

The Journey Ahead: Decarbonizing Industry in California

April 22, 2025



Welcome and Kickoff





Mia Reback

Manager, RMI
rmi.org

Agenda

- 01** Welcome & Kickoff
- 02** Opening Remarks
- 03** Spectrogram
- 04** Decarbonizing Ports, Drayage Trucking and Shipping
- 05** Unlocking FOAK/NOAKs in California: The Industry Perspective
- 06** Creating the Enabling Ecosystem: Policy, Finance and Community Engagement
- 07** Closing

Ground Rules

 **BE PRESENT**

 **ENGAGE**

 **RESPECT CONFIDENTIALITY**

 **CONNECT AND NETWORK**

 **RESPECT OTHERS**

 **HAVE FUN**

Anti trust statement

The following guidelines on competition and antitrust laws have been developed to preserve the appropriate sharing of learnings with the group and to ensure that exchanges on opinions, experiences and deliberations do not interfere with the competitive relations of companies. These guidelines apply to all participants.

Do



- Discuss macroeconomic issues and how they impact the global and regional economy
- Discuss common problems and challenges of a general, administrative or logistical nature, as long as the purpose of the discussion is not to encourage uniform action or the elimination or restriction of competition, for example in relation to prices, capacity, inputs or outputs
- Share your opinion and experience, as long as this does not result in confidential or sensitive business information being shared
- Insist that any meeting has a list of topics known to you in advance; object if you see anything on the agenda that risks violating any of the prohibitions set out below
- Terminate a discussion or leave a meeting if you consider there is a risk of violating any of the prohibitions set out to the right
- Seek independent legal advice if you are at any time unsure of how to apply these rules

Do not



- Recommend or agree on the following matters with members and participants:
- Actual purchasing or selling prices, price trends, price changes and their implementation, discounts, rebates or margins
 - Asset specific costs, including input costs and staff costs without prior acknowledgement of data use Terms and conditions of purchase or sale or choice of suppliers and supplier categories
 - Current or future levels of production and specific technological developments or changes that could have a competitive impact
 - Division or allocation of geographies or customer groups, sales volumes or market shares
 - Limitations on business methods or practices including those based on ethical or “fair” business practices
 - Refusing to deal with customers or suppliers

Polling

- We will use Slido for a quick audience poll
- Scan the QR code or enter #3387 632 at slido.com
- Question 1: What sector best represents your work?
- Question 2: What type of organization are you representing today?

Join at
slido.com
#3387 632





What sector best represents your work?



What type of organization are you representing today?

Opening Remarks



Welcome

Bryan Fisher

Managing Director, RMI
rmi.org



Welcome



Charlotte Pera

Senior Fellow, Mission Possible Partnership
missionpossiblepartnership.org



**MISSION
POSSIBLE
PARTNERSHIP**



**MISSION
POSSIBLE
PARTNERSHIP**



**BEZOS
EARTH
FUND**

ARMI
ENERGY. TRANSFORMED.

Welcome

Paul Bodnar

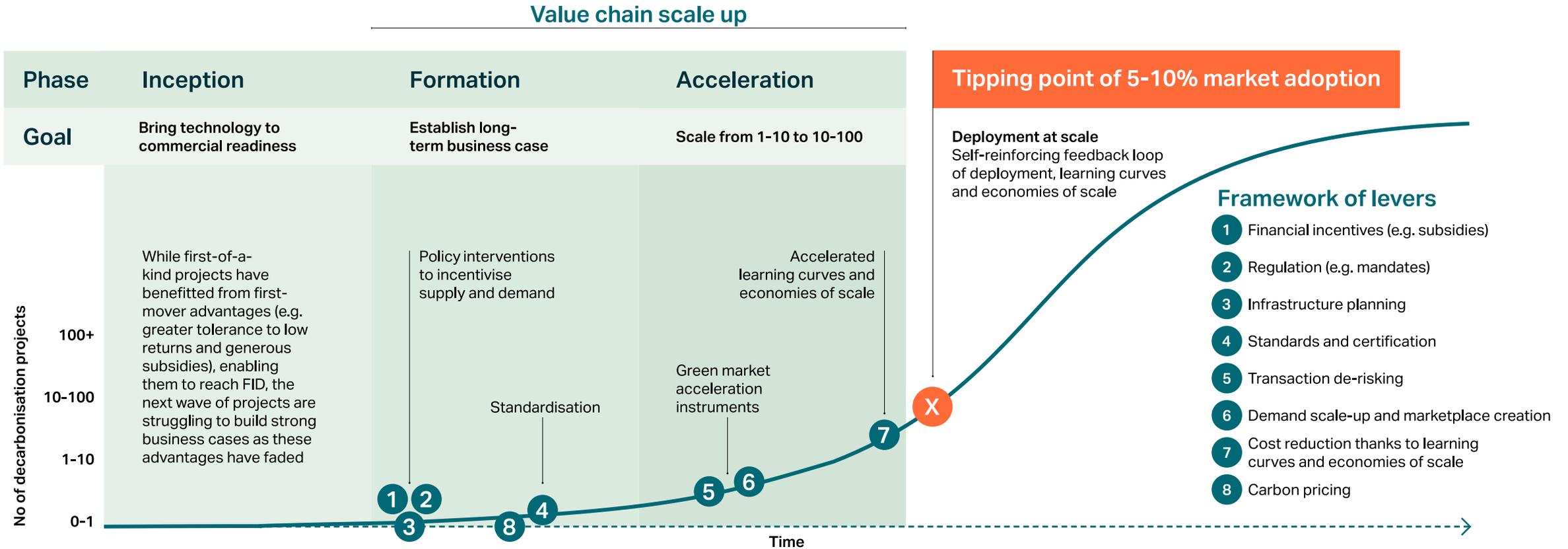
Director of Sustainable Finance, Industry, and Diplomacy

Bezos Earth Fund

bezosearthfund.org



We accelerate the scale-up of green value chains toward a tipping point to unlock exponential growth of green commodity markets



Source: MPP analysis

Through exchanges with project developers, we have confirmed that 5 critical challenges are slowing down investment in clean industrial projects

1

Green Demand

Struggle to find buyers for low / zero carbon products given green premiums from 10% to 200% - in the absence of appropriate policy incentives

2

Misaligned Policies

Struggle with country specific ill-suited policies (e.g. power market design, taxation policy,) & with lack of global harmonisation (e.g. EU CBAM & SAF criteria)

3

Clean Energy

Struggle to secure access to large volumes of low-cost renewable electricity and clean hydrogen, and to develop carbon transport and storage infrastructure

4

Finance

Struggle to mobilise own balance sheet in low-margin context, to get financing given market uncertainty & to access low-cost capital in developing markets

5

Technology

Struggle to deploy lower-TRL technologies at commercial scale & to access new technologies developed by competitors (esp. in developing countries)

Source: ITA analysis

Industrial Decarbonization in 2030

● In operation
 ● Final Investment Decision (FID) reached
 ● Announced
 ● Pipeline Gap



Aluminium

2030 TARGET

70

Low-carbon
refineries and
smelters

Passed FID
57%



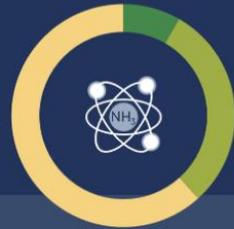
Cement

2030 TARGET

45

Low-emission
plants

Passed FID
9%



Chemicals
AMMONIA

2030 TARGET

60

Green and blue
ammonia
plants

Passed FID
38%



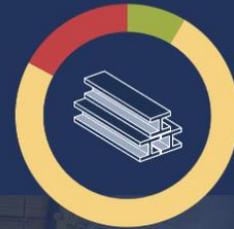
Chemicals
OTHER

2030 TARGET

60

Near-zero
emission
chemicals
plants

Passed FID
20%



Steel

2030 TARGET

70

Near-zero
emission
primary steel
plants

Passed FID
9%



Aviation

2030 TARGET

300

Sustainable
Aviation Fuel
plants

Passed FID
17%



Shipping

2030 TARGET

100

Near-zero-
emissions
shipping fuel
plants

Passed FID
4%



Trucking

2030 TARGET

7M

Million zero-
emission
trucks

Operational
2%**

*Progress includes zero emission capable assets. **FID is not applicable to Trucking

Source: MPP Global Projects Tracker (November 2024)

Welcome



Julia Thayne

— Founding Partner, Two° & Rising
twoandrising.com

Why California

RMI and the Mission Possible Partnership focused on accelerating low-carbon solutions for industry and heavy transport in California for three main reasons:

1. California presents a critical emissions challenge

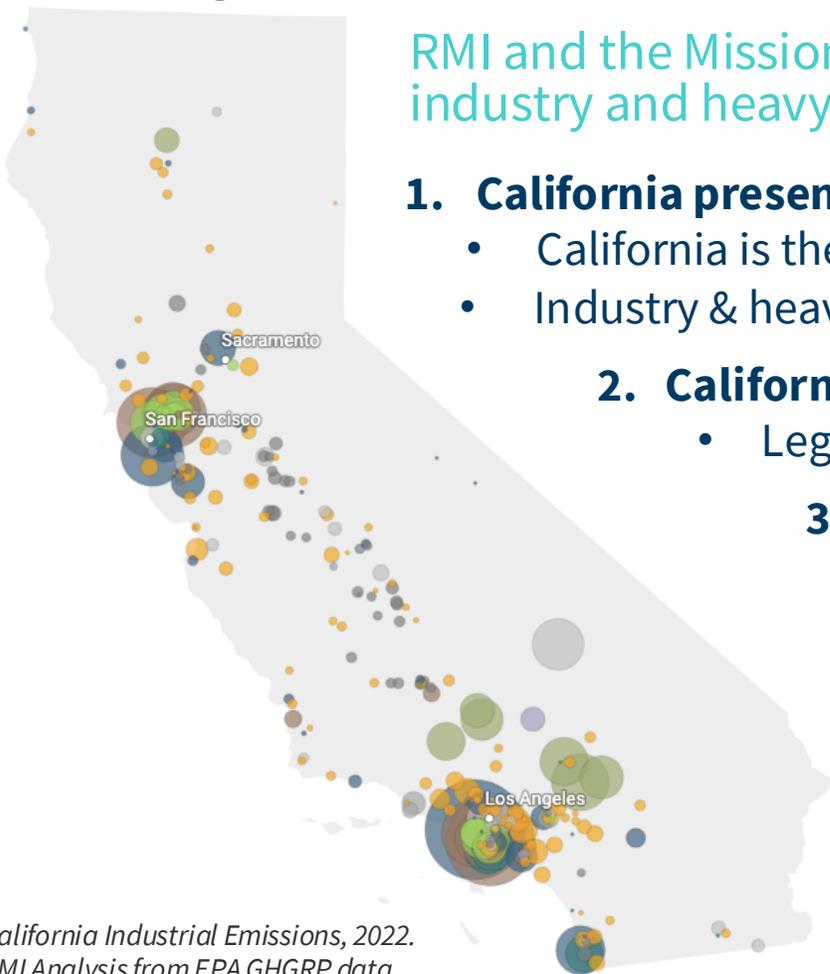
- California is the 3rd largest industrial emitter in the U.S.
- Industry & heavy transport (trucking, shipping, aviation) contribute ~30% of statewide emissions

2. California is a leader in climate action

- Legally binding statewide target: net-zero GHG emissions by 2045

3. California is an economic engine with industrial depth

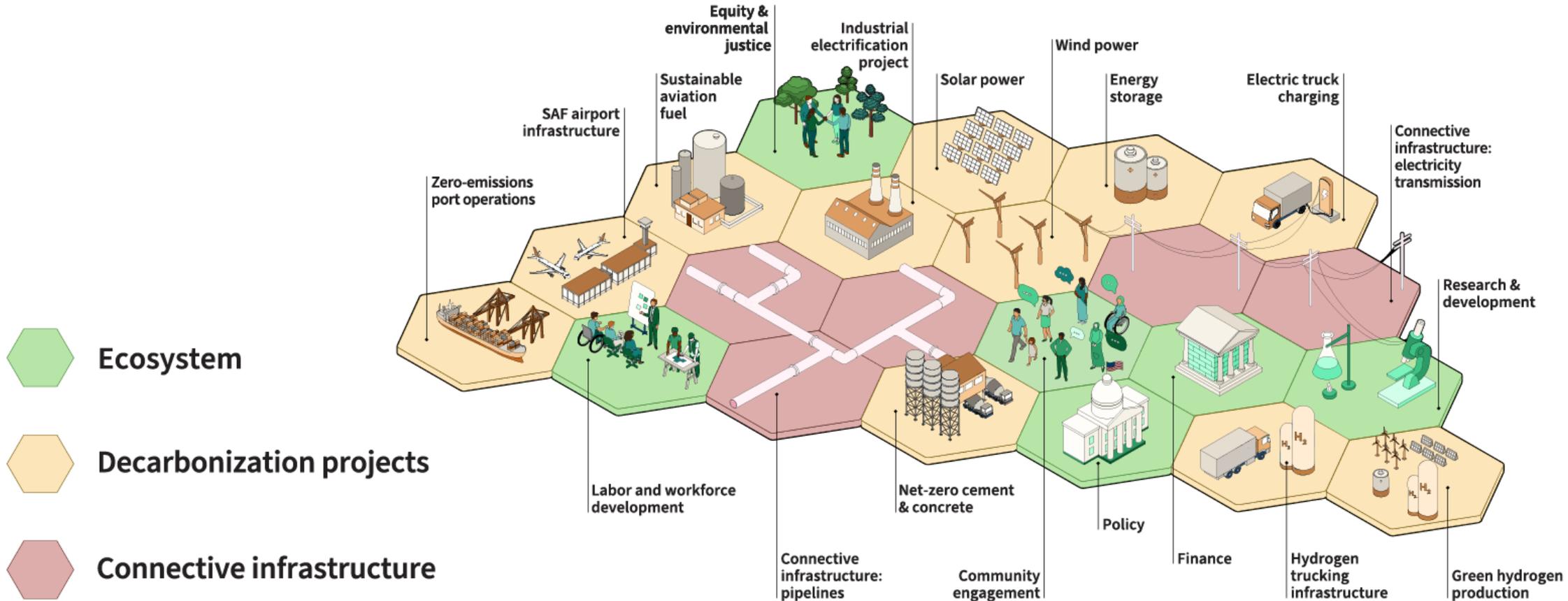
- Largest state economy in the US, 14% of national GDP
- Manufacturing contributes 11% of the state's GDP
- The Ports of LA and Long Beach support 3 million US jobs



California Industrial Emissions, 2022.
RMI Analysis from EPA GHGRP data.

California Clean Industrial Hub/Cluster

Clean industrial hubs bring together project developers, policy makers, financial institutions, and community-based organizations to support regional clusters of clean energy and industrial decarbonization projects



Hubs' value proposition – four key takeaways

RMI and the Mission Possible Partnership's work with partners in California has shown the market potential hubs create through supply and demand side drivers



Co-locating Supply and Demand



Concentrating Feedstocks



Reducing Logistic Complexity



Optimizing Infrastructure

Group Spectrogram

Spectrogram

As you look ahead for the rest of this year, how will your strategy and/or investment focus change?



Panel I – Decarbonizing Ports, Drayage Trucking & Shipping



Decarbonizing Ports, Drayage Trucking & Shipping



MODERATOR

Nocona Sanders

RMI
Senior Associate, Carbon Free
Transportation



Paul Gioupis

Zeem Solutions
Co-Founder & CEO



Amber Coluso

Port of Los Angeles
Air Quality Environmental
Specialist



Maggie Messerschmidt

C40
Senior Project Manager,
Green Shipping Corridors

Audience Questions

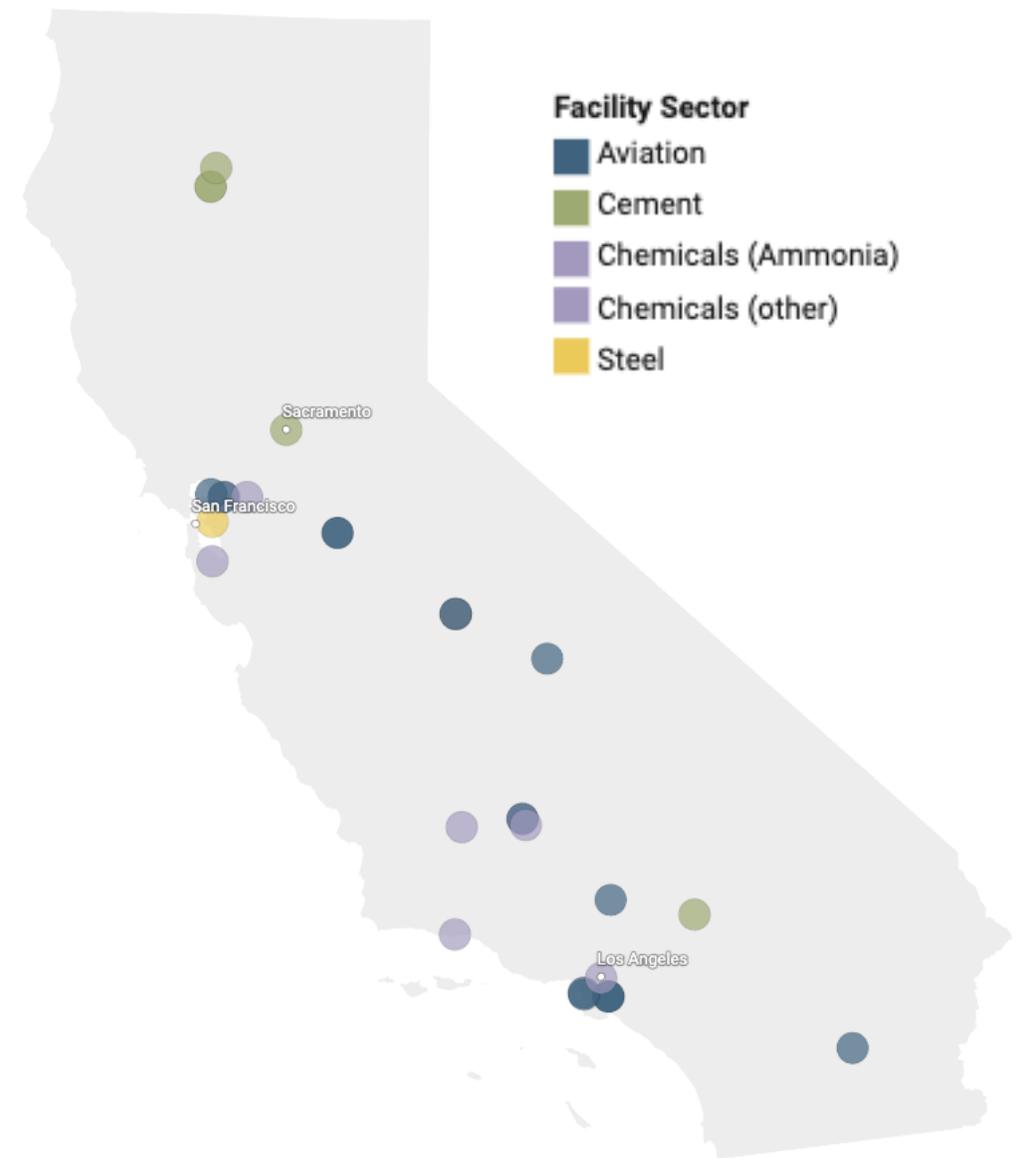
Unlocking FOAK/NOAKs in CA: The Industry Perspective



California Project Progress

- 63*+ commercial-scale industrial decarbonization projects announced across the state.
- Potential for \$80B+ in private capital invested in clean manufacturing and industrial projects by 2030
- State level initiatives such as 2045 net-zero target, cap-and-trade, and CEC's INDIGO program

*not all projects pictured on map



<https://rmi.org/building-bigger-and-cleaner-industries-in-us-states/>

Unlocking FOAKs in California



MODERATOR

Ben Skinner

RMI
Manager
Climate Aligned Industries



Steve Regis

CalPortland
Chief Operating Officer



Dr. Josh Stolaroff

Mote
Co-Founder & Chief
Executive Officer



Felix Hennebert

Rondo
Power Solutions
Manager



Corey Stewart

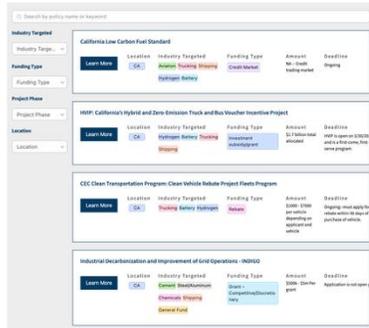
RMI
Senior Associate

Audience Questions

Creating the Enabling Ecosystem: Policy, Finance & Community Engagement

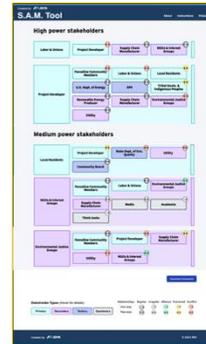


RMI and MPP Tools to Support the Ecosystem



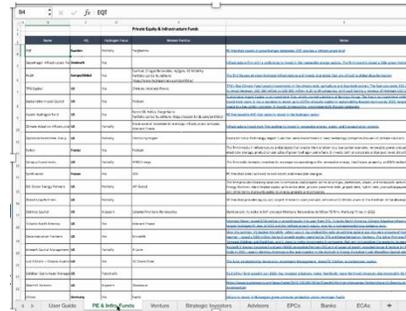
Decarbonizing Industry Resource Tool (DIRT)

An interactive, online lookup tool that identifies financial incentives for industrial decarbonization at the state and federal levels



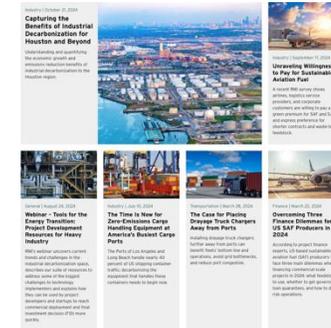
Stakeholder Engagement and Mapping Tool (S.A.M.)

A web-based tool that simplifies the process of creating visualizations of stakeholder relationships and power dynamics for projects in all sectors, communities, and regions



Industrial Investor Database

Catalogues over 200 institutions that have expressed interest in and/or closed transactions related to industrial decarbonization



Publications

Case studies, reports, blogs, and webinars spotlighting success stories and lessons learned



Global Project Tracker

Map tracking the pipeline of industrial decarbonization projects, including more than 250 projects in the US

Creating the Enabling Ecosystem: Policy, Finance & Community Engagement



MODERATOR

Jane Sadler

RMI
Senior Associate
US Program



Daniel Adomian

California IBank
Associate Government
Program Analyst



Sean Knierim

SidePorch
Founder & Partner



Carmelita Kelly Miller

RMI
Director of Energy Equity



Michelle Kinman

LACI
SVP, Market
Transformation

Group Conversation

Each of you represents a critical piece of this ecosystem — policy, finance, community, economic development, and project developers.

Looking forward, what are the opportunities for collaboration that would strengthen your work / make your work more successful?

Closing



Thank you for coming!

