

SmartWay International Summit Summary Notes

December 2-4, 2008 Ann Arbor, Michigan

December 2, 2008

Complex Model Analysis of the SmartWay Transport Partnership Dr. Edgar Blanco, Massachusetts Institute of Technology

- Dr. Blanco and Kwan Chong Tan are conducting a study of the factors contributing to the success of the SmartWay program and policies to ensure that this success is sustained over the long run.
- They have developed a model of the program and are performing simulations to test policies regarding the future structure of the program.
- The SmartWay program is subject to both positive (or reinforcing) feedback loops and negative (or balancing) feedback loops. The feedback loops in the model were developed using data on the historical growth of the SmartWay program.
- An example of a positive feedback loop is that as more carriers join the program, industry awareness of the program increases, which leads to even greater carrier participation.
- An example of a negative feedback loop is that, all other things being equal, the increasing popularity of the program results in decreased levels of service to each participating company.
- Preliminary simulations suggest that a focus on large carriers would achieve more reductions in CO₂ emissions than the baseline scenario for the program.
- The final report of this research is scheduled for completion in January 2009.

Sustainable Logistics: A European Perspective Dr. Alan McKinnon, Heriot-Watt University, Edinburgh

Key Points:

• Economic integration and enlargement of the European Union (EU), as well as greater prosperity, has resulted in greater freight transport activity or "intensity." In other words, freight activity is growing faster than the economy.

- In the United Kingdom (UK), carbon emissions per tonne-km have gone down, primarily due to deindustrialization (i.e., outsourcing). However, if one includes the carbon "embedded" in imported products, UK carbon emissions are actually 50% higher and growing.
- Freight intensity varies considerably across EU Members, which makes it more challenging to design common emissions reduction strategies.
- There are several levels of logistical decision-making: strategic, commercial, operational, and functional. To date, most "green" measures have been implemented at the lower levels, and they are often offset by decisions made at higher levels.
- The EU has tried unsuccessfully to shift freight to lower-carbon modes (e.g., from trucks to rail or marine).
- In the EU, the average payload of trucks has been going up and empty miles have been going down. Factors such as just-in-time inventory systems may be contributing to the number of trucks that are running less than full.
- The UK has done benchmarking surveys of different freight sectors to measure energy intensity. Looking at the variation of companies within sectors allows you to estimate potential savings from helping the poorest performers in each sector.
- Some work has been done to develop marginal cost curves for carbon abatement in the transport sector. However, we need more of these cost curves that are specific to different freight sectors.

Merging Business and Environmental Goals Panel Discussion

Participants: Mark Servidio, Sharp Electronics (Moderator) Bill Boyer, NYK Logistics Americas Glenn Kedzie, American Trucking Associations (ATA) David Miller, Con-way

Key Points:

- At least some U.S. freight carriers were initially skeptical about the value of joining the SmartWay program. After learning more about the program and seeing the benefits, they have now become enthusiastic participants.
- Participating companies are deriving many benefits from the SmartWay program, including:
 - o Increased fuel efficiency and reduced operating costs,
 - Improved environmental performance, which is increasingly important to customers,
 - Public recognition as progressive companies,

- Ability to benchmark environmental performance against industry best practices,
- o Advancement of broader corporate sustainability goals, and
- o Increased environmental awareness among employees.
- ATA has recently unveiled a sustainability plan, in part to inform regulators about which emissions reduction strategies will work best for the trucking industry. The plan includes recommendations in the following areas:
 - Reducing speed limits,
 - Decreasing idling,
 - o Increasing fuel efficiency by participating in the SmartWay program,
 - Reducing congestion by improving the U.S. highway network,
 - Increasing size and weight limits on trucks, and
 - Setting higher national fuel economy standards.
- The U.S. trucking industry recognizes that the SmartWay program has "outgrown its pants," which has resulted in decreased levels of service to participating companies. The trucking industry is trying to help EPA by advocating for the program in Washington.
- Because the vast majority of U.S. trucking firms are small businesses (20 or fewer trucks), there is a need to provide technical and financial assistance, especially during the current recession.

Overview of Transportation, Air Quality, and Climate Change Panel Discussion

<u>Participants:</u> Bob Smith, Natural Resources Canada Gerald Lalevee, ADEME, France Tadashi Kaneko, Japan International Transport Institute Rick Barber, New Zealand Transport Agency

Key Points Regarding Canada:

- Transportation accounts for 26 percent of Canada's GHG emissions. Of the GHG emissions attributable to on-road vehicles, 65 percent are from light-duty vehicles and 34 percent are from heavy-duty vehicles.
- Because 99 percent of transportation energy is derived from fossil fuels in Canada, energy efficiency is a key strategy for reducing GHG emissions.
- Nearly 80 percent of commercial/institutional vehicles in Canada operate in fleets, so there is great potential for outreach regarding best practices in fleet management and fuel-efficient driving.
- Canada is addressing climate change and air pollution through its Clean Air Agenda, a package of programs and regulations overseen by Environment

- Transport Canada's activities include programs aimed at shifting transportation demand, promoting energy efficient technologies and best practices, and providing incentives for purchasing choices. Its programs include ecoMOBILITY, ecoAUTO rebates, and ecoFREIGHT.
- Natural Resources Canada develops policies and programs aimed at reducing the fuel use and related GHG emissions from personal, commercial, and institutional vehicles in all land sectors except for rail. Its programs include ecoENERGY for Personal Vehicles and ecoENERGY for Fleets (FleetSmart).

Key Points Regarding France:

- ADEME is the French Environment and Energy Management Agency. Among its missions is to reduce energy consumption and GHG emissions from the transport sector. It pursues this mission through research and development, technical assistance, and development of decision-making support tools.
- The transportation sector in France currently accounts for 29 percent of GHG emissions, with road transportation accounting for 81 percent of the energy consumed by all means of transportation.
- Transport GHG emissions in France have leveled off recently, but this is due to decreases from passenger-vehicle emissions. Freight sector emissions have increased.
- The French government has a website to promote intermodal transport. The goal is to increase rail modal share by 25 percent by 2012. In France, rail is powered by electricity, which comes mainly from nuclear energy, so it results in lower GHG emissions than road transport.
- This month, France will roll out Objectif CO₂, which is targeted initially at road carriers. It is similar to SmartWay in that it requires a baseline inventory of CO₂ emissions and a three-year action plan. The action plan must cover the areas of vehicle, fuel, driver, and the organization of transport flows.
- ADEME is working on a future environmental label so that carriers can be differentiated based on environmental performance. It is also working to bring shippers into the program.

Key Points Regarding Japan:

- GHG emissions from the transportation sector account for 20 percent of the nation's total, and they have been decreasing since 2001. Emissions from freight vehicles peaked in 1996, and emissions from passenger vehicles peaked in 2001.
- Japan's strategies for reducing GHG emissions from the transport sector include:
 - Setting "best in class" fuel efficiency standards for all sizes of vehicles, including the world's first mileage standards for large trucks and buses;
 - Implementing a green tax system that encourages purchase of fuelefficient vehicles;

- Assisting with the development of low-emission vehicles;
- Promoting eco-friendly driving techniques;
- Encouraging shift of truck freight to rail and maritime modes; and
- Creating a Green Distribution Partnership that engages both shippers and carriers to develop energy-saving plans and to report annually on energy consumption.

Key Points Regarding New Zealand:

- Transportation accounts for 37% of energy consumption in New Zealand.
- The country has nearly 3 million licensed vehicles, roughly 650 vehicles per thousand people. Less than 20 percent of the vehicles are diesel-powered, but they use 40 percent of the energy consumed by on-road vehicles.
- More than half of the vehicles imported into New Zealand are used; the average age of used diesel vehicles entering the country is nearly 10 years.
- Actions taken by the New Zealand government to reduce vehicle emissions include:
 - Completing a national freight demand study;
 - Promulgating a 2006 vehicle emissions rule that applies to both new and used vehicles;
 - Testing vehicles for visible exhaust (smoke check);
 - Conducting a "Choke the Smoke" publicity campaign; and
 - Promoting walking school buses for children.
- New Zealand plans to develop a Fleet Best Practice Program based on other nations' programs.

Discussion:

Question: What are your countries doing in the areas of testing, verifying, or validating fuel-saving technologies and strategies?

Bob Smith: Canada is testing aerodynamics and other technologies, but getting the word out about technologies is difficult. Canadian agencies do not have the same ability as other countries to do public outreach or social marketing.

Rick Barber: New Zealand's fleet emissions model needs further development, but they are making good progress.

Dinner Presentation Andrew Savitz, author of <u>The Triple Bottom Line</u>

Key Points:

• Companies are now expected to fulfill many more social objectives that were previously left solely to government.

• Companies that strive to meet financial, environmental, and social objectives (the triple bottom line) outperform their competitors.

Discussion:

Question: Do you have any sustainability recommendations for domestic automobile industry?

Answer: Everything is about to change. President-elect Obama is putting much emphasis on developing tools and technology to improve sustainability, and the public is showing little tolerance for the reluctance of big companies to embrace this change. We can therefore expect early action on climate change.

Question: What are the financial implications of sustainability?

Answer: Seventy percent of the Fortune 500 companies are using the Global Reporting Initiative's sustainability reporting guidelines because of energy savings they are achieving. It's necessary to grab the low-hanging fruit. In the longer run, sustainability requires investment, so you must avoid a short-term mentality.

December 3, 2008

SmartWay Partner Innovations: Reducing the Freight CO₂ Footprint Panel Discussion

Participants: Sabina Strautman, IKEA Sebastian Seifarth, Holcim (US) Inc. Dave Guernsey, UPS

Sabina Strautman, IKEA:

- The company is using the following strategies to reduce emissions:
 - o Increasing filling rates and reducing empty positioning,
 - Flat packaging of products,
 - Choosing the most environmentally adapted mode of transport,
 - Conditional environmental requirements in business contracts (e.g. North American carriers are required to join SmartWay), and
 - Cooperating with carriers to help improve fuel efficiency and following up with carriers to check performance.
- IKEA has seen the following benefits from SmartWay participation:
 - Credible demonstration to stakeholders of commitment to reduce emissions,
 - o Can point carriers to program resources regarding best practices,
 - Provides an easy understanding of scoring the carrier,
 - Allows shipper to compare carriers using common tools,
 - o Assists with setting environmental goals with individual carriers, and
 - Resource for purchasers when evaluating new carriers.

• The company is looking forward to getting specific emission rates for individual carriers.

Sebastian Seifarth, Holcim

- Holcim, one of the world's largest cement producers, was the first cement company to join the SmartWay program,
- The cement production process releases CO₂ from limestone, so it is important for the industry to reduce GHG emissions wherever possible.
- Emission reduction techniques used by the company include:
 - Increasing direct shipments from plants to customers (bypassing distribution centers),
 - Exchanging product with competitors to deliver cement with fewer miles of transport,
 - Using rail and barge transport, and
 - Using the SmartWay score as a criterion when selecting truck carriers.
- Barge transport generates fewer emissions per ton-mile than rail or trucking. Spill rates per million ton-miles also favor marine, and rates of injury and fatality are lower in barge transport.
- The company is building a new cement plant near St. Louis, in part to take advantage of the Mississippi River and barge transport opportunities.

Dave Guernsey, UPS:

- UPS moves nearly 16 million packages per day and has 3,000+ facilities (2,000 in the U.S.) and 102,000 delivery vehicles.
- In the U.S., 91 percent of the company's energy consumption and 88 percent of its CO₂ emissions are from mobile sources.
- UPS achieves GHG emissions reductions through network optimization, vehicle technologies, and lower-carbon fuels.
- Network optimization: the company's scale enables efficiency because direct routing is possible more often. UPS uses route optimization software to reduce labor hours and miles traveled.
- Shifting freight among modes offers great opportunities for reductions of GHG emissions.
- Vehicle technologies: UPS downloads vehicle performance data so that maintenance can be done before breakdowns occur.
- Lower-carbon fuels: UPS has 1,600 alternative fuel vehicles and is continually buying more.

Discussion:

Question: What is UPS doing to help with roll-out of a hydrogen fueling infrastructure? Maybe carriers could share the cost of fueling facilities?

Dave Guernsey: UPS is looking for opportunities to provide funds via the UPS Foundation for research on hydrogen fueling. UPS does share LNG fueling facilities with bus fleets and others, but it is still very expensive.

Question: What factors influence Holcim's location decisions?

Sebastian Seifarth: It is important to locate facilities near sources of raw materials and also near waterways for efficient transport options.

Question: Does IKEA plan to label its products with carbon labels?

Sabina Strautman: IKEA is working on it, but we have nothing definite yet. We don't yet understand how the consumer interprets carbon labeling information.

Question: Could any of you speculate on what would need to be done to take SmartWay to developing countries where products are sourced?

Sabina Strautman: IKEA would look forward to having consistent GHG emissions data from operations across the globe.

Dave Guernsey: Shipper demand is key. When shippers value environmental performance, they'll move the market.

Supply Chain Accounting and Harmonization of Metrics Panel Discussion

<u>Participants:</u> Sarah Froman, EPA (Moderator) Brian Nemeth, Maersk Logistics David Rich, World Resources Institute Erik van Agtmaal, Green Logistics Consultants Group, Belgium

Discussion:

Question: Complexity is an issue when companies are cutting back on resources for logistics departments. Does this pose an obstacle to accounting for GHG emissions?

Brian Nemeth: This is sometimes an issue, and the best solution is getting top management on board.

Question: In the Macy's example that Brian Nemeth described, what was the proposed alternative to dropping all freight in L.A.?

Brian Nemeth: The alternative was all-water service to the East Coast via the Panama Canal.

Question: Will it be worth it to try to come up with carbon labels for products?

Erik van Agtmaal: These types of efforts will be stopped because of the methodological obstacles.

Question: What do you envision as the international forum for developing a common methodology?

Erik van Agtmaal: It should be an organization that can offer a methodology as well as solutions for reducing emissions.

Question: What is the demand for looking at criteria pollutants?

Brian Nemeth: Only one client has asked for this information so far, but Maersk Logistics is trying to stay ahead of customer base.

Erik van Agtmaal: Load factor and energy use are often considered confidential data by carriers, so getting data can be difficult.

Issue Forums

Forum 1: Creating an International SmartWay Exchange Network

<u>Facilitator:</u> Buddy Polovick, U.S. EPA

Key Points or Questions Raised:

- Financial mechanisms
 - EPA has developed financing packages to help carriers upgrade equipment.
 - EPA has also identified lenders that would provide small loans, backed by SBA. The US trucking system is dominated by small carriers, so this helped level the playing field.
- Education to consumers and stakeholders
 - It's crucial to make sure incentives are understood.
 - Shippers have been key to recruiting carriers.
 - It is important to make sure drivers are educated.
- Driver incentives
 - It is essential to bridge the gap between management and drivers.
 - In Australia, drivers get points for achieving certain measures.
 - In the UK, all drivers gain a certificate of professional competence; the course taken in order to receive the certificate includes fuel efficient training. UK also has a tax incentive (high tax on fuel).
- Need for a cultural shift away from focusing on fuel
 - It's important to educate children.
 - This is a behavioral change program.
- Sharing and exchanging information to avoid duplication

- Could be through a clearinghouse (disseminated through an academic institution?).
- Should include a data exchange protocol.
- Need universal metric to resolve variations in size and weight scale.
- ATA has a lot of information.
- Canada can't share driver training due to government interference.
- The forum also discussed what types of programs work best in each country.
 - In the UK, an educational/marketing approach works best.
 - In Canada, driver education is key.
 - In Australia, energy efficiency is key; financing is tricky. Australia asked how to set up a SW program at the transportation operators level.
- Marketing and branding an international program: What is the value to a universal brand?
 - There was general consensus that everyone would benefit from a universal logo/brand, specifically shippers because of cross-border travel.
 - there may be political challenges. For example, in the UK, the government won't allow a logo on trucks or letterhead.
 - It is important to keep the integrity of the logo. In SW, there are different levels of logo usage.
 - C-TPAT (a US government customs program) can serve as a model branding program.

Forum 2: Creating Common GHG Supply Chain Accounting Systems

Facilitators:

Sujeesh Krishnan, Carbon Trust John Sullivan, UMTRI, University of Michigan

Key Points or Questions Raised:

- Participants were asked why they are interested in common GHG supply chain accounting systems:
 - The U.S. SmartWay program is interested in common carbon accounting systems, because it needs measures that differentiate best performers in each mode.
 - Carriers are interested because more and more shippers are asking for emissions data from them, sometimes at a very detailed level.
 - A representative of a large shipper said that he is being asked to come up with data that would tell the company how much it would cost to achieve more reductions in GHG emissions.
 - Both carriers and shippers said that the prospect of U.S. regulation of carbon emissions is also a reason for their interest.

- IPCC has developed methods for countries to use in developing emissions factors, so countries can at least be comfortable that they are using a common method even if the resulting emissions factors are different.
- There are numerous carbon accounting organizations in existence, and there was competition among them early on, but because of the strength of the Greenhouse Gas Protocol, it has become the standard methodology used by these organizations.
- One participant expressed concern about the difficulty of developing a standard accounting methodology and the potential for "arbitrary" decisions to favor some companies over others.
- It was asked whether there are any precedents to collecting emissions factors for companies and sharing the data among countries. One participant noted that there is an international life-cycle database in Europe, but the problem has been keeping it up to date. One participant suggested that companies would be unwilling to have this information widely available.
- It was suggested that a common GHG supply chain accounting system could be developed through the International Standards Organization, through a new organization, or an add-on to an existing organization.
- Identifying a funding source for this effort will be very important.

Forum 3: Creating an Information Exchange Between Urban-Regional Transportation Hubs

Facilitator:

Sue Zelinski, SMART, University of Michigan

Key Points or Questions Raised:

- The discussion began with the definition of an urban region. Should the focus be on goods moving through an urban area or on goods delivered for use by residents of an urban area?
- There was a robust discussion of congestion pricing and how it could be part of the solution to urban and regional transportation issues.
- Participants also talked about vehicles and right-sizing trucks for local deliveries.
- Participants noted the deterioration of urban transportation infrastructure in the U.S. and the need for increased investment.

December 4, 2008:

Setting Up a SmartWay Sister Program: Tools and Best Practices

Exploratory Stage of Program Creation

Panel Presentation

Participants: Buddy Polovick, U.S. EPA Rick Barber, New Zealand Transport Agency Sharon Banks, Cascade Sierra Solutions

Discussion:

Question: Who are the potential partners in other countries?

Canada: Canadian Trucking Alliance

Richard Elviss: Potential partners in the UK are the Road Haulage Association (carriers) and the Freight Transport Association (mostly shippers). The UK's Freight Best Practice program has also provided information on fuel-efficient transport to lecturers in logistics and related courses so that they can work it into their courses for future freight transport managers.

Question: Do other countries have financing programs to help carriers?

Lynda Harvey: Canada has no third-party financing. Natural Resources Canada offered rebates on cab heaters and APUs. We can't do any advertising with federal dollars, but we did spend \$7 million on 17,000 units (20 percent rebates). Transport Canada is offering an incentive program through its ecoFreight program. It's a competitive bid program open to all freight modes.

France: The French government can subsidize use of intermodal containers. It also offers subsidies to companies for completing baseline studies of GHG emissions.

Netherlands: There are European-wide subsidies to encourage mode shifts (e.g. truck to rail).

Question: Are there pre- and post- evaluations of these subsidy programs?

Bob Smith: Canada asked APU makers to offer an extra benefit (warranty extension of one year) if purchaser would come back and allow download operation data from equipment. Data was forwarded to Natural Resources Canada, which was able to calculate fuel and emissions savings from the program.

Sharon Banks (Cascade Sierra Solutions): CSS uses a low-interest revolving loan fund, which stretches available funds farther than a grant program can. CSS also has some carbon credits coming back into program, which provides more funds. CSS also gets funds back from dealers (percentage of receipts from sales).

CSS also received some funds from banks to add to EPA funds. CSS had to demonstrate to banks that truck drivers were low-risk (low # of defaults).

Question: Has any country tried to engage the militaries in their country?

Rick Barber: New Zealand has engaged the military, but primarily in the area of safety. They are now getting on the bandwagon regarding the benefits of fuel savings.

Question: Has any country developed a fuel-efficiency benchmarking tool?

Richard Elviss: The UK is trying to develop an online benchmarking tool for carriers. This tool will tell them where they stand compared to their competition. We are running a trial on carriers of quarry products. The aim is to get 35 percent of freight vehicles in the UK using the tool. We will then be able to show carriers where they stand with regard to fuel efficiency and safety. We want to link it to the fuel sales industry so that fuel consumption data is imported automatically. We want to bring it down to the level of detail for individual makes and models, so carriers can compare performance on the same type of vehicle.

Sharon Banks, (Cascade Sierra Solutions): With new vehicle replacements, CSS installs GPS units that measure and report fuel economy. CSS needs the data for carbon credits.

Program Design and Development

Buddy Polovick, U.S. Environmental Protection Agency Lynda Harvey, Natural Resources Canada

Discussion:

Question: Have you had any discussions regarding privacy concerns?

U.S. EPA: Yes, companies would ask about this due to the intense competition in the industry. SmartWay developed protocols and procedures to make sure information isn't disclosed. SmartWay currently takes model results for carriers and converts them to three scoring bins. Shippers can then see who is good, better, and best. We want to develop a more sophisticated method.

Question: Can you use the data to evaluate impact of technology?

U.S. EPA: We use the data to report the benefits of the program in terms of emissions reduction and savings. The White House sees the aggregate results. EPA's technology verification staff evaluate the performance of individual technologies.

Marketing

Patrice Thornton, U.S. EPA Robert Schultz, The Causeway Agency

Discussion:

Question: Could you discuss the importance of research as a way of educating and familiarizing senior managers with the value of marketing efforts?

Joann Jackson-Stephens (U.S. EPA): Surveys and research ahead of time were important to get buy-off of senior managers. Benchmarking and follow-up surveys were key to showing managers that investment in marketing was paying off.

Gay MacGregor (U.S. EPA): SmartWay advertisements in airports caught the attention of senior officials in other federal agencies, who then contacted senior EPA officials. This helped reaffirm the decision to conduct the marketing campaign.

Lunch Presentation: UK Freight Best Practice Program Richard Elviss, Faber Maunsell/AECOM

Key Points:

- The Freight Best Practice Program is best described as a behavioral change program focused on actors at the top (managers) and bottom (drivers) of carrier companies.
- The program is funded at 1.5 million pounds per year (not including cost of printing and distribution of publications). About 40 percent is devoted to marketing.
- The program is organized around six categories:
 - Saving fuel,
 - o Developing skills,
 - Equipment and systems,
 - Operational efficiency,
 - Performance management, and
 - o Multimodal.
- The program currently has 80 items in its library, and 15 more will be developed in the next year.
- About 20 percent of the program is dedicated to non-road transport and modal shift, but because of the small size of the UK, rail transport is not viable very often.

Partner Management and Recruiting

Technology Verification

Joe Bachman, U.S. EPA

Key Points:

- Since the SmartWay Truck and Trailers specifications were completed, new models of trucks have come out and new aerodynamic features are available. EPA would like to move to performance-based criteria. This is new to trucks, because EPA usually tests only heavy-duty engines, not entire vehicle.
- EPA is now testing the practicality and precision of its draft test protocol and is comparing various test methodologies.
- Carriers asked early on for ability to put the SmartWay logo on their trucks, but it was the last thing that EPA wanted to do at the time. The agency needed to be sure that logo was only being used on clean vehicles.

Financing Ken Adler, U.S. EPA

Sharon Banks, Cascade Sierra Solutions

Key Points:

U.S. EPA, States, and non-profit organizations like Cascade Sierra Solutions have come up with some innovative ways to help carriers finance the purchase of fuel-saving technologies. Some examples include:

- Small Business Association (SBA) loans for small carriers,
- Green Lease program set up to complement California's Clean Truck program,
- Development of a different credit scoring matrix for the trucking industry, and
- Allowing for payment of freight-related charges into funds set up to provide financial assistance to carriers.

Expansion of the SmartWay Concept

Discussion:

Question: How can we ignore freight activity in developing countries?

Gay MacGregor (U.S. EPA): You have a valid point, but we have a limited amount of resources to support programs, and programs in those countries can be very resourceintensive. We did invite the China Trucking Association and others, but we didn't have resources to bring them here.

Shipper partner: I think that EPA is really missing the mark with shippers who do not have their own fleet. We use all SmartWay carriers in North America and Canada. We had to recruit some of our carriers; in fact, we've probably recruited more carriers than any other shipper. We don't see any dollar savings from using supposedly more efficient carriers. There's no pass-back to shippers. I recommend that you re-focus on what you can do for shippers as far as logo placement on products. We can't say whether we've sold more because of our participation in SmartWay, but it's important to us and it's part of our environmental program. Because the Canadian FleetSmart program does not have a logo component, we decided to have all Canadian carriers join the SmartWay program.

Answer: You make some compelling points. The SmartWay program has many resource limitations and constraints. We need to make sure the program represents something to all partners.

Question: What are the plans for non-CDL dock-high vehicles? They outnumber tractor trailers

Joe Bachman (U.S. EPA): We've focused on Class 8 vehicles not only because of their number but because of their high share of the CO_2 emissions coming from trucks.

Question: What do you require of other countries wishing to formalize a relationship with the SmartWay program?

Lynda Harvey (Natural Resources Canada): Canada's agreement with the U.S. wasn't really like an application process. It was more a recognition of common interests and the desire to maximize our limited resources by not duplicating efforts.

Shipper partner: Does Canada plan to utilize shippers?

Lynda Harvey (NR Canada): This has been part of our long-term plan in harmonizing with the SmartWay program. It's our responsibility to go back and see if we can do this in Canada. Government organization makes doing things like this difficult; we have many steps to take. We should be able to expand our current work and relationships to include branding.

Rick Barber (New Zealand Transport Agency): I hope that we come up with some form of collaboration or way to keep the momentum going.

Sarah Froman (U.S. EPA): One potential follow-up is a webinar in the next few months. It's one way to keep the momentum going and a bit more collaborative than a simple exchange of emails.