



Showcasing Your Pollution Reductions Using the “Shipper Strategies” Tab in the SmartWay Shipper Tool

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NOTE: < > bracketing indicates explanatory text or web links not stated in the presentation.

Showcasing Your Pollution Reductions Using the Shipper Tool’s ‘Shipper Strategies’ Tab – Erik Herzog, EPA

<Host (Mary Walsh) first walked through “housekeeping” slides on how the webinars are run, how to ask questions, and where to find information from past webinars like slides, transcripts, and recordings at the “SmartWay Webinars & Events” page

<www.epa.gov/smartway/smartway-webinars-events; select the tab “Past Webinars/Events.” She then introduced the presenter, Erik Herzog of EPA SmartWay.>

Erik Herzog, EPA: Thank you for that wonderful introduction, Mary. Good afternoon and welcome.

Covered Previously – Erik

Today, we’re going to be going into the Shipper Tool again and looking at a very specific piece of it, because last week we had a demonstration of the entire tool—all the parts that Matt

<Payne> navigated through: the basics of the Shipper Tool. <As mentioned above, past webinars are posted at the “SmartWay Webinars & Events” page

<www.epa.gov/smartway/smartway-webinars-events; select the tab “Past Webinars/Events.”>

Covered Today – Erik

This is a more specialized presentation on part of the Shipper Tool, which is using the “System Activities” and “Modal Shift” tabs in the Shipper Tool. These are two parts that are optional, but they are very important and very much worth your while, as I will explain.

Why Do Shipper Strategies? – Erik

What are shipper strategies? These are things that you do to reduce your emissions with shipping. By this, we mean things like reducing the size or weight of your packaging, or making some changes in either your transportation network or your logistic arrangements so that you are traveling fewer miles—things of that nature.

Why add these things into your Shipper Tool, even though you can send the Shipper Tool in without it, and we’ll accept it? Well, it enables you to do a more complete carbon accounting for your supply chain and gives us a way to promote a lot of the good things you’re doing to reduce your carbon footprint. It gives us a way to promote those things. And it is one of the criteria for

receiving the SmartWay Excellence Awards. *<For more information, go to www.epa.gov/smartway/smartway-excellence-awardees.>*

Shipper Strategies: Questions – Erik

As you approach the Shipper Strategies tab and are trained to get your hands around how you quantify the benefit of what you did, so that you can put it in the tool, there are some questions. The first one is, what did you do? The second and equally important one is, what would have happened if you didn't do it? For example, *<say that>* you did something to reduce the number of miles that your goods travel to get to the retail destination. What would have happened if you didn't do it? The answer would be whatever your network looked like before. And then analytical boundaries: what will you consider and what will you not? In some cases, there's a little bit of a judgment call involved in the things you'll include in your calculations. And again, I think we'll get into that as we get further on with some examples.

Shipper Strategies – Steps

First off, what are you reducing? Now, when you put your information on your strategy into the "System Activities" tab, we ask you to characterize it in one of two ways: either you've reduced the number of miles for your shipments, or you've reduced the weight of your shipments. And then in terms of "Modal Shifts," which we'll be looking at as well, say you've switched the goods you've been shipping from truck to train. There, you would want to quantify the number of miles that the goods are traveling in the new mode *<vs. the miles>* that they would have traveled in the old mode, or *<you could quantify>* the number of ton-miles. Then, you calculate how much you've reduced, and you calculate the percentage reduction, and then the amount that you've reduced as a percentage of your "counterfactual" as a percentage as what would have happened instead. Those percent changes are the numbers you actually input into the Shipper Tool. From that, the tool calculates your emission benefits.

Example: New Distribution Center – Erik

<on screen pulls up "2016 Shipper Example" tool>

Here is an example. At this point, I'm going to get back into the Shipper Tool itself.

<on screen Erik navigates to "Welcome to the 2016 SmartWay SHIPPER Tool" by clicking "CLOSE">

I had started it up previously today, so I did not get the warnings that are described in the User Manual, and perhaps were covered last week in the demonstration. So, we just go right into the tool.

<on screen Erik navigates to "Assistance for New Users" by clicking "NEXT" button>

There's a little bit of a different look to the Shipper Tool this year from previous years. There is a video to give you some information and help you along; it's very useful if you're doing this for the first time. It might contain some useful information even if you've done the Shipper Tool already more than once. There are some links for additional information.

<on screen Erik navigates to "Partnership Agreement for Shippers" by clicking "NEXT" button>

We'll continue to the next page. This is the general SmartWay agreement. You put that you understand and accept the agreement, and we'll go on to the next.

<on screen Erik clicks on "next" to advance to "Tool" data home page>
Okay, here is the example Shipper Tool.

<on screen Erik clicks on Step 4 "Download Latest SmartWay Carrier Data File" button>
Erik Herzog, EPA: As it turns out, you actually have to do that every time you launch the tool, even if it's been completely filled out.

<on screen Erik clicks "OK" and the "SmartWay Shipper Tool: ABC Shipping – Retail" window opens>

Here are some of the screens you saw last time where you input your carriers and activity data.

<on screen Erik clicks on "Shipper Strategies" tab>
We're going to skip over to the "Shipper Strategies" tab. Once you've clicked on that, there are two sub-tabs: "System Activities" and "Modal Shift." Again, you either enter it in terms of miles removed from the system or weight removed.

<on screen Erik navigates to the PowerPoint presentation>
We'll go back to our slides here. Let's say that, as an example, you put in a new distribution center in order to reduce the distance your goods traveled from the distribution center to the various stores. Here are some example stores that had been served by Essex. The distance from the Essex distribution center is shown under that column. You built a new one in Wessex, and it's closer in our hypothetical *<case>* to all the stores that had previously been served by the Essex center. These are the miles from Essex and the distance from Wessex, and this is the difference.

So back to our previous terminology, the Essex miles are your counterfactual. The Wessex miles represent the new measure you took. And the difference is the difference of this many miles for the shipment that would have come from Essex, but is now coming from Wessex. And here is our hypothetical number for the number of loads shifted in each case.

The total miles saved is just simple multiplication. There are the totals for number of loads, and there are the totals for number of miles. The improvement *<here>* is the total improvement of 1.84 percent.

<on screen Erik navigates to the "2016 Shipper Example" tool >
Now we'll go back to our Shipper Tool. I was going to put this in, but because of some difficulties we had, I think the example Shipper Tool—remind me if this is true, Mary--has this been locked? *<Online example tools are locked.>* We would put in miles removed from the system and click the "Add Activity" button. We would put miles removed from the system, give it a name, and then put in percent improvement for the appropriate mode. In this case, we would get the percent improvement that we calculated on the spreadsheet I showed. It is only for the truck mode *<in this example>*, so we would put that percentage in just for the truck, and the tool would then calculate for us what the emissions reduction would be.

<on screen Erik navigates to the PowerPoint presentation>

Back to the slides.

Example: Mode Shift

Here is another example, and this is in case we were doing a mode shift. We're moving 500 tons from a warehouse to a distribution center, and the two places are 1,000 miles apart. In the previous year, those 500 tons would have traveled by truck; this year, we are working with a multimodal carrier in order to do that. The math is a little bit simpler in this case—you don't have to calculate percentages. It's just a matter of putting in the miles.

Think carefully about emissions factors. What I mean by that, of course, is that for each of the SmartWay Partners, we have emissions factors for each one. If you had been sending that with a SmartWay Partner by truck in the previous year, and you wanted to do this, you could double-check what the efficiency of that truck carrier was versus the efficiency of the multimodal carrier. Make sure you really are getting a savings. That is one of the reasons why we publish that data for you, so make sure you really are getting a savings when you do that.

Example: More Concentrated Detergent – Erik

One final example is for when you want to reduce the weight, and perhaps the package size, of your detergent. You've made it more concentrated. Originally, the package weighed 35 ounces, let's say, and you've reduced that down to 20 ounces. That's a weight reduction of 43 percent. You have 200,000 loads of the product, of which the weight has been reduced 43 percent for the detergent. However, your company makes products other than detergent, and you have a total of 1,500,000 loads of all your products, of which the detergent is only 200,000. When you apply that weight reduction to the entire amount of products you're shipping, it's an overall reduction in weight of only 6 percent. And that brings us to the end...

Example: New Distribution Center – Erik

I'm going to back up here a little bit to expand on a point I made earlier, and that was analytical boundaries. In this case, we are only looking at the miles the product racks up going from the distribution center to the retail outlet. One of the things that will also have changed, which could have an effect on emissions, is the miles that the product traveled in order to get to the distribution center. If that is taken into account, you might still have a savings, or you might still have an increase. For example, you might not have those figures for a variety of reasons, or whatever difficulty you might have in getting them, you've made a decision to not consider that part of it. That's valid, but the point is that we have set an analytical boundary around it. It is just from the distribution center to the retail outlet, and if you were to take an expanded look, you would probably see more effects on your transportation system other than just those miles saved as a result of your new distribution center.

For More Information or Assistance – Erik

That brings us back, once again, to the end. We can open it up for questions at this point.

Mary Walsh, EPA: Okay, Erik. This is Mary. Can you hear me?

Erik Herzog, EPA: Yes, I can.

Mary Walsh, EPA: Wonderful. I was just in the process of typing an answer, but I think this is actually a good question to open up to everybody.

The question says, “Reducing miles means changing customers or distribution center location, and reducing weight or ton-miles means less product, none of which is desirable, other than better location for a distribution center. Other than the latter, shouldn’t we rather reduce pollutants per mile or ton-mile? Numerators should go down, not the denominator.”

Erik Herzog, EPA: Okay. Can you go over the earlier part of that question again?

Mary Walsh, EPA: I think you’ll want to take it in steps, because there are a couple of assumptions there in the beginning of the question to address first. It begins, “Reducing miles means changing customers or distribution center location, and reducing weight or ton-miles means less product, none of which is desirable.”

Erik Herzog, EPA: Reducing miles—yes, it could mean changing a distribution center location. In that example, that could have other effects. Reducing ton-miles doesn’t necessarily mean reducing product if you have reduced the weight of your product.

Mary Walsh, EPA: The questioner does come back saying, “Yes, Erik, you did point out that you can reduce weight by reducing packaging as well, not just the product. That’s a point that we do make, that this is something that people should look at. Do you really need that weight of packaging? Can you lighten your load that way?”

Regarding the first part of his question about “reducing miles means changing customers or DC location,” the idea is that you’re going to be optimizing this route that you’re taking between the place of origin of the shipment and where it winds up. You don’t necessarily have to change your customers—you’re just finding a better way to get the product to them. So, I wasn’t sure; if we’re not addressing your question correctly, could you clarify? We’re not sure why changing the distribution center location would necessarily mean losing or changing your customers.

The second part of his question was about other than the latter, which was reducing weight. Should we reduce pollutants per mile or per ton-mile?

Erik Herzog, EPA: Yes, that is very much desirable, and that’s one of the reasons why we did highlight who are the more efficient carriers, and what are the more efficient modes. In the case of a mode shift, if you’re going from a mode that has more emissions per ton-mile to one that has less (such as from most trucks to rail), then you have reduced that numerator. If you reduce miles or ton-miles, then yes, you’re reducing the denominator, but the numerator stays the same. But anyway, you’re not actually reducing the denominator, but fewer grams per ton-mile. If that’s fewer ton-miles, then in the end it’s fewer grams per metric ton.

Mary Walsh, EPA: And of course, part of the answer to that question is that instead of saying, “Should we look at this, rather than that,” we’re asking people to look at the whole picture. Yes,

reducing pollutants per mile and per ton-mile is important, but we also want you to look at whether you can optimize your route more, change your distribution centers, or look at the packaging. We're asking people to look at a variety of ways to deal with your environmental footprint.

Erik Herzog, EPA: And we've put some fairly simple examples here. We've heard of some shippers doing some very interesting things that can be quantified in the "Shipper Strategies" tab. However, if you happen to be working on something, you can contact SmartWay or me directly, and we can put our heads together on how to quantify it. For example, Ocean Spray was making regular shipments of their juice products from a place in New Jersey down to Florida. They discovered that an orange juice maker was sending trainloads of their juice up to New Jersey, and then empty trains back down to Florida. So, Ocean Spray made an arrangement with that juice company to load their product on those returning trains. One way to look at that is eliminated miles. Before, Ocean Spray would have sent their product down to Florida in full vehicles, and perhaps returned empty vehicles. Those empty return rides are part of the total miles in your system, so you eliminate those. They may, on top of that, have shifted some loads that would have gone by truck over to train. In that case, they got a reduction in two ways.

Another interesting one (I think I can name names because this one has gotten a fair amount of publicity) was Whirlpool Corporation, who makes large appliances, among other things. They had a situation where when they loaded their product on trucks, and because washers and dryers are fairly large and are metal boxes with a fair amount of empty space, the truck got full before it hit its weight limit. They partnered with another company called Daltile, which shipped tiles, so they had the opposite problem: the trucks hit their weight limit before they got full. They optimized loads on a truck so that they had some tiles and some washing machines, and the truck was both full and at its weight limit. So, there are a number of ways you can look at it. You could get a mileage reduction out of that. Another thing is that they split the truck, so you could attribute part of the truck's emissions to washing machines and part of it to the tile, and that could be called a weight reduction. There are a number of interesting things people have done where it might not be obvious how they could go into the "Shipper" tab, but one way or another, they can. Again, if you are interested in a particular strategy or are interested in using the tab but are not sure what would be the best way to proceed, definitely give us a call, because we are more than happy to work with you on that.

Mary Walsh, EPA: Thanks, Erik. I'm glad you explained that, because for a second I was envisioning washing machines and refrigerators filled with tiles. Just kidding!

I'd like to move on to another question. It's about modal shift. The question is, "Can we use the fact that we ship all dry van freight from California, Oregon, Washington, and Idaho to our distribution center via multimodal instead of by truckload, and have been for several years?" I guess they're not doing it between last year and this year when they're filling out the tool. They've actually been doing it for a while, and are wondering if they can get credit for that.

Erik Herzog, EPA: Yes, if this is something you used to do, and shipping by truck is something you did some years back. Now, you ship by multimodal in order to make your system more

efficient—but even if that wasn't your primary motivation, that's still okay. You're just finding out now that you can get credit for that with SmartWay tools. That's fine. Again, it's just a matter of what your counterfactual is, and that would be the loads that you are sending this year via multimodal that you would have sent instead by truck.

Mary Walsh, EPA: Of course, you could only do that once. When you do your success with your tool, you'll be comparing to the preceding year. Is that correct, Erik? You only would do that the first time around when you're reporting that distance. Or am I mistaken?

Erik Herzog, EPA: No, we don't have that restriction, because you're not going to do it for one year only. If this is a change you've made on an ongoing basis, particularly if there is a possibility that you could go back to doing it the old way. I think you could continue to take credit for that. We don't have a restriction saying that it's a one-time thing.

Mary Walsh, EPA: Okay, so you're not interested in the year-to-year difference. You're just looking at the overall picture to get the counterfactual.

Erik Herzog, EPA: Yes, in terms of the counterfactual or reference cases you're comparing to, the reference case is what you would have done differently this year, had you done it the way you did in previous years. You're comparing the numbers from a particular warehouse or distribution center: last year you sent a certain number of loads by truck, and this year you're sending a certain number of loads by train. Your level of businesses changes every year, so the number of loads you sent by truck last year does not necessarily represent what you would have sent this year. The thing that you are comparing to is always what you would have done otherwise.

Mary Walsh, EPA: Thank you for explaining that, and thank you for the question from our participant.

I am not seeing additional questions. I encourage our participants to go ahead and let us know by typing into the question box. We'll be happy to respond to the question in the time we have remaining.

But if I don't see any evidence of something being typed in within the next few moments, I think we'll move to close the presentation. I'm just going to give a little opportunity there. I'm also going to ask if our host for the GoToMeeting webinar can tell us if she sees any questions coming in that I might be missing.

Amanda Peters, ERG: Hi, Mary. It looks like you've covered everything, and I don't see any new questions.

Mary Walsh, EPA: Okay, and I'm not seeing any others popping up, so I'll reiterate my earlier comments for anyone who came on board after I covered this in the "Housekeeping" slide. This webinar was recorded and you will be able to access PowerPoint slides and the audio recording with pictures. Also, a transcript will become available within the next week or two on the SmartWay website if you go to the "SmartWay Webinars & Events" page

<www.epa.gov/smartway/smartway-webinars-events> and click on the tab for “Past Webinars/Events.”

In the meantime, you have an invaluable resource: your Partner Account Manager, which you see referenced on the slide on the screen. If you’re a Partner, you have a Partner Account Manager, and they are your guru and personal consultant for all things SmartWay. They are a valuable resource; we couldn’t do without them. Please consider checking in with them if you run into any questions with your tool, or any other SmartWay questions. *<If you are not a Partner, enter your contact information at <https://www.epa.gov/smartway/become-smartway-shipper-partner> to get started. If you **are** a Partner and don’t know who your Partner Account Manager is, call the SmartWay helpline (listed in the next sentence).>* There’s also a helpline number you can call <734-214-4767>, and Erik has helpfully provided his own phone number *<for questions related to this webinar; 734-214-4487>*. There’s also the **smartway_transport@epa.gov** mailbox to which you can send your questions, and they will be parsed out to the right expert to answer your question.

Once again, I see no additional questions, so for my part and on behalf of SmartWay, I’d like to thank you for your attendance and attention today. I hope you found it to be worth your while, and that you’ll try out using the “Shipper Strategies” tab features. Erik, do you have any final notes?

Erik Herzog, EPA: No, nothing further to add.

Mary Walsh, EPA: Great. Thank you all for your attendance.