

# Accelerate to Zero (A2Z) Electric Vehicle Strategy

Advisory Committee Meeting October 20, 2022

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# Agenda

Welcome and Intros Project Update Stakeholder Engagement A2Z Strategies Funding Wrap Up



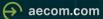
## Introductions

Please share a brief introduction in the chat





# **Project Update**



#### **Project Update**



Stakeholder Engagement

Recommended EV Strategies

#### Fall 2022

• Assessed existing conditions and conducted gap analysis

Existing

Conditions

- Reviewed key information regarding policy, regulatory, market and industry environment
- Developed uptake impact tool
- Reviewed current best practice EV strategies
- Developed spatial charging optimization tool

- Conducted five outdoor workshops and Phase 1 Questionnaire informed strategy development
- Phase 2 Questionnaire gathering information on draft strategies
- A2Z Web Page provides information on goals and draft strategies

- Developed Implementation Goals from Core Principles to lead to Strategy Development
- Created 10 High-Impact Strategies with supporting Implementation Tactics to achieve each strategy
- Currently writing up full descriptions and tactics for each of the 10 strategies

#### ZEV Strategy Development

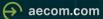
### March 2023

To compile all work completed into A2Z Strategy Document





# Stakeholder Engagement Update



### **Engagement Activities**

Phase	Timing	Activities	
1) Barriers, Opportunities, and Guiding Principles	April – June 2022	<ul> <li>Core Project Team</li> <li>Steering Committee</li> <li>Advisory Committee</li> </ul>	- Online Questionnaire - Five Outdoor Workshops - Webpage
2) Feedback on Draft Strategies	Sept/Oct 2022	<ul> <li>Core Project Team</li> <li>Steering Committee</li> <li>Advisory Committee</li> </ul>	- Online Questionnaire - Webpage
3) Present Final Strategies and Thank You	Jan – Mar 2023	<ul> <li>Core Project Team</li> <li>Steering Committee</li> <li>Advisory Committee</li> </ul>	- Supplemental events led by Core Team - Webpage



### Phase 1 Engagement Summary: Key Findings

- Broad interest in personal EVs across SD
- Less informed about shared EV mobility options (buses, rideshare)
- Common Reasons against EV purchasing:
  - Access to charging
  - Costs of an EV
  - Lack of desire to switch from current vehicle
- Charging stations are desired especially in 'Homes', 'Shopping Centers', and 'Work'
- Participants noted a lack of opportunities to learn about EVs and available vehicles
  - Online media sources and word-of-mouth most desired
  - Most familiarity with hybrid gas-electric vehicles due to lack of range with battery EVs
  - Some interest in learning about hydrogen-powered vehicles
- FAQs around availability/supply chain of EVs, costs to own EV, and the cleanliness of the electricity source







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### Phase 1 Engagement Summary: Community Perceptions of ZEVs



Quieter vehicle operation

Savings from fuel costs

Lack of desired range

Lack of access to charging

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#### Phase 2 Questionnaire

#### Questionnaire is still open

• 22 responses to date

#### Response Trends:

- General appreciation of the Strategies
  - Particularly equitable ZEV infrastructure distribution and education/workforce strategies
- Concern about utility infrastructure's ability to support increased ZEVs
- Grants will be needed to make EVs accessible for many

Accelerate to Zero Emissions (A2Z) Strategy Acelerar a Cero Emisiones (A2Z, por sus siglas en inglés)

Help us work towards making Electric Vehicles accessible for all complete this short questionnaire:



https://bit.ly/A2ZPhase2

Ayúdenos a trabajar para hacer que los vehículos eléctricos y de cero emisiones sean accesibles para todos completando este cuestionario breve:



https://bit.ly/A2ZPhase2Spanish

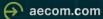
For more information on the A2Z Strategy, go to: Para más información sobre la Estrategia A2Z, visite: www.a2zsandiego.com



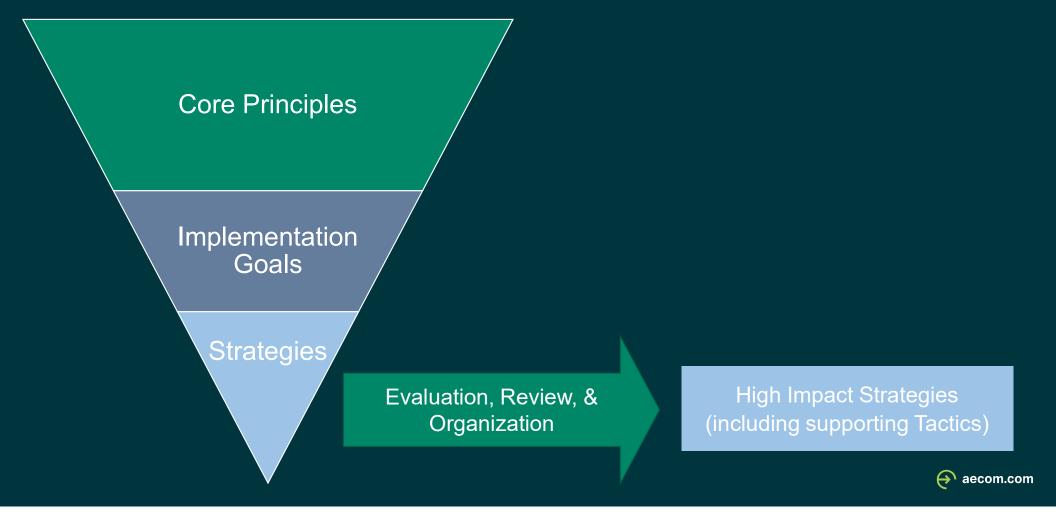
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# **A2Z Strategies**

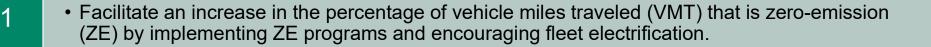


### **Strategy Prioritization Approach**



#### **Draft Strategies**

2







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 Work with local jurisdictions and public/private property owners to accelerate publicly accessible ZE infrastructure to better support local ZEV drivers.





 Work with local and regional stakeholders to provide equitable and accessible education and outreach about ZEVs for the public and local communities to increase ZEV awareness and adoption.

3

4

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#### **Draft Strategies**

• Support skills training and workforce development programs specialized for the ZEV industry to support regional economic growth.



 Support policies and programs at all governmental levels to encourage and facilitate ZEV adoption by helping lower policy and financial adoption barriers.

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6

5

#### **Draft Strategies**



• Update building codes and streamline ZE infrastructure permitting process to facilitate ZE infrastructure deployment, with focus on multi-family housing and higher density residential and/or commercial areas.



 Ensure sufficient local grid capacity for projected ZEV demand through grid enhancements and utility program design.

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1	<ul> <li>Facilitate an increase in the % vehicle miles traveled (VMT) that is zero-emission (ZE)</li> </ul>	6	<ul> <li>Support policies and programs at all gov't levels to encourage ZEV adoption</li> </ul>
2	<ul> <li>Work with local jurisdictions and public/private property owners to accelerate publicly accessible ZE infrastructure</li> </ul>	7	<ul> <li>Update building codes and streamline ZE infrastructure permitting process to facilitate ZE infrastructure deployment</li> </ul>
3	<ul> <li>Accelerate ZEV infrastructure implementation in rural areas and communities of concern</li> </ul>	8	<ul> <li>Ensure sufficient local grid capacity for projected ZEV demand</li> </ul>
4	<ul> <li>Work with local and regional stakeholders to provide education and outreach about ZEVs</li> </ul>	9	<ul> <li>Encourage and support fleet transition (e.g., transit, municipal, private, goods movement, micromobility) to zero emissions.</li> </ul>
5	<ul> <li>Support skills training and workforce development programs specialized for the ZEV industry</li> </ul>	10	<ul> <li>Support innovation and regional collaboration to transition cars, trucks and buses to ZE</li> <li>aecom.com</li> </ul>



# Activity—Strategy Impact



Strate	egy Impact	
1	<ul> <li>Facilitate an increase in the % vehicle miles traveled (VMT) that is zero-emission (ZE)</li> </ul>	How Impactful Are These Strategies?
2	<ul> <li>Work with local jurisdictions and public/private property owners to accelerate publicly accessible ZE infrastructure</li> </ul>	1 = Low Impact 5 = High Impact
3	<ul> <li>Accelerate ZEV infrastructure implementation in rural areas and communities of concern</li> </ul>	
4	<ul> <li>Work with local and regional stakeholders to provide education and outreach about ZEVs</li> </ul>	
5	<ul> <li>Support skills training and workforce development programs specialized for the ZEV industry</li> </ul>	

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#### **Strategy Impact**

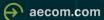
### How Impactful Are These Strategies?

1 = Low Impact 5 = High Impact





# Discussion





### National EV Infrastructure (NEVI) Program

Established through federal Infrastructure Investment and Jobs Act (IIJA) aka Bipartisan Infrastructure Law (BIL)

Establish a nationwide, interconnected network of publicly available EV chargers along Alternative Fuel Corridors

- 4 DC Fast Chargers (CCS Connectors) per location
- Max 50 miles between stations, Max 1 mile from highway
- CA to receive ~\$384 million over 5 years
- Caltrans partnered with CEC to manage grant program
- CEC planning 4 rounds of grants, first round in Q1 2023
- Grant applicants to be private entities
- San Diego included in Round 1 and likely Round 4 (still to be finalized by CEC)

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### **NEVI** Implementation Timeline

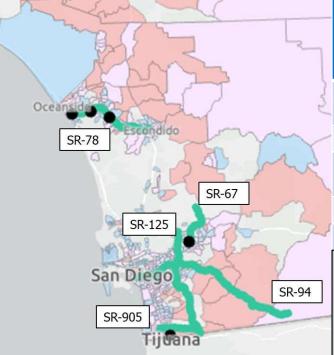
Milestone	Time	STATE OF CALIFORNIA
Caltrans submits draft CA NEVI plan to Feds	June 8, 2022	
CEC/Caltrans pre-solicitation workshops on state's NEVI funding approach	Sept 7-8, 2022	California's Deployment Plan for
Federal approval of CA NEVI Plan	Sept 14, 2022	the National Electric Vehicle Infrastructure Program
Anticipated first round of solicitation release	Q1 2023	
Subsequent rounds of solicitation releases	Q3 2023, Q1 2024, Q3 2024	
		FREFARED BY

CEC's NEVI site: <u>https://www.energy.ca.gov/programs-and-</u> topics/programs/national-electric-vehicle-infrastructure-program-nevi

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Caltrans ( CALIFORNIA ENERGY COMMISSION

### **Proposed Corridor Group #15**



Group Corridor Segments	Minimum # of New Charging Stations	Number of New Chargers	<b>Required Sites</b>	
SR125: Santee to Otay Mesa	2	8	SR125/SR52 (Santee), SR152/SR905 (Otay Mesa)	
SR94: San Diego to Dulzara (Tecate)	2	8	SR94/I-5 (San Diego)	
SR905: San Diego to Otay Mesa	2	8	SR905/I-5 (San Diego), SR905/SR125 (Otay Mesa)	
SR78: Oceanside to Escondido	1	4	-	
SR67: El Cajon to Eucalyptus Hills	1	4	-	
Total:	8 32			
Disad Comm Justic Califo Disad	ns that meet NEVI Crite vantaged and/or Low-in uunities designated by b e40 mia-designated Low-inc vantaged Communities e40-designated Disadva	come oth California and ome and/or	Source: CEC NEVI Workshop, 9/8/22 ecom.com	

### **Proposed Corridor Group #16**



Group Corridor Segments	Minimum # of New Charging Stations	Number of New Chargers	Required Sites	
I-8: San Diego to El Centro	2	8	-	
I-15: San Diego to Murrieta	2	8	I-15/I-5 (San Diego) I-15/I-215 (Murrieta)	Source: CEC NEVI Workshop,
I-805: San Diego to San Ysidro	2	8	I-805/I-5 (San Diego) I-805/I-5 (San Ysidro)	9/8/22
Total:	6	24		↔ aecom.com

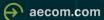
### **NEVI Program Corridor Ranking Results**

Rank	Group	Group Score	Rank	Group	Group Score
1	7	57.67	11	4	37.00
2	16	53.33	12	5	31.00
3	20	50.00	13	9	30.67
4	6	49.00	14	3	30.50
5	14	48.75	15	13	29.50
6	19	49.00	16	18	27.00
7	1	47.33	17	15	24.40
8	12	45.83	18	10	22.50
9	8	40.00	19	17	22.00
10	2	37.67	20	11	17.25

Source: CEC NEVI Workshop, 9/8/22



# Discussion



#### What's Next?

- Toolkit of high impact strategies will be developed for review
- A draft plan and presentation will be developed
  - Literature review and best practices
  - Existing conditions and characteristics
  - Strategy toolkit
  - Site-specific strategies
  - Network-wide strategies
  - Equity considerations
  - O&M considerations
  - Funding and incentive opportunities
- Final plan will be developed based on stakeholder and community feedback

Link to Phase 2 Questionnaire:



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# Thank you.



