

NET-ZERO

BY 2040*



2022 ENVIRONMENTAL SUSTAINABILITY REPORT

*Net-Zero for Scope 1 & Scope 2 Emissions

MESSAGE FROM OUR CHIEF EXECUTIVE OFFICER

Last spring, we announced our commitment to become Net-Zero by 2040, and I am pleased to say we are progressing. In short, The Port of Virginia® continues to advance.

We are taking deliberate actions to use clean fuels to move your cargo and power our operations. By 2024, we will be sourcing our electricity from 100 percent clean energy. Creating a carbon-neutral operation requires vision, planning and a long-term commitment. Fortunately, we began this effort years before last spring's Net-Zero announcement and continue to make progress.

More than six years ago, we began electrifying our terminals, replacing aging equipment with greener machines and leveraging emerging technology. Today, from the big ship-to-shore cranes to the forklifts in the shops, more than 50 percent of the equipment we use is electric or hybrid-electric. Additionally, we deployed a pilot of four new all-electric yard tractors at Norfolk International Terminals last December. Testing will inform future decisions regarding our fleet composition.

In addition, we are powering our facilities from clean and sustainable sources. As the availability of power from resources like nuclear, solar and wind becomes more widespread, we will continue to take advantage of this opportunity.

We are proud to announce that we will be the only U.S. East Coast port to fulfill all of our electrical power needs from clean energy sources next year. This includes our inland port as well, which recently began using 100 percent clean power for its operational needs. These are deliberate steps that are part of an even larger program.

We are moving forward with our \$1.4 billion improvement and expansion effort called the Gateway Investment Program. This program includes adding more clean cargo handling equipment and continuing our momentum of building and expanding our modern facilities while incorporating the latest technology.

Our approach includes many traditional investments, but it focuses on efficiency. We see efficiency as our ability to effectively move your goods, using cleaner equipment and technology that is ready for our terminals, all while using cleaner energy.

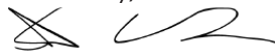
This level of efficiency is where we can provide the most significant benefit for our port users and partners. By deploying cleaner, more efficient equipment, The Port of Virginia will not only be a premier partner in your supply chain but also a partner in lowering your emissions.

Increased productivity, elimination of carbon emissions and decreased operational costs: this is a formula for success. It is the formula we will continue to deploy to build a better port, become an even better neighbor and prepare for the future.

In the following 2022 Environmental Sustainability Report, you will see what we have achieved and where we are headed.

I welcome your feedback and ideas, and appreciate your support.

Sincerely,



Stephen A. Edwards

Port Committed to UN Sustainability Goals 9, 13, and 14



LIFE BELOW WATER

- » Participate in Clean the Bay Day
- » NIT Living Shoreline Project



CLIMATE ACTION

- » Increase use of clean energy
- » Facilitate offshore wind hub development
- » Reduce fossil fuel consumption



INDUSTRY, INNOVATION, AND INFRASTRUCTURE

- » Expand use of alternative technology
- » Pilot eUTR at NIT

TARGET

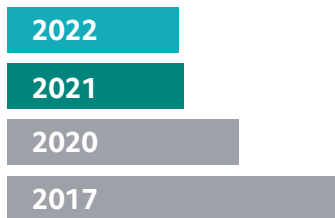
PROGRESS

ACTION

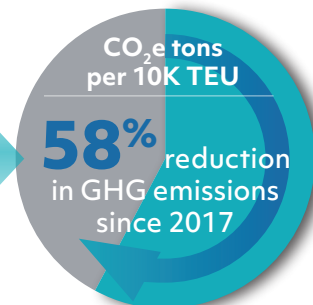
STATUS



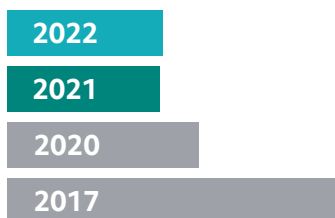
CO₂e tons per 10K TEU



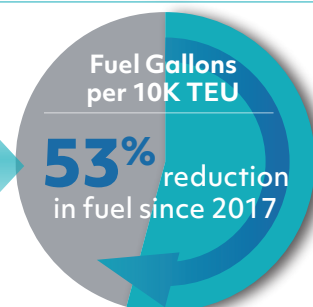
Reduce Scope 1 & 2 GHG emissions



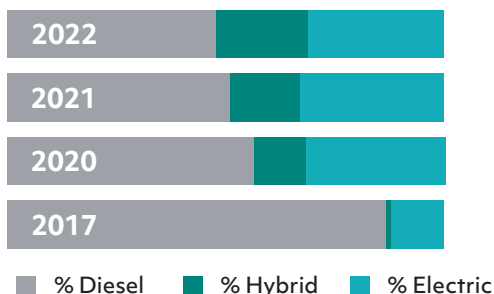
Fuel Gallons per 10K TEU



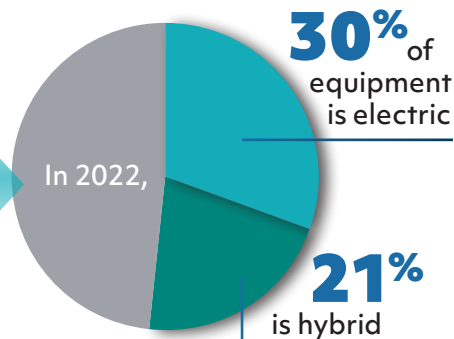
Reduce fuel consumption



Percent Electric Equipment



Evaluate and deploy cleaner technology



Virginia International Gateway Turn-Time



Maintain best-in-class 50 minute Turn-Time

Turn-Time (min)	40.4
Truck Visits	563,908



Norfolk International Terminals Turn-Time

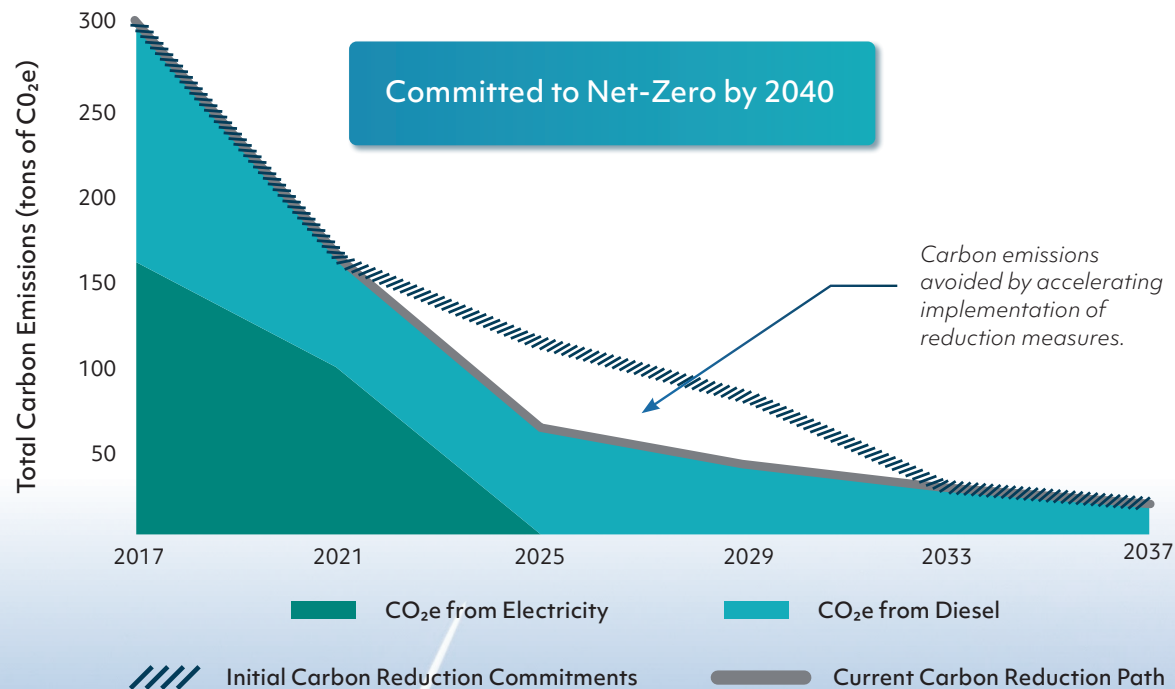


Maintain best-in-class 50 minute Turn-Time

Turn-Time (min)	39.6
Truck Visits	465,770

TEU: Twenty-foot equivalent unit
GHG: Greenhouse gas emissions
CO₂e: Carbon dioxide equivalent

100% Clean Electric



Operating on 69% Clean Energy.

The Port of Virginia has taken deliberate steps to purchase electricity sourced from clean energy. In 2022, we entered into a long-term Power Purchase Agreement with Dominion Energy scaled to meet our growth in Hampton Roads and Richmond and a similar agreement with Rappahannock Energy Cooperative for the Virginia Inland Port.

Currently, 69 percent of our electric consumption is sourced from clean energy. In 2024, this will be 100 percent as Dominion Energy will bring the Bookers Mill solar farm online.

TURN-TIMES



Customer service excellence, combined with our unique 24-hour semi-automated technology that reshuffles containers based on our Pro-Pass truck reservation system, produces turn-times up to 35 minutes lower than the industry average. These turn-times have led to a reduction in truck idling times at our terminals by 160,000 hours annually.

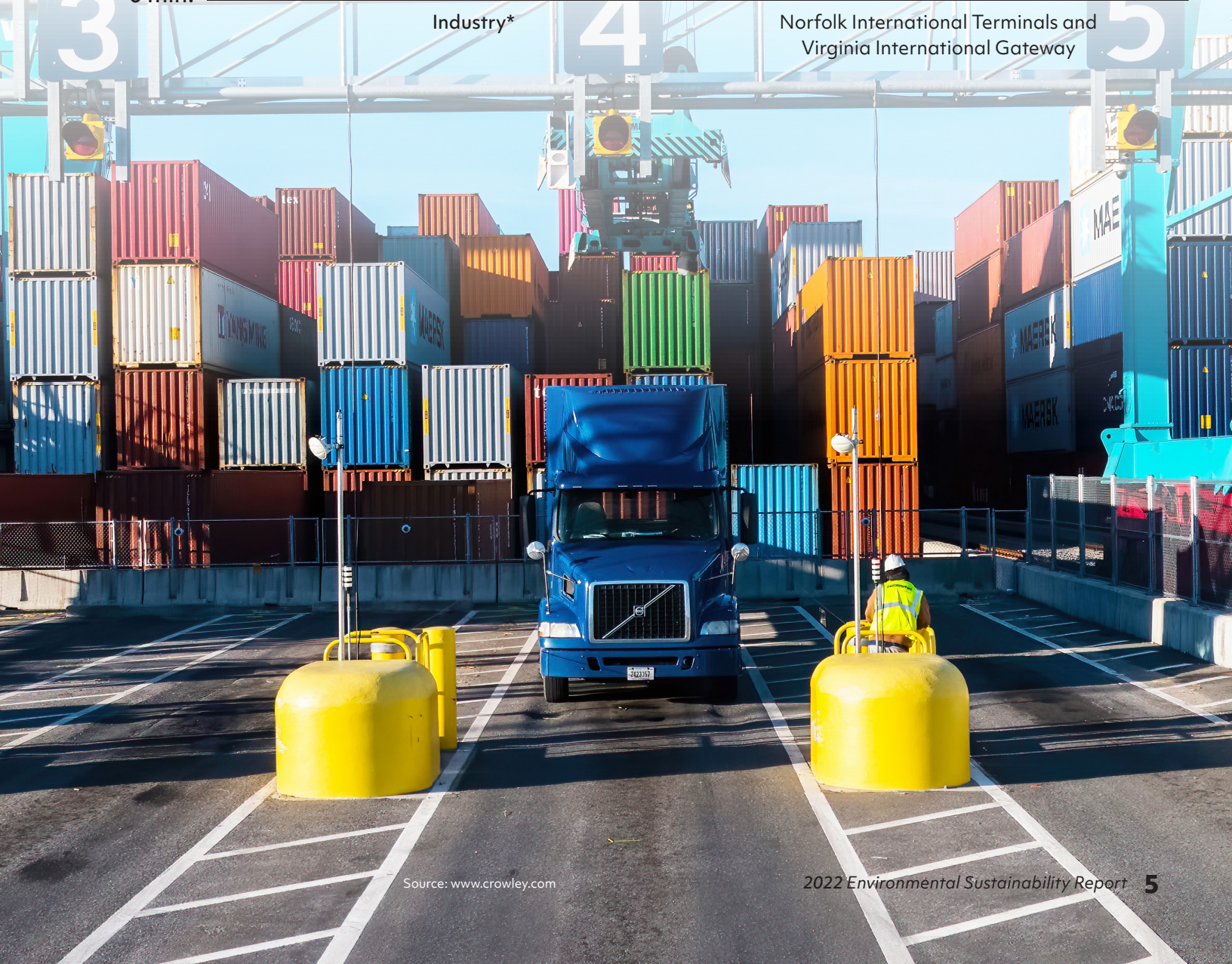
80 min.
70 min.
60 min.
50 min.
40 min.
30 min.
20 min.
10 min.
0 min.

**INDUSTRY AVERAGE:
40-75 MIN.**

**PORT OF VIRGINIA
AVERAGE: 40 MIN.**

Industry*

Norfolk International Terminals and
Virginia International Gateway



HYBRID SHUTTLE CARRIER UPDATE



Since replacing diesel straddle carriers with hybrid shuttle carriers, the port has reduced nitric oxide emissions by 90 percent per unit and saved 50 percent in diesel fuel consumption per unit. This reduction trend will continue through the completion of our hybrid fleet.



ELECTRIC UTILITY TRACTOR RIG (UTR) PILOT



In addition to implementing hybrid equipment, the port deployed the first zero-emission yard tractors in its operations at NIT. These new all-electric yard tractors result in a 100 percent reduction of emissions as containers are moved throughout our terminals.



OFFSHORE WIND HUB



The port is an active partner in expanding clean energy in our region. We are currently facilitating the transformation of the Portsmouth Marine Terminal into a 160-acre offshore wind energy hub to support new offshore wind projects along the US East Coast. Leased by Dominion Energy and Siemens Gamesa, the new hub will act as a staging area and blade finishing facility for the Coastal Virginia Offshore Wind (CVOW) project. CVOW will consist of 176 Wind turbines installed 27 miles off the coast of Virginia and produce 2.6 GW of renewable energy.



NIT LIVING SHORELINE



The Port of Virginia has reached 100 percent design completion for its NIT Living Shoreline Project. The shoreline project will restore 3,600 linear feet of shoreline and include elements of a living shoreline, such as native wetland grasses, oyster reefs and native plantings.



2022 ADDITIONAL SPOTLIGHTS

GREEN OPERATOR (GO) UPDATE

Our longstanding Green Operator Program has reduced emissions by helping replace more than 400 older model diesel trucks to date – 11 in 2022 alone.

CLEAN THE BAY DAY

Our annual “Clean the Bay Day” participation was a success. More than 50 volunteers collected 10,000 pounds of trash along the Elizabeth River.

CLASS 8 TRUCK STUDY

The port has published an electric dray truck study that informs future and current viability for alternatively fueled Class 8 trucks – a class of trucks exceeding 33,000 pounds, i.e. dray truck or tractor trailer. The study included an evaluation of the infrastructure required by Scope 3 partner sites to operate and maintain a reduced or zero-emission fleet of drayage trucks.

SUSTAINABILITY CERTIFICATE

In collaboration with Virginia Wesleyan University this past fall, The Port of Virginia introduced a six-week course on sustainability for our colleagues to help facilitate more profound environmental education and leadership efforts. Our next port course starts summer of 2023.



THE PORT OF VIRGINIA®

CONSTRUCTION UPDATE

Our Central Rail Yard Expansion will double rail capacity at NIT, bringing our total projected rail capacity to 1.9M TEUs, and greatly enhance rail efficiency. Our modern truck reservation systems, technology and optimization projects have already made us the most efficient container port in North America.

BARGES MOVE FREIGHT EFFICIENTLY

Since 2017, the port has increased container moves via barge by 67 percent. Each barge trip saves more than 10,000 truck miles on Virginia's highways. Using barges results in 35 percent fewer oxides of nitrogen and 60 percent fewer CO2 emissions than moving freight by truck. Our barge service conveniently connects terminals in the Norfolk Harbor to inland locations, driving commerce while reducing truck traffic and roadway emissions.

LOOKING FORWARD



The Port of Virginia is working alongside our partners to study Scope 3 emissions and identify Scope 3 priorities. We plan to use this study to explore future Scope 3 partnerships and make additional emissions reductions.



The Port of Virginia will break ground on the North NIT optimization, a \$650 million capital expansion. This project will renovate, expand and modernize the North Berth at NIT, creating capacity for more than 1.4M TEUs. In addition to other technology integration, our legacy diesel yard equipment will be replaced by fully-electric cranes powered solely by clean energy.



In addition to its longstanding Green Operator Program, The Port of Virginia is establishing a new Zero-Emission Green Operator Program to drive the adoption of electric and other alternately-fueled zero, or near zero, emission Class 8 Trucks. Look for more information at www.greenoperator.org.





Net-Zero by 2040. Our goal is to reduce our contribution to global climate change and to protect our ocean and marine resources.





THE PORT OF
VIRGINIA®



www.portofvirginia.com



This document printed in a limited run on recycled paper.