



## Maryland Green Registry MEMBER

The Maryland Green Registry promotes and recognizes sustainable practices at organizations of all types and sizes. Members agree to share at least five environmental practices and one measurable result while striving to continually improve their environmental performance.

# CSX Corporation



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Transportation

Member since October 2009

## Management and Leadership

### Environmental Policy Statement

*CSX is committed to protecting the environment and the safety and health of the public, customers and its employees in all aspects of the company's operations. We strive to minimize impacts on the environment and the communities in which we operate. We work to maximize the business and its positive impacts by delivering the best service to our customers. The company's decisions and actions are guided by the following principles:*

#### *Skilled and Committed Workforce*

- *Conduct operations safely.*
- *Leverage the CSX Environmental Management System to ensure compliance with environmental laws and regulations, internal policies and best-management practices.*
- *Train and empower employees to fulfill environmental responsibilities. Communicate openly with employees, customers and the public regarding the company's environmental programs.*

#### *Fuel Efficiency and Supply Chain Engagement*

- *Improve our environmental footprint by utilizing state-of-the art technology and pollution prevention efforts to reduce energy and fuel consumption and minimize waste through comprehensive recycling and reuse initiatives.*
- *Assist customers in reducing their transportation-related greenhouse gas emissions by promoting highway-to-rail conversions and continually seeking to improve our locomotive fuel efficiency.*

- *Take environmental stewardship beyond CSX by encouraging suppliers to follow environmentally sustainable practices, engaging in public-private partnerships that promote environmental responsibility, and fostering communications with communities and public agencies where we operate.*

#### *Water Management and Conservation*

- *Recognize water availability concerns and manage our water consumption by identifying and implementing water reduction, recycling and reuse measures.*
- *Maintain the quality of our water discharges by applying good operating practices.*

#### *Recognize and Respond*

- *Take immediate action to report and respond to situations that could negatively impact the environment, such as unauthorized dumping, releases or other accidents.*
- *Maintain broad business continuity plans and site-specific operating plans to maximize responsiveness to events that could include those resulting from extreme weather or shifting populations.*

#### *Explore and Protect*

- *Explore, test and implement the use of alternative energy sources and energy efficiency opportunities.*
- *Protect local biodiversity and habitats while managing properties, constructing new facilities and managing remediation projects.*
- *Continue to improve environmental performance by setting and reviewing targets and goals that protect people and the environment using sound business practices.*

### **CSX Sustainability Statement**

*At CSX, sustainability is the way we manage and operate our business to best serve our customers, care for the environment, secure profits and drive long-term prosperity. Sustainability is a business method that ensures safety, efficiency and responsibility in a manner that protects CSX employees, communities, shareholders and the environment, now and in the future. Our daily operations align business performance with a commitment to environmental, social and community stewardship encompassing three elements:*

- *Reduce the environmental footprint of our operations.*
- *Transport goods in a manner that minimizes community and environmental impacts.*

- *Reduce fuel, energy, water and other resources needed to move each ton-mile of freight.*
- *Increase recycling and reuse efforts through waste minimization.*
- *Strive to manage the CSX supply chain in consideration of environmental effects and good governance.*

*Engage openly on sustainability issues.*

- *Communicate regularly with customers, employees and external stakeholders on sustainability issues, goals and efforts.*
- *Provide opportunities to customers, suppliers, employees and communities to actively participate in sustainability programs.*
- *Increase transparency and disclosure of our sustainability performance through our annual Corporate Social Responsibility report and related sustainability disclosures.*

*Support sustainable development.*

- *Collaborate with customers and communities to grow sustainably, considering social, economic and environmental effects.*
- *Build innovative infrastructure to support operations and minimize resource use.*

*To learn more about CSX's environmental programs and policies, please visit: <http://corporate-social-responsibility.csx.com/>*



### **Environmental Team**

*CSX has an Environmental Management System (EMS) that serves as the cornerstone for the company's successful management of its environmental programs and performance. It consists of three primary environmental components: requirements, actions and verifications. In addition to its compliance efforts, CSX has a team in place to drive and coordinate the company's sustainability efforts. These sustainability initiatives reduce the company's environmental impact and improve the efficiency of its business.*

*To learn more about CSX's environmental management initiatives, please visit: <http://corporate-social-responsibility.csx.com/>*



### **Annual Environmental Goals**

*By reducing energy use and fuel consumption, we also reduce greenhouse gases (GHG) and other emissions. CSX consumed less energy in 2012 compared to 2011 which also resulted in a lower level of GHG emissions. We are committed to reducing our GHG emission intensity between 6 and 8 percent below 2011 levels*

by 2020. CSX has set a target to increase the mix of renewably sourced electricity from 6 percent to 8 percent by 2020.

*Managing materials use and ensuring proper disposal of waste represent other key areas of environmental focus. During 2012, we set new, aggressive hazardous waste reduction goals through 2020. Part of this effort includes identifying creative ways to recycle and reuse these materials. At the beginning of 2012, CSX set a goal to reduce hazardous waste generated through ongoing operations by 5 percent by year end. In 2012, we reduced hazardous waste by 7 percent compared with 2011 performance. We have set a goal to increase recycling and reuse of crossties from 95 to 99 percent by 2015. We also have a goal to reduce the hazardous waste generator status of 25 percent of our facilities by 2020.*



### **Environmentally Preferable Products and Services**

*As companies begin to look at the environmental impact of their supply chains, particularly related to product transport, CSX anticipates growth in freight rail. A typical CSX freight train is approximately four times more fuel efficient than highway freight transportation and can carry the cargo load of 280 trucks. As a result of this efficiency, CSX enables our customers to reduce transport-related GHG emissions. This equates to a nearly 75 percent reduction in GHG emissions when shippers switch from truck to rail. This has the same environmental impact as taking 1 million passenger vehicles off the road. These actions help CSX customers realize efficiencies in product environmental footprints. Rail also provides significant cost efficiencies relative to truck transport.*

*In Maryland, CSX operates and maintains approximately 1,400 miles of track; handled nearly 380,000 carloads of freight during 2012; employs approximately 1,700 people with nearly \$124 million in annual compensation and benefits for current and former employees; and invested nearly \$69 million in the network in Maryland in 2012. CSX carries a variety of commodities important to our economy and way of life, including consumer products, automobiles, food and agriculture products, coal and chemicals. Products shipped in Maryland include containerized consumer goods, passenger vehicles, aggregates and municipal waste.*

*CSX facilities in Maryland include major rail yards in Baltimore, Cumberland, and Brunswick; CSX Intermodal terminal in Baltimore; TRANSFLO terminals in Baltimore and Hagerstown; Automotive distribution center in Jessup; and division headquarters in Baltimore.*

To help inform its customers of the most environmentally-friendly way to move goods, CSX has developed an online Carbon Calculator that calculates the carbon dioxide (CO<sub>2</sub>) emissions savings of specific rail shipments, providing comparative data among transportation choices. Visit CSX's Carbon Calculator: <http://www.csx.com/index.cfm/responsibility/carbon-calculator-v2e/>

### **Passenger and Commuter Rail Operations**

- *MARC operates 38 commuter trains per day on CSX tracks through Maryland.*

### **National Gateway**

- *The National Gateway is an approximately \$850 million, multi-state, public-private infrastructure project to improve the flow of freight between the Mid-Atlantic and the Midwest by clearing key freight corridors for double-stack rail service. The National Gateway has received considerable state and federal funding and construction on this key initiative is well underway. CSX is investing approximately \$575 million in the project.*
- *The National Gateway is expected to be complete by 2015, in time for the opening of the expanded Panama Canal.*



### **Environmentally Preferable Purchasing**

*At the start of the procurement process, which applies to purchases or contracts that are above a specified financial threshold, the CSX Procurement team establishes goals and a timeline for the project, conducts research and benchmarking, solicits supplier input, accepts supplier qualifications statements, and after careful evaluation, awards the contract. CSX makes purchasing decisions according to the following criteria:*

- *Value pricing resulting from efficient production facilities, sound engineering and research.*
- *Quality and logistics of materials and services.*
- *Health and safety programs and performance.*
- *Environmental performance.*
- *Labor policies and programs relating to diversity and non-discrimination.*
- *Service that meets the needs of our customers.*



### **Environmental Restoration or Community Environmental Projects**

*The Beyond Our Rails program ([beyondourrails.org](http://beyondourrails.org)) encompasses company-wide initiatives such as community investments, national partnership*

*support, in-kind transportation moves, in-kind donations of products and services, volunteer and board service grants, and disaster recovery assistance.*

*CSX recognizes the responsibility to protect and restore the environment in the areas in which we operate. We believe that improving all aspects of the environment is critical and we provide assistance in the following areas: teaching environmental stewardship, planting trees and improving local habitats, leading and supporting environmental cleanups, recycling and minimizing waste, and promoting energy efficiency and carbon reduction.*

*Together with Alliance for Community Trees and City Year, CSX has planted more than 18,000 trees as part of CSX's Trees for Tracks program. Trees for Tracks aims to plant one tree for each of the 21,000 miles of track CSX owns. This partnership builds upon the company's focus on communities and the environment.*

*CSX is the official railroad sponsor of "All Hands on Earth," a public education campaign for environmental protection in partnership with The Nature Conservancy. CSX also holds annual Earth Day events to engage employees across our 21,000-mile network.*

*CSX worked closely with the Mississippi Department of Environmental Quality (MDEQ) to remediate the West Pascagoula Creosote Works. Most significantly, this included the remediation of material from the former creosote treatment plant, removal of submerged logs, concrete and debris from the West Pascagoula River and the Bayou Pierre shoreline, installation of a multilayer sediment cap and restoration of 2.5 acres of shoreline for an improved estuarine habitat and aquatic ecosystem. CSX has invested nearly \$20 million to date, and is partnering with the Land Trust for the Mississippi Coastal Plain, a chapter of the Land Trust Alliance, to put a conservation easement on the site to conserve the remediated land in perpetuity.*

### **CSX and the Maryland Community**

- In partnership with state and local economic development agencies, businesses invested more than \$6 million in new or expanded rail-served facilities on CSX or its connecting regional and short lines in 2012.*
- CSX sponsored a City Year service day in Locust Point where nearly 100 volunteers helped transform the Francis Scott Key School. CSX employees joined with volunteers from Under Armour, City Year and the Locust Point Civic Association to paint murals, build flower beds, mulch the playground, repair benches and plant 65 trees on the school grounds and in a neighboring park. Through its*

*partnership with City Year, CSX brings its emphasis on safety and excellence to directly impact communities across the country.*

- *In 2012, CSX contributed nearly \$950,000 to national and local organizations. Those in Maryland include the Alliance for Community Trees, Anacostia Watershed Society, Baltimore United Way, Chesapeake Bay Foundation, Living Classrooms, Maryland Food Bank, the Parks & People Foundation and Operation Lifesaver.*

#### **Independently-Audited Environmental Management System**

*Our formal EMS verification program includes annual inspections that involve a detailed review of process consistency and documentation. Additionally, we conduct independent compliance and management system reviews to ensure that CSX's environmental performance remains on track.*

*To maintain consistent environmental compliance, CSX established a series of compliance assurance reviews to verify our environmental and hazardous materials compliance. The environmental compliance assurance reviews include different tiers of evaluation, ranging from internal "peer" reviews to comprehensive external reviews performed by CSX employees alongside qualified environmental consultants.*

*Each year, CSX performs these reviews at approximately 75 sites using this tiered evaluation structure. The company maintains a program that supports accurate tracking and timely corrective actions for any non-conformances identified during these reviews. Additionally, CSX created the Compliance Assistance team, which visits locations to support corrective action plans and the timely resolutions of non-conformances.*

## Waste

#### **Recycling**

*CSX is committed to reducing non-hazardous waste throughout our operations. We have identified the major waste streams from our ongoing operations and continually look for new ways to reuse and recycle all waste. For example, used lubricating oil from CSX locomotives is reused in some facilities to heat buildings. In addition, a third party also reprocesses portions of this used oil into vacuum gas oil, an important feedstock in the manufacture of unleaded gasoline and low-sulfur diesel fuel. CSX also recycles batteries, steel and crossties from our operations. We have set a goal to increase recycling and reuse of crossties from 95 to 99 percent by 2015.*

*In 2012, CSX continued the effort of recycling construction debris such as asphalt, concrete and brick. The company is developing an enterprise-wide program to achieve a 99 percent recycling rate for construction debris generated from these building products by 2020. One current program, No Spike Left Behind, developed in 2010, is a successful example of CSX's extensive recycling efforts. This program conducts extensive cleanups of our rail yards to reduce the amount of unused product and recyclable material stored on site. Since 2010, CSX has generated more than 50,000 tons of recycled material from this large-scale recycling program that is now running system-wide.*

**Hazardous Waste/Toxic Use Reduction**

*At the beginning of 2012, CSX set a goal to reduce hazardous waste generated through ongoing operations by 5 percent by year end. In 2012, we reduced hazardous waste by 7 percent compared with 2011 performance. Since exceeding our reduction goal, we are striving to further reduce hazardous waste generation from our ongoing operations.*

*CSX continually looks to replace chemicals, paints and cleaners with safer and more sustainable products. As we find ways to reduce our use of substances and processes that produce hazardous waste, we are striving to reduce the U.S. Environmental Protection Agency designated generator status of each operating facility to the lowest possible level. Our goal is to reduce the generator status of 25 percent of our facilities by 2020. We anticipate this goal will assist the company in reducing risk related to material-purchasing decisions, chemical use and waste management practices.*

## **Energy**

**Energy Efficiency**

*CSX continues to invest in fleet upgrades to improve locomotive fuel efficiency. CSX has spent more than \$1.75 billion in the last decade to update our locomotive fleet with newer, more fuel-efficient locomotives and technologies. Over the past five years, we purchased 30 ultra-low-emission GenSet locomotives for our fleet and we are continuing to invest in additional fleet upgrades. For example, new locomotives such as the GE Evolution® Series locomotive offer improvement in efficiency compared to an average fleet locomotive, saving approximately 12,600 gallons of diesel fuel each year. Due to these continued fleet enhancements and the technology advancements described below, the company's fuel efficiency improved by 2 percent from 2011 to 2012. This means*



that a CSX train can move freight 466 miles on a single gallon of fuel, up from 456 miles in 2011.

**Employee Training:** CSX locomotive engineers are coached on locomotive simulators, developing best practices and improving their awareness of fuel-efficient train handling. The company also uses locomotive Event Recorder Automated Download (ERAD) devices. Similar to a "black box" on an airplane, ERAD monitors and records actual train operations and is used to provide feedback to the engineers on how to improve fuel-efficiency. Using the ERAD program, CSX saved more than 19 million gallons of fuel between 2005 and 2009, reducing carbon dioxide (CO<sub>2</sub>) emissions by more than 200,000 tons.

**Locomotive Idling Reduction Technology:** To reduce fuel consumption and carbon emissions during idling, CSX has invested in two separate pieces of idle-reducing technology, Auxiliary Power Units (APUs) and Automated Engine Start Stop (AESS). As the name suggests, APUs provide auxiliary power to a locomotive, allowing the larger diesel engine to be shut down. AESS acts similarly by automatically shutting the locomotive down when not in use and automatically starting it when needed. In addition to these systems, CSX invests heavily in training its employees on proper locomotive shutdown rules to eliminate unnecessary idling.

**Piloting New Technology:** CSX is committed to implementing new technology that optimizes train operations for fuel efficiency. This new, real-time energy management technology uses GPS, track grade and curvature data along with train information to identify the most fuel efficient throttle settings for each trip as the train moves across the system. In addition, methods of rail lubrication are being explored to reduce rail-to-wheel friction and increase fuel-efficiency. Each of these focus areas are being applied in Maryland to improve fuel efficiency and ultimately reduce the greenhouse gas intensity of CSX's operations in Maryland.



## **Renewable Energy**

CSX is evaluating the potential for renewable energy applications across the network as an additional means to improve energy efficiency. The company installed a 53-kilowatt solar photovoltaic array at the Queensgate yard in Cincinnati, Ohio. The system connects with the local electricity grid and any excess power generated is sold back to the area's electric utility as an offset. The company also utilizes solar power for signaling systems in remote field locations across the network.

*Additionally, CSX engineers have begun utilizing hydrogen fuel cells for use as power sources during commercial power outages for crossing and signal systems, because they are a safer and cleaner alternative to gasoline backup generators.*

## **Transportation**

### **Efficient Business Travel**

*CSX utilizes an online host, “ReadyTalk” systems, which offers web seminars, online meetings, and conference calls, to 23 states and two providences in Canada reducing the need for out of town travel for meetings.*

### **Fleet Vehicles**

*Low-emission vehicles are used, when available, for our company fleet of trucks and automobiles. The company also has a standard purchasing agreement in place to purchase low emission vehicles for the company fleet.*

*CSX also subsidizes transportation expenses for employees who take public transit to work at CSX corporate headquarters in Jacksonville. The company also provides reduced parking fees for carpoolers and individuals at the Jacksonville headquarters who drive low-emission or hybrid vehicles (meeting the requirements of the U.S. Environmental Protection Agency’s National Low Emission Vehicle Program) to work.*

## **Water**

### **Water Conservation**

*CSX is working to understand the company’s water footprint by looking for source reductions and recycling and reuse options throughout our network. In 2012, CSX consumed approximately 1.13 billion gallons of water, a decrease from 2011, primarily due to improved measurement techniques. Of that total, 15.5 million gallons were recycled, which includes collected rainwater. CSX is aware of potential water scarcity issues in areas of our network, primarily in the Southeast. During 2013, CSX plans to conduct surveys focused on freshwater usage at our larger facilities to understand water consumption patterns and identify opportunities for improvement. These initiatives will allow CSX to establish a comprehensive water baseline from which to set goals and management priorities for reducing water use.*

## **Water Conservation in Maryland**

*At the Curtis Bay Piers site near Baltimore, Md., CSX implemented water management practices, which we are also in the process of implementing at other locations throughout our network. For example, the Curtis Bay site has a rainwater-harvesting system that will help the site reach water conservation goals.*

## **Wastewater Discharge Focus**

*The company is focused on reducing exceedances in wastewater discharges through enhanced treatment and water quality measures. In 2012, CSX developed a wastewater treatment facility centralized control system that allows for remote monitoring and control of our treatment facilities. This system automatically records data such as pH and flow rate and can graph trends. Implementing this system allows CSX to accurately manage our wastewater to ensure compliance with all appropriate regulations. As of the end of 2012, eight sites are operational and 15 sites will receive the system in 2013.*



## **Stormwater Management and Site Design**

*The company's treatment facilities cleanse and protect millions of gallons of water throughout the network every year. CSX uses the latest treatment technologies at its wastewater treatment facilities throughout the network including Cumberland and Baltimore. When constructing new railroad facilities, minimizing affects to the environment are considered in the preliminary engineering phase of the project. Impacts to wetlands and threatened and endangered species are considered and when affected the proper mitigation is implemented.*

## **Green Building**

*CSX has improvement teams focused on finding new ways to reduce the environmental footprint of our buildings. As a company, we have nearly 4,800 buildings across our operations. We periodically upgrade the infrastructure and interiors of these buildings. We incorporate Leadership in Energy and Environmental Design (LEED) standards to new construction projects that meet specific criteria. As the CSX network grows, particularly in our intermodal business, we are implementing a set of best practices for efficient, sustainable construction projects. For example, at the Jacksonville Intermodal Terminal, CSX installed energy-efficient LED fixtures on high-mast light poles, the administration building and the gate canopy that reduce energy consumption at the facility by nearly 25 percent.*

## Other



### **Anacostia River Cleanup**

*Raising awareness around sustainability issues at every level of the company continues to be a priority at CSX. Each year, we hold Earth Day events throughout our network to engage employees. In Jacksonville, CSX hosts a series of environmental education sessions and an expo for employees. In addition, CSX partners with the Anacostia Watershed Society's annual Earth Day Cleanup and Celebration, where more than 2,000 volunteers remove trash from sites around the Anacostia Watershed in Washington, D.C. and Maryland. For other examples of employee engagement on environmental management and sustainability, please see the Beyond Our Rails website at [www.beyondourrails.org](http://www.beyondourrails.org).*

### **"Trees for Tracks" Program Continuous Progress**

*Even though we believe that rail remains the most environmentally friendly, efficient means of land transportation, we are committed to continually improving our environmental impact and making the communities we serve cleaner and greener. In 2013, we were named to the Dow Jones Sustainability Index for the third consecutive year for our environmental initiatives, including our commitment to reduce greenhouse gas emissions by 6-8 percent by 2020 and our "Trees for Tracks" program, where we will plant 21,000 trees (one for every mile of track) by the end of this year.*

### **Increasing freight and commuter rail service in partnership with Commonwealth of Massachusetts**

*CSX is partnering with the Commonwealth of Massachusetts to increase freight and commuter rail service within the state. Specifically, the company is expanding our Worcester, Mass., terminal into a state-of-the-art terminal for the safe and efficient distribution and transfer of goods around the New England region. CSX collaborated with the Massachusetts Department of Environmental Protection to integrate sustainable elements into the terminal design. The site's administration building is powered by on-site solar panels and has a solar hot water heater. CSX identified and procured hybrid diesel-electric cranes, which are 40 percent more fuel-efficient than the standard diesel equipment being replaced. These hybrid cranes use a small diesel engine briefly during start-up and run on batteries when operating. This minimizes the amount of emissions and noise disturbances on site and in the surrounding community. We will*

*continue to look for innovative technologies and practices to enhance the Worcester terminal and others throughout our network.*

### **CSX Environmental Performance Recognition**

- *In 2013, CSX earned a spot on the Dow Jones Sustainability Index (DJSI) for North America for the third consecutive year. The DJSI evaluates corporate economic, environmental and social performance.*
- *CSX was also named to the Carbon Disclosure Project (CDP) S&P 500 Carbon Performance Leadership Index, as well as the CDP Global 500 Carbon Performance Leadership Index.*
- *In 2012, CSX was listed on the Maplecroft Climate Innovation Leader Index, one of three Maplecroft Climate Innovation Indices that rank U.S. companies on their leadership in climate change mitigation and management. CSX was the highest-ranked Class I railroad included on the 2012 index and the only railroad featured on the top 100 Climate Innovation Leaders list.*

**Profile Updated October 2013**



*Help build a greener, more sustainable Maryland through voluntary practices that reduce environmental impacts and save money.*

*Learn more at [www.green.maryland.gov/registry](http://www.green.maryland.gov/registry)*

