

Puget Sound Zero-Emission Truck Collaborative

Meeting Summary | June 30, 2023

Attendees

- **Collaborative Members:** Jed Boba (Puyallup Tribe of Indians), Stephanie Bowman (PNWER; *Alternate: Betz Mayer*), Colin Lay (PACCAR/Kenworth), Sheri Call (Washington Trucking Associations), Christine Cooley (Puget Sound Clean Air Agency), Peter Gishuru (African Chamber of Commerce of the Pacific Northwest), Tyler Dickens (HTEC), Steven Hershkowitz (WA Department of Commerce), Jim Jensen (WSU Green Transportation Program), Rick Kolpa (Prologis), George Mitchell (Mercer Logistics), David Logsdon (Seattle City Light), Michael Mann (Clean and Prosperous Washington), Steve Nicholas (Northwest Seaport Alliance; *Alternate: Nicola Graham*), Christian Poulson (Duwamish River Community Coalition), Paula Sardinias (Build Black Back Alliance), Wade Smith (Puget Sound Energy), Margaret Sonnen, (Tri Pak, Inc.), Jeremy Stewart (Tacoma Public Utilities), Marcos Wanless (Latino Metropolitan Chamber of Commerce), Tracey Whitten (City of Seattle), Paul Williams (Suquamish Tribe)
- **Support Team:** Tom Beierle (Ross Strategic), Bill Ross (Ross Strategic), Heather Christopher (Ross Strategic), Dennis McLerran (Cascadia Law Group), Patrick Couch (GNA), Natalie Graves (S&A), Consuelo Davis (S&A), Tyler Vasquez (S&A)

Meeting Overview

This first Collaborative meeting was held virtually on June 30th, 12-3:30pm Pacific. The purpose of this first meeting was to introduce members of the Collaborative and create a shared understanding of project context, background, and objectives and proposed process for the Collaborative. Participants discussed and affirmed Roadmap principles and Collaborative purpose, as well as the Collaborative charter and operating guidelines.

Meeting materials and presentation slides can be found on the [Zero Emission Truck Collaborative webpage](#).

Opening

Tom Beierle (facilitator, Ross Strategic) reviewed the objectives and agenda for the meeting. Tom then led a go-around of introductions where participants shared their name, affiliation, and how their work is connected to zero-emission drayage efforts.

Project Background and Objectives

Key Issue and Drivers

Steve Nicholas (Northwest Seaport Alliance) gave an overview of the [2020 Northwest Ports Clean Air Strategy](#), which put forth the vision to phase out emissions from seaport activities by 2050. The 2020 strategy lays out shared objectives and actions by the ports to advance the vision, metrics for the ports to monitor against and report annually on progress, and an adaptive management approach to support implementation of the strategy while maintaining and enhancing commercial competitiveness. The [2021-2025 Implementation Plan](#) outlines key actions and milestones that the Northwest Seaport Alliance (NSWA) will take in the next five years to advance the vision. Steve reviewed the key milestones and progress-to-date, including today's launch of this regional truck Collaborative. Reducing emissions from drayage trucks is a priority for the NWSA, as these trucks account for 27% of NWSA's greenhouse gas emissions and about 8% of the NWSA's diesel particulate matter emissions, many of which occur in overburdened communities. Steve highlighted the opportunities and challenges to transitioning to zero-emission trucks and emphasized the importance of collaboration to achieve success.

Key items from the discussion:

- One participant asked what routes/specific use cases NWSA is seeing for hydrogen fuel cell drayage vehicles. Washington Department of Commerce is modeling this through 2035 for the Transportation Electrification Strategy (not specifically for drayage, but more broadly for commercial trucks), and would welcome input on key factors.
 - Steve shared that NWSA hasn't gotten that far yet; they are just assuming it will be a mix of technologies. Many drayage truckers do longer-haul as well, so those trucks might be good candidates for hydrogen fuel cell vehicles.
- Another participant noted that truckers are operating fleets for both drayage and long-haul trips. Currently, there is no positive return on investment for using electric trucks for long haul trips, so it's a hard sell for these fleet owners. If the technology doesn't advance, fleet owners will have to deploy electric or alternative fuel trucks for drayage, and diesel trucks for long haul trips.

Roadmap Principles

Dennis McLerran (Cascadia Law Group) provided background and context for developing the Roadmap. The process began in November 2022 with development of a scoping report, which highlighted key issues/drivers, potential solutions, and recommendations for the Roadmap, Collaborative, and demonstration projects. A stakeholder "Convening Group" met four times between December 2022 and March 2023 to refine these recommendations and inform the design of the Collaborative and outline of the Roadmap. Dennis reviewed the roadmap purpose, principles, and potential outline (see meeting slides).

Key items from the discussion:

- How will the initial principles evolve and develop more through this collaborative process?
 - These principles were reviewed and refined by the Convening Group and will serve as a starting point to help drive the content of the Roadmap.
- Technology and financials are changing quite a bit now, and there are efforts to improve guidance on which fuel types should be used for Class A trucks. Perhaps a principle should be trying to use the most efficient use of energy as possible. As we get more electric vehicles on the road, we will need more efficient use of energy and clean energy.

- Dennis noted that the intent is to be fuel agnostic going into this process, and he acknowledged the need for learning and adapting to newer technologies.

Tom and Dennis noted that part of the role as a Collaborative member is being a liaison to your community and network. Dennis shared that Collaborative members may be asked to do some outreach to others in their sector.

Collaborative Purpose and Process

Tom reviewed the purpose of the Collaborative, as well as the proposed process, phases of work, and 2023 meeting schedule (see meeting slides).

Collaborative Charter and Operating Guidelines

The Collaborative reviewed the charter and operating guidelines that were distributed to in advance of the meeting.

Project Context and Inputs

Policy and investment landscape

Dennis reviewed the policy and investment landscape, including key opportunities and challenges (see meeting slides).

Driver and near-port community engagement

Natalie Graves (Stepherson & Associates) discussed proposed engagement with drivers and near-port communities, including the goals of engagement and outreach and engagement methods. Natalie noted that S&A is still considering engagement tools and welcomes any suggestions from Collaborative members.

Key items from the discussion:

- Driver “ride-alongs” can be an effective method of engagement. Spending time with a driver may provide a better perspective of their experience. Arrangements would need to be made with the port for this to happen.
- It’s important to ensure organizations like ECCC and Tabor 100 are included in the driver outreach and engagement process. The engagement team should gather information about the drivers these organizations represent and loop them into this process.
- Having a discussion with a group of drivers in a local restaurant can be a helpful way to engage.
- It’s important to segment the drivers when thinking about an engagement strategy. There’s a subset of drivers that are independent owner/operators and another subset is trucking companies that can reach out to their drivers. The outreach methods for independent owner/operators will be different than for trucking companies.
- It can be difficult to reach out to the independent owner/operators to get them involved.

Experience from other regions

Patrick Couch (GNA) provided an overview of how this roadmap development process will draw on experiences from other regions. Patrick shared that a key challenge to transition to zero emission drayage is determining who pays, noting that grants and incentives are key components. Incentive options include:

- Requiring scrappage, which involves getting rid of and destroying old trucks
- Voucher programs, which have become a popular incentive structure for drayage trucks because they bring down the upfront cost
- Demonstration projects, which are expensive, require access to certain funding, and are higher risk investments

Patrick reviewed project examples from Daimler, Volvo, and others and highlighted lessons learned, including the need for incentives and regulations to deploy projects at scale.

Key items from the discussion:

- It will be important to offer vouchers in lieu of rebates because of the cost. Access to capital remains a tremendous problem in the BIPOC driver community.
- A lot of truck drivers say they buy these trucks second hand, and they struggle with maintenance costs. Truck owners have to consider the cost of operating, fuel, maintenance, etc. Truck owners have expressed fear that the transition to zero-emission vehicles will force them to transition out of their jobs or from ownership to a lease structure.

Collaborative members reflected on what they heard throughout the meeting and shared their thoughts on the question: *What considerations & inputs will make this project most successful?*

Key items from the discussion:

- One participant asked if somebody has examined each different part of the whole transportation drayage system to identify areas where carbon can be reduced (not just through zero-emission trucks)?
 - Patrick shared that in the freight pathway, trucks are not the only contributors of emissions. There are opportunities to reduce emissions in each component of the supply chain (e.g., cargo handling equipment at docks and warehouses, rail, etc.).
 - Dennis shared that at a future meeting, we'll have the opportunity to talk about efforts to target some of these areas.
 - Another participant emphasized the importance of looking at the whole supply chain. For example, if you could reduce queue times at the gates, that would have a huge impact on near-port communities.
 - Steve added that this Collaborative is part of a much larger program that the NWSA has underway (e.g., looking at vessels, green shipping corridor with South Korea, etc.). NWSA is also working with marine terminal operators to help them transition to zero emission equipment.
- We're talking about spending \$2,250,000,000 to transition 4500@~\$500,000 per vehicle. The idea of drivers/fleet operators financing that and being reimbursed seems unlikely.
- One participant asked if anyone has tried to convert an existing truck to electricity.
 - Patrick shared that there have been efforts to try retrofits, but with limited success.

- Another participant expressed interest in hearing about California’s experience with Advanced Clean Fleets, and how they are thinking about scaling. It would be helpful to hear the challenges and understand where duty cycles make electrification not possible.

Public Comment

One member of the public commented:

- There is a common term in engineering that perfect is the enemy of good enough. This is important to keep in mind as you address truck owners and operators. Washington state’s net zero plan is a decarbonization plan, but it seems like some are saying "reducing emissions" and "decarbonization" are the same thing.

Wrap up and Adjourn

Tom reviewed next steps coming out of this meeting, noting that a summary and all meeting materials will be posted on the website. The planning team will be following up to schedule the August meeting, which will hopefully be in-person.

Steve gave closing remarks and thanked everyone for participating