

Puget Sound Zero-Emission Truck Collaborative

Meeting Summary | August 18, 2023

Attendees

- **Collaborative Members:** Jed Boba (Puyallup Tribe of Indians), Elsa Brown (City of Seattle), Sheri Call (Washington Trucking Associations), Christine Cooley (Puget Sound Clean Air Agency), Logan Danzek (Communities for a Healthy Bay), Tyler Dickens (HTEC), Steven Hershkowitz (WA Department of Commerce), Jim Jensen (WSU Green Transportation Program), Betz Mayer (PNWER), David Logsdon (Seattle City Light), Peter Gishuru (African Chamber of Commerce of the Pacific Northwest), Michael Mann (Clean and Prosperous Washington), Leah Missik (Climate Solutions), Steve Nicholas (Northwest Seaport Alliance; *Alternate: Nicola Graham*), Christian Poulson (Duwamish River Community Coalition), Clarisse Reiter (IKEA), Wade Smith (Puget Sound Energy), Margaret Sonnen, (Tri Pak, Inc.), Jeremy Stewart (Tacoma Public Utilities), Marcos Wanless (Latino Metropolitan Chamber of Commerce)
- **Support Team:** Tom Beierle (Ross Strategic), Bill Ross (Ross Strategic), Heather Christopher (Ross Strategic), Dennis McLerran (Cascadia Law Group), Patrick Couch (GNA), Erik Neandross (GNA), Consuelo Davis (S&A), Kate Nolan (Northwest Seaport Alliance), Tania Park (Port of Seattle)
- **Driver Panel:** John Agaba (Wangoma Trucking), Dawit Habte (Afar Trucking & Logistics), Daud Vora (A1 Transport)

Meeting Overview

This second Collaborative meeting was held virtually on August 18th, 11am-2:45pm Pacific. The objectives of this meeting were to:

- Understand key issues, concerns, and benefits of the transition to zero-emission trucks from the perspective of drayage drivers
- Collectively brainstorm key issues from a range of perspectives for transitioning to zero-emission drayage in the Puget Sound Region
- Discuss proposed small group issue team process and identify members' areas of topical interest
- Review and provide input on a draft driver and community engagement strategy

Meeting materials, presentation slides, and a recording of the driver panel can be found on the [Zero Emission Truck Collaborative webpage](#).

Opening

Tom Beierle (facilitator, Ross Strategic) reviewed the objectives and agenda for the meeting and led a go-around of introductions for Collaborative members that were unable to attend the first meeting.

Driver Challenges and Opportunities

Moderated discussion and Q&A with drayage driver panel

Three drayage truck drivers in the region, John Agaba (Wangoma Trucking), Dawit Habte (Afar Trucking & Logistics), and Daud Vora (A1 Transport) shared their perspectives on the transition to zero-emission trucks. Margaret Sonnen (Tri Pak, Inc.) moderated the conversation and began with a set of prepared questions before opening up the discussion to Q&A with Collaborative members (see website for full recording).

Key highlights from the discussion:

- **Current Operations and Ownership:**
 - Drayage drivers that are small business owners and independent owner-operators typically own or lease used diesel trucks, as new trucks are expensive. The average cost for used diesel trucks is \$30,000 to \$90,000 depending on year, mileage, and brand, while new diesel trucks cost around \$150,000 to \$180,000.
 - Drivers often prefer owning their own trucks, which provides flexibility and meets their operational needs in terms of range and versatility.
 - Drivers on the panel usually travel 100 to 250 miles per day for local drayage routes and park in a company yard overnight (where vehicles could be charged)
- **Potential Benefits of ZEV Trucks**
 - Cleaner air and healthier work environment
 - Avoid high and volatile fuel prices
- **Challenges of Transitioning to Electric Trucks:**
 - **Cost:** The high cost of electric trucks is a significant challenge. New electric trucks can cost around \$400,000 to \$500,000. Higher costs get passed on to customers, making services less competitive.
 - **Charging Infrastructure:** Concerns about availability, accessibility, and security of charging stations. If longer routes aren't served by charging infrastructure, two vehicles (one ZEV for drayage and one diesel for long-haul) may be needed to replace the work of one current diesel vehicle.
 - **Range and Charging Time:** Worries about the range of electric trucks and the time required for charging, especially for long-haul routes, which are a significant source of revenue for some drivers.
 - **Financing:** Difficulty in securing financing for electric trucks, including issues related to loans, credit, and cost of early termination of financing for current vehicles.
 - **Insurance Costs:** Anticipated higher insurance costs due to the higher value and specialized maintenance requirements of electric trucks.
 - **Fuel Surcharge.** Ambiguity about how charging/fueling costs will be passed on to shippers. (Diesel costs are currently passed on as a fuel surcharge).

- **Maintenance and Operational Challenges:**
 - For drivers on the panel, current maintenance practices involve a combination of in-house and third-party servicing.
 - Maintaining electric trucks may require specialized skills and facilities. High-voltage systems raise safety concerns.
 - Terminal schedule and operations limit the time available during the workday for charging (if needed).
 - Lack of emergency services for ZEV trucks at ports may create operational bottlenecks if a truck runs out of charge or needs repair on port property.
 - In light of legal load limits, the additional weight of ZEVs may limit the weight of loads that drayage drivers can carry or the routes they can take.
- **Logistical Changes and Driver Engagement:**
 - Transitioning to electric trucks will require changes in route planning, charging times, and delivery schedules.
 - Driver engagement and outreach will be crucial for successful adoption of electric trucks. NWSA, African Chamber of Commerce, and trucking associations all have ways of reaching out to drivers.

Brainstorming Key Issues for the Puget Sound Region

In this session, Collaborative members were divided into four breakout groups to brainstorm key issues key for transitioning to zero-emission drayage trucks, particularly around:

- Vehicle affordability, access, and support
- Charging/fueling infrastructure
- Equitable transition
- Funding and financing

These breakout session discussions were intended to serve as a starting point for identifying small subgroups groups that will meet in between Collaborative meetings. Subgroups will meet to refine the list of issues and begin the process of identifying potential solutions, as well as important questions and data needs.

Key items from the breakout sessions, synthesized across the four groups, are listed below.

- **Vehicle Affordability, Access, and Support:**
 - *Options for drivers:* The need to provide various affordable options for purchasing, leasing, and using electric trucks; there is no one-size-fits-all approach for drivers. Options may include purchase incentives, trucking-as-a-service, and co-op models.
 - *Education and training:* The importance of providing training and support on owning and/or operating a ZEV truck.
 - *Availability:* Concerns that ZEV truck availability will be prioritized in California (due to ACF rules) or larger fleets.
 - *Financial support:* Many drivers are low-income and will need large subsidies to make ZEV trucks affordable. Drivers expressed concern that a 40% rebate, for example, is not enough. Drivers will also need additional financial support beyond rebates for vehicle purchases to cover additional costs related to insurance, taxes, etc.

- *Secondary market for used EV trucks:* Importance of creating a secondary market for used electric trucks to reduce up-front costs and provide more certainty about vehicles' resale value.
 - *Maintenance:* How to address maintenance and service needs for electric trucks, including recalls and breakdowns. A new pool of mechanics will be needed, and the existing pool of maintenance crafts will be impacted.
 - *Operations:* The need to discuss the impact of the weight of electric trucks on what they can carry and where they can operate.
 - *Hydrogen considerations:* Hydrogen vehicles are more expensive than battery electric and hydrogen fuel is subject to more volatile pricing.
- **Charging and Fueling Infrastructure:**
 - *Range:* Challenges related to charging infrastructure for trucks that travel long distances.
 - *Charger location and utilization:* Consideration of charging infrastructure utilization and location.
 - *Security and safety:* The importance of security and theft prevention for charging infrastructure and theft/vandalism of trucks while they are charging.
 - *Right-sizing charging to vehicles and duty cycles:* Should install the right type of technology to match charging times and durations (e.g., less expensive/lower power for overnight charging vs. more expensive public fast charging).
 - *Hydrogen:* Explore opportunities in the hydrogen sector to address truck weight and refueling challenges.
 - *Timing of charger and vehicle availability:* The need to have zero-emission vehicles and infrastructure available at the same time.
 - *Insurance implications:* Where drivers park impacts their insurance rates, so prioritizing safe storage will be important.
 - *Competing infrastructure demands:* How to balance competing demands and priorities for infrastructure at port (e.g., shore power vs. vehicle charging)
- **Equitable Transition:**
 - *Community and driver outreach, engagement, and communication:*
 - The need to ensure that drivers and communities are well-informed about the opportunities and challenges of transitioning to electric trucks.
 - Importance of engaging smaller operators and independent owner-operators and ensuring drivers aren't looked over in outreach efforts.
 - The need to provide education and outreach to drivers, especially those in overburdened communities.
 - *Cost burden and benefits:* Focus on wealth distribution and ensuring wealth benefits go to small businesses owners, drivers, and community members.
 - *Mitigate risks for early adopters:* Ensure early adopters of ZEV trucks are shielded from risks.
 - *Support along transition:* Provide support to drivers beyond the purchase of a truck, including ensuring they understand the technology/charging/operations/etc.
 - *Preserve independent ownership:* The need to preserve the business model around independent ownership. Trucking-as-a-service and co-op models may maintain equity in a business but not vehicle ownership.

- *Broader support in other sectors:* Ensure awareness of broader economic trends and business opportunities for independent drivers (sector support strategies could complement ZEV truck transition).
- **Funding and Financing:**
 - *Stackable incentives:* The need for stackable incentives from various funding sources, including federal, state, and local sources.
 - *Tax implications:* Consider tax implications of large grants or incentives for small businesses or individual drivers.
 - *Stakeholder coordination:* Ensure collaboration and coordination among stakeholders, including utilities, truckers, and grant funders.
 - *Filling gaps with loans:* How to ensure appropriate (non-predatory) loans are available to drivers.
 - *Non-financial incentives:* Should consider non-financial incentives to drivers (e.g., port access).
 - *Incentive limits:* The need to understand limits of incentive programs given the “gift of public funds” clause in the state constitution.

Planning for Driver and Community Engagement

Consuelo Davis (Stepherson & Associates) shared current planning for the engagement process through fall of 2024. Consuelo reviewed themes regarding zero-emissions trucks/technologies and driver/community engagement, based on early conversations with several Collaborative members who are connected to various communities and could provide valuable insights.

To inform the engagement process, Consuelo asked what information would be most useful for the Collaborative to know when engaging drivers and near-port communities.

Key items shared include:

- **Drivers:** Collaborative members highlighted the relatively low level of awareness among drivers regarding these technologies, particularly for independent truck drivers who aren’t as well-connected as larger businesses. Participants emphasized the need for targeted education and outreach efforts aimed at raising awareness and clarifying misconceptions. Suggested questions to ask drivers include:
 - *How long is their dwell time and when is it (e.g., at night, in the morning)? Where do they dwell (e.g., at home, depot, sides of streets)?*
 - *When electric trucks are available, would you be interested in owning one?*
 - *What would you need to buy an electric truck?*
 - *Besides more funding, what are drivers/trucking companies looking for from shippers (e.g., charging near destinations)?*
 - *Are they open to different business models (e.g., ownership, leasing, co-op, trucking as a service)?*
- **Near-port communities:** Attendees stressed the need to make human health a central theme of engagement, focusing on how zero-emission trucks can improve air quality. Participants also highlighted

that near-port residents often lack access to decision-making processes and have limited power to influence changes in their communities. Engagement strategies should be sensitive to these challenges, offering meaningful interactions and outcomes while minimizing any additional burden on already resource-strained communities. Suggested questions to ask near-port communities include:

- *What outcomes are community members are hoping for? (Once we know outcomes, we can look at how transition can help them reach these outcomes.)*
- *What are their perspectives/concerns/preferences around infrastructure and other implications of new fuels?*

Public Comment

One member of the public commented:

- Engaging with labor groups will be critical to getting this infrastructure installed and maintained. This would hopefully be done under the Electric Vehicle Infrastructure Training Program (EVITP) certification and an agreement for diversity and inclusion provisions that would benefit the community. IBEW is almost a year into its five-year plan and is still working to find funding sources to support this infrastructure. IBEW is interested in partnering with Collaborative efforts and has data from California to share.

Wrap up and Adjourn

Dennis McLerran (Cascadia Law Group) highlighted several parallel efforts, including the EV Council's draft transportation electrification strategy and the upcoming JTC (Joint Transportation Committee) study process, which share the same overarching goal of a smooth and equitable transition to zero-emission technologies. Dennis noted the importance of sharing information across these efforts with Collaborative members to ensure everyone is informed and aligned.

Steven Hershkowitz (WA Department of Commerce) noted that the EV Council is developing a public draft transportation electrification strategy that will be open for public comment. If the timing makes sense, Steven can spend some time at the next Collaborative meeting (October 13) to present on the major policy recommendations related to drayage trucks and charging infrastructure, in addition to sharing some modeling results.

Betz Mayer (PNWER) shared updates on the JTC study process happening this fall, including the recent announcement of CALSTART as the lead consultant. PNWER will be the stakeholder outreach and engagement partner and will work to combine efforts with the Collaborative. While the JTC effort is broader and includes vehicles and technologies beyond drayage trucks, there will be overlap for things like port equipment, cargo handling, and delivery vehicles serving the ports.

Steve Nicholas (Northwest Seaport Alliance) noted the complexity of ongoing efforts and acknowledged the challenge of keeping Collaborative members up to date without consuming excessive meeting time. Steve suggested finding a mechanism to share current information efficiently and highlighted the need to stay informed about state and federal policies, funding opportunities, and recent demonstration projects.

Steve also shared an update on the recent briefing that the Northwest Seaport Alliance had with the Port Commissioners in Seattle and Tacoma, who were very supportive of the Collaborative's efforts and emphasized

the importance of data-driven approaches and engagement. Commissioners also expressed interest in exploring charging and fueling infrastructure on port-owned properties, leading to collaboration with the real estate departments of both the ports of Seattle and Tacoma.

Leah Missik (Climate Solutions) shared that she hosts an e-mail distribution list on zero-emission medium- and heavy-duty vehicle advocacy in Washington State. Leah regularly uses this to share opportunities to participate in advocacy efforts, such as signing letters and weighing in on funding matters. Collaborative members can join the distribution list by sending Leah an email.

Tom Beierle reviewed next steps coming out of this meeting, noting that there will be a follow-up survey for attendees to choose small groups they want to participate in. The names of these groups will be circulated, and arrangements will be made to schedule small group meetings. The information discussed in today's meeting will be used as a starting point for these small group discussions. A summary of today's meeting and all materials will be posted on the website. The next full group meeting is planned for Friday, October 13th, and will be held in-person.