



## **California High-Speed Rail** **BRIEFING: October 20, 2022, Agenda Item #3**

**TO:** Chairman Richard and Board Members

**FROM:** Margaret Cederoth, Director of Planning and Sustainability

**DATE:** October 20, 2022

**RE:** 2022 Sustainability Report

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### **Summary**

This document highlights the environmental, social and governance (ESG) achievements of the CHSR, as indicated in the 2022 Sustainability Report.

### **Background**

HSR POLI-PLAN-03, adopted by the Board in April 2019, 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 2022 Sustainability Report is the seventh published report, focusing on the activities that occurred during the 2021 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.

## ESG Achievements:

The HSR system serves as the backbone of electric, interregional travel and is a significant part of California's climate goals. The Authority also focused on delivering extensive additional co-benefits and encourages these co-benefits through progressive procurement. These benefits include:

- 7,200 future jobs ;
- 8,334 construction jobs already dispatched;
- 721 small businesses engaged;
- \$4.8B investment in disadvantaged communities;
- 102,272,049 metric tons of carbon dioxide equivalent emissions reductions;
- 420,245 pounds of criteria air pollutants avoided;
- 422,790 metric tons of carbon sequestered and avoided through habitat and conservation;
- 62,000 air trips will be reduced annually; and
- 5 billion vehicle miles traveled reductions annually.

The following sections highlight the specific progress in 2021 as they relate to ESG achievements, as indicated in the 2022 Sustainability Report.

## Environment:

- Transitioning to a zero-carbon economy
  - The Authority has implemented requirements for contractors to solely use zero-emission vehicles (ZEVs) for their on-road project fleets in all future construction contracts and off-road fleets to be composed of newer, more efficient equipment models all that meet the highest emission standard set by the U.S. Environmental Protection Agency(Tier 4). The Authority will amend the off-road fleet requirements to mandate contractors to use increasingly more ZEVs in the future, as ZEV technology improves and becomes more available. The notable strategy implementation phases are noted below:
    - By 2030, requiring 10% of off-road equipment to be composed of Zero Emissions Vehicles (ZEV), where feasible.
    - By 2035, requiring 100% of off-road equipment to be composed of ZEVs, where feasible.
  - Since construction began, the Authority has steadily increased the per centage of Tier 4 equipment to over 90%. The current clean equipment requirements are estimated to have:
    - Avoided more than 85,000 pounds of criteria air pollutants in just 2021, corresponding to over 280,000 criteria air pollutants since the start of construction; and
    - Lowered emissions for reactive organic gases, particulate matter, black carbon and nitrogen oxide by 64% to 74% compared to a typical fleet.
  - Achieving net-zero tailpipe emission in construction through carbon sequestration and Voluntary Emissions Reduction Agreement (VERA):
    - Continuing our Urban Forestry program, more than 7,100 trees have been planted since 2018 in partnership with Tree Fresno and California Urban Forests Council.
    - Participation in VERA program resulting in total lifetime offsets of 1,358 tons of criteria air pollutants.

- Environmental Clearance for Phase I of the HSR system
  - Certification of the Final Environmental Impact Report / Environmental Impact Statement (EIR/EIS) and approval of the approx. 90-mile segment from San Jose to Merced.
- Preserving and creating habitat
  - Preserved and restored more than 2,900 acres of habitat and approved more than 3,300 acres of agricultural land for protection.
  - Over 2,400 acres are now protected under agricultural conservation easements.
  - Advancing implementation of landscape along HSR alignment.
- Advancing sustainable infrastructure
  - Out of the 10,605 tons of non-hazardous waste generated, 4,808 tons of waste was diverted in 2021.
  - Progress to date on the program is 93% of non-hazardous waste diverted (196,838 Tons).
  - Implementing actions identified in the Climate Adaptation Plan, including developing a climate change policy and integrating climate change into the Safety and Security Management Plan (SSMP).

### Social:

- Economic Development
  - At end of 2021, over 6,300 construction jobs have been dispatched at construction sites along the Central Valley segment; more than 4,100 are targeted workers.
  - The number of small businesses put to work on the project has increased by nearly 130% since 2015. The number of those businesses located in disadvantaged communities has grown by over 210% since 2016.
- Community focused station area planning
  - Station area development plans focusing on offices, housing, education, health care facilities and shopping around high-speed rail stations, creating 15-minute communities where daily needs are within walking or cycling distance.
  - Providing opportunities such as community meetings and open houses, for community members to receive information and provide feedback on matters affecting them. This includes engaging communities with special concerns, such as disadvantaged communities.
- Advancing Safety
  - The award of a \$24 Million RAISE grant, which will be used for crucial safety, efficiency and construction projects in and around the city of Wasco.
    - Includes better and safer multi-modal connectivity across the freight corridor, a new sidewalk, an enhanced State Route 46, and an efficient roundabout.
  - Series of completed grade separations including:
    - South Avenue grade separation in Fresno County;
    - Completion of Road 27 overcrossing in Madera County;
    - Completion of 25<sup>th</sup> Avenue grade separation in San Mateo County; and
    - Advancing separation south of Bakersfield.

## Governance:

- Continuously improving organizational capacity
  - Creation of targeted governance committees
    - The Authority developed a Diversity, Equity, and Inclusion Taskforce in 2021 that is working to develop action items and to create a policy initiative to address gaps.
    - Creation of the Change Control Committee to clarify roles and responsibilities, bring more rigor to decision-making and more consistency to documenting the change order process.
    - A Development Review Committee (DRC) was established to apply commercial revenue development principles to the development of land owned by the CHSR Authority.
  - Development and refinement of policies, including but not limited to:
    - Configuration Management Policy that details roles and responsibilities related to a formal Release process for Configuration Baselines within the document control function that ensures control of storage, archiving, and access by HSR personnel.
    - Updated Environmental Justice Policy that details the Authority's process to identify and address the potential for disproportionately high and adverse effects of our programs, policies and activities.
    - A new Climate Policy that details our commitment to mitigating greenhouse gas emissions and adapting to climate change.
    - Sustainable Procurement Policy and corresponding procedure to ensure the Authority's procurement of all goods and services is in alignment with its environmental, social and governance priorities.
  - Requiring an ESG submittal as a pass-fail requirement when procuring.
- Completion of a **Materiality Assessment:**
  - The Authority conducted a materiality assessment to refresh, validate and prioritize the environment, social, and governance (ESG) topics most material to the organization.
  - Key findings illustrate an inflection point in the project with a focus on delivery and an operating system (see *Figure 1*), where GHG emissions management, air, land, and water pollution, and socioeconomic equity remain fundamental. Restorative actions relative to economic development and employment continue to rank among the most important issues for stakeholders.
  - The assessments results illustrate the evolution of stakeholder priorities where transparency and accountability, and health and safety remain crucial underpinnings of the Authority's delivery of the high-speed rail project, and its commitments and objectives.
  - The result of the assessment organizes the ESG topics evaluated according to relative importance. The assessment results can be leveraged to inform the Authority's sustainability strategy and help guide decision making as it relates to sustainability reporting and disclosure.

**EXHIBIT 1.6: CALIFORNIA HIGH-SPEED RAIL AUTHORITY UPDATED MATERIAL TOPICS (2023)**

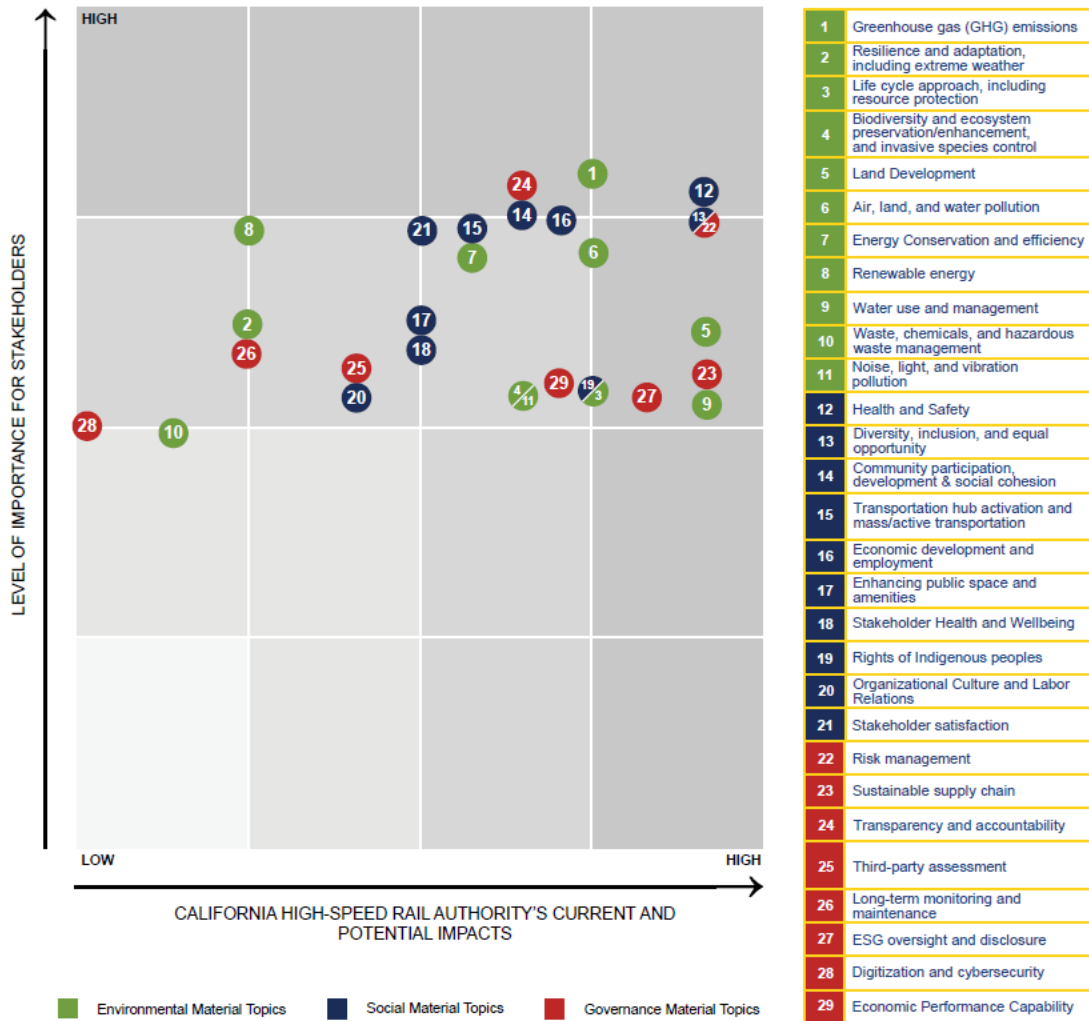


Figure 1: Materiality Assessment Key Findings

**Key Activities Moving Forward**

As identified previously, we continue to move forward with key activities, advancing implementation work in the following areas:

- **Greenhouse Gas (GHG) Emissions:** Continuing to actively manage carbon information including monitoring and accounting for the GHG emissions produced, sequestered and avoided in project delivery. Applying the insights from the life-cycle (embodied) carbon models for the project and refining a baseline of materials and construction emissions with information from the 2020 Business Plan and Program Baseline.
- **Award:** Continuing to maintain the Envision Platinum award by implementing Envision requirements in the procurement packages for a range of consultant and contractor actions.
- **Station Communities:** Finalizing 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:** Continuing to confirm the details of a logical, cost-effective approach. This includes optimizing the size of batteries to enable a range of operating scenarios and configuring the proposal into the Authority program; and continuing to implement the Zero Emissions Vehicle (ZEV) action plan for on-road project fleets.
- **Climate Change:** 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 and explore refined ESG dashboarding for the monthly program delivery report.
- **Procurement:** Finalizing the Sustainable Procurement Policy; continuing the Authority’s demonstrated leadership in sustainable procurement with an internal, multidisciplinary working team which has been implementing sustainable procurement strategies and increasing attention on influencing equity through procurement.
- **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 with respect to the Materiality Assessment.

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**

The Legal Office has reviewed, and this item complies with Authority policy.

**Budget and Fiscal Impact**

This is an informational item on the Authority’s 2022 Sustainability Report, and by itself, does not have a budget or fiscal impact.

REVIEWER INFORMATION	SIGNATURE
Reviewer Name and Title: Brian Annis Chief Financial Officer	Signature verifying budget analysis: Signed Oct 12, 2022
Reviewer Name and Title: Alicia Fowler Chief Counsel	Signature verifying legal analysis: Signed Oct 12, 2022

**Recommendations**

This is an informational item.

**Attachments**

2022 Sustainability Report