



California High-Speed Rail **BRIEFING: September 26, 2024 Sustainability Report** **Agenda Item # 3**

TO: Chairman Richard and Board Members

FROM: Margaret Cederoth, Director of Planning and Sustainability

DATE: September 26, 2024

RE: 2024 Sustainability Report

Summary

This document highlights the environmental, social and governance (ESG) achievements of the California High-Speed Rail (CHSR), as indicated in the 2024 Sustainability Report.

Background

HSR POLI-1007 Sustainability Policy (first adopted by the Board in April 2016 as HSR POLI-PLAN-03), states that the Authority will produce a sustainability report every year that reflects environmental, social, and governance (ESG) issues and conforms with global best practice.

The Authority develops annual reports compliant with the Global Reporting Initiative (GRI) G4 standards, a reporting protocol used globally by companies including peer rail organizations. Through the annual reports, the Authority honors its commitment to transparency, providing stakeholders with quantitative and qualitative data on progress against key commitments and other significant topics for disclosing the sustainability of the high-speed rail (HSR) system.

The Authority published its first report, covering calendar year 2015, in December 2016. The 2024 Sustainability Report is the ninth published report, focusing on the activities that occurred during the 2023 calendar year, and progress to date on key commitments.

Discussion

The Sustainability Policy states: “The California High-Speed Rail Authority (Authority) will deliver a sustainable high-speed rail system for California that serves as a model for sustainable rail infrastructure. The Authority has developed and will continue to implement Sustainability practices that inform and affect the planning, siting, designing, construction, mitigation, operation, and maintenance of the high-speed rail system.”

Annual reporting offers a periodic snapshot of the effectiveness of the Authority’s implementation actions across the program. The report provides consistent measurement of indicators that provide the

Authority with reliable data to inform the refinement of contract requirements, policy, and organization activities. The report also illustrates where corrective action is necessary to achieve success. Our approach to sustainability reflects our organization and our mission to deliver a complex mega project as well as the critical interests of stakeholders. The sustainability framework below is how we organize our approach.

Economic Development and Governance	Refers to responsible leadership and management, transparency practices, and sound business planning.
Energy and Emissions	Refers to the conservation and type of energy resources the Authority uses to construct and operate the rail systems as well as to the tracking and minimization of emissions (both greenhouse gas (GHG) and criteria air pollutant emissions) associated with both construction and operation.
Natural Resources	Refers to the environment and its resources, addressed in and within ecological systems
Sustainable Infrastructure	Refers to the set of principles and actions in planning, siting, design, construction, mitigation, operation, maintenance, and management of infrastructure that reflect a balance of social, environmental, and economic concerns.
Station Communities and Ridership	Refers to collaborative planning activities that promote transit-oriented development and sustainable land use decisions that will help bring riders into the high-speed rail system; encourage and promote proximity co-location for education, health, and business institutions; and ancillary consumer concession services.

ESG Achievements:

The HSR system serves as the backbone of all-electric, zero-emission interregional travel and is integral to reducing road and air miles travelled in California. The system contributes to California achieving its goals of a carbon-neutral transportation system by 2035 and a carbon-neutral economy by 2045. The Authority also focuses on delivering extensive additional co-benefits and encourages these co-benefits through progressive procurement. These benefits and co-benefits include:

- 3,000 future jobs;
- 14,096 construction jobs dispatched through August 2024;
- 847 small businesses engaged;
- \$6.6 billion investment in disadvantaged communities;
- 142 million metric tons of carbon dioxide emissions avoided during system operation;
- 570,840 pounds of criteria air pollutants avoided through use of clean construction vehicles;
- 527,707 metric tons of carbon sequestered and avoided through habitat and conservation;

The following highlights from the 2024 Sustainability report illustrate the specific progress in 2023 under each element of the sustainability framework.

Economic Development and Governance

- The number of small businesses at work on the project has increased by nearly 166% since 2015. The number of disadvantaged business enterprises has grown by 191% since 2015.
- The Authority has applied relevant elements of the Sustainable Procurement Policy to ensure the Authority's procurement of all goods and services is in alignment with its environmental, social and governance priorities.

Energy and Emissions

- The Authority has continued to maintain its achievement of net-zero construction through its carbon sequestration projects as well as the projects implemented through the Voluntary Emission Reduction Agreements (VERA) with the San Joaquin Valley Air Pollution Control District; participation in the VERA program has resulted in total lifetime offsets of 1,358 tons of criteria air pollutants.
- The Authority has begun to implement requirements for contractors to use zero-emission vehicles (ZEVs) for their on-road project fleets in all future construction contracts and for their off-road fleets to be composed of newer, more efficient equipment models that meet the highest emission standard set by the U.S. Environmental Protection Agency (Tier 4).
- Since construction began, the Authority has steadily increased the percentage of Tier 4 equipment to over 90%. The current clean equipment requirements are estimated to have avoided over 110,000 pounds of criteria air pollutants in just 2023, and over 570,000 pounds of criteria air pollutants since the start of construction.
- Authority practices have lowered emissions for reactive organic gases, particulate matter, black carbon and nitrogen oxide by 69% to 84% compared to a typical fleet.

Natural Resources

- The Authority has preserved and restored more than 4,400 acres of habitat and protected more than 3,400 acres of agricultural land from development.
- Over 3,190 acres are now protected under agricultural conservation easements.

Sustainable Infrastructure

- We have diverted 95% of non-hazardous waste from landfill: 306,159 tons out of a 323,739 total were recycled or reused.
- In 2023 alone, we diverted 3,198 tons out of the 4,445 tons of non-hazardous waste generated.
- We continue to implement the Climate Adaptation Plan in alignment with state requirements and focused on piloting incorporation of climate scenario models to inform infrastructure design work.

Station Communities and Ridership

- The Authority continued to advance design of the 4 Central Valley Stations, that serve a population of 3 million Californians. This work included urban design that best integrates the stations with the surrounding cities and community plans.
- Stakeholder engagement has included opportunities such as community meetings and open houses for community members to receive information and provide feedback on matters

affecting them during the development of the HSR system. This includes engaging communities with special concerns, such as disadvantaged communities; over 33,700 community members joined the 346 community meetings we hosted.

Key Activities Moving Forward

We will continue to advance key activities in the following areas:

- **Greenhouse Gas (GHG) Emissions:** Continuing to actively manage carbon information including monitoring and accounting for the GHG emissions produced, avoided, and sequestered in project delivery; applying the insights from the life-cycle (embodied) carbon models for the project to improve the project's impact, updating methodologies with the Air Resources Board; refining our GHG calculations with updated information from the 2024 Business Plan.
- **Zero Emission Vehicles:** Finalizing details of the implementation of a Zero Emissions Vehicle (ZEV) pilot project for the Chinatown ZEV mobility hub; this would be an all-electric or all-ZEV construction, eliminating emissions during construction.
- **Station Communities:** Scale delivery using a building block approach to the stations, prioritizing universal accessibility, sustainable design, pedestrian access, and community connections in Merced, Fresno, Kings/Tulare, and Bakersfield.
- **Renewable Energy:** Reducing operating costs through implementation of an integrated traction power and solar/battery electric storage system.
- **Climate Change:** Updating the climate adaptation plan and continuing climate adaptation efforts with the ultimate goal of creating a resilient and reliable system for California.
- **Organization:** Refining Sustainability Implementation to make necessary updates to targets, definitions of program sustainability elements, milestones, and measures for success.
- **Reporting:** Providing continued transparency through monthly reporting and the EMMA dashboard.
- **Award:** Continuing to maintain the Envision Platinum award by implementing Envision requirements in the procurement packages for relevant consultant and contractor actions.
- **Procurement:** Implementing the Sustainable Procurement Policy; continuing the Authority's demonstrated leadership in sustainable procurement through incorporating sustainability requirements into procurement documents.
- **Engagement:** Continuing a comprehensive engagement process with all communities and external stakeholders to identify and address community issues, ideas for mitigation, and quantify the significance of different environmental, social, and governance issues based on the 2022 Materiality Assessment.
- **Embodied Carbon:** Implement thresholds and specifications to limit the embodied carbon of major construction materials.

The actions of every member of the Authority and its delivery partners contribute to the positive outcomes and progress detailed in this Sustainability Report.

Legal Approval

This is an informational item, and by itself, does not raise any legal concerns.

Budget and Fiscal Impact

This is an informational item on the Authority’s 2024 Sustainability Report, and by itself, does not have a budget or fiscal impact.

REVIEWER INFORMATION	SIGNATURE
Reviewer Name and Title: Natalie Daniel Acting Chief Financial Officer	Signature verifying budget analysis: Signed 9/18 original signature on file
Reviewer Name and Title: Alicia Fowler Chief Counsel	Signature verifying legal analysis: Signed 9/18 original signature on file

Recommendations

This is an informational item.

Attachments

2024 Sustainability Report