Algoma Central Corporation

Environmental Report 2011

Launching a new era in environmental efficiency

Welcome to Algoma Central Corporation's first formal Environmental Report.

We are pleased to provide this report discussing both our accomplishments and our challenges on the environmental front. While our shipboard and office staff have been involved in environmental improvement initiatives for a long time, we have increased and formalized our efforts over the last five years. There have been many accomplishments along the way, including Green Marine and ISO 14001 certification, which are highlighted inside. The publication of this report marks another milestone, where we share our current performance and improvement initiatives with the public.

The efficiency of marine transportation makes it an environmentally friendly choice by nature. Operating on the world's largest freshwater system, however, presents unique challenges and demands. Algoma Central Corporation employees spend considerable time on environmental challenges and collectively we take pride in the company's continual improvements.

We are keenly aware, however, that there is much left to be done. Environmental leadership is one of the cornerstones of our strategic plan, and we are investing hundreds of millions of dollars in new ships and technologies to achieve this goal. We look forward to reporting significant progress across our entire environmental footprint in future editions.

We hope that you find this report interesting. If you have feedback, please let us know.

Greg Wight	Mira Hube
President and CEO	Director, Environment

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Introduction

The Great Lakes represent approximately 22% of the world's fresh water, providing drinking water to tens of millions of people. Recreation, fishing, tourism and industry also depend on the health and vitality of the Great Lakes system. Operating our fleet of dry and liquid bulk cargo vessels on this beautiful and treasured waterway, we at Algoma Central Corporation are constantly mindful of our duty to be responsible stewards of the environment on which our business depends.

Marine transportation is the most economical and environmentally friendly mode of commercial transportation available today, consuming significantly less fuel than rail, road or air transport per tonne of cargo moved. Marine shipping generates fewer air pollutants and lower greenhouse gas emissions as well — about one third of those generated by road transport.

Despite these clear environmental benefits, our ships do burn fuel and generate wastes. We are therefore committed to taking actions to minimize the environmental impacts of these activities. In fact, our objective is to be one of the most environmentally sustainable transportation companies operating in our region. We have committed to a process of continual improvement in our environmental performance and are proud of the accomplishments highlighted in this, our first Environmental Report.

We know there is more to do though. As we move forward, we are constantly focused on innovation and creative solutions – including the introduction of more efficient vessels that will bring us to the forefront of a new age of environmental responsibility in the Canadian shipping industry.

What environmental sustainability means to us

Marine shipping transports 90% of global trade, and in the Great Lakes region provides essential transportation services for the steel, construction materials, power generation, agriculture, petroleum, salt, mining and other industries. Clearly, our economy could not function and the environmental impacts of transportation would be significantly greater without marine transportation. A sustainable shipping industry is one that minimizes environmental impacts while continuing to provide essential transportation services that contribute to our overall prosperity.

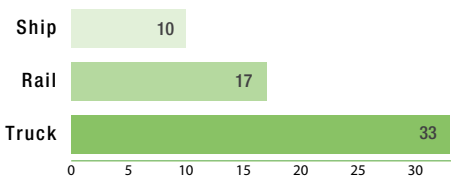
At Algoma Central Corporation, we view Environmental Sustainability as one of the four main tenets of sustainability together with Operational Excellence, Social Responsibility and Corporate Governance. Our social license is earned and maintained through acting in an ethical manner, contributing to sustainable business development and providing a safe work environment and a high quality of life for our employees, their families and the communities in which we operate.

Our sustainability goals are ambitious. We envision a future fleet of modern, environmentally efficient vessels that will provide customers with top-quality service and employees with safe and sustainable jobs, while at the same time maintaining the health of our air and waterways for generations to come.

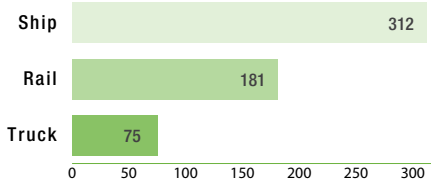
The environmental benefits of marine transportation

Short sea shipping has great potential to help Canada to achieve its sustainable development objectives. Studies show that the environmental and social costs of short sea shipping are generally lower than those of rail and road transportation modes. Marine shipping also has the lowest environmental impact related to spills, noise and traffic congestion, and the lowest incidence of injuries due to accidents. The value of marine transportation to the Canadian economy, combined with its excellent environmental performance, makes it a vital part of Canada's sustainability strategy.

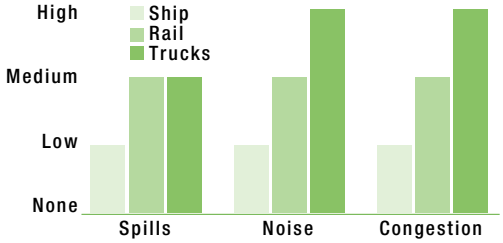
Greenhouse gas emissions (CO_2)
Grams per tonne of cargo transported one kilometre



Fuel efficiency
Distance one tonne of cargo travels on one litre of fuel



Spills — Noise — Congestion
Impact on the environment



Source: Lawson Economics Research Inc., Ottawa, Canada "The Environmental Footprint of Surface Freight Transportation", June 2007

About Algoma Central Corporation

Our operations and activities

Algoma Central Corporation was formed in 1899. Today Algoma owns and operates the largest fleet of Canadian flag dry and liquid bulk carriers operating in the Great Lakes-St. Lawrence waterway and Canadian east coast regions. Our fleet carries such cargoes as:

- Iron ore and coal for the steel industry
- Grain and potash for the agricultural industry
- Aggregate products and gypsum for the construction and road building industries
- Salt for road safety and commercial use
- Petroleum products and chemicals for the petroleum industry
- Coal for power generation
- Specialty commodities

On average, we transport almost 37 million tonnes of cargo over 1.8 million kilometres per year. In addition, Algoma has interests in ocean dry-bulk and product tanker vessels operating in international markets. Algoma also owns a diversified ship repair and fabricating facility and, through Algoma Central Properties Inc., owns and manages commercial real estate properties in Ontario.

Our self-unloader type vessels discharge their dry-bulk cargo by way of conveyor and boom systems while the gearless bulk carriers require shore-based unloading equipment. A typical gearless bulk carrier voyage would see grain move eastward through the Seaway system to lower St. Lawrence River ports, balanced with a returning iron ore shipment to Great Lakes destinations.

Self-unloaders use conveyor systems to discharge their cargo in as little as six hours.

All Algoma petroleum/ chemical tankers are double-hulled; no cargo is carried in tanks directly adjacent to the outer hull.

Environmental Management at Algoma

Our international recognition

Algoma's commitment to the protection and stewardship of the waterways in which we operate and to the environment is demonstrated by the many actions we are taking, beginning with our comprehensive environmental management program.

In 2008, we achieved certification of the environmental management system on our product tanker fleet to the International Organization for Standardization's ISO 14001:2004 standard. Certification of our dry-bulk fleet was achieved in 2010. Our overall Integrated Management System (IMS) is also certified to both the ISO 9001:2008 quality management standard and the International Safety Management (ISM) Code of the International Maritime Organization (IMO).

Certification to these internationally recognized standards demonstrates our commitment to the protection of the environment, to the safety of our employees and to providing a quality service to our customers.

An integral part of any effective management system is communication and training. Algoma's environmental responsibilities and procedures are conveyed to ships' management and crews through annual conferences, procedural and maintenance training, and regular shipboard meetings.

We are continually reviewing our processes with the objective of improvement. Our shore-side and shipboard operations and personnel are regularly audited against the ISO standards and the ISM Code by both internal and external parties.

Our operations personnel meet regularly to discuss improvement initiatives, review progress against environmental objectives and ensure effective management of the company's environmental issues. The Environmental, Health and Safety Committee of our Board of Directors meets on a semi-annual basis.

Algoma also works in partnership with stakeholders to promote a more environmentally sustainable shipping industry. We participate in numerous Canadian and U.S. marine environmental forums, including the Canadian Marine Advisory Council with Transport Canada and Environment Canada, and the bi-national Great Lakes Ballast Water Collaborative. We also take leadership roles on the Canadian Shipowners Association and the Green Marine Program Environmental Committees.

Pivotal to our efforts are several environmental improvement programs, including efforts to reduce energy usage, reduce waste generation and conserve resources. We are confident that these programs, along with other initiatives currently under way, will help us fulfill our commitments to continually improving in environmental performance, to managing safety hazards and to ensuring customer satisfaction – promoting excellence in all we do and creating a greener marine industry for years to come.

ISO9001 • ISO14001

Lloyd's Register ISM CERTIFIED

Improvement programs

This table summarizes recent and current initiatives that are in place to improve our environmental performance.

Environmental Aspect	Improvement Programs		Actions
Air Pollutants (SOx, NOx, GHGs, Particulate Matter)	Conserve Energy	Reduce Fuel Use	■ Air pollutants emissions inventory ■ Engine replacements ■ Waste heat recovery (>50% of fleet) ■ Energy management plan ■ Energy conservation measures feasibility study ■ State-of-the-art fuel monitoring systems
		Reduce Energy Use (Office)	■ Awareness initiatives ■ Investigate and implement energy conservation measures (2011)
	Upgrade/Innovate	Research Emission Abatement Technology	■ Emissions testing (Environment Canada) ■ Investigate scrubbers
		Replace Halon	■ All ships halon-free as of 2010
Waste	Reduce Waste	Reduce	■ Promotion of supplier packaging reduction ■ Elimination of bottled water (office) ■ Awareness initiatives ■ Reusable coffee mugs ■ Reusable water bottles
		Recycle	■ Recycling (shipboard and office) ■ Shipboard organics collection
Oily Discharges	Upgrade/Innovate	Improve Effluent Quality	■ New Oily Water Separators (OWS) installed (12 ships) ■ Remaining OWS upgraded
		Lubes Replacement	■ Water-cooled stern tubes (1 new installation 2011)
			■ Phasing in of biodegradable/environmentally preferable lubricants in underwater and deck equipment
Sewage/Grey Water	Upgrade/Innovate	Improve Effluent Quality	■ New Marine Sanitation Devices (MSDs) installed (5 ships completed) ■ Upgraded all other MSDs ■ Phosphate-free detergents ■ Non-toxic cleaning chemicals
		Conserve Water	■ Promotion of low-flow shower heads, front-loading washing machines, low-flow or vacuum toilets
Cargo Residues	Reduce Waste		■ Annual fleet inventory ■ Promotion of reduction best practices ■ Upgraded dust control equipment
Ballast Water/Aquatic Invasive Species	Upgrade/Innovate		■ Investigate feasible treatment options ■ Participate in industry AIS Risk Assessment
All Areas	Upgrade/Innovate	Fleet Renewal	■ Invested $190 million to modernize product tanker fleet including the addition in 2004, 2008 and 2009 of new double-hull product tankers ■ Commitment to add seven new dry-bulk vessels for delivery in 2013-2014

Our environmental policy

Declaring our commitment to excellence

The Algoma Safety and Environmental Protection policy is a key component of our Integrated Management System. It represents our commitment to the guiding principles of compliance, continual improvement and the prevention of pollution, and informs all employees and stakeholders of our dedication to environmental stewardship.

Algoma strives to be an exemplary leader in safety and environmental management, and is committed to the protection of the environment, particularly the marine environment, the prevention of human injury and loss of life, and the protection of property.

To achieve and sustain these goals our operations are guided by the following seven basic principles:

- Management, operating, maintenance, health, safety, environmental, and emergency response practices will be conducted in accordance with documented procedures that meet the requirements of the International Environmental Management System Standard ISO 14001 and the International Maritime Organization's International Safety Management Code, and ensure compliance with all applicable regulations and legislation.
- Risks to the safety of ships, health of employees and preservation of the environment will be constantly evaluated and managed.
- Specific resources will be dedicated to the continual management of safety, health and environmental protection programs, and to communication and co-operation with government agencies, customers and industry associations.
- All management systems are subject to periodic internal and external audits, with specific emphasis on health, safety and environmental protection.
- New projects will be evaluated for potential risks to employees, customers, the general public and the environment.
- Education and training will ensure that personnel familiarize themselves with all applicable procedures and conduct themselves conscientiously with respect to health, safety and environmental protection.
- Safety and environmental management will be subject to regular review by the Environmental Health & Safety Committee of Algoma Central Corporation.

The pledges in our environmental policy are more than just words. Our commitment to lead is, we believe, demonstrated on a daily basis by our programs targeting waste reduction, energy management, and equipment upgrades, and challenges us to implement leading-edge technological improvements where feasible. Pollution prevention is fostered through ongoing awareness and environmental training, and adherence to instructions outlined in the company's Integrated Management System.

Green Marine

An industry-led environmental program

Algoma was one of the founding members of Green Marine, a voluntary, industry-led program of the St. Lawrence and Great Lakes marine industry founded in 2008. This program is designed to encourage improvement in environmental performance by all member shipping companies, ports and terminals, and to encourage members to adhere to the following guiding principles:

- Demonstrate leadership in the search for best environmental practices and the promotion of voluntary protection measures.
- Minimize environmental impact and continually improve environmental performance.
- Integrate sustainable development practices that are technically and economically achievable.
- Collaborate with governments, citizens' groups and other stakeholders in the furtherance of the Green Marine action plan.

At Algoma, we assess and report our performance annually against the Green Marine Program criteria and set targets for improvement in each key area. These targets form part of our yearly strategic goals and environmental improvement plans. Our 2009 performance compared to the industry average is shown below. Scores are based on a 1 to 5 scale, with 1 representing compliance with regulations and 5 representing excellence.

Algoma's Green Marine Results

Priority Issue	Algoma Dry-Bulk Score 2009*	Algoma Tankers Score 2009*	Average Industry Score 2009
Aquatic Invasive Species	3	3	2.7
Air Emissions – SOx	4	4	3.7
Air Emissions - NOx	3	3	2.6
Greenhouse Gases	3	3	2.9
Cargo Residues	3	N/A	3.1
Oily Waters	3	4	2.7

* Results verified by external agency

An important feature of the Green Marine Program is the biannual external verification of participant results to ensure an independent audit of progress.

Algoma continues to be committed to the Green Marine improvement program and maintains active involvement in its maintenance and development through participation in Green Marine committees including the Steering Committee, the Great Lakes Environment Committee and the Shipowners Technical Committee.

Air pollution prevention

Protecting the air we breathe

Air pollution and climate change caused by fossil fuel emissions are among the most pressing issues facing all sectors of the transportation industry today. At Algoma we understand the critical importance of these issues and are taking strong steps to ensure that we reduce our impact on the air we all breathe.

Understanding marine emissions

The main emissions from marine engines are sulphur oxides (SOx), nitrogen oxides (NOx), particulate matter (PM) and greenhouse gases (CO_2 equivalent), all of which are generated from fuel combustion. These emissions negatively impact air quality and, in the case of CO_2, are linked to climate change. Methods to reduce these exhaust gas emissions are being actively pursued by the shipping community, the International Maritime Organization (IMO) and regulatory bodies.

Internationally, air emissions from marine vessels are regulated by Annex VI of the International Maritime Convention for the Prevention of Pollution from Ships (MARPOL Convention). In 2010, IMO's revised and strengthened regulations, including a progressive reduction in emissions of SOx, NOx and PM, and introduction of emission control areas (ECAs), came into force.

Also in 2010, IMO approved the Canada/U.S. application to designate the coastal waters of North America as an ECA. Under the terms of this designation, beginning in August 2012, all vessels operating within 200 nautical miles of the North American coast will be required to reduce their SOx emissions. As well, any engines installed after 2016 must meet the strictest NOx standards (Tier III) when operating in the ECA.

Regulations for operations in internal waters, including the Great Lakes, are being implemented as well by Canadian and U.S. authorities. The U.S. Environmental Protection Agency has introduced new rules enforcing the ECA within the Great Lakes, and Transport Canada will finalize new Canadian regulations in the near future to implement the IMO standards.

As a consequence of these requirements, IMO estimates that by 2020, global emissions of sulphur oxides and nitrogen oxides from vessels will be reduced by 85% to 99%. These measures will also significantly reduce particulate matter emissions.

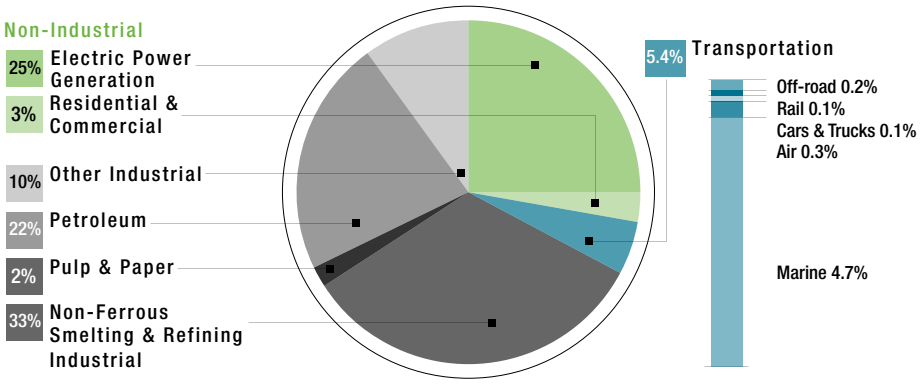
Sulphur dioxide emissions

The quantity of sulphur dioxide (SO_2) emitted by a marine engine from combustion of fossil fuel is proportional to both the level of sulphur contained in the fuel and the amount of fuel used. The "heavy" fuels that have traditionally been used in the marine industry contain higher levels of sulphur than the more refined marine diesel and gasoline fuels.

The current allowable sulphur content of marine fuel, as regulated globally by IMO for areas outside of emission control areas (ECAs) is 4.5% sulphur, by mass. This will be progressively reduced to 3.5% in 2012, and to 0.5% by 2020 (or 2025). For ECAs, the sulphur content is now capped at 1% until 2015, at which time it will be further reduced to 0.1%. This will require ships to either switch to using marine diesel or to install exhaust gas scrubbing equipment designed to remove sulphur dioxide and other contaminants.

Canadian SOx emissions by sector

Marine emissions accounted for 4.7% of nationwide SOx emissions in 2008. While this represents the largest proportion of transportation emissions, abatement technologies are being actively developed to address this issue. Emissions from the marine industry will be dramatically reduced over the next 5 to 10 years.

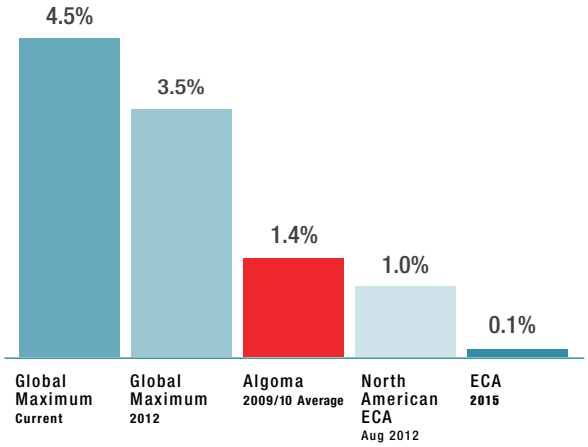


Source: Environment Canada

Sulphur content of fuel used by Algoma

The sulphur content of the fuels used by Algoma vessels is tracked and inventoried by ship and for the fleet in total. In 2009 and 2010, the overall average sulphur content of fuels used by all vessels was just 1.36% and 1.46%, respectively. In fact, more than 20% of the fuel consumed by the fleet's dry-bulk vessels is marine diesel fuel, which contains less than 0.05% (500 parts per million) sulphur.

The average sulphur content of fuel used by Algoma is well below the current allowable global limit of 4.5% sulphur by mass.



SOx emissions

SOx emissions are measured on both a total emissions basis and on an intensity basis, defined as the amount of emissions for every tonne of cargo carried one kilometre. Algoma's SOx emissions for the years 2008 through 2010 are shown below. Business reductions caused by the economic downturn along with the retirement of older, non-economic capacity primarily accounted for the decrease in total emissions in 2009 and 2010 from 2008. Emissions intensity has, however, remained relatively constant, with a slight increase in 2010 primarily as a consequence of the retirement of several diesel (lower sulphur content fuel) burning vessels.

SOx Emissions	2008	2009	2010
Total (Tonnes)	4,770	3,313	3,872
Intensity (g/T-km)	0.11	0.11	0.12

Algoma is committed to reducing SOx emissions by:

- Building new, more fuel-efficient vessels to reduce the amount of fuel required to move cargo.
- Installing new, more fuel-efficient engines.
- Installing exhaust gas scrubbers to remove SOx, when the technology is available, and/or burning lower-sulphur fuels.
- Promoting energy conservation and reduced fuel usage.

Exhaust gas scrubbers

Reducing SOx emissions by running engine exhaust gases through a "scrubber" system prior to release to the atmosphere is a technology that is under active investigation by Algoma. These systems operate utilizing either an "open loop" configuration that continuously introduces water, or with a "closed loop" system that requires the use of chemicals.

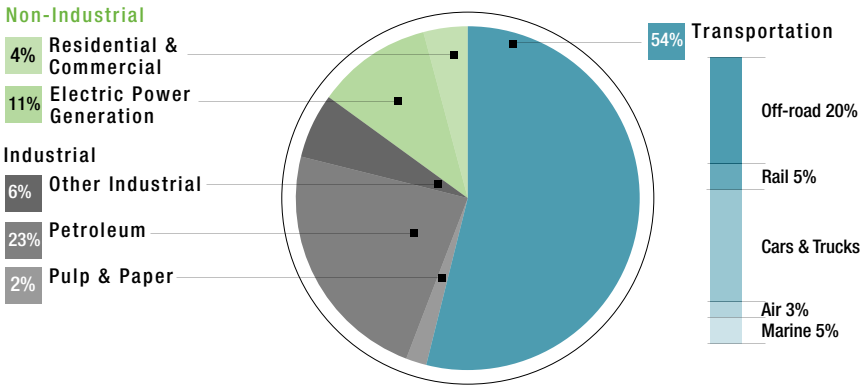
Scrubbers are a proven technology and have long been successfully used in land-based facilities, such as power generation. Current marine scrubber technology is 95% effective. However, it predominantly uses salt water in the treatment process. The challenge for the domestic marine industry is to develop technology that can operate as effectively in the fresh water Great Lakes - St. Lawrence Waterway.

Nitrogen oxide (NOx) emissions

The quantity of NOx emitted from marine vessels is directly related to the amount of fuel used and the engine specifications, including age, design, maintenance and combustion temperature. Maintaining engines in optimum operating condition is a key factor in reducing emissions.

Canadian NOx emissions by sector

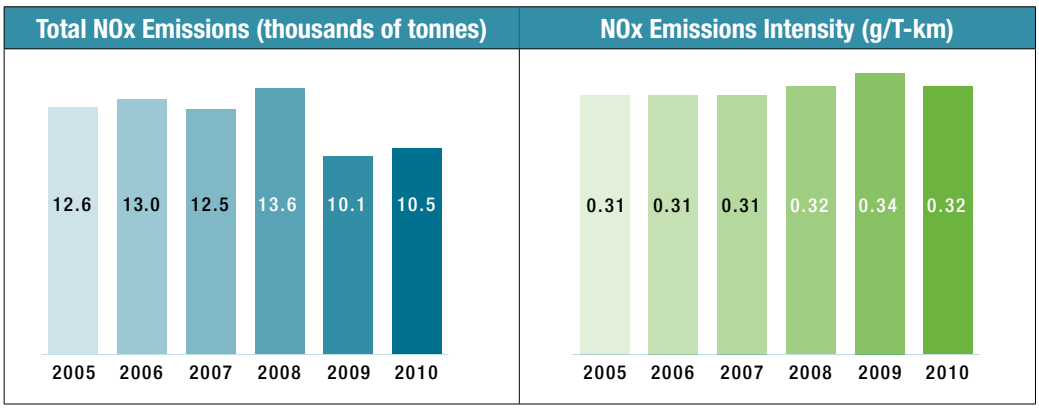
According to Environment Canada data the transportation sector accounted for 54% of NOx emissions in 2008. Marine transportation's contribution to nation-wide emissions was 5%.



Source: Environment Canada

NOx emissions

NOx exhaust emissions generated by the Algoma fleet are inventoried on an annual basis (total emissions and emissions per tonne-km). As with SOx emissions, NOx declined significantly in 2009 and 2010 as a result of decreased business activity. When evaluated in terms of intensity (g/T-km), emissions have increased slightly since 2005.



2005 to 2007 data for dry bulk fleet only; 2008 to 2010 data for dry bulk & tanker fleets.

A planned maintenance program has been developed and employed to ensure all our engines continually operate in peak condition. Several engine replacement projects implemented since 2007 have also resulted in improved engine performance on those vessels.

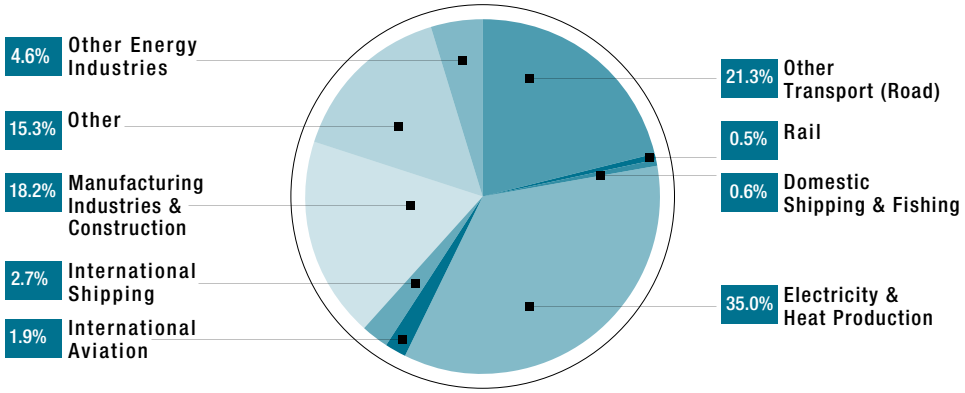
Planned new vessels, with even more efficient engines, promise a dramatic reduction in NOx emissions estimated at 45% compared to existing vessels.

Greenhouse gas emissions (GHG)

Although marine shipping is the most energy-efficient mode of dry-bulk transport, it is estimated that international shipping emitted 870 million tonnes, or about 2.7%, of the global man-made emissions of greenhouse gases (CO_2) in 2007 due to the sheer volume of global marine traffic.

In addition, GHG emissions from shipping are projected to increase in the future with the growth of world trade. In response, IMO has developed specific measures to help reduce emissions from marine vessels by up to 25% to 75% from their current level. Algoma is actively assessing each of these measures for applicability to our fleet.

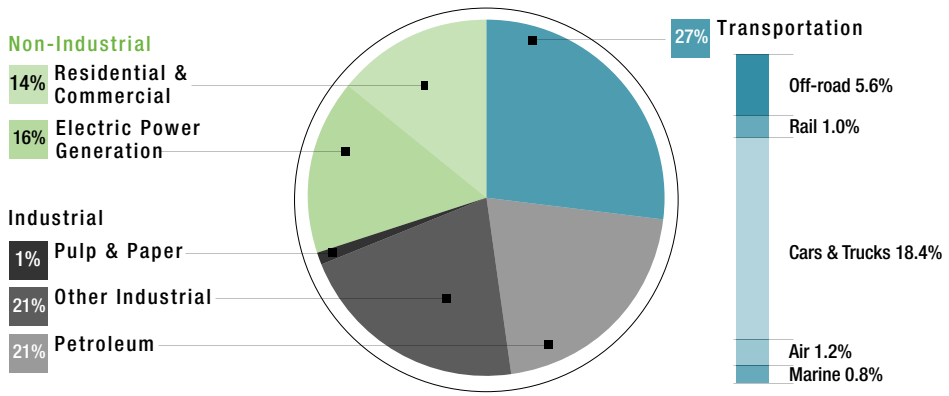
2007 Global CO_2 Emissions



Source: Second IMO GHG Study 2009

In 2008 in Canada the transportation sector accounted for 27% of nationwide GHG emissions. Cars, trucks and off-road vehicles contributed the bulk of transportation emissions at 24%. In contrast, marine shipping accounted for only 0.8% of total GHG emissions in 2008.

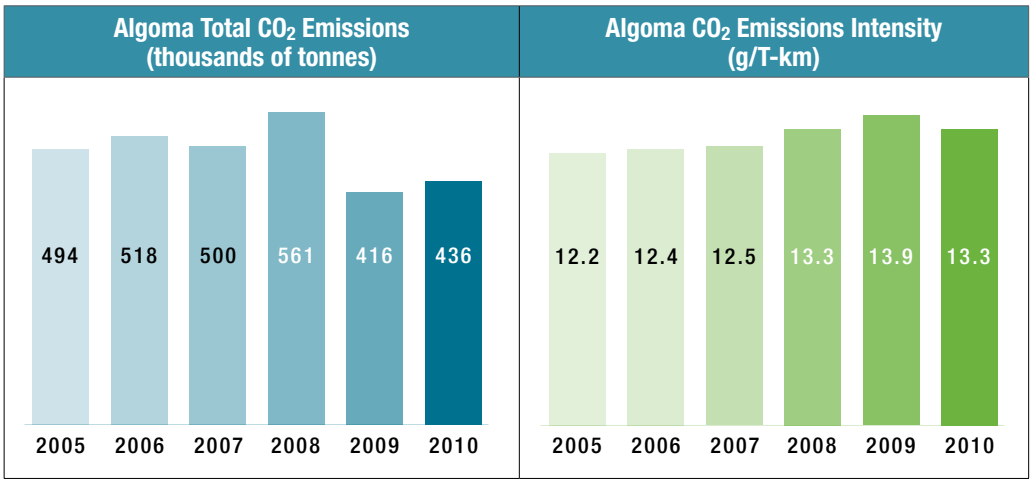
2008 Canadian GHG Emissions by Sector



Source: Environment Canada

GHG inventory

Algoma maintains and monitors an annual inventory of GHG emissions. Fleet total CO_2 emissions were lowest in 2009 and 2010, primarily as a consequence of reduced economic activity and the retirement of older vessels from the fleet. Emissions intensity has shown a slight upward trend since 2005, believed to have resulted from a change in trading patterns and an increase in the number of return voyages conducted without cargo (i.e., less backhauls).



2005 to 2007 data for dry bulk fleet only; 2008 to 2010 data for dry bulk & tanker fleets.

Algoma is committed to reducing GHG emissions and is focused on finding new ways to reduce our vessels' fuel usage. We are currently implementing energy-conserving operational and technical measures in our fleet. For example, over 60% of the vessels in the fleet employ waste heat recovery systems, such as exhaust gas economizers. Comprehensive fuel management systems will be installed in early 2011 on selected vessels for potential implementation throughout the fleet.

Further significant reductions will be achieved with the introduction of new vessels to our fleet in 2013/14, which will emit about 40% less GHG emissions per tonne of cargo carried than our existing vessels.

What we are doing to reduce air emissions

- Total emissions are inventoried on an annual basis in accordance with Green Marine requirements.
- An Energy Management Plan has been implemented, including assessment of conservation measures and setting of GHG reduction targets.
- Vessel performance is optimized through voyage planning and long-term preventative and predictive maintenance systems.
- Main and auxiliary engine replacements have provided air emission reductions due to new engine design technology and cleaner burning engines. Main engines on two ships and auxiliary engines on five ships have been replaced since 2007. All of these engines meet the latest emissions regulations and are upgradable to Tier II requirements. In addition, our newest full-size self-unloader (to be delivered in summer 2011) will be fitted with a new engine.
- Our Technical Department is actively researching solutions and improvements to meet our air emission reduction strategy, including scrubbers and engine-based technologies.
- We are currently working with Environment Canada to better understand shipboard emissions.

In 2010, Algoma provided an operating vessel as a testing platform for Environment Canada's scientists to sample emissions generated by different fuels and engines at varying operating modes.

Case Study: The Algobay

In 2009, new engines were installed on the re-newed M/V Algobay, significantly reducing its exhaust gas emissions. A new thermal oil heating system with an exhaust gas economizer, new propulsion controls, and a comprehensive alarm and monitoring system were also added. Along with the new main engines, three new diesel generator sets were installed with electronic power management controls. The main engines and generators meet current Tier I emission standards and are upgradable to Tier II standards. In addition, an entire new forebody was designed and built to match the original Algobay's stern hull structure.

These engines are significantly more fuel-efficient than those of existing vessels, with 30% lower NOx and GHG intensity and 10% lower SOx intensity in 2010 compared to the 2009 fleet average.

Water and wastewater management

Protecting our greatest natural resource

Ships generate several wastewater streams as part of normal operations. These include engine room bilge water, ballast water, black water (sewage), grey water (from showers, sinks and laundry), cargo hold wash water and cooling water. While these wastewaters cannot be entirely eliminated, Algoma vessels manage them according to all regulatory requirements and industry best practices, and we work to minimize their generation wherever possible.

Wastewater discharges

The Regulations for the Prevention of Pollution from Ships and for Dangerous Chemicals, enacted under the Canada Shipping Act, prohibit the discharge of pollutants to water and specify discharge standards for treated bilge water and sewage. When in U.S. waters, Algoma vessels are also subject to requirements under the Clean Water Act and the U.S. Vessel General Permit. Compliance with these and all applicable regulations is guided by operational procedures that are verified during audits conducted on board annually by qualified personnel from both Algoma and external classification societies. In addition, treatment systems are inspected routinely by both Canadian and U.S. regulatory authorities.

Bilge water management

Bilge water accumulates in the lowest compartment of all vessels as part of routine engine room and ship operations. As a consequence, it typically contains a small percentage of oil. All bilge water is processed through an approved Oily Water Separator to meet strict regulatory standards before being discharged. The International Standard for oil content in treated bilge water effluent is 15 parts per million. While operating in the Great Lakes, however, vessels must comply with the more stringent standard of 5 parts per million of oil, a standard stricter than many municipal wastewater treatment plants.

Algoma's bilge water management plan includes implementation of procedures and best practices to minimize this wastewater, and requires stringent record-keeping, maintenance of bilge water inventories and preventative maintenance for bilge water treatment equipment. The majority of our tankers are equipped with an integrated bilge water management system.

In addition, Algoma has invested in significant improvements in bilge water management and treatment technology on our older vessels. New state-of-the-art bilge water treatment systems have been installed on 12 of our fleet's dry bulk vessels since 2008. Vessels that have not been fitted with new separators were furnished with polishing filters and other measures to improve performance. We are committed to eliminating any amount of oil entering the water from our vessels, through the implementation of new technologies and processes.

New state-of-the-art Oily Water Separator installation on an Algoma ship.

Ballast water

An essential part of vessel operations is to carry ballast water on vessels in light condition (when not carrying cargo) as a means to provide vessel stability when sailing. The discharge of ballast water sourced in another area can introduce water-borne species that are not indigenous to the discharge area and that may upset the local ecological balance.

Ocean-going ships entering the Great Lakes from foreign ports have been the primary ship-mediated conduit for aquatic invasive species (AIS). However, the introduction in 2004 of mandatory salt water (ocean) exchange of ballast water and ballast tank inspections at the Port of Montreal for ships entering the Great Lakes has slowed or even stopped new AIS. Scientists report that no new AIS have been detected in the Great Lakes since 2006.

Algoma's Canadian flag dry and liquid bulk vessels operate almost exclusively within the waters of the Great Lakes — St. Lawrence Waterway and therefore are not thought to introduce AIS, but may transfer these species from port to port. All Algoma vessels manage ballast water according to regulatory requirements, maintaining ship-specific Ballast Water Management Plans and following the industry Voluntary Ballast Water Management Practices to Reduce the Transfer of Aquatic Nuisance Species within the Great Lakes.

To further address AIS transfer risks, we participate in the Canadian Shipowners Association Ballast Water Working Group and take an active role in the Great Lakes Ballast Water Collaborative, a group that brings key stakeholders in the region together to discuss specific strategies for AIS mitigation.

The treatment of ballast water is a rapidly expanding technology sector that Algoma is continually monitoring. Most commercial systems have been engineered to meet the environmental conditions and design parameters of ocean-going vessels. They are not yet able to meet the unique operational and technical characteristics of Great Lakes vessels. We continue, however, to assess treatment options and other measures with a view to reducing the risk of potential AIS transfer.

Algoma has participated in various Department of Fisheries and Oceans Canada AIS studies, including sampling of ballast water from tanks for biological testing.

In 2009, a vessel was provided as a testing platform for a DFO Dye Dispersion Study, aimed at understanding the dispersion rates of biological species in enclosed waters.

Sewage systems and treatment

Sewage and grey water generated on Algoma vessels is treated prior to discharge in approved sewage treatment units (Marine Sanitation Devices) in compliance with both Canadian and U.S. regulations. Algoma vessels comply with regulatory requirements governing wastewater discharges, including U.S. sewage "No Discharge Zones", where for commercial vessels even the discharge of treated sewage is prohibited.

Algoma recently installed new sewage treatment units on five vessels, enabling these vessels to achieve effluent test results well below regulated levels. These new units employ the latest membrane technology as part of the final treatment process, producing the lowest effluent test results of any marine sewage unit in operation today. The remaining vessels received significant improvements to their existing units to enhance performance and reliability.

Water conservation efforts to minimize the volume of wastewater generated on board the ships are underway, including using front-loading washing machines, low-flow shower heads and vacuum or low-flow toilets designed to reduce water use. To improve treatment systems' performance and effluent quality, only phosphate-free detergents and non-toxic cleaning chemicals are allowed on board.

Dry-bulk cargo residues

Cargo residues are often generated during cargo loading or unloading operations, and from washing of cargo holds on dry-bulk vessels. Regulations allow the discharge of these cargo residues subject to a strict set of conditions, depending on the type of material and the location of discharge.

Algoma follows all regulatory requirements for cargo residues, including record-keeping and regular government reporting. Our crews also make every effort to minimize cargo residues and have developed handling and management practices to promote shore-based transfer.

Oil pollution prevention and response

Algoma's product tanker fleet carries oil as cargo and all of our vessels carry oil as fuel. Our crews are well trained and skilled in the prevention of any and all oil spills. Emergency preparedness is provided through our Marine Emergency Response Plan and our Shipboard Oil Pollution Emergency Plans, as well as regularly scheduled shipboard drills and exercises.

Shipboard equipment further supports our commitment to oil pollution prevention. The majority of stern-tube systems, a potential source of pollution, are either water-cooled or use environmentally friendly biodegradable products. In addition, hydraulic deck equipment systems are being transitioned to environmentally preferable lubricants.

Waste management

Reducing and recycling programs

Waste generated by ships can include anything from food waste and general garbage to oily sludge, cargo residues and incinerator ash. All waste on Algoma vessels is managed according to legal requirements. The discharge of ANY materials whatsoever overboard is strictly prohibited.

Algoma crews follow procedures set out in the ship-board Garbage Management Plans. General garbage is either incinerated on board in approved incinerators or recycled or disposed at land-based facilities. Complete recycling programs are available to Algoma's dry-bulk fleet, including programs for paper, glass, metal and plastics. In 2010, an estimated 10 tonnes of mixed cardboard and paper and 25 tonnes of mixed plastic, cans and glass were removed from the vessels and recycled.

No industrial or hazardous wastes are incinerated on the ships. All of these types of wastes are properly collected and segregated for disposal at fully licensed land-based waste management facilities. For instance, oil and oil filters, batteries, fluorescent lamps, and electronic waste (or e-waste) are removed from the vessels by licensed waste transporters and recycled at approved sites. Over 2 tonnes of fluorescent light tubes and batteries were recycled in 2010, diverting mercury, lead and other hazardous substances from landfill sites where they could leach into groundwater.

We continue to look for ways to produce less waste. We have implemented a formal waste-reduction program, including initiatives to further promote recycling on the ships, to work with suppliers to identify packaging reduction opportunities, and to reduce the use of disposable materials. To support this, all employees have been provided with thermos coffee mugs to discourage use of disposable cups. In addition, bottled water has been eliminated from the office and employees provided with refillable water bottles, avoiding an estimated 15,000 disposable plastic water bottles annually.

The Future - New Equinox Class Vessels

Launching a new era in environmental efficiency

Consistent with our commitment to environmental sustainability, Algoma will be introducing a series of new vessels to our existing dry-bulk fleet starting in 2013.

The new vessels – called the Equinox Class – will include both self-unloaders and gearless bulk carriers. Developed by Algoma together with a team of world class vessel designers, architects, engineers and researchers, these state-of-the-art vessels represent the next generation of Great Lakes bulk carriers.

These new vessels will significantly reduce the environmental footprint of our Great Lakes dry-bulk fleet.

New vessel environmental features

1 Optimized hull form

The optimized high displacement hull form minimizes resistance and ensures maximum efficiency and performance of the optimized propeller. Combined with an energy-recovering rudder, these features produce more speed with less power, which translates into superior fuel efficiency and reduced emissions.

2 Advanced Tier II compliant engines

The state-of-the-art electronically controlled engines will generate significantly lower levels of exhaust emissions. Combined with other efficiency gains, air emissions will be reduced by about 40% per tonne-km compared to existing vessels.

3 Energy-efficient ships

Heat from exhaust gas emissions will be recovered, reducing the requirement for thermal oil heating. Energy-efficient lighting will be installed wherever possible. The heated fuel oil tanks are grouped together and separated from the ship's hull for safety and to avoid heat loss. Underwater "hard coatings" on the hull will reduce friction and power requirements, maximizing efficiency.

4 Exhaust scrubbers

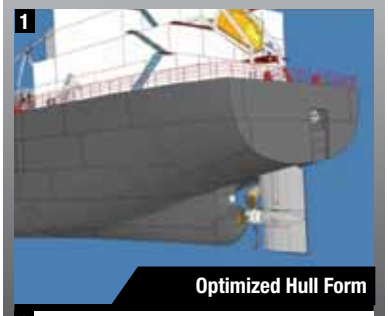
The new engines will be capable of burning low-sulphur fuels but are designed to use residual fuels in combination with scrubbers. Scrubbers remove almost 100% of the sulphur content from the exhaust and 80% of particulate-matter emissions. However, marine engine exhaust scrubber technology is still in development. Once available, we will have the necessary room to install scrubber equipment.

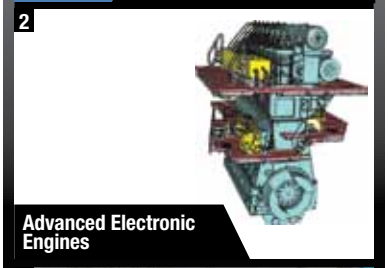
5 Ballast water

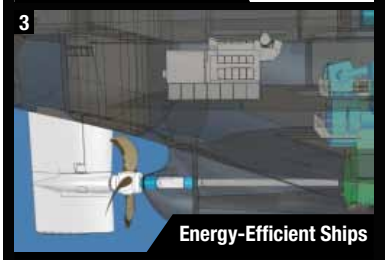
The design allows space for the installation of future ballast water treatment solutions. Tank design and coatings maximize ballast flow and minimize the build-up of sediment in the tanks.

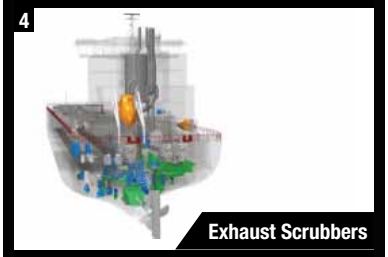
6 Residue minimizing cargo holds

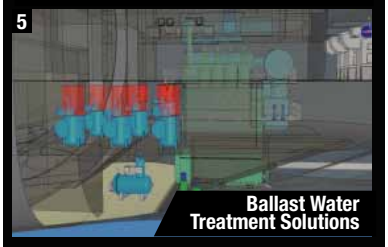
The cargo holds are designed to minimize cargo accumulation and facilitate cleaning. All hopper slopes are lined and any exposed steel is coated with impact and abrasion-resistant epoxy.











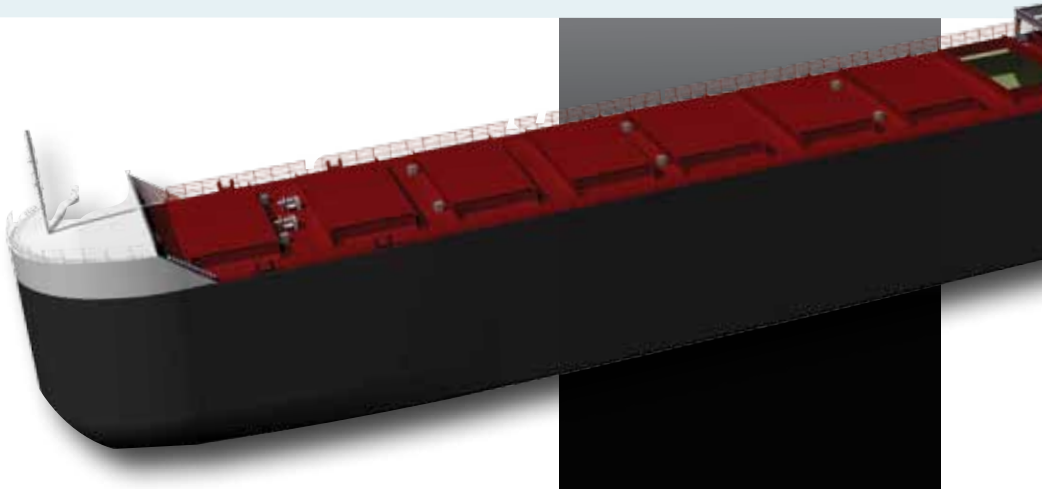
The new vessels will use about 25% less fuel than existing bulk carriers.

Smoother surfaces could reduce power requirements by an additional 5%.

Automated cargo hold washing equipment will minimize water use.

The new face of responsible marine transportation

The **Equinox Class** design balances hull form, power and speed with cargo-carrying capability for optimal performance and environmental efficiency. The new ships will emit an average of 40% less air emissions per tonne-kilometre of cargo carried.



7 Cargo spillage control

An enclosed self-unloading boom and variable-speed discharge belt system will help to control cargo spillage and residues on the ship and minimize discharges to the environment.

8 Dedicated wash water holding tanks

All ships have dedicated wash water holding tanks to control wash water discharges in environmentally sensitive areas. Even deck run-off can be captured and directed to these wash water tanks.

9 Advanced wastewater management technology

- **Integrated bilge water management system**
  The bilge water management system is designed to reduce oily residues at source. It features mechanical seals on all pumps and engineered drainage systems to capture potential leakage. Any oily residues that do occur will be treated with a high-efficiency Oily Water Separator.
- **Water-lubricated stern and rudder bearings**
  Stern and rudder bearings are lubricated with water to eliminate oil leakage from these sources.
- **Water-saving sewage systems**

  State-of-the-art sewage treatment units treat both black and grey water to the latest standards with minimal water consumption. Vacuum toilets consume 90% less water than conventional flushing toilets. Storage tanks for treated wastes are available for use in environmentally sensitive areas.

The new vessels will be able to carry more cargo at increased speeds while using less energy.

Safety and habitability

The new vessels feature an ergonomically designed bridge layout and enhanced visibility from all points. 10 All bridge systems can be monitored by one person. Monitors are capable of multiple displays. Low-light and thermal-imaging cameras will be used to improve safety in low visibility situations.

Noise and vibration levels are substantially less than those of today's typical Great Lakes vessel. To further enhance the comfort of crew members, individual cabins will have broadband internet access and satellite television. 11

Other features:

- Double-hull construction, with oil storage tanks separated from the shell by cofferdams.
- Land-based remote monitoring of vessel position and conditions, and equipment performance.
- Mooring winches located on both sides of the unloading boom slewing trunnion, for operational control on either side of the vessel to improve visibility and safety.
- Fully enclosed freefall lifeboat system allowing safer evacuation for the crew regardless of list and sea condition. 12

Official Green Passport

The Green Passport for ships is a document that lists all materials known to be potentially hazardous used in the construction of the ship, its equipment and systems. A Green Passport will be prepared for each ship and will accompany it throughout its operating life. This will help ensure the safety of all workers on the vessels and those involved in dismantling the vessel at the end of its life.

Algoma Central Corporation is currently planning the integration of these next-generation vessels into our fleet beginning in 2013.

10

Ergonomic Bridge Design

11

Habitability and Comfort

12

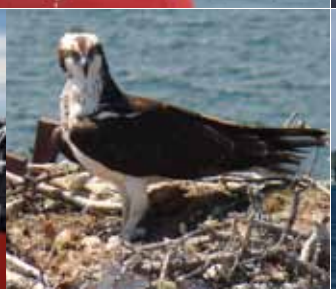
Freefall Lifeboat

Our Earth Day Contribution

Employees marked Earth Day on April 22nd this last year by volunteering at Malcolmson Eco-Park, a 36-acre natural ecological park located adjacent to Lock 1 of the Welland Canal in St. Catharines, Ontario. The park is noted for migrating bird species and is home to many rare Carolinian species of trees. It also boasts several walking and cycling trails for the public's enjoyment. Our team, led by the park's forestry expert, worked hard to clear an area in the park of a highly invasive shrub known as buckthorn, which crowds out native plants. It was a worthwhile effort and a good day was had by all.

"When one tugs at a single thing in nature, he finds it attached to the rest of the world."

– John Muir



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