs) Fleet Size: 7	VIG: 2018NIT: 2023
	GRUNTS Fleet Size: 12	 VIG: 2019 NIT: 2024 VIP: 2024
The Port of Virginia has reduced overall fuel consum by 75 percent through investments in s		

ELECTRIFYING OUR EQUIPMENT

EQUIPMENT BENEFITS • Programmed to continuously organize container yard for efficiency • Replaced 122 diesel straddle carriers (all 126 will be replaced by 2026) • Asset replacement is estimated to save 1M gallons of diesel per year • Utilized to move containers between STS crane and container yard • Run only on diesel ~40% of the time and the remainder on electric battery power • Replaced 16 diesel shuttle trucks Asset replacement has reduced shuttle truck exhaust by 55% per unit • Utilized to move chassis, warehouse inventory, lumber, aluminum and other miscellaneous cargo • Powered by battery electric • Replaced 16 diesel and propane forklifts • Asset replacement is estimated to save 28k gallons of fuel per year • Utilized to transport containers throughout the terminals • Powered by battery electric • Replaced four diesel utility trucks • Asset replacement is estimated to save 54 gallons of fuel per day · Semi-automated cranes utilized to load rail containers • Replaced diesel reach stackers & diesel rubber tire gantry cranes • Asset replacement is estimated to save 40k gallons of fuel per year • Utilized to transport workers to remove pins from double-stacked rail cars • PPowered by battery electric • Replaced gas-powered pickup trucks for pin remova • Asset replacement is estimated to save 82k gallons of fuel per year

umption by 45 percent and total carbon emissions n sustainable and modern equipment.

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A Look Inside Our Gates Carbon Emissions | Scope



CONTAINER HANDLING EQUIPMENT



CARBON EMISSIONS PER TEU



More than half of the equipment we use to handle our containers is hybrid or electric.

HYBRID SHUTTLE IMPLEMENTATION VS. CO2E TONS PER YEAR



Total carbon emissions from shuttle carrier exhaust have been reduced by 55 percent per unit.

investments in sustainable and efficient technology.

FUEL GALLONS PER TEU



Since 2017, we have decreased the amount of fuel* used per TEU 56 percent and have reduced overall fuel consumption by 45 percent.

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Since 2017, TEUs have increased by 24 percent, and total carbon emissions have been reduced by 75 percent through





Scope 2: Carbon Emissions from Electricity

Scope 2 emissions are indirect CO2e from the electricity we purchase. This includes energy used to charge equipment and to power, heat, and cool our buildings. In 2024, we fully transitioned to be the first major U.S. port powered by 100 percent clean energy through a Power Purchase Agreement with Dominion Energy and a rider with Rappahannock Electric Cooperative – eight years ahead of our original clean energy goal.



Operating on 100% Clean Energy

CURRENT CO2E ELECTRICITY EMISSIONS VS. INITIAL PLAN AND COMMITMENT



Effect of clean energy use on Net-Zero by 2040 progress: Since our transition to 100 percent clean energy, the port has eliminated the majority of scope 2 emissions.











AMERICA'S MOST MODERN GATEWAY SUSTAINABILITY THROUGH OUR GATES

Innovative Solutions

Being a gateway means we look outside our direct operations to support like-minded partners and create sustainable opportunities for supply chains moving through our gateway.



Norfolk Southern & 123 Carbon | **First RailGreen Corridor**

We have collaborated with Norfolk Southern and 123 Carbon to offer RailGreen—a transparent, third-party verified solution that helps shippers reduce emissions associated with their freight rail shipments. Through this innovative program, customers moving goods via the Virginia Inland Port (VIP) in Front Royal can reduce their supply chain's carbon footprint without compromising efficiency.



Barge Service | Reductions to Richmond

In 2024, our barge service to and from Richmond Marine Terminal kept 30,000 trucks off the road, saving more than 3 million truck miles on Virginia's highways.

In 2024, VIP kept more than 21,000 trucks off the road — saving more than 4.6M truck miles on Virginia's highways.

Using Richmond barge results in ~30 percent less oxides of nitrogen and 56 percent less carbon emissions than moving freight by truck.



Green Operator | Opportunities for Truckers

Our longstanding Green Operator (GO) Program has reduced emissions by helping replace more than 400 older model diesel trucks to date, including 25 in 2024. The newly deployed GO-Zero Program is providing funding for at- and near-zero emission trucks. In 2024, the Go-Zero program assisted Givens trucking in Chesapeake, VA in purchasing a near-zero, compressed natural gas truck.

Chesapeake Bay Foundation | Partnering for Impact

Oyster Gardening and Wetlands Plantings Chesapeake Bay.

Clean the Bay Day

Annual Clean the Bay Day attracted over 50 volunteers, who removed over 20 tons of trash and debris from the shores of the Elizabeth River.



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The Port of Virginia planted 500 plugs of black needlerush, 500 plugs of smooth cordgrass, and 50 bushy seaside oxeye, marking the completion of a 158-foot

living shoreline at Bluebird Gap Farm in Hampton, VA to improve the overall health of the



Sustainability through the Gates | Innovative Solutions





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