

THE Global Green Freight Action Plan

REDUCING THE CLIMATE AND HEALTH
IMPACTS OF GOODS TRANSPORT



CLIMATE &
CLEAN AIR
COALITION
TO REDUCE SHORT-LIVED
CLIMATE POLLUTANTS

 globalgreenfreight.org

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PURPOSE

In accordance with the Global Green Freight Action Statement issued at the 2014 UN Climate Summit in New York, the Global Green Freight Action Plan calls on governments, private sector, civil society, and other actors to work in concert to align and enhance existing green freight efforts, develop and support new green freight programs, and to incorporate black carbon reductions into green freight programs.

The goal of the Global Green Freight Action Plan is to enhance the environmental and energy efficiency of goods movement in ways that significantly reduce the climate, health, energy, and cost impacts of freight transport around the world. Full implementation of this Action Plan will shape a more sustainable global freight sector where goods, materials, and trade flows move with the best available technologies and strategies through an efficient, cleaner and greener, multimodal, global freight supply chain. Performance data and best practices will be shared and exchanged via green freight programs and in ways that enhance efficiency, cost savings, competitiveness, environmental performance, public health, and economic development.

Why join? Joining the Global Green Freight Action Plan will give your organization, company, or government an opportunity to both leverage your relevant activities on a global scale and take advantage of expertise supplied by the active partners. The Action Plan aims to build on current momentum and accelerate progress on green freight. Stakeholders can join this effort by contacting the Green Freight Steering Group and offering a commitment, supporting action, or resource that may be added to the Action Plan and Global Green Freight website.



1. Why Green Freight?

The global trade in goods and materials is a key driver of economic growth and development, linking trading nations and consumer markets through an increasingly interconnected and interdependent global freight supply chain. International and domestic freight transport or “goods movement” is projected to continue its rapid growth in the coming years and decades as a result of the growth in trade, particularly in export-oriented economies and developing nations. However, freight trade and goods movement have well known and significant environmental and health impacts, which will continue to grow with that trade expansion.

Freight movement is largely driven by diesel-powered cargo vessels, trucks, and trains. While diesels are the workhorses of the transport sector and relatively energy efficient (as compared to gasoline vehicles or jet aircrafts), their combined contribution to transportation-related climate warming greenhouse gases and other short-lived climate pollutants, particularly black carbon, is significant. Black carbon is a component of fine particulate matter, a notable diesel pollutant, and is known to have significant air quality and public health impacts. Black carbon is also a potent short-lived climate pollutant, due to the climate-warming effects it creates in the atmosphere and its role in accelerating the melting of snow and ice.

Green freight refers to the efforts of the freight sector to help reduce greenhouse gas emissions and air pollutants and improve fuel efficiency across the global supply chain while maintaining competitiveness and economic growth. By reducing the amount of energy (i.e., fuel use) associated with freight transport through a range of measures, businesses can reduce costs and become more competitive. These efficiency measures invariably lead to emissions savings that result in broader benefits for society and the environment.

There exists a wide spectrum of complementary elements that policymakers may include in their sustainable freight transportation portfolios. Planning and investments in transportation systems, infrastructure, and maintenance have significant implications for freight efficiency, equipment durability, and costs. Vehicle emissions standards and fuels standards have obvious impacts on the environmental performance of the vehicles and engines that move and handle freight. For purposes of this Action Plan, improving the energy and environmental performance of freight operations through green freight programs will be the primary focus.

2. What Are Green Freight Programs?

Green freight programs, partnerships, and collaborative initiatives have been implemented as voluntary efforts in some countries and regions in various forms to drive improvement beyond business-as-usual (see **Table 1**). This includes both green freight *programs* and green freight *initiatives*. For the purposes of the Action Plan, a green freight *program* combines carbon accounting and disclosure with action plans, collaboration, and recognition for businesses’ efforts, e.g. through a label. An *initiatives* may be working on a subset of those activities or conducting research or work to support programs.

Programs like the SmartWay Transport Partnership (“SmartWay”) in the United States and Canada, with over 3000 partners, and the Clean Cargo Working Group (“Clean Cargo”) in the marine sector have been operating for a decade, setting examples for other partnerships and sector-based programs that have followed. Europe is home to several regional and national level green freight programs. In addition, green freight programs are being established in Asia and Latin America. As the drivers for green freight become more evident, governments, businesses, and civil society are working to further advance the development and implementation of green freight programs at the local, regional, and global level.

Numerous green freight programs and related efforts have developed around the world in the past decade, particularly in the last few years. Most of these programs have developed a variety of approaches to promote the adoption of energy-saving and emission reducing strategies. The focus of these programs, the types and numbers of partners included, and their data collection, performance benchmarking and reporting methodologies depend on the transport modes addressed, the pollutants and performance metrics of interest, as well as the geographic regions involved. Many of these programs have consistently demonstrated potential for significant emission reductions in a wide variety of locations and operating conditions.

The most successful green freight programs are based on the business case for fuel savings; they incentivize investments in fuel saving and emission reducing technologies and operational strategies, resulting in substantial cost savings to operators. In this way, the programs generate a “win-win”

outcome, with both financial and environmental benefits. Although the green freight programs may differ, several common features have been found that lead to program success:

- **Stakeholder Involvement:** Extensive stakeholder involvement in all aspects of program design, deployment, and operation is crucial to long-term success. Although the business-to-business nature of green freight programs presents unique challenges, these can be overcome through strong stakeholder commitment and participation in developing a program vision, quantification methodology, and measurement methods, as well as balancing concerns for transparency with confidentiality and data security. Programs should have representatives from across the entire supply chain, including shippers, carriers, and logistics providers, as well as key affiliates such as trade associations to foster mutual trust between partners and program administrators. Stakeholders from government and civil society should also be engaged in the process.
- **Administrative Structure:** Programs can be successful under a variety of administrative structures, with active leadership coming from industry, government, and/or other research organizations/NGOs. The appropriate structure will depend upon the data needs and preferences of the region, transport modes, and target participants. The key is to provide industry with a trusted, impartial arbiter ensuring that performance data are reliable and secure.
- **Data Collection and Benchmarking:** Amassing and organizing data on fuel consumption and activity allows the various stakeholders of the program to assess how carriers compare in terms of fuel efficiency and emissions. Using this information, fleets are able to analyze how they compare to other similar fleets according to these criteria. Also, shippers and logistics providers are able to select fleets based on performance metrics. In this manner, green freight programs leverage information in order to stimulate heightened awareness and competition for carriers and other entities across supply chains. Successful programs integrate both “push” (carrier-driven) and “pull” (shipper-driven) elements to varying degrees, reflecting the strategic and market value of performance measurement and evaluation for carriers, as well as the importance of reliable carbon footprinting and benchmarking for shippers.
- **Guidance for Technologies and Operational Best Practices:** This function is found to some extent in virtually every green freight program. Program administrators and participating companies generally look to use data and information collected about efficiency technologies and strategies to share best practices and lessons learned. This is an important service, as it is often the case that fleets lack enough information to make informed decisions around the multitude of technologies and operational practices that are available in the market. Guidance can also encompass verification of technologies and strategies. This refers to the independent testing of technologies using well-established test procedures. Employing standardized protocols to assess the fuel savings (or emissions reduction) performance of individual products and making this information public, gives stakeholders confidence as to the effectiveness of specific technologies. Often, verification done by green freight programs or other independent entities creates a level playing field in which technology suppliers can showcase their products’ merits. By having their products vetted through the technology verification process, manufacturers can highlight third-party results that evidence a certain level of performance.
- **Public Recognition and Incentives:** Public recognition includes things such as branding, labeling, and awards. Within the context of green freight programs, these elements are a way for program members to publicize and be acknowledged for the work that they are doing to voluntarily benchmark and improve their performance. This is also a way for green freight program administrators to raise the visibility of the program and incentivize various stakeholders to participate.
- **Funding:** Programs should be provided with consistent, reliable funding (commensurate with program goals and commitments) and qualified, trained staff in order to ensure sustained communication with partners, effective data management, reliable program performance assessment, and successful outreach and partner recruiting.

- Continuous Improvement:** Established programs should consistently be evaluating, refining, enhancing, and expanding their program. Most programs are not able to cover the entire freight spectrum within their given region or mode. Programs can start with what is feasible, with the forethought of making further improvements as the initial program becomes well established

TABLE 1. CURRENT GREEN FREIGHT PROGRAMS OR INITIATIVES AND PROGRAMS UNDER DEVELOPMENT

Program Type	Scope	Name
Green freight programs that include emissions calculation, label schemes and continuous improvement	Modal	<ul style="list-style-type: none"> Business for Social Responsibility: Clean Cargo Working Group IATA: Air Cargo Carbon Footprint working group
	Regional	<ul style="list-style-type: none"> Green Freight Europe Green Freight Asia
	National	<ul style="list-style-type: none"> Canada and US: SmartWay Transport Partnership Australia: Ecostation* Belgium: Lean and Green China: China Green Freight Initiative Germany: Lean and Green France: Objectif CO₂ Italy: Lean and Green Japan: Green Logistics Partnership and Tokyo Freight Carrier Assessment System** Korea: Green and Smart Transport Partnership Mexico: Transporte Limpio Netherlands: Lean and Green United Kingdom: EcoStars Fleet Recognition
Other green freight programs and initiatives (note: list is not comprehensive)	Programs for specific modes and strategies	<ul style="list-style-type: none"> Carbon War Room: Operation Sustainable Shipping Forum for the Future: Sustainable Shipping Initiative EU: iCargo EU: Green Efforts* EcoPorts Environmental Ship Index (ESI) Existing Vessel Design Index (EVDI) Green Marine ADB: Greater Mekong Sub-region (GMS) Green Freight Initiative
	Emission calculation tools, methodologies or reporting	<ul style="list-style-type: none"> Clean Shipping Index EcoTransIT Network for Transport Measures (NTM) EU Cofret* WEF: Carbon Consignment Working Group* Carbon Disclosure Project (CDP) SFC: Global Logistics Emissions Council (GLEC)
	Global development programs on freight	<ul style="list-style-type: none"> CCAC: Global Green Freight Action Plan World Bank and Netherlands: Sustainable Logistics Trust Fund
	Global transport partnerships that include freight	<ul style="list-style-type: none"> Partnership on Sustainable Low Carbon Transport (SLoCaT) International Transport Forum (ITF)

Note: links to the websites of these initiatives and/or the organizations that host them as well as an overview of international industry associations and leading institutes relevant to the freight and logistics sector are available on <http://www.smartfreightcentre.org/map>

* No longer active

** Subnational program in Tokyo only

3. The Global Green Freight Action Plan: Overview

Recognizing that mitigating short-lived climate pollutants is critical to both addressing climate change in the near term and improving air quality, the Climate and Clean Air Coalition to Reduce Short-Lived Climate Pollutants (CCAC) was established in February 2012. Further recognizing the growth in freight movement, the environmental impacts of freight, and the potential for efficiency gains in this key economic sector, the CCAC chose to embrace and support the green freight movement as a platform to help advance the goal of reducing black carbon.

Fifty government, civil society, private sector and other partners committed to support the development and implementation of the Global Green Freight Action Plan at the UN Secretary General's Climate Summit on 23 September 2014 in New York. Additional organizations have joined the effort since and have provided their input and expertise, which have been crucial to the development of the Action Plan. A Green Freight Steering Group established early on in the project, consisting of representatives from government, civil society and the private sector, has overseen the development of the Action Plan and will continue to

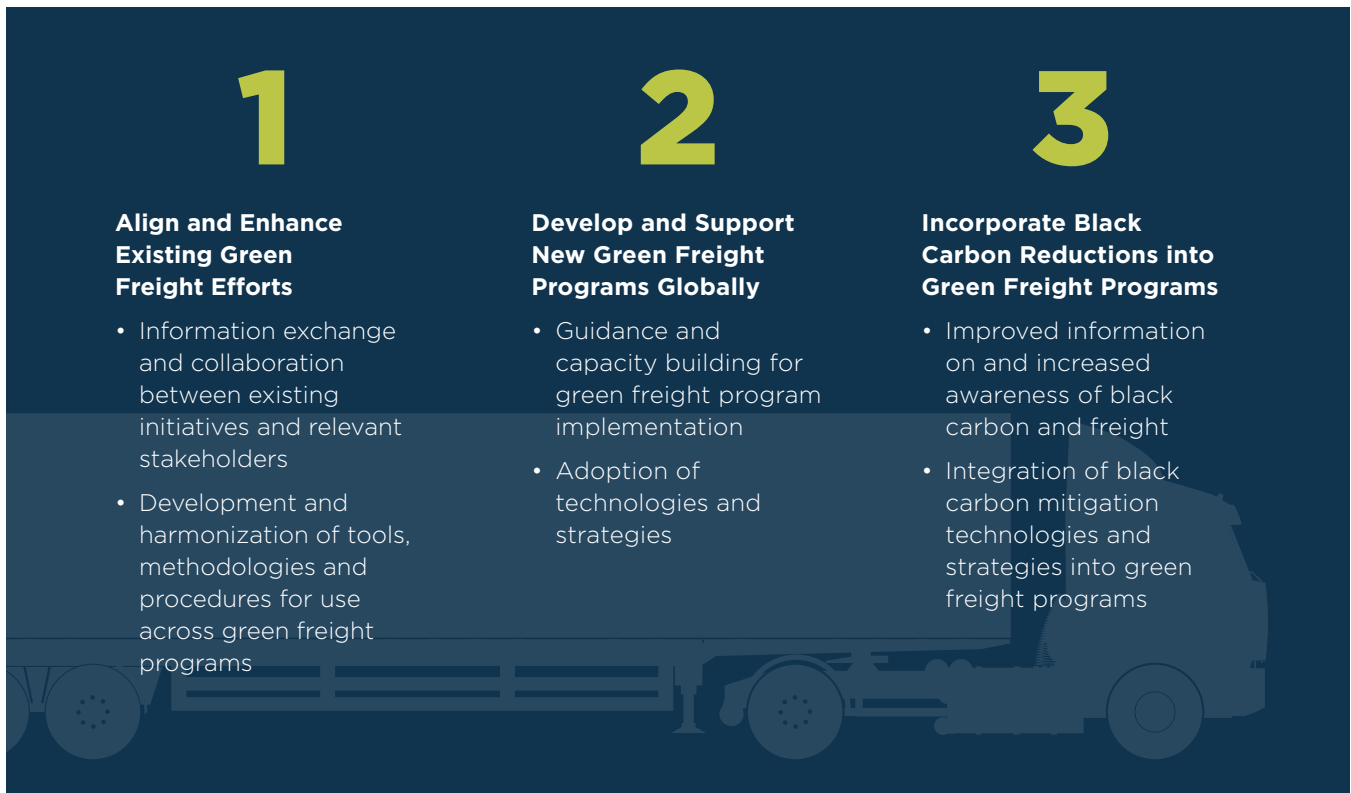
oversee the modification of the plan as needed and in consultation with the stakeholders who have helped inform these efforts.

This Action Plan is intended to serve as a roadmap and blueprint to advance the development and harmonization of green freight programs, and thereby reduce the emissions intensity of carbon dioxide (CO₂), black carbon, and other air pollutants from freight transport globally.

As can be seen in **Figure 1**, the Global Green Freight Action Plan supports three key goals: align and enhance existing green freight efforts; develop and support new green freight programs globally; and incorporate black carbon reductions into green freight programs. These goals will be advanced by a range of actions and activities, such as a Global Green Freight website, pilot programs, targeted work in select countries, and the development of new forums for information exchange and capacity building.

Successfully completing the Action Plan would result in an integrated network of national or regional green freight initiatives which are based on or use: (1) similar principles, partnership design, frameworks and core elements; (2) standardized quantification and performance benchmarking tools; (3) complementary

Figure 1. Goals and Action Types for the Action Plan



branding and marketing efforts; (4) multinational business partners that move goods through the multimodal global supply chain; and (5) a common information and data sharing forum to improve data and policy making on freight activity and emissions mitigations. In addition, success would result in quantifiable and significant near-term and long-term reductions of black carbon, toxics, greenhouse gases and other harmful diesel emissions from each of the participating countries, as well as quantifiable and significant fuel and cost savings which benefit the partners, offer payback on technology adoption, strengthen economies and enhance energy security. Lastly, we expect the Action Plan will result in expanded markets for emission reducing and fuel saving technologies. More details about the specific actions that have been identified to support this objective are discussed in the next chapter.

3.1 Align and Enhance Existing Green Freight Efforts

Green freight programs of all shapes and sizes are in various stages of development across the globe. The characteristics and scope of these programs vary widely, but at the highest level these programs have a common mission: to improve the efficiency of freight transport. These programs range from national programs formed as public-private partnerships, to regional industry-led initiatives, to mode-specific programs. In addition to established programs, there are a vast number of supporting groups, such as NGOs, universities, and other organizations conducting research and associated activities to support specific elements of green freight programs (such as technology verification, emissions measurement and reporting methodologies, or enhanced logistics). (See **Table 1** for a summary of existing programs.)

While the proliferation of green freight efforts underscores the appeal and potential of these programs, their success will depend on global collaboration and cooperation to help ensure maximum impact and reductions. There is a limit to what a disconnected assortment of individual programs can accomplish when it comes to improving the efficiency of the global supply chain. For example, business and industry with global, multi-modal supply chains are increasingly demanding linked green freight programs with standardized tools, methods, and metrics to support their sustainability efforts. Business leaders

can most effectively leverage their market influence to drive efficiency efforts when they can accurately account for freight energy use and carbon throughout their supply chain.

Without a way to align the programs, the result is a patchwork system that discourages participation from the global shippers and carriers who are the keys to the implementation of freight efficiency best practices. There is a need to connect the dots at a global level in order to tie all the existing green freight programs together and obtain the maximum potential benefit. Thus there is a growing need to align, harmonize, and share best practices on a global scale.

There are a number of actions that should be carried out to accomplish this objective. In general, these actions fall into two main categories: (1.1 in Table 2) information exchange and collaboration between existing initiatives and relevant stakeholders, and (1.2) development and harmonization of tools, methodologies, and procedures for use across green freight programs.

Information exchange and collaboration is a key for fostering green freight program alignment on a global scale. For example, international symposia with representatives from green freight programs along with stakeholders from industry, government, and civil society can create a forum for sharing of expertise and experience that will lead to stronger ties between existing programs. In addition, these symposia can help strengthen mutual understanding of various program elements as well as identify key areas for alignment.

Developing harmonized tools, methodologies, and procedures for use across programs is vital to successfully align existing green freight efforts. For example, most programs incorporate an element of carbon footprint calculation and reporting by program participants. However, universal tools are not available globally for multinational companies to reliably and consistently measure, calculate, report and optimize their emissions and fuel use. Without these tools, it is difficult for companies to compare and benchmark their global, regional, or national CO₂, black carbon, and other air pollutant emissions across modes or between countries, or to fully assess the efficiency of their freight operations internally, or to compare with their industry peers.

The specific actions that have been identified to support this objective are listed and described in **Table 2**.

3.2 Develop and Support New Green Freight Programs Globally

There are a number of countries with a desire to establish national green freight programs. However, there are barriers these countries face which can, in general, be traced back to either lack of information or lack of capacity. There is an overall need for access to information and expert support for those countries looking to establish or develop a green freight program. Expertise, data, and reliable information can be difficult to find. There are a number of green freight program elements, such as program financing and applicable technologies and strategies, which program managers need to comprehend in the context of their country or region for a program to be successful.

A range of financing and incentive schemes are necessary for green freight programs to be successful. For example, governments need capacity and resources to run or manage such a program, carriers need financing options to purchase technology and implement strategies promoted by green freight programs, and incentives are needed to encourage increased participation. There are a number of financing and incentive schemes that can be used to increase the success of green freight programs. Some examples are loans, subsidies, grants, reduced taxes and fees, improved access, and combining financial incentives with regulatory backstops. In addition, there is a range of financing sources from which green freight programs can receive financial assistance.

One of the central elements of green freight programs is to give freight carriers reliable tools, information, and support for improving their efficiency. This can be in the form of information on specific technologies (e.g. aerodynamic devices, low rolling resistance tires, and anti-idling equipment) and strategies (e.g., driver training and incentive programs, improved logistics, and improved maintenance programs) and through verification of manufacturer-specific technologies. Most technologies and strategies will have an upfront cost to implement so the carriers need to have a concrete understanding of how well the technologies or strategies will work for their application and what sort of payback time they can expect. Green freight program leaders must have a detailed understanding of the freight system in their country or region in order to understand which technologies and strategies will be the most applicable to the given fleet. Accelerating efficiency improvement, performance benchmarking, and reporting for the carriers will enable shipper partners to also benchmark and report their own

emissions while optimizing supply chain performance using performance data.

Ideally all countries would have a green freight program customized for their region. Initially, the actions will focus on creating tools and resources that can be utilized by a wide range of countries and, in addition, conducting specific work in countries that have the most interest in establishing or improving their green freight program. In general, the actions to support this objective fall into two main categories: (2.1 in Table 2) guidance and capacity building for green freight program implementation and (2.2) adoption of technologies and strategies.

Actions to support guidance and capacity building include the development of a centralized website resource, development of training materials and training workshops, and more. Actions to support the adoption of technologies and strategies include country-specific freight assessments, technology verification programs, and development of financing strategies to support the implementation of technologies and strategies.

The specific actions that have been identified to support this objective are listed and described in **Table 2**.

3.3 Incorporate Black Carbon Reductions into Green Freight Programs

While green freight programs' central mission is the improvement of freight efficiency and the reduction of CO₂ emissions, the reduction of other diesel emissions (such as black carbon) is a complementary benefit. Green freight programs reduce black carbon through a number of mechanisms, such as accelerated renewal of the fleet and implementation of technologies and strategies that reduce black carbon while also reducing fuel consumption.

While the business case for improving efficiency to reduce fuel use is straight forward, the business case for black carbon reductions may not be so clear. Black carbon is a relatively new or unknown challenge for most business leaders that are committed to environmental leadership, and these firms will need guidance on how to incorporate black carbon mitigation into their supply chain sustainability efforts. Furthermore, many private sector shippers and carriers will need to understand new risks and unknowns that black carbon could present to their operations and supply chains. Thus prioritization of black carbon emissions should be an essential part of their strategy.

Green freight programs do not currently measure or track black carbon reductions; therefore it can be challenging to quantitatively estimate the potential impact of globalized green freight efforts on black carbon emissions. Tracking black carbon reductions will likely follow a different methodology than CO₂ accounting, due to the fact that black carbon reductions are almost entirely dependent on the emissions certification level of the vehicle (or vessel) and the associated sulfur level of the diesel fuel. It would be possible for a given shipper to have a very low black carbon footprint while still having a very large CO₂ footprint.

In addition to the lack of measurement and reporting tools for black carbon, there is a lack of information on the impacts of green freight program technologies and strategies on black carbon reductions. There are a number of efficiency technologies that likely have the potential to produce corresponding black carbon reductions, but have not been verified as such.

A number of actions have been identified that will be required to meet the objective of incorporating black

carbon (and other air pollutants) into green freight programs. These actions fall into two main categories: (3.1 in Table 2) improved information and increase awareness on black carbon and freight and (3.2) integration of black carbon into green freight programs (specifically, supporting tools and methodologies and driving the adoption of technologies and strategies to reduce black carbon.)

Actions to support improved information and increased awareness on black carbon and freight include working with the private sector to promote the business case for black carbon reductions. Actions to support the integration of black carbon into green freight programs include the development of a methodology to track and report black carbon emissions and to determine the black carbon reductions that can be obtained through the use of advanced efficiency technologies, strategies, and best practices.

The specific actions that have been identified to support this objective are listed and described in

Table 2.

4. Actions

4.1 Actions and Milestones

Table 2 specifies the actions that have been identified as a strong foundation for achieving the three main goals of the Action Plan. These actions were identified through an extensive outreach and consultation process involving the over fifty endorsers as well as other stakeholders. For actions that support multiple goals, these were placed in the table under the most relevant goal for that action. It is noted that not all actions are fully funded and additional funding is being sought in parallel to the implementation of the Action Plan.

Figure 2 illustrates a 15-year vision of how the actions will build on each other to cohesively work towards accomplishing the three goals.

4.2 Implementation and Stakeholder Roles

Deliverables, timeframes, points of contact, and various stakeholder roles have been identified for most actions.

It is expected that as the Action Plan is launched and implemented, additional organizations will be identified to participate in new and existing actions. We acknowledge that there are a vast number of actions currently being performed by organizations around the world that support the objectives of the Action Plan. It was not deemed feasible to comprehensively list all activities. Key stakeholder groups that will implement the action include:

Public sector and government agencies:

Ministries, agencies and authorities which oversee environmental, energy, and transportation policy making in their countries are invited to engage in further development and implementation of the Action Plan. These stakeholders will be able to learn best practices and acquire lessons learned in developing and implementing green freight programs. They can also gain new insights on how these programs can complement or supplement efforts to improve the infrastructure, logistics sector, and regulatory programs in their countries. The collective results of these efforts should foster more sustainable economic development, energy security, and improved public health in their countries.

Figure 2. Timeline of Key Global Green Freight Action Plan Milestones



Private sector: Businesses that ship, carry, or manage goods movement are invited to engage in supporting the implementation of green freight programs through this Action Plan. Shippers, carriers, and logistics firms in key economic sectors such as manufacturing, retail, food and beverage, and other industries that move the most tonne-miles of freight globally will have opportunities to shape green freight programs to help advance their needs and address their challenges. Associations, technology suppliers, vehicle manufacturers, and service providers can work with the shippers, carriers, and logistics firms as well. Private sector support is pivotal to the success of green freight programs, and they have much to gain, including cost savings, enhanced competitiveness, corporate leadership, and policy influence.

Civil society: Organizations with missions that aim to address common challenges around climate change, environmental protection, economic development and other related global concerns are invited to lend their support and influence to implement the Action Plan. Freight movement links developed and developing economies creating broad impacts but also opportunities for collaboration and engagement across a wide range of organizations: NGOs,

research/academic institutes, development agencies, foundations, financing institutes, and others.

4.3 Web-Based Action Plan

This Action Plan should be fluid and dynamic in order to easily accommodate new actions that are identified and to update as actions are completed. Therefore, the Action Plan will “live” on the website globalgreenfreight.org, which is due to launch in mid-2015. The Action Plan will be regularly updated and kept current in order to reflect the pace of change in the world of green freight. Utilizing a web-based format, as planned, for maintaining the Action Plan will allow new implementers and actions to be identified in real time and will transform a static document into a dynamic Action Plan. The web-based Action Plan will include further details as to the status of actions as well as more information regarding the organizations contributing to various actions. In addition, the website will serve as a structured portal to information about green freight and green freight programs around the world, and the hub of a community of expertise to supply guidance and support for establishing and developing green freight programs.

TABLE 2. GLOBAL GREEN FREIGHT ACTION PLAN: ACTIONS, IMPLEMENTATION, AND STAKEHOLDER ROLES

Objectives	Actions	Implementation			Stakeholder Roles (where applicable)		
		Deliverable	Timeframe	Point of Contact	Public Sector	Private Sector	Civil Society
Align and Enhance Existing Green Freight Efforts	1.1. Information exchange and collaboration between existing initiatives and relevant stakeholders						
	1.1.1. Information exchange meetings. Convene multi-stakeholder meetings for the purpose of information exchange and collaboration on how to improve and accelerate freight efficiency and the reduction of CO ₂ , black carbon and other emissions. These meetings will be focused on specific, focused topics relevant to green freight programs.	Meetings resulting in actionable work and building on each other	Start in 2015	SFC			
	1.1.2. Regional workshops. Bring together existing programs/ initiatives and stakeholders from government, private sector and civil society (from both countries with programs and those interested in developing programs) to increase collaboration, harmonization and expand programs in countries across a given region.	Workshops resulting in actionable work and building on each other	Start in 2015	ICCT: Latin America CAA: Asia SFC: Europe	<ul style="list-style-type: none"> Actively participate and present on development of green freight activities with an eye to interoperability across regions 	<ul style="list-style-type: none"> Actively participate and present on development of green freight activities with an eye to interoperability across regions 	<ul style="list-style-type: none"> Facilitate meetings and provide balanced information to other stakeholders
	1.1.3. Global Green Freight Summit. Organize a regularly occurring event to bring together high-level green freight representatives from all over the globe.	Meetings giving high level attention to Global Green Freight. Agreed upon best practices for green freight programs.	Start in 2016 and continue on biennial basis	ICCT, SFC	<ul style="list-style-type: none"> Support high level participation to show strong support for harmonization of green freight programs 	<ul style="list-style-type: none"> Support high level participation to show strong support for harmonization of green freight programs 	<ul style="list-style-type: none"> Facilitate meetings and provide balanced information to other stakeholders
	1.1.4. Regional programs cooperation and replication. Explore the feasibility of increased cooperation between existing programs in a given region and the potential to expand programs across the region. This action will focus initially on Europe due to the fact there are a number of existing programs.	Meetings specifically identifying actions for regional alignment of programs	Start in 2015	ICCT: Latin America CAA: Asia SFC: Europe	<ul style="list-style-type: none"> Agree to be open to harmonization and cooperation between programs 	<ul style="list-style-type: none"> Agree to be open to harmonization and cooperation between programs 	<ul style="list-style-type: none"> Facilitate the process with a balanced and informed approach
	1.2. Development and harmonization of tools, methodologies, and procedures for use across green freight programs						
	1.2.1. Harmonized logistics emissions methodologies. Develop and drive the adoption of a universal and transparent way of calculating freight/logistics emissions across the global supply chain that companies can use to compare and select more fuel efficient modes and carriers and identify ways to increase efficiency and reduce costs.	GLEC Framework for Logistics Emissions Methodologies	2014-2017 with continued follow up and improvement	SFC		<ul style="list-style-type: none"> Lead the development of methodologies through contribution of practical information and real data 	<ul style="list-style-type: none"> Facilitate, monitor and share harmonized methodologies with stakeholders
	1.2.2. Global verification procedures for technologies/strategies. Develop globally applicable procedures for the verification of technologies and strategies to be used to improve freight efficiency and establish a center or entity to act as an impartial verifier of technologies and strategies.	International Technology Verification Center	Start pilot work in 2015. Establish center by 2020	ICCT	<ul style="list-style-type: none"> Develop policies which recognize global verification procedures 	<ul style="list-style-type: none"> Agree to test solutions or make them available for testing 	<ul style="list-style-type: none"> Facilitate, monitor and verify testing

TABLE 2. GLOBAL GREEN FREIGHT ACTION PLAN: ACTIONS, IMPLEMENTATION, AND STAKEHOLDER ROLES

Objectives	Actions	Implementation			Stakeholder Roles (where applicable)		
		Deliverable	Timeframe	Point of Contact	Public Sector	Private Sector	Civil Society
Develop and Support New Green Freight Programs Globally	2.1. Guidance and capacity building for green freight program implementation						
	2.1.1. Global Green Freight Website. Develop a Global Green Freight website that provides a central portal for information and guidance on how to develop or improve national green freight programs.	Website with guidance and information for developing and improving a green freight program	Launch in 2015 and maintain indefinitely	ICCT			<ul style="list-style-type: none"> Continuously develop and improve information
	2.1.2. Training materials. Develop green freight program training guide and curriculum to be used to train program administrators and other participants.	Training materials including presentations and related documents	Begin in 2015 and continue indefinitely	USEPA	<ul style="list-style-type: none"> Those with experience: develop and share their program experience; those without programs: make partnerships to learn 		<ul style="list-style-type: none"> Drive the international partnership development process and assist in training where necessary
	2.1.3. Training workshops. Organize regional and country training workshops on green freight program development.	Training workshops	Begin in 2015 and continue indefinitely	USEPA	<ul style="list-style-type: none"> Conduct informative trainings based on best practices and lessons learned 		<ul style="list-style-type: none"> Conduct informative trainings based on best practices
	2.1.4. Existing programs tracking. Document and share existing green freight programs in a comparable format and share through Global Green Freight website. Mapping/tracking of existing programs including the elements of the programs and other details. Keep updated as new programs come online or as programs are further developed.	Website tracking	Begin in 2015 and continue indefinitely	ICCT			<ul style="list-style-type: none"> Continuous development and improvement of information
	2.1.5. Supporting policies. Develop policy descriptions of different types of policies to complement green freight programs. Included will be link to policy summaries and/or links to websites/documents with more detailed information to allow countries that develop policies to learn from existing efforts. Promote policy guidelines to allow countries that develop policies to elaborate their norms and regulations	Element of Website	Begin in 2015 and continue indefinitely	ICCT	<ul style="list-style-type: none"> Commit to the further development of an entire portfolio of sustainable freight activities including policies 	<ul style="list-style-type: none"> Communicate and educate stakeholders about the realities of the freight sector 	<ul style="list-style-type: none"> Continuously develop and improve information
	2.1.6. Establish and improve green freight programs. Support countries to establish or improve national green freight programs. [Currently, CCAC funded work is being done in Mexico, Vietnam, and Bangladesh. Additional work is being performed in many other countries.]	Green freight recommendations for establishing and improving country level programs	Begin in 2014 and continue indefinitely	ICCT/CAA	<ul style="list-style-type: none"> Aim to develop domestic programs with linkages and interoperability with global programs 	<ul style="list-style-type: none"> Participate in programs, report data into global reporting systems 	<ul style="list-style-type: none"> Assist and support in the establishment and improvement of green freight programs
	2.1.7. Expert assistance. Provide expert assistance for countries seeking to establish or improve upon a national green freight program. Provide easy access to experts in the field of green freight for those unable to obtain the information through other means.	Ad hoc assistance and expert advice	Continue indefinitely throughout project	ICCT			
	2.1.8. Develop financing strategies. Develop financing strategies to assist countries in establishing or supporting a national green freight program and to assist program participants to make improvements to the efficiency and emissions of their freight movement.	Country specific finance strategies based on relevant funding opportunities	Continue indefinitely throughout project	ICCT			
	2.2. Adoption of technologies and strategies						
	2.2.1. Freight assessments. Develop a methodology for countries or regions to determine the potential benefits from establishment of a green freight program. Develop methodology as well as conduct freight assessments to determine where the biggest improvement potential is that can be reflected in the design of green freight program.	Country specific freight assessments with guidance for applicable technologies and strategies	Begin in 2015 and continue indefinitely	ICCT	<ul style="list-style-type: none"> Supply data and information to support freight assessments 	<ul style="list-style-type: none"> Supply data and information to support freight assessments 	<ul style="list-style-type: none"> Conduct impartial freight assessments and develop methodologies.
	2.2.2. Pilot projects. Establish pilot projects to demonstrate the viability of technologies and strategies which can be readily applied.	Pilot programs that cover one or a number of elements of a green freight program and that are designed to ultimately lead to an established program	Begin in 2015 and continue indefinitely	ICCT			
	2.2.3. Promote technologies and strategies. Promote and inform the freight sector on new and existing technologies and operational strategies that can be implemented by the freight industry to improve efficiency and reduce emissions. Include information about how the technology or strategy can be applied to different operational scenarios and the expected benefits. Promote newly developed technologies and strategies to accelerate the adoption curve of relevant technologies and strategies. Promote market opportunities for technology suppliers	Links to overview of existing technologies and strategies on Website	Begin in 2015 and continue indefinitely	ICCT, SFC	<ul style="list-style-type: none"> Provide funding or incentives for the adoption of technologies and strategies 	<ul style="list-style-type: none"> Assist with real world validation of technologies and strategies 	<ul style="list-style-type: none"> Supply impartial information to assist stakeholders in determining the most applicable technologies and strategies

TABLE 2. GLOBAL GREEN FREIGHT ACTION PLAN: ACTIONS, IMPLEMENTATION, AND STAKEHOLDER ROLES

Objectives	Actions	Implementation			Stakeholder Roles (where applicable)		
		Deliverable	Timeframe	Point of Contact	Public Sector	Private Sector	Civil Society
Incorporate Black Carbon Reductions into Green Freight Programs	3.1. Improved information and increased awareness on black carbon and freight						
	3.1.1. Black carbon and freight information. Develop information package on black carbon and freight with relevant statistics and information that demonstrate a clear link between black carbon, freight, and green freight programs.	Report on black carbon and green freight	2015-2020	ICCT			
	3.1.2. Business case for black carbon. Work with the private sector and governments to develop the business case for black carbon reduction. Promote the business case through outreach and awareness campaigns in order to create an environment of public support for the reduction of black carbon.	Report and outreach on the business case for black carbon	2015-2020	ICCT			
	3.2 Integration of black carbon into green freight programs' supporting tools and methodologies						
	3.2.1. Black carbon calculation methodology. Develop a calculation methodology for black carbon, particulate matter and other air pollutants for each mode of freight.	Black Carbon methodology for green freight programs	2015-2020	SFC	<ul style="list-style-type: none"> Provide expert assistance; co-lead development of methodology, where expertise exists 	<ul style="list-style-type: none"> Provide input into constraints on given methodologies 	<ul style="list-style-type: none"> Provide expert assistance; co-lead development of methodology, where expertise exists
	3.2.2. Harmonized black carbon methodology. Incorporate a black carbon and other air pollutant calculation methodology into reporting tools and methodologies and integrate them into green freight programs (related to action 1.2.1).	Black Carbon methodology added to GLEC framework	2015-2020	SFC		<ul style="list-style-type: none"> Provide input into applicability of given methodologies 	<ul style="list-style-type: none"> Facilitate, monitor and share harmonized methodologies with stakeholders
	3.2.3. Black carbon financing. Develop a financing strategy to incorporate black carbon reductions into green freight programs.	Country specific report on strategies to improve incentives and financing for black carbon reduction through their green freight program	Begin in 2015 and continue indefinitely	ICCT	<ul style="list-style-type: none"> Implement creative programs and schemes to fund and incentivize black carbon reduction technologies 	<ul style="list-style-type: none"> Participate in projects to install technologies and renew fleets utilizing available financing 	<ul style="list-style-type: none"> Inform on best practices for black carbon financing
3.2.4. Black carbon technologies and strategies. Develop an approach for assessing black carbon reductions from technologies and integrate these into technology verification protocols, schemes, and website information (related to action 1.2.2). In addition, promote relevant technologies including how the technology or strategy can be applied in different operational situations and the expected benefits.	Black Carbon technologies included in technology verification center technology list.	Begin in 2015 and continue indefinitely	ICCT				

- CAA** Clean Air Asia
- ICCT** International Council on Clean Transportation
- SFC** Smart Freight Centre
- USEPA** U.S. Environmental Protection Agency

5. Next Steps

Following publication of the Global Green Freight Action Plan, the next steps will be:

Continue Consultation and Outreach of the Action Plan to key stakeholders and at key events.

Launch globalgreenfreight.org with Web-based Action Plan mid-2015.

Continued Implementation of Actions in **Table 2** with the Action Plan endorsers and other stakeholders.

Track Actions and Report on Progress annually.

Expand the Action Plan by regularly adding actions, engage more stakeholders, and mobilizing additional funding.

COP21. Progress and new commitments will be announced at the COP21 in Paris in late 2015.

Finally, this Global Green Freight Action Plan is a starting point on the pathway to more sustainable global goods movement. It is intended to be a catalyst and a new call to action for others to join and support this critical effort. The Steering Group invites those who share this vision for global green freight to lend their support, expertise, influence and resources to help champion and implement this Action Plan. All public sector, private sector, civil society, and other stakeholders with something to contribute are invited to join this effort and move the world toward green freight.

Please see “*Global Green Freight Action Plan: Supplemental Document*” for supporting information

To join the Global Green Freight Action Plan or for further information please contact the Green Freight Steering Group through Rachel Muncrief (rachel@theicct.org).



STAKEHOLDERS AND ENDORSERS

Bangladesh	Hewlett Packard	Nigeria
Benin	IKEA	Norway
CAEM	Institute for Global	Partnership on Sustainable
California Air Resources Board	Environmental Strategies	Low Carbon Transport
Canada	Institute for Governance and	Peru
CEID Colombia	Sustainable Development	Philippines
Central African Republic	International Council on Clean	Poland
Centre for Clean Air Policy	Transportation	Republic of Korea
Centro de Derechos	International Network for	Russian Federation
Humanos y Ambiente	Environmental Compliance and	Smart Freight Centre
Centro de Investigación en	Enforcement	Sweden
Mecatrónica Automotriz of	International Solid Waste	Swiss Foundation for
Tecnológico de Monterrey	Association	Technical Cooperation
Centro Mario Molina Chile	Ireland	Switzerland
Clean Air Asia	Japan	Togo
Clean Cargo Working Group	Lean and Green	United Nations Environment
Cote d'Ivoire	Liberia	Programme
Deutsche Post DHL	Mexico	United States of America
ECO Stars Fleet	Molina Center for Strategic Studies	Vietnam
Recognition Scheme	in Energy and the Environment	Volvo
FIA Foundation	Morocco	World Bank
France	Natural Resources Defense Council	World Meteorological Organization
Green Freight Europe	Netherlands	

GREEN FREIGHT STEERING GROUP

United States Environmental Protection Agency
International Council on Clean Transportation
Environment Canada
Smart Freight Centre
United States Department of State
Clean Air Asia
Natural Resources Canada
World Bank

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