



CALIFORNIA
High-Speed Rail Authority

2023 Sustainability Report

Margaret Cederoth

Director of Planning and Sustainability

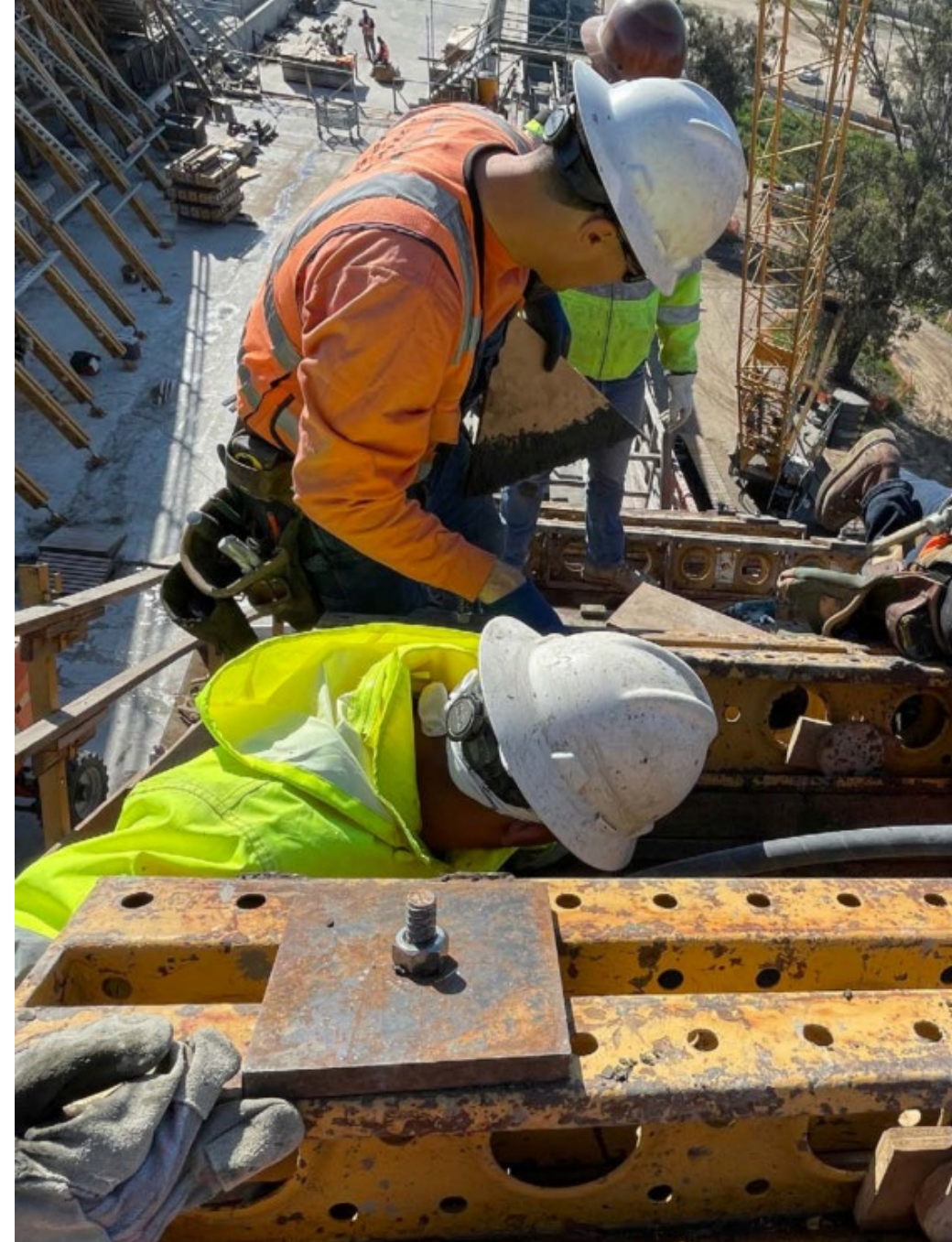
November 2, 2023

2023 Sustainability Report

This is an annual report of progress toward the Authority's signature sustainability commitments.

- Zero-Net Carbon
- Net-Zero Operations
- Exemplar for Rail Infrastructure

It also updates the several dozen indicators that maintain fidelity with global reporting standards and stakeholder interest.



Sustainability Policy

The 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 effect the planning, siting, designing, construction, mitigation, operation and maintenance of the high-speed rail system.

POLI-1007 – Sustainability Policy, 2020-04-02



The system supports California's ambitious climate goals.

- The system contributes to the State's goals of a **carbon-neutral transportation system by 2035** and a **carbon-neutral economy by 2045**.
- High-Speed Rail is the backbone of electrified interregional travel and reduction of road and air trips.



The system provides co-benefits beyond carbon reductions.

7,200
Future Jobs

11,474*
Jobs Created

761**
Small Businesses Engaged

\$ 5.5 billion
Disadvantaged Communities
Benefited



102,272,049 MTCO₂e
Emissions Reductions

500,150 lbs.
Criteria Air Pollution Avoided

503,393 MTCO₂e
Carbon Sequestered and Avoided



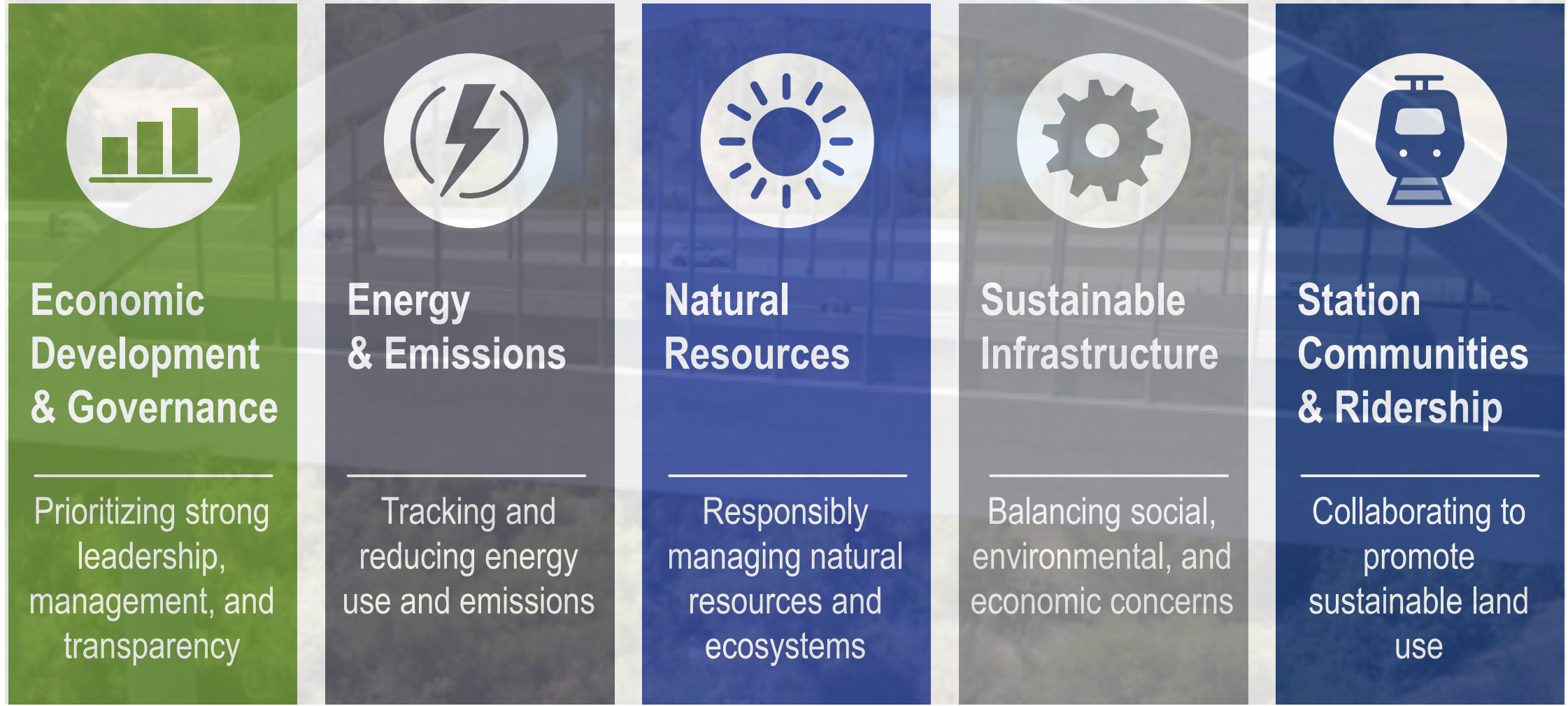
1,900,000 MWh
Renewable Energy Generation

62,000
Air Trips Reduced Annually

5 Billion
VMT Reductions Annually



Our approach to sustainability reflects our organization and mission to deliver a complex rail mega project.





Economic Development and Governance

HIGHLIGHTS

Economic Development

- Contributing to California's economy
- Partnering with small businesses
- Benefitting disadvantaged communities

Governance

- Embedding sustainability in delivery as we advance the First Operating Segment
- Continuously improving organization transparency

Contributing to California's economy & benefitting disadvantaged communities

Our investments generated approximately \$15 billion to \$16 billion in total economic activity in the State.

11,474 Construction Jobs Created

4,211



4,424



2,839



As of July 31, 2023.

65%

of the total construction labor jobs were filled by targeted workers, who live in disadvantaged communities.

Partnering with small businesses

As of December 2022, the 761 Certified Small Businesses working on High-Speed Rail represented **\$1.5 Billion** in investment.

215 located in disadvantaged communities.

761

Certified Small Businesses working on the high-speed rail program statewide





Energy and Emissions

HIGHLIGHTS

Reducing Emissions in Construction

- Moving toward all-electric construction
- Progressing uptake of Tier 4 equipment
- Protecting communities from air pollution

Achieving a net-positive carbon emissions balance

Moving toward all-electric construction, where feasible

We are building Zero-Emission Vehicles (ZEVs) requirements into our contracts:

- On-Road Fleets:
 - » 100% ZEVs in all future contracts
- Off-Road Equipment:
 - » 100% Tier 4 Equipment in all future contracts
 - » 10% electric by 2030
 - » 100% electric by 2035

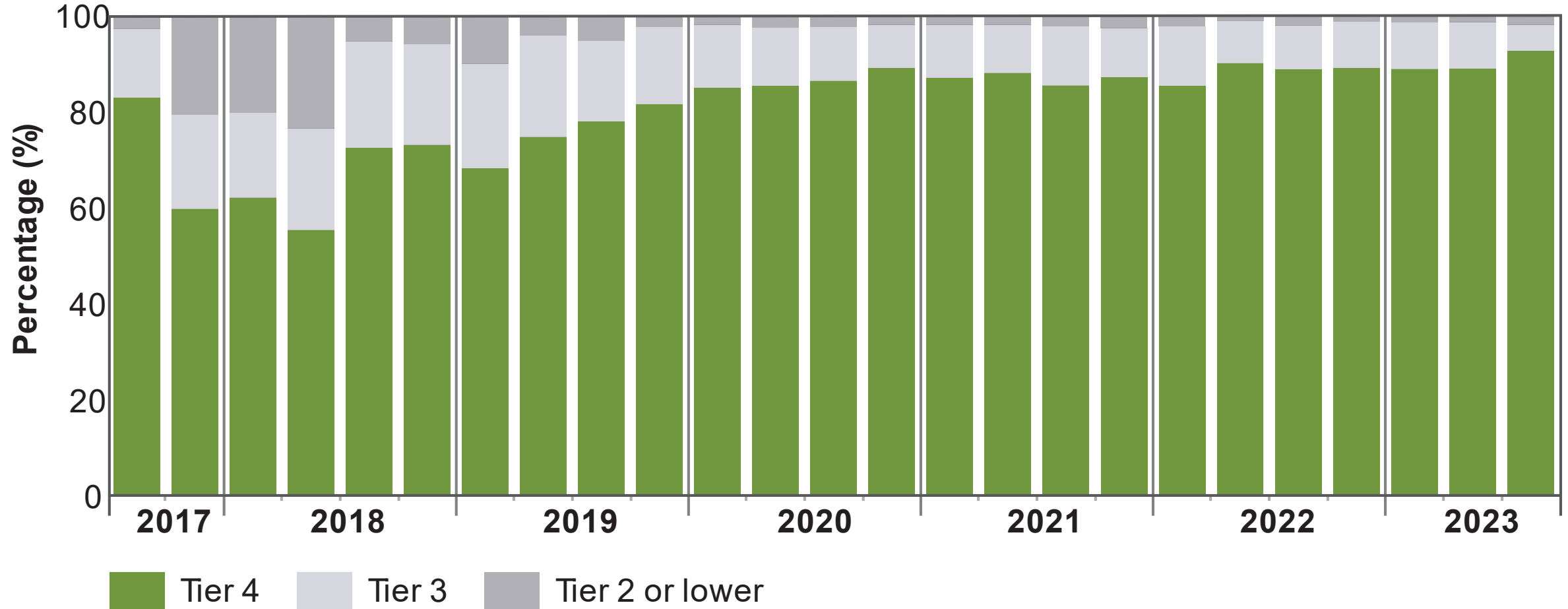
And laying out a system for 100% renewable energy for operations:

- » Solar and Battery Storage Strategy



Progressing uptake of Tier 4 equipment

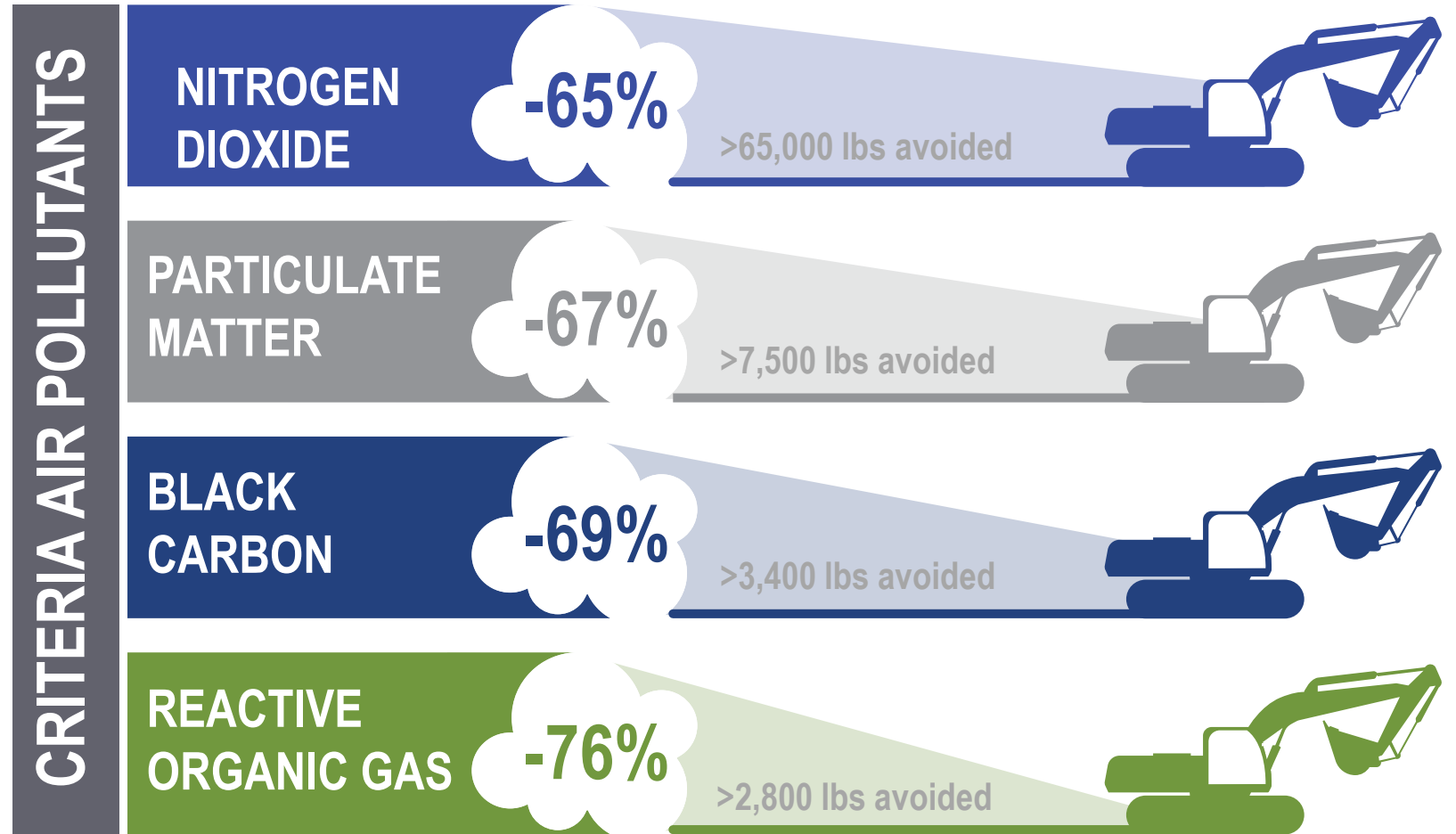
Since 2015, the use of Tier 4 equipment avoided 227 tons of criteria pollutants.



Protecting communities from air pollution

We avoided almost 80,000 pounds of criteria air pollutants just in 2022.

We've avoided over 350,000 pounds of pollutants since the start of construction.





Natural Resources + Sustainable Infrastructure

HIGHLIGHTS

Natural Resources

- Preserving agricultural land and creating habitat

Sustainable Infrastructure

- Diverting waste away from landfills
- Advancing climate adaptation and resilience

Preserving Land and Creating Habitat

4,490 acres of land protected of equal or greater **habitat** value:

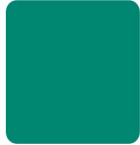




- Adjacent to other conserved areas
- Supporting diverse species including threatened and endangered species


Approved more than **3,470 acres of agriculture land** with **3,190 acres** protected by conservation easements



The Authority has continued to focus on diverting waste from landfill.

Since 2015:

-  Total Diverted
95% (302,961 Tons)
-  118,381 Tons Recycled
-  87,332 Tons Reused
-  11,740 Tons Composted
-  85,508 Tons Stockpiled

 Total Landfilled
5% (15,333 Tons)



Actively addressing climate adaptation is critical for a project of this scale and timespan.

We are progressing several items from the Climate Adaptation Plan:

- Continuing cross-functional consultation to build a sophistication with projected future climate data and extreme weather within the Authority.
- Contributing climate risk specifics to Authority plans.
- Coordinating with asset management team to track weather- and climate-related impacts to the system.
- Implementing the Authority Climate Change Policy.
- Updating the Climate Adaptation Plan.

CLIMATE ADAPTATION PLAN





Station Communities and Ridership

HIGHLIGHTS

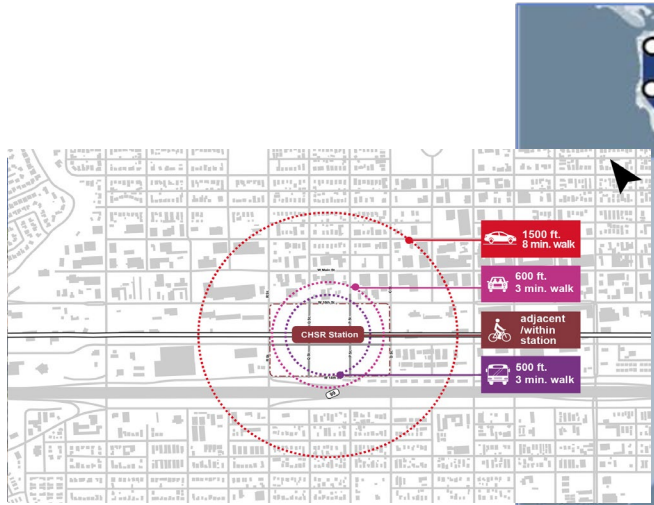
Community-Focused Planning and Design

- Applying equity lens to station area planning and design
- Creating 15-minute communities

Advancing Community Outreach

- Engaging communities across California

Central Valley Stations



Community consultation and engagement continues to be a core focus.

2022 Progress





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Headquarters

California High-Speed Rail Authority

770 L Street, Suite 800

Sacramento, CA 95814

www.hsr.ca.gov



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California High-Speed Rail

Questions?

