

Clean Tech Task Force

House Economic Development Committee, 9.24.24

Task Force Chairs

- Governor Tina Kotek
- U.S. Senator Ron Wyden
- John O'Leary (Daimler Truck NA)
- Rakesh Aneja (Vice Chair) (Daimler Truck NA)

Task Force Membership

- Senator Jeff Merkley, U.S. Senate
- Congresswoman Suzanne Bonamici, U.S. House of Representatives
- Rep. Julie Fahey, Oregon House Speaker
- Sen. Rob Wagner, Oregon Senate President
- Sen. Daniel Bonham, Oregon Senate Minority Leader
- Rep. Jeff Helfrich, Oregon House Minority Leader
- Sophorn Cheang, Director, Business Oregon
- Janine Benner, Director, Oregon Department of Energy
- Catie Theisen, Political & Legislative Director, Oregon AFL-CIO
- Robert Camarillo, Secretary-Treasurer, Oregon Building and Construction Trades Council
- Robert Westerman, President Directing Business, IBEW State Association
- Jayathi Murthy, President, Oregon State University
- Angela Jackson, Executive Director, Industry & Entrepreneurial Engagement, PSU
- Randall Edwards, Former State Treasurer
- Stephanie Bulger, President, Lane Community College
- Andrew McGough, Director, Oregon Workforce Partnership
- Aina Abiodun, President & Executive Director, VirtueLab
- Nicole Hughes, Executive Director, Renewable Northwest
- Eric Dresselhuys, CEO, ESS Inc.
- Laura Beane, North American CEO, Vestas
- Alicia Chapman, Owner & CEO, Willamette Technical Fabricators
- Larry Bekkedahl, Senior VP for Advanced Energy Delivery, PGE
- Marcelino Alvarez, CEO, Photon Marine
- Joseph Lu, Founder and CEO, QPO
- Tamara Lundgren, CEO, Radius Recycling
- Robert Benjamin, Founder and CEO, Aris Hydronics
- Monique Claiborne, President and CEO, Greater Portland Inc
- Steve Curley, Director, EDCO/REDI
- Curtis Robinhold, Executive Director, Port of Portland
- Meredith Connolly, Oregon Director, Climate Solutions
- Kory Murphy, Program Officer, Lemelson Foundation

Task Force Charge

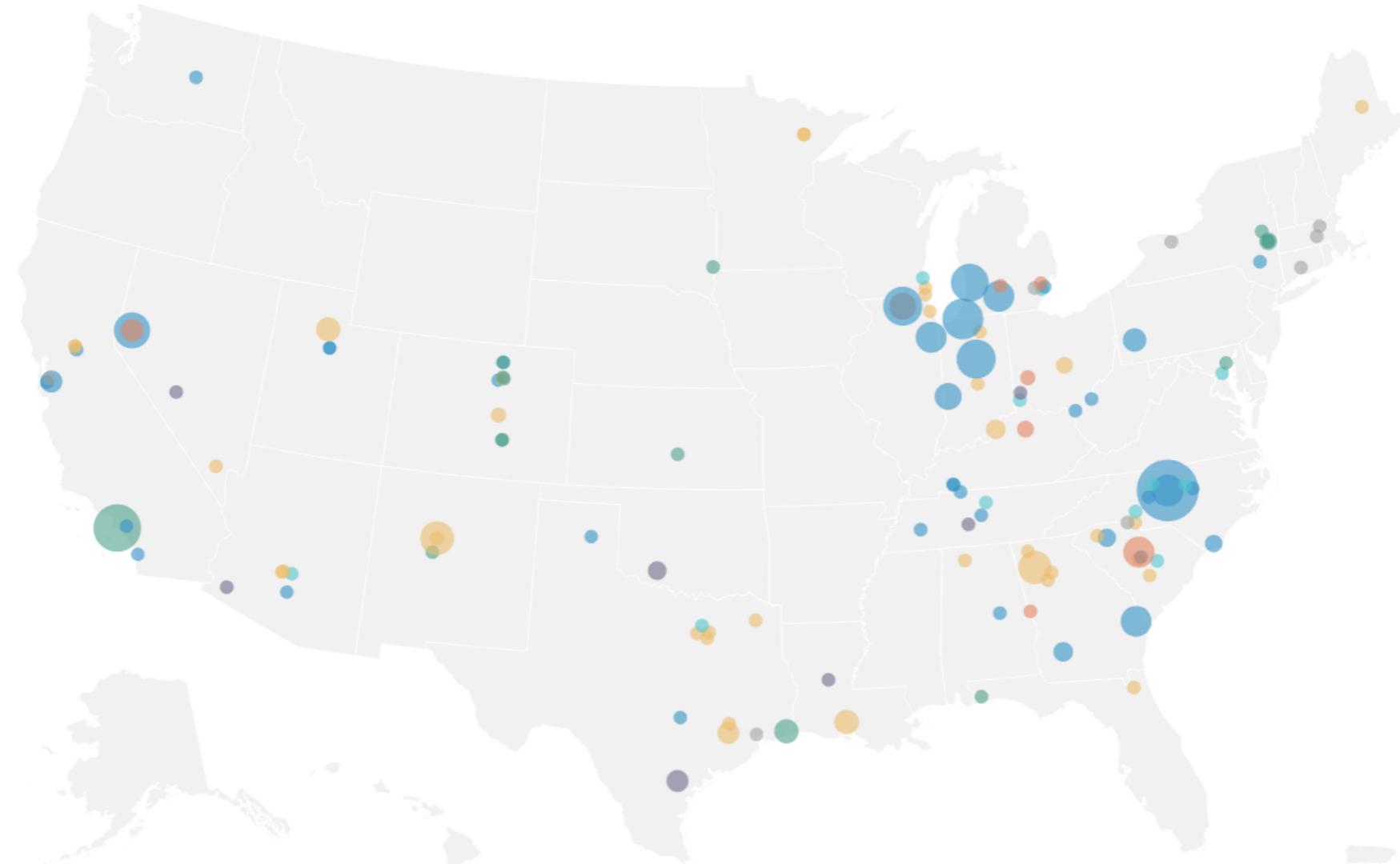
Provide recommendations to maximize state's competitiveness in:

- A) Attracting clean energy technology manufacturing investment
- B) Positioning the state as a leader in research, development and commercialization of new clean energy technologies

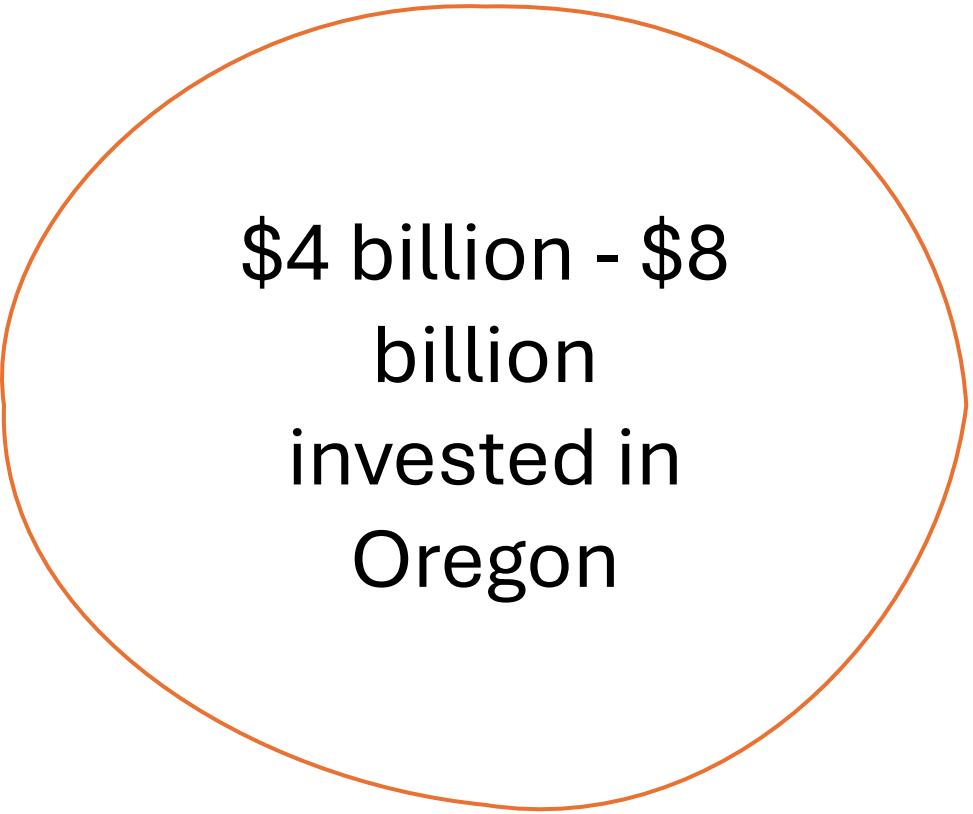
Manufacturing investment announcement locations (2023)

\$0.3B ○ ○ \$0.6B

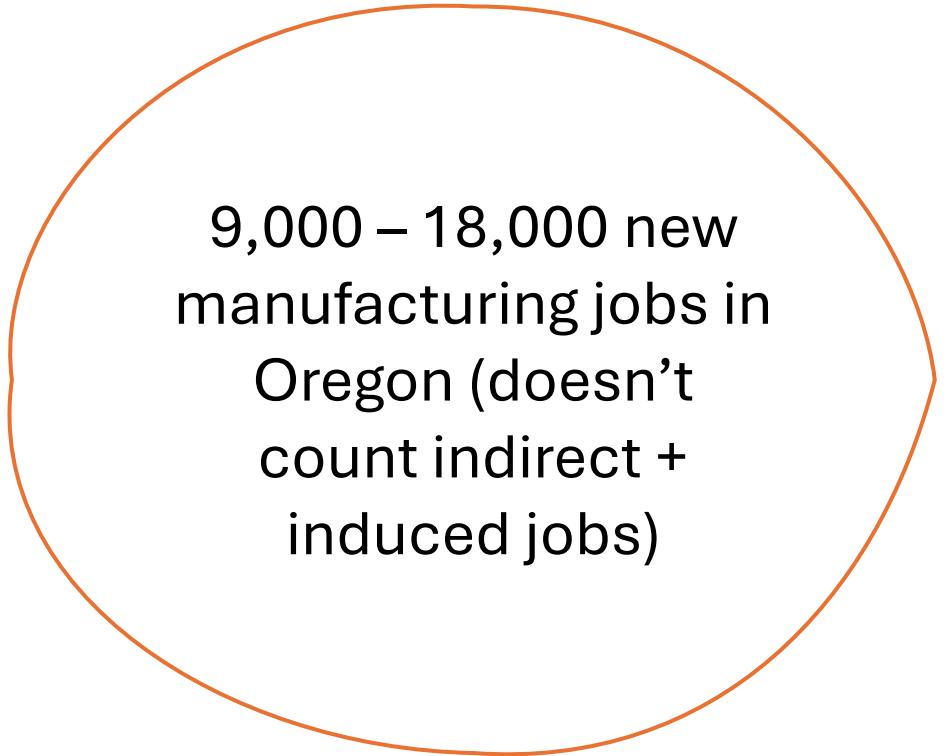
■ Critical Minerals ■ Electrolyzers ■ Solar ■ Wind ■ Batteries ■ Zero Emission Vehicles ■ Fueling Equipment



The Opportunity is Vast!



\$4 billion - \$8 billion invested in Oregon



9,000 – 18,000 new manufacturing jobs in Oregon (doesn't count indirect + induced jobs)

DAIMLER TRUCK
North America



LEADING SUSTAINABLE TRANSPORTATION

September 24, 2024

Rakesh Aneja

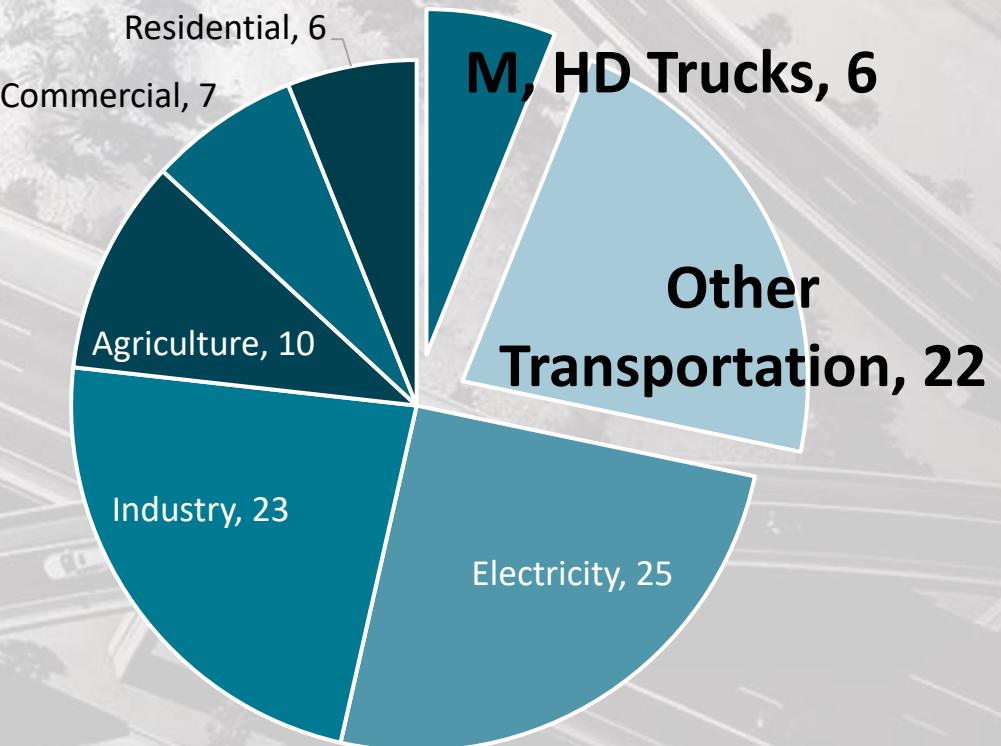
Daimler Truck North America

TRUCKING SERVES AS THE BACKBONE OF AMERICAN COMMERCE AND PRESENTS A 6% ANTHROPOGENIC GHG REDUCTION OPPORTUNITY

73%

of our nation's freight

2022 U.S. GHG Emissions by Sector [%]



OUR COMPANY



Unit Sales
195,014

DTNA Sales, 2023

Market Share
38%

Class 6-8

Revenue
\$23.4B

FY 2023



Employees, YE 2023

17,400+_U

SA

10,700+

Mexico

70+

Canada

OUR OREGON LOCATIONS

Portland

- DTNA Headquarters
- Over 3000 Employees
- Wind Tunnel & Test Engineering
- Freightliner & Western Star TMP
- Electric Island



Madras

- High Desert Proving Grounds
- Safety Testing



DAIMLER TRUCK GLOBAL AMBITION: ALL NEW VEHICLES IN EUROPE, NORTH AMERICA, AND JAPAN CO2-NEUTRAL BY 2039



2021

Thomas Built
Buses
Saf-T-Liner
C2 Jouley

2023

RIZON

2020
Freightliner
Custom Chassis
eWalk-in Van

202X
Mercedes-Benz
eAtego

2022
Freightliner
eCascadia

2024
Mercedes-Benz
eActros 600

202X
Mercedes-Benz
GenH2 Truck

2021
Mercedes-Benz
eActros

2018
Mercedes-Benz
eCitaro

2022
Mercedes-Benz
eEconic

2023
Freightliner
eM2

2022
Mercedes-Benz
fully electric
bus chassis
eO500U

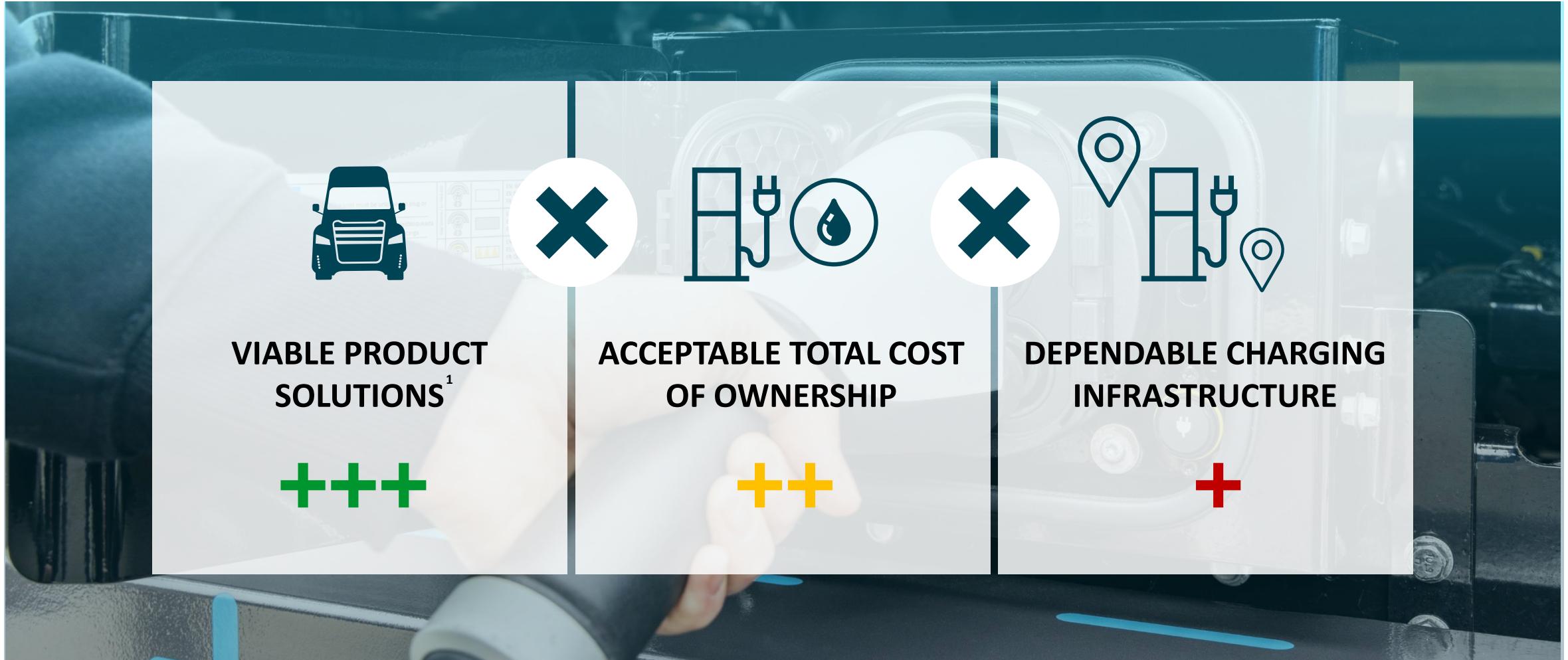
2017

FUSO eCanter;
Next Generation
in 2023

Hundreds of customers have already covered tens of millions of miles with our electric trucks and buses.

THE DECARBONIZATION TRANSFORMATION EQUATION

Current status of required trifecta



¹ Assessment refers to effectiveness of available production applications only; Significant portfolio yet to be decarbonized.

340

New Projects

40

States

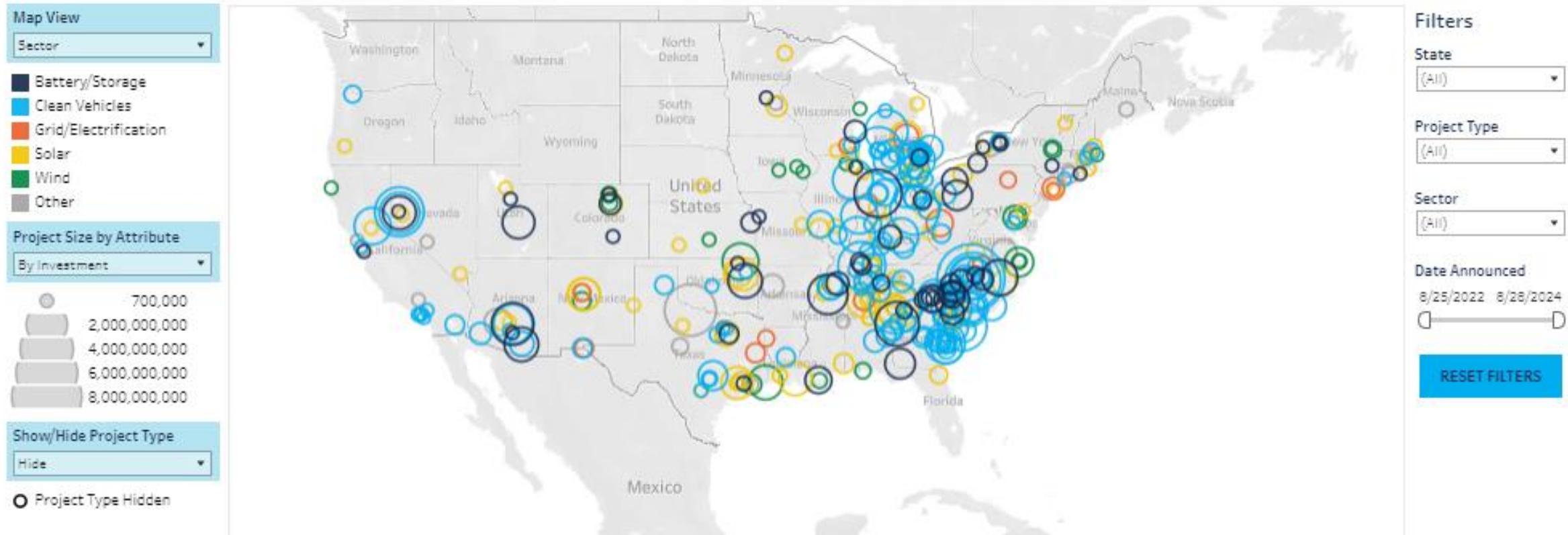
\$ 128,001,629,000
Investments

111,578
Jobs



MAJOR CLEAN ENERGY PROJECTS ANNOUNCED SINCE THE PASSAGE OF IRA

Explore the hundreds of projects announced since the Inflation Reduction Act (IRA) with the dropdown navigation, filters, and interactive charts.



Cleantech Opportunity in Oregon: Industry Feasibility by Metropolitan Area

Feasibility scores represent percentile, with 384 metropolitan statistical areas (MSAs) considered nationwide.

Feasibility Percentile Range



	Albany- Lebanon, OR	Bend, OR	Corvallis, OR	Eugene- Springfield, OR	Grants Pass, OR	Medford, OR	Portland- Vancouver- Hillsboro, OR-WA	Salem, OR
Batteries & Components	54	87	32	92	55	87	95	56
Electric Vehicle & Component Manufacturing	56	89	24	93	56	90	96	66
Energy Transmission Equipment	50	87	33	92	53	88	94	58
Green Hydrogen	46	80	29	89	50	82	88	65
Heat Pumps	50	83	22	92	53	84	90	65
Low-Carbon Cement & Concrete	67	98	21	98	81	97	95	70
Low-Carbon Iron & Steel	56	87	24	93	57	90	93	54
Solar Energy Components	47	86	45	89	55	86	95	70
Wind Energy Components	55	91	24	95	63	91	96	58

Table: RMI • Source: Clean Growth Tool • [Download image](#) • [Download PDF](#)



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Current Projects



GPI Business Development Climate Tech Projects - May 2024

Stage ↑	Code Name	Active Date	Jobs	CapEx	Sq Ft	Acres
Prospecting	Project Lava	5/2/2024				
	Project Thayer	3/6/2024				
	Project Zulu	11/30/2023				
	Project Tahitian	9/21/2023				
	Project Renewcell	8/17/2023	200	\$270,000,000		10
	Project Runic	8/16/2023				
	Project - TBD	8/15/2023				
	Project New Continen	4/12/2023	1253	\$1,429,000,000		200
	Project Landing	2/1/2023			10,000	
	Project Sunlight	8/29/2022	230	\$60,000,000	338,000	8
Review	Project Chinook	8/23/2023	543	\$167,900,000	376,736	17.3
	Project Glisan	4/15/2024	500			20
	Project Glisan	2/15/2024				
	Project Benson	2/13/2024				
	Project Sunday	11/8/2023	300	\$81,500,000		7
	Project Javanese	6/22/2023	200		200,000	
	Project Taurus	12/9/2022	30		5,000	
	Project Runway	7/1/2022	2100	\$3,700,000,000		250
	Project Broadbill	7/8/2022	100	\$500,000,000		50

19 Climate/Clean Tech projects are currently in GPI's active business development pipeline.

5,400 potential jobs and capital investment over \$6.2 billion.

Project Losses



GPI Business Development Climate Tech Projects - May 2024

Stage ↑	Code Name	Active Date	Jobs	CapEx	Sq Ft	Acres
Closed Lost	Project Poppy	3/7/2023	2000	\$3,000,000,000		300
	Project Arch	2/16/2023	1400	\$2,000,000,000		400
	Project Starlight	10/28/2022	150	\$30,000,000	50,000	
	Project Dame	7/22/2022	360	\$136,500,000		20
	Project Neptune	6/20/2022	140	\$400,000,000		25
	Project Arches	1/7/2021	25	\$30,000,000		5

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Reasons Lost

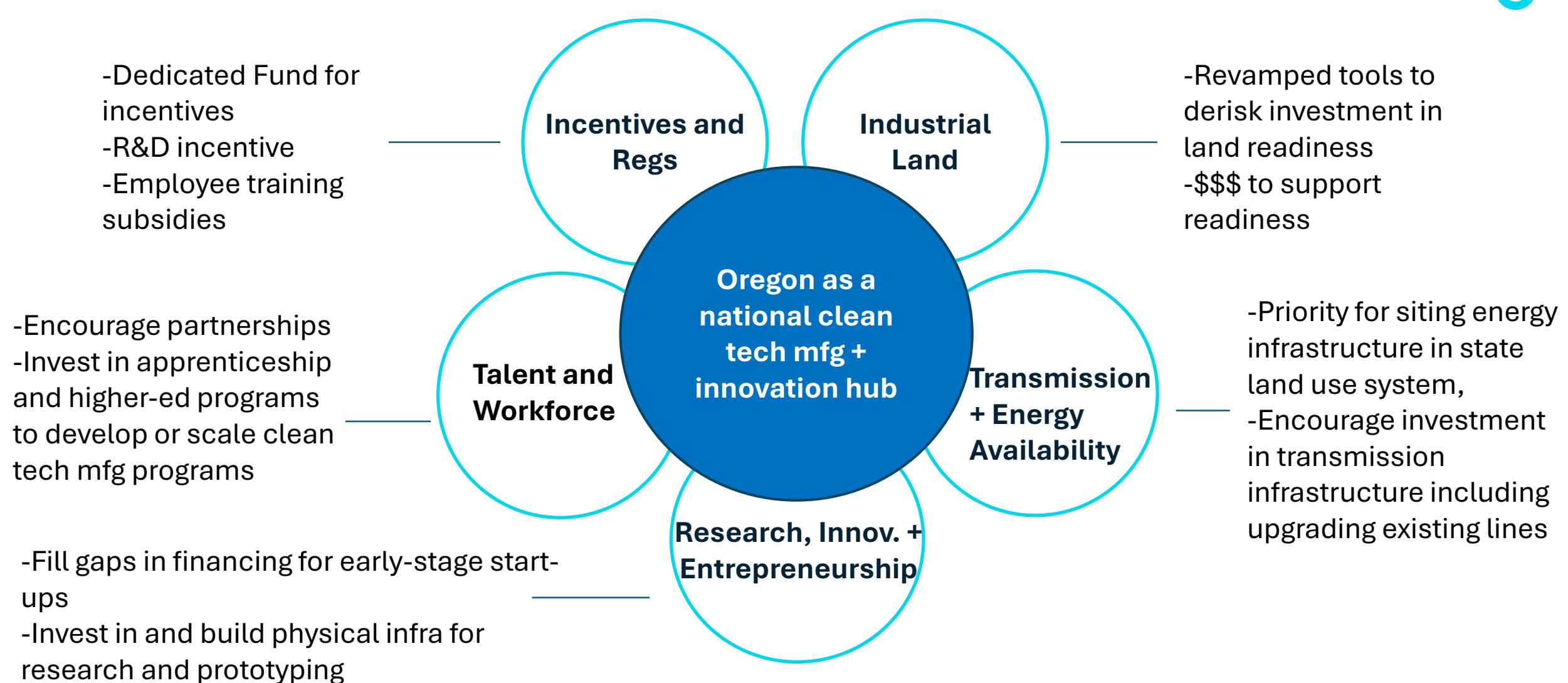
Poppy = Lack of available industrial land, lack of local interest in submitting a proposal.

Arch = Lack of available industrial land.

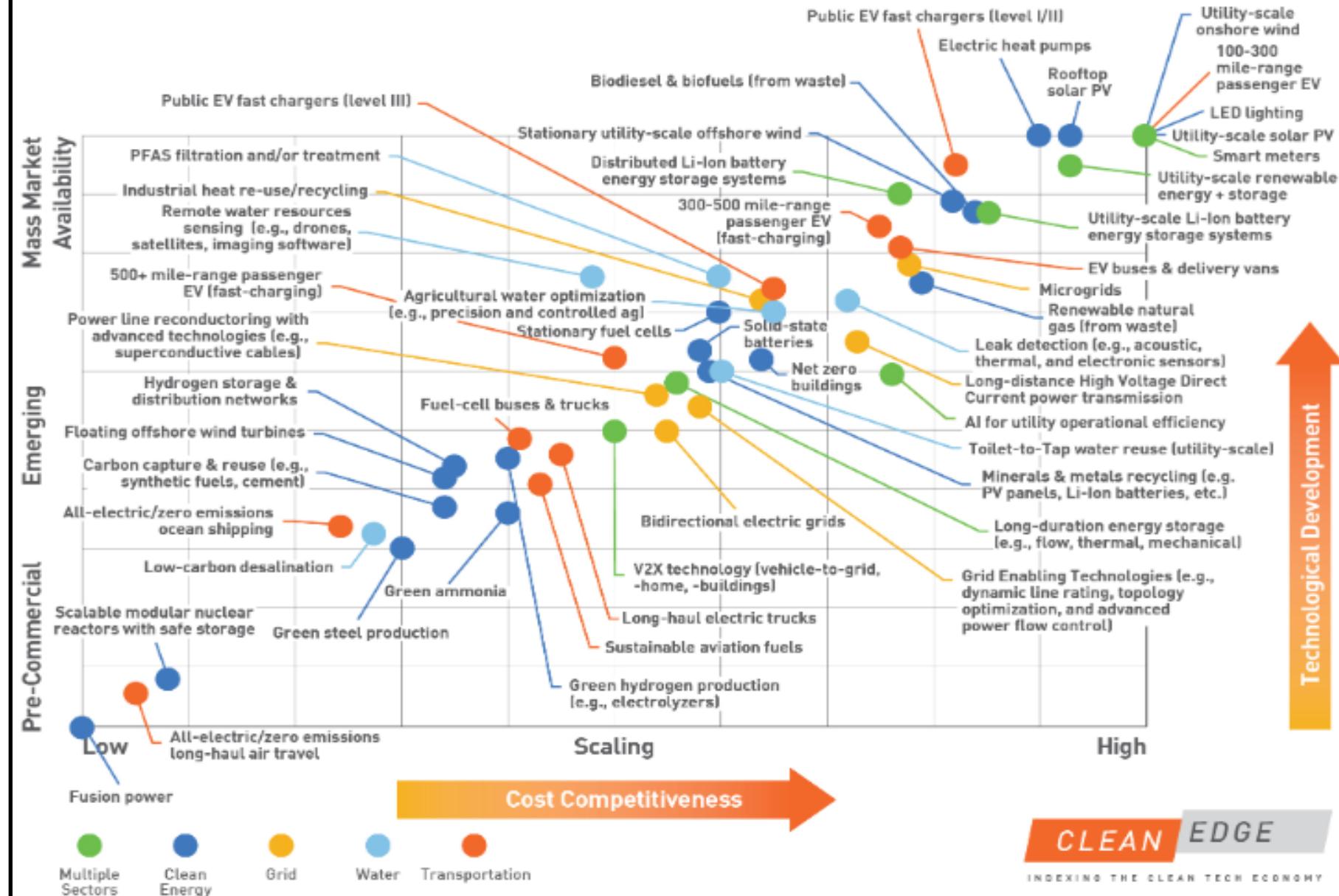
Starlight, Dame, Neptune = Unknown. No correspondence.

Arches = Decided not to locate in region.

How we'll be competitive



2024 Clean Edge Tech Maturation Model



Oregon Clean Tech Task Force

Strategic Incentives to Scale Clean Tech Manufacturing &
Support Statewide Economic Prosperity

Minimizing the “cost gap”

Analysis: Oregon’s existing incentives vs. Competing states’ offerings, including **27 states that have attracted \$100+ million** in clean tech investment since 2023. E

- **Massachusetts:** \$1B over 10 years (\$400M for the Mass. Clean Energy Center, \$300M in tax incentives, \$300M for workforce dev.)
- **Kansas:** \$1B+ in public incentives for 2 major clean tech manufacturing facilities
Mississippi: \$365 million in incentives for battery manufacturing factory including site development costs and tax incentives
- **South Carolina:** 20% subsidy for cost of manufacturing machinery/equipment at clean energy manufacturing facilities
- **OH, AZ, WA, NJ, MA:** R&D incentives, among other offerings

Takeaway: Oregon’s existing incentive offerings do not “stack up”

Maximizing Oregon's competitive advantage

- **Adopt New Incentives Programs** to provide needed, up-front investment for companies to:
 - Construct, retool or expand manufacturing facilities
 - Leverage federal & private capital
 - Create and retain family wage jobs statewide
 - Facilitate R&D
- **Maintain Existing Incentive Programs** critical for encouraging large capital investments, including:
 - Strategic Investment Program
 - Strategic Reserve Fund

Guiding Vision:

Incentives should be designed to...

- Demonstrate a data-driven return on investment, with clear metrics around job creation and retention.
- Align with and achieve Oregon values to apply, qualify, or get the full amount of the incentive.
- Foster economic vitality statewide, prioritizing benefits for BIPOC, rural, tribal, and other environmental justice communities.

A bold investment today will secure Oregon's place in the race and help ensure that we can build a prosperous, equitable, sustainable economy.