

Annual Report

Investing in
entrepreneurs.
Deepening climate
and local impact.

2024

CONTENTS

00	Letter from our Founder and CEO
01	The Climate Innovation Scale Gap
02	Our Platform for Entrepreneurs
03	Our Approach to Commercializing Technology
	 Catalytic Capital
	 Project Expertise
	 Local Partnership
	 Mobilizing Investors
04	Our Nonprofit Investor Model



Letter from our Founder and CEO

This is an extraordinary time for climate innovation.

Over the past 15 years, we have invested in early commercial technologies and deployed projects in big cities and small towns. Last year marked a key point in our evolution: with the support of more than 40 philanthropic and government funders, we became Elemental Impact, formerly Elemental Excelerator, to mark our expansion to a broader investing platform and growing portfolio.

2024 brought our largest round of investment to date, with Elemental supporting 36 pioneering entrepreneurs. Today our portfolio includes 160+ companies, catalyzing \$11.5B in additional funding and creating 17,200 jobs. These entrepreneurs are building technologies that make energy more reliable and affordable, help farmers grow food in changing conditions, strengthen domestic supply chains, and create jobs throughout the United States and beyond.

And yet, even as venture investment in climate has topped \$30 billion a year for four straight years, we face a new challenge: hundreds of companies with talented teams and proven technologies are ready to scale, but there's a critical funding and project expertise shortfall for first-of-a-kind and early commercial projects.¹ This is what we call the Scale Gap, and we are obsessed with helping entrepreneurs traverse it.

By investing catalytic capital, providing expert coaching, and mobilizing later stage investors, Elemental is constructing a bridge to bankability like no other. In fact, compared to a random sample of 1,000 companies, Elemental companies are almost 2.5x more likely to survive from early to late commercial stages than companies we didn't invest in.²

Once companies cross the bridge to bankability, they are poised to operate at scale and therefore deliver real impact in neighborhoods and communities. It has never been more important to ensure that great companies succeed despite market shocks. This makes 2025 a critical window for philanthropy to step in and ensure the most important innovations continue to scale.

We are excited to share our results and latest insights with you in this report. Thank you to the creative and visionary funders who are innovating with us, and we hope to work with many more in our next chapter.

Dawn Lippert

Founder and CEO, Elemental Impact
Founding Partner, Earthshot Ventures

The background of the slide is a photograph of a sunset. The sky is a deep orange and red. In the foreground, there are dark silhouettes of trees and people. A person is visible on the right side, and another person is visible in the center, near the sun. The sun is a bright, glowing orb in the center of the image, partially obscured by the silhouettes of trees and people. The overall mood is serene and contemplative.

01

The Climate Innovation Scale Gap

Broad adoption of new technology is critical to advance more resilient energy systems, spur domestic manufacturing, and create local jobs in communities. Yet, even after the technology is proven to work, entrepreneurs often struggle to secure the right capital needed to finance their first commercial deployments. This is what we call the Climate Innovation “Scale Gap,” and we’re laser focused on creating a bridge.



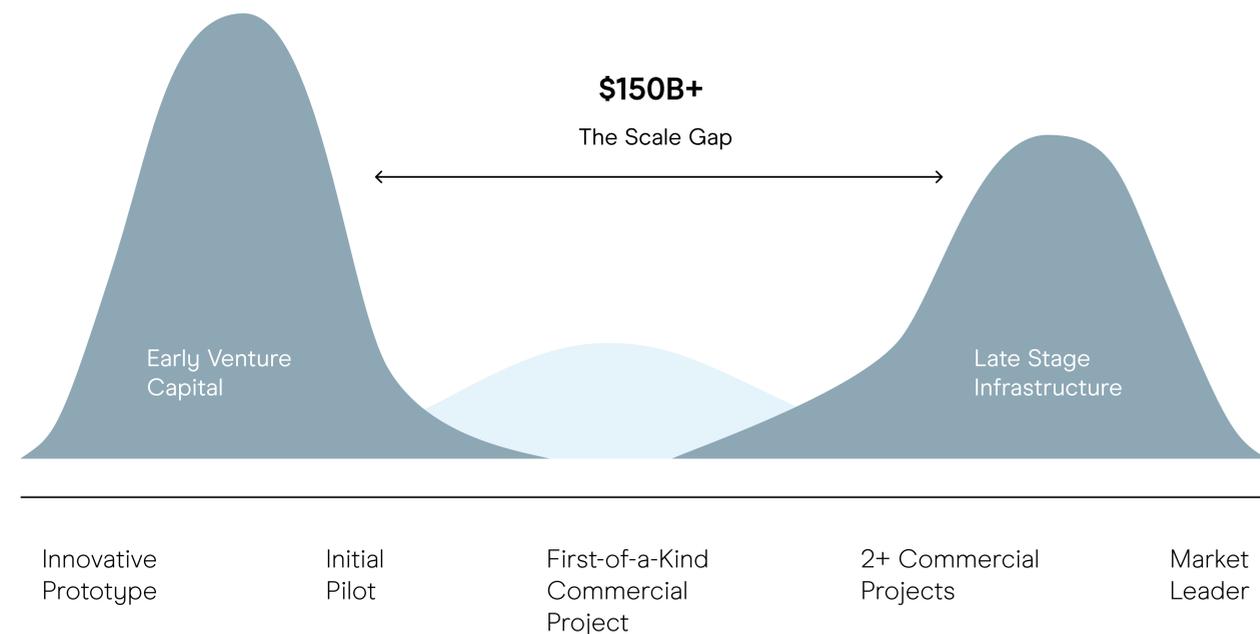
Traversing the Scale Gap

85% of technologies still need to be commercialized to keep greenhouse gas emissions in check.³

Some of the highest impact technologies, such as wind and solar energy—that can power our grid safely, accelerate local economies, and build resilient communities exist today at scale. However, the majority of the remaining technologies are not yet widely available.

The Scale Gap is an acute funding (and expertise) shortfall that climate technology companies face on their path from pilot to large-scale deployments. At Elemental, we’ve seen firsthand that this gap applies to small and large-scale first-of-a-kind (FOAK) commercial facilities, as well as early commercial projects with distributed assets.

Think: facilities like the next critical mineral recycling plant in Ohio and the organic fertilizer plant near farms in Central Valley, California; or AI-enabled robots in material recycling facilities in the Pacific Northwest, and distributed virtual power plants working across homes in Texas.



Transitioning from your first pilot to your first (or second, third) commercial deployment is daunting—and many startups fail along the way.

Take rooftop solar, for example. It took nearly two decades of technical, policy, finance, and business model innovations to form the robust market we see today. That is not going to work for the next generation of technologies that are needed. We must create faster, efficient, and impactful pathways to mass deployment.

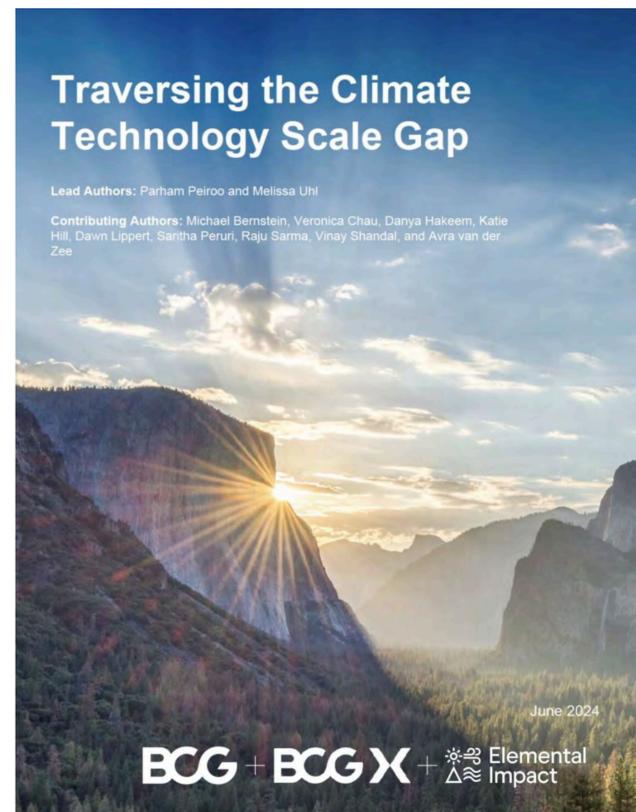
The current investing landscape isn't positioned to solve this market failure—early deployments are complex and costly. Creating a bridge for these critical climate technologies is the only way we will ever see mainstream adoption in local communities. This is why Elemental Impact exists.

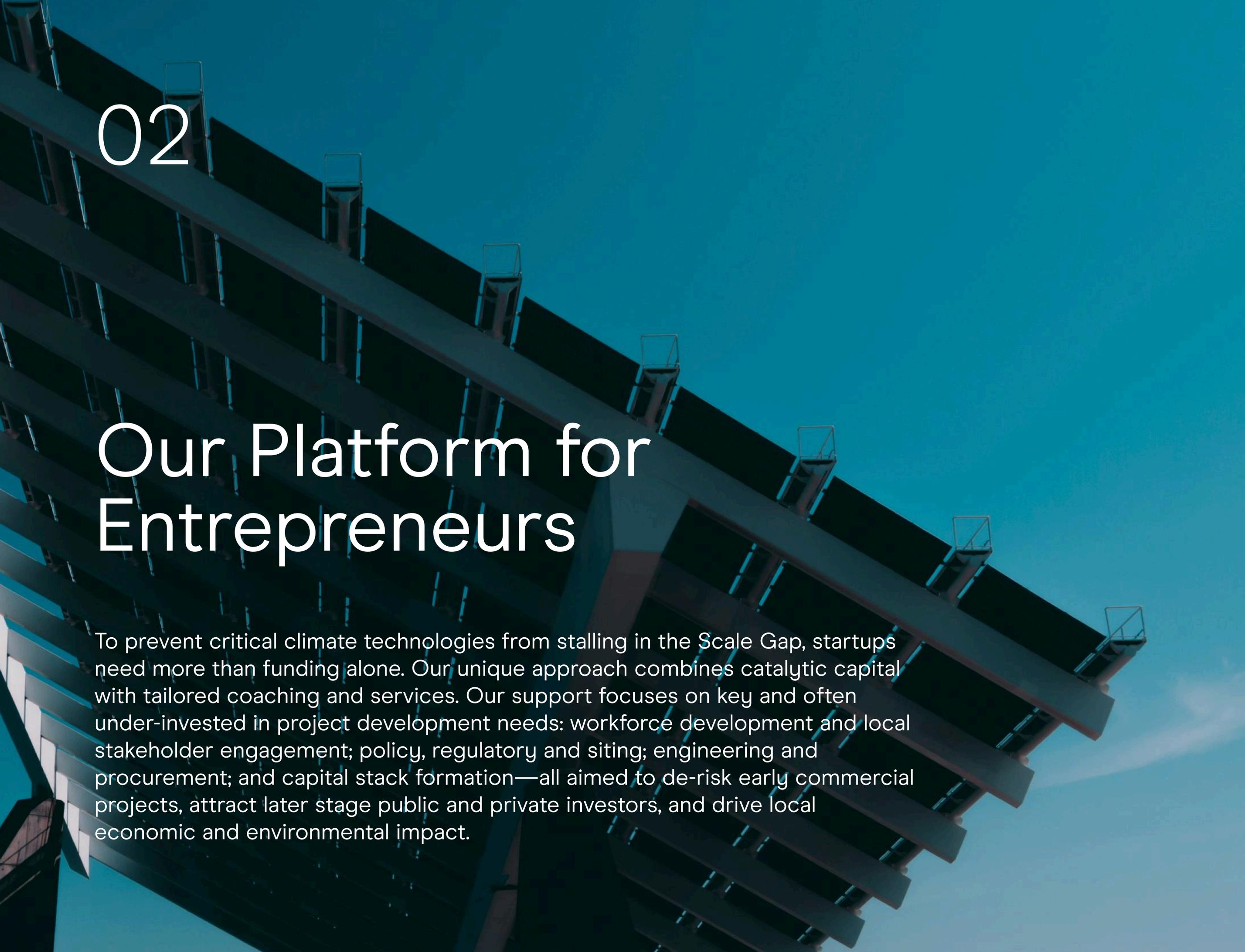
Quantifying the 'missing middle'

Within Elemental's portfolio of 160+ companies alone, the financing needed to get their projects off the ground is greater than \$600 million.

In 2024, Elemental and Boston Consulting Group interviewed over 100 investors from across the capital stack to help quantify the missing middle.

In June, we published "Traversing the Climate Technology Scale Gap," where we present data and key insights from those discussions—we found at least \$150B of missing capital.⁴





02

Our Platform for Entrepreneurs

To prevent critical climate technologies from stalling in the Scale Gap, startups need more than funding alone. Our unique approach combines catalytic capital with tailored coaching and services. Our support focuses on key and often under-invested in project development needs: workforce development and local stakeholder engagement; policy, regulatory and siting; engineering and procurement; and capital stack formation—all aimed to de-risk early commercial projects, attract later stage public and private investors, and drive local economic and environmental impact.

Why We Started

For 15 years, Elemental has directed over \$200M in catalytic capital and tailored coaching to projects in local communities.

Hawai'i had the perfect conditions to pilot energy innovation. As an island state, Hawai'i was importing \$5 billion dollars worth of fossil fuels each year.⁵ Of all the petroleum in the U.S. burned for electricity, more than half was burned in Hawai'i, and energy costs for residents were 3-4x the national average.⁶

In 2009, in response to the ambitious Hawai'i Clean Energy Initiative, Elemental was created—with seed funding from the Department of Energy—as a novel technology deployment accelerator to help the state become the first in the U.S. to reach 100% renewable energy by 2045.

Since then, we've intentionally invested in innovative companies across energy, transportation, water, food and agriculture, nature, industry, and carbon—and continue to center local communities in projects. For the last 15 years and through four presidential administrations, we have stayed focused on filling gaps for technology development and preparing entrepreneurs for last mile implementation.

From place-based technology accelerator to global investment platform, our name change to Elemental Impact this year marks this exciting evolution.



Our Footprint Today

100X Impact

For every dollar invested by Elemental, our companies unlock an additional \$100

\$105M

directly invested in companies

\$11.5B

in additional funding catalyzed

20M

lifetime metric tons of CO₂ avoided⁷

160+

companies in our portfolio

150+

projects funded

17,200

jobs created to date

290

total investment transactions

18%

exit rate⁸

ELEMENTAL PORTFOLIO AT OUR ANNUAL CEO AND LEADERSHIP SUMMIT | 'OAHU, HAWAII'

Our Portfolio

Energy

- Amber Kinetics
- Bedrock Energy
- Blue Planet Energy
- Bright Light Systems*
- ConnectDER
- Dimensional Energy
- Energy Dome
- Fervo Energy
- Found Energy
- Geli*
- Go Electric*
- Heliogen*
- HST
- Kevala
- kWh Analytics
- Lastwall
- Leap
- Liminal
- MetOx International
- Noon Energy
- Nuventura
- OhmConnect*
- Opus One Solutions*
- RatedPower*
- Shifted Energy
- Shyft Power Solutions*
- Sighthen*
- Solar Analytics
- Solstice*
- Span.IO
- SparkMeter
- Spider 9*
- Stem*
- SunFi
- T-REX
- Twelve
- UtilityAPI
- VIA Science
- WeaveGrid

Food & Agriculture

- Blue Ocean Barns
- C16 Biosciences
- Ceres AI
- Creative Food Labs
- Edacious
- Farm Link Hawai'i
- FlyWire Cameras
- Full Harvest
- Gather
- Goodr
- Hawai'i 'Ulu Cooperative
- Inevitable Technology
- Klim
- Maui Nui Venison
- Nitricity
- PastureMap*
- Planet FWD
- Plantible
- Propagate
- SIMPLi
- Terviva
- TradeLanes
- Vence*
- Verdi

Transportation

- Actionfigure
- Ampaire
- Amply Power*
- Artyc
- Blynscy*
- ChargerHelp!
- Chargetrip
- Courial
- Dollaride
- eMotorWerks*
- Fleet Robotics
- Forum Mobility
- FreeWire Technologies
- HIVED
- Mythos AI
- Nuviel
- Oonee
- Rally
- Remix*
- Scoot Networks*
- Seabound
- SparkCharge
- Swiftly*
- Xos Trucks*
- ZeroAvia

Nature-Based Solutions

- Applied Carbon
- Foray Bioscience
- Genomines
- Mast Reforestation
- Vesta
- Vibrant Planet
- Yard Stick

Industry

- Aspiring Materials
- Capture6
- Ebb Carbon
- Evrnu
- Glacier
- Made of Air
- Molg
- Novoloop
- Nth Cycle
- Olokun Minerals
- Origen Carbon Solutions
- Reath Technology
- SuperCircle
- The Better Packaging Co
- Thrilling
- Trove
- WEEE Centre (Waste Electrical and Electronic Equipment Centre)
- Xplorobot

Built Environment

- Allume Energy
- Banyan Infrastructure
- BlocPower
- Carbon Lighthouse
- CarbonCure Technologies
- Community Energy Labs
- EnergyRM
- enVerid Systems
- Gradient
- Jupiter Intelligence
- Kelvin
- Pono Home
- Rebound Technologies
- Symbium
- Transaera

Water and Oceans

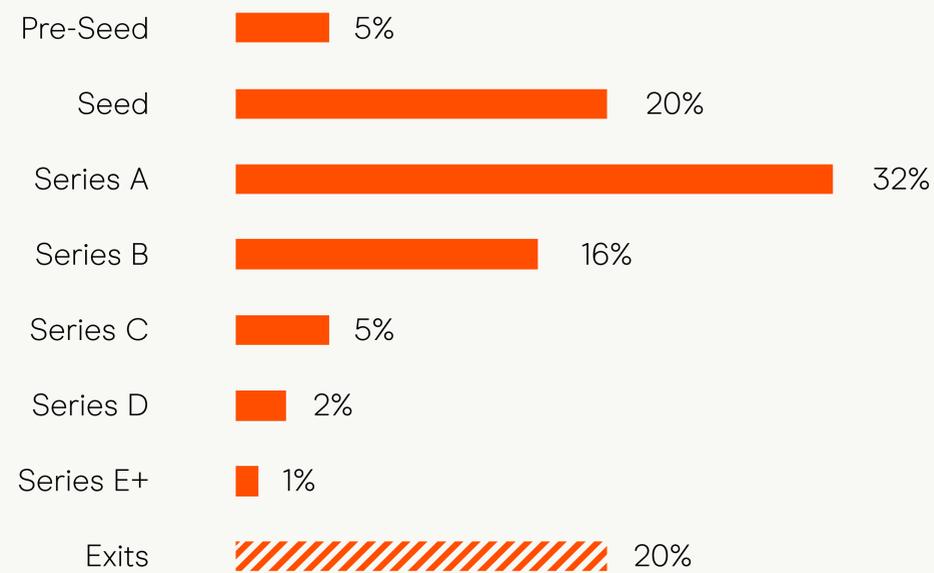
- Buoy Labs*
- Cambrian Innovation*
- Digital Paani
- FREDsense
- Hohonu
- Kando
- Matter.
- Microvi Biotechnologies
- SENTRY
- SOURCE Global
- Transcend
- WaterSmart Software*

ASTERISK * = EXITED

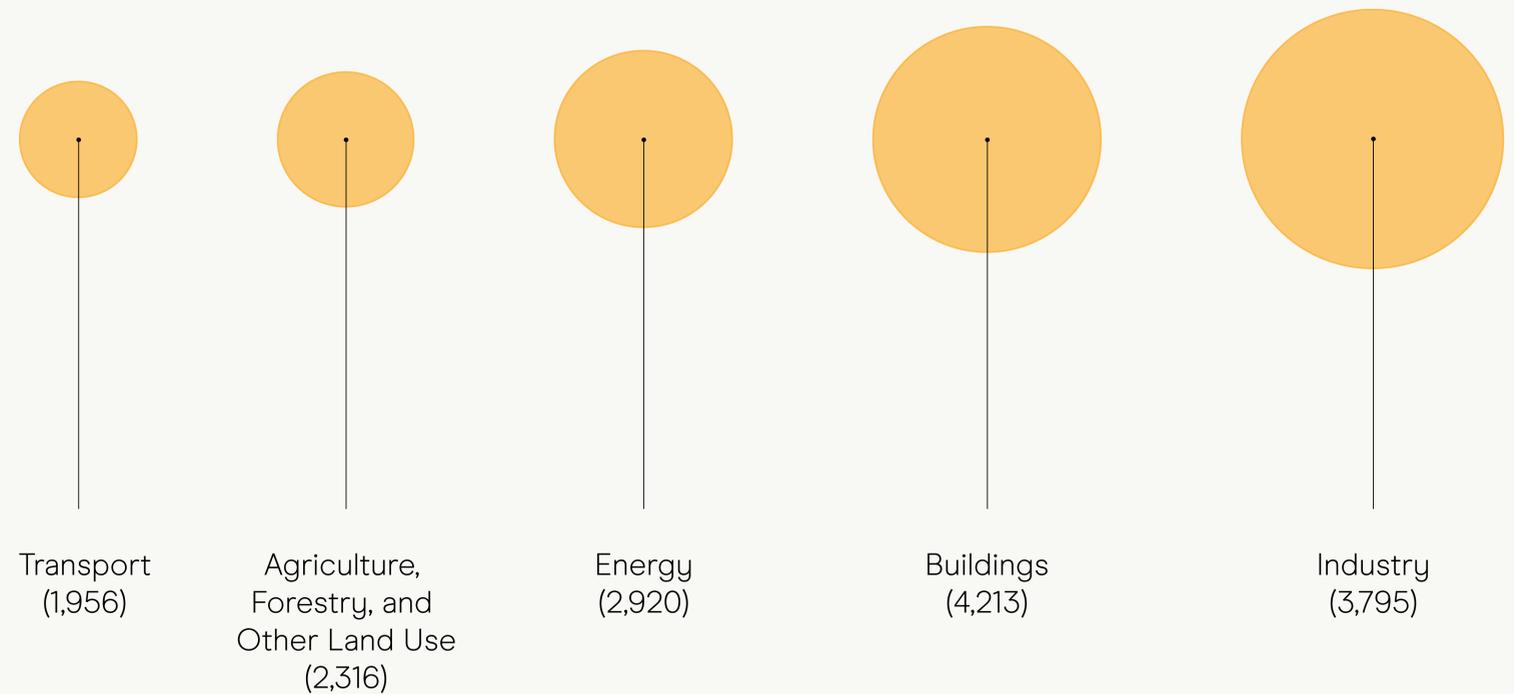
By the Numbers

Our mission in action—we intentionally invest in the hard-to-abate sectors that have the biggest impact across economic opportunity, job creation, and greenhouse gas emissions.

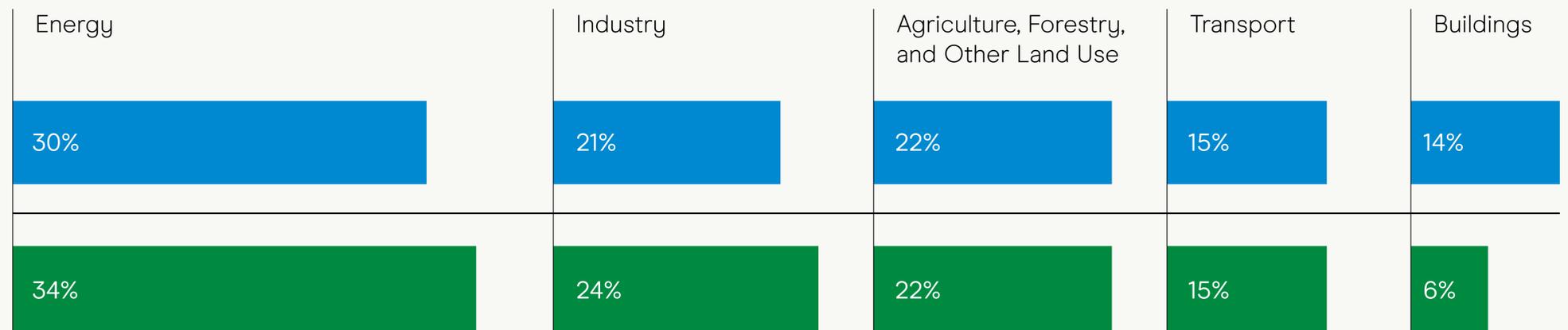
PORTFOLIO DISTRIBUTION BY FUNDRAISING STAGES

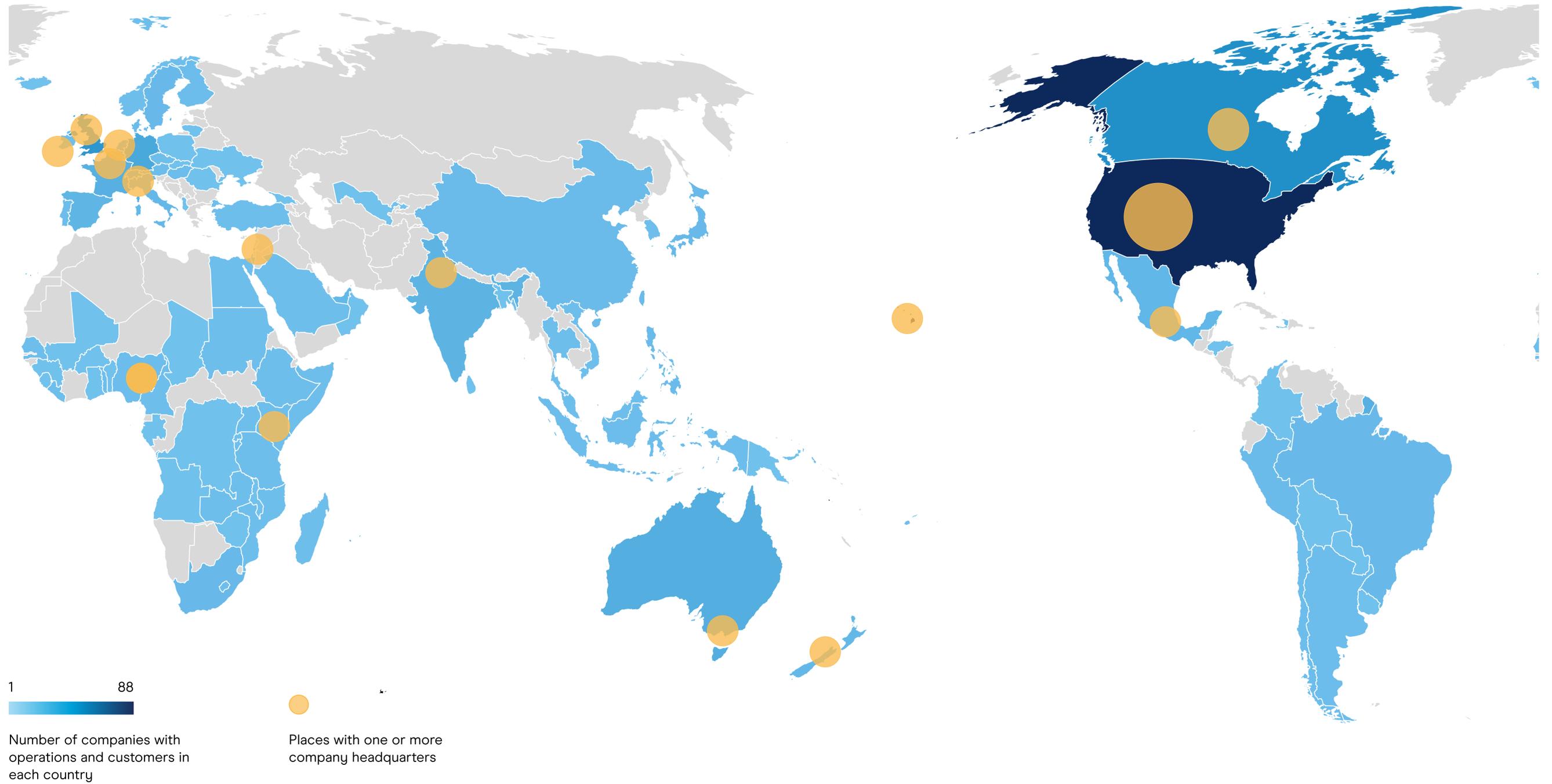


JOBS CREATED PER SECTOR



ELEMENTAL PORTFOLIO BY AMOUNT INVESTED





Our Momentum Across U.S. and Global Markets

Elemental's portfolio is scaling innovation and deploying climate technology in all 50 states and over 100 countries.

\$1.4B

Lifetime Revenue

4.8M

Customers

2,500

Portfolio Company Community Partners in 2024¹⁰

2-3x

reduction globally for every MtCO₂e reduced in the US as technology transfers¹¹

Our Platform

We fill capital gaps and de-risk climate technologies every step of the way.

Elemental's 501(c)(3) nonprofit is our home for testing new financing and deployment strategies with entrepreneurs along their path to broad market adoption—innovating together in real communities as the national and state policy landscape evolves.

In 2024, we expanded our investments from early-stage innovations, pilots and demonstration projects to commercial-scale deployments. We marked this exciting evolution by updating our name from Elemental Excelsior to Elemental Impact to reflect the growth of our portfolio and the scale of projects we are now able to structure and finance.

Today, we knit together different types of capital—from catalytic funding to venture equity to debt financing—that are fit-for-purpose along an entrepreneur's path to commercial scale. In 2021, we expanded this model when we launched an independent returns-focused fund, Earthshot Ventures, for early-stage climate technologies. This enabled private investors to invest with us for returns for the first time.

Elemental is now poised to set up new fund structures as market needs emerge, including early commercial and later-stage infrastructure deployments.

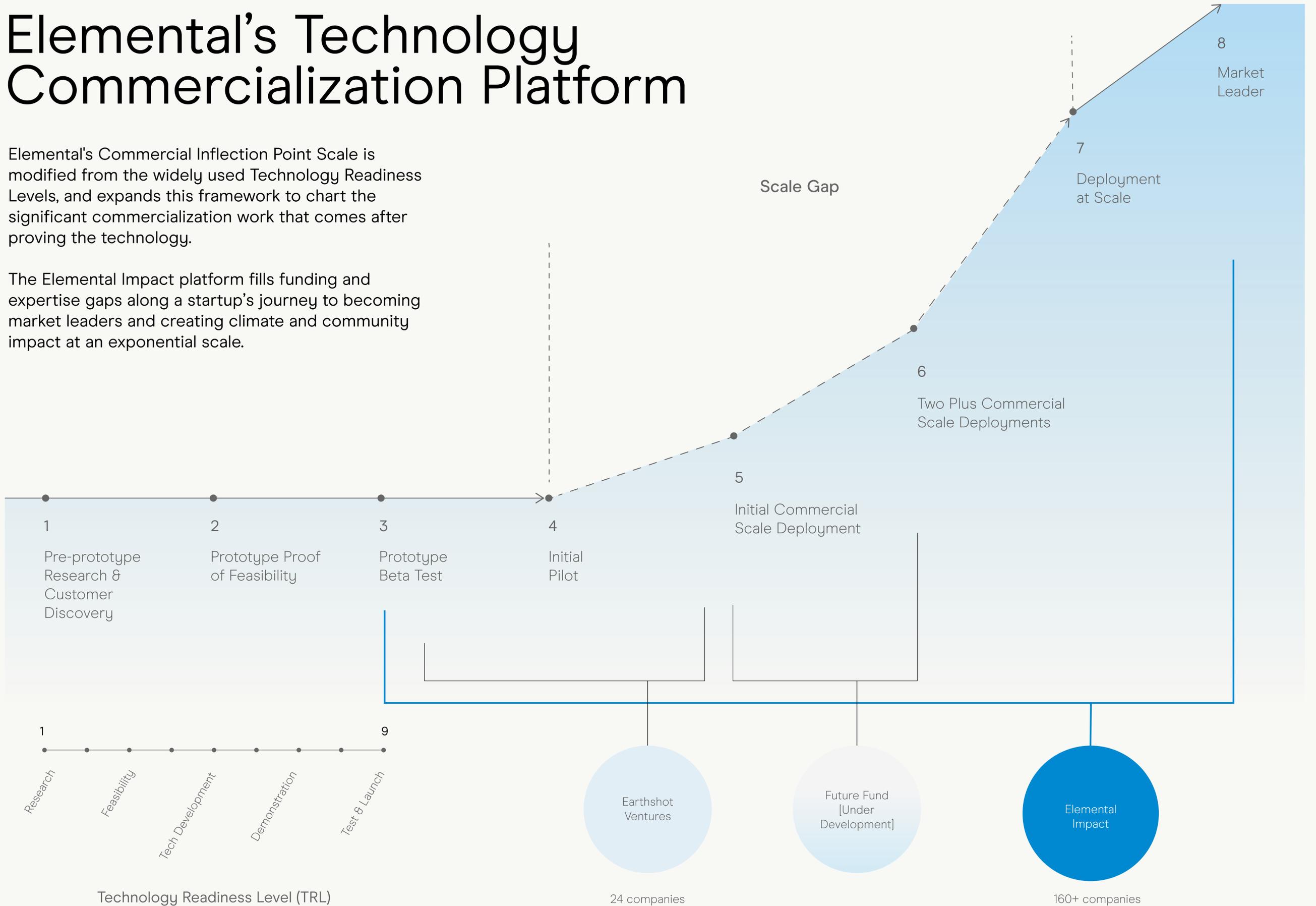
BEDROCK ENERGY
INVESTED IN 2023

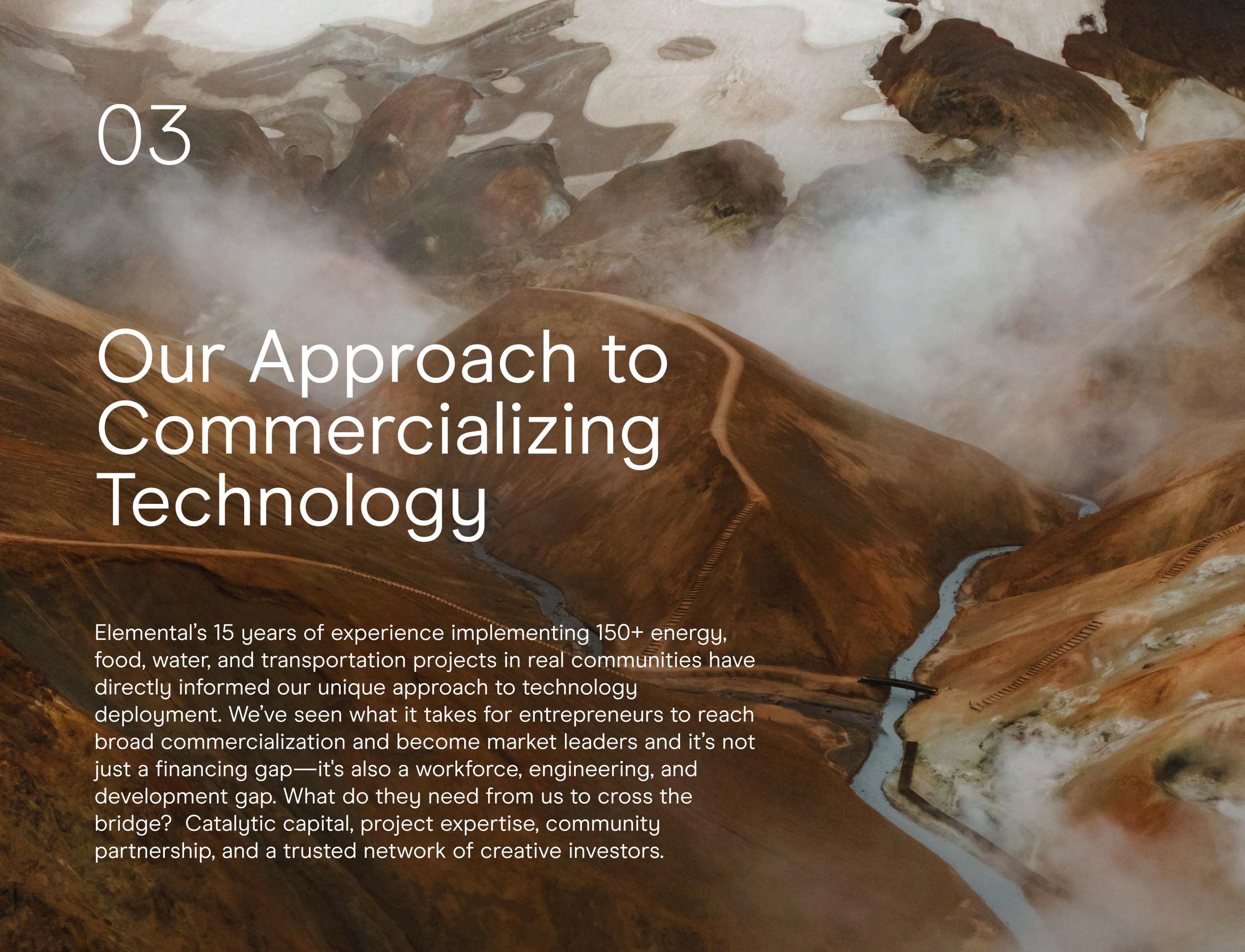


Elemental's Technology Commercialization Platform

Elemental's Commercial Inflection Point Scale is modified from the widely used Technology Readiness Levels, and expands this framework to chart the significant commercialization work that comes after proving the technology.

The Elemental Impact platform fills funding and expertise gaps along a startup's journey to becoming market leaders and creating climate and community impact at an exponential scale.



An aerial photograph of a large hydroelectric dam. The dam is a long, low structure with several spillways. Water is flowing through the spillways, creating white rapids. The surrounding landscape is rugged and mountainous, with some snow patches visible on the higher elevations. The overall color palette is dominated by earthy browns and greys, with the white of the water providing a strong contrast.

03

Our Approach to Commercializing Technology

Elemental's 15 years of experience implementing 150+ energy, food, water, and transportation projects in real communities have directly informed our unique approach to technology deployment. We've seen what it takes for entrepreneurs to reach broad commercialization and become market leaders and it's not just a financing gap—it's also a workforce, engineering, and development gap. What do they need from us to cross the bridge? Catalytic capital, project expertise, community partnership, and a trusted network of creative investors.

Our Approach to Commercializing Technology

HOW WE INVEST

01

Catalytic Capital

We provide flexible funding to help entrepreneurs overcome early project risks, preparing climate technologies for commercial deployment and traditional investors.

HOW WE DEPLOY

02

Project Expertise

We guide entrepreneurs through the complexities of commercial-scale projects, providing critical expertise in construction, financing, and deployment strategies.

HOW WE IMPACT

03

Local Partnership

We foster partnerships between entrepreneurs and local partners—schools, farmers, homeowners, mayors, and workforce providers—through projects that lead to local adoption and lasting impact.

HOW WE CONNECT

04

Mobilizing Investors

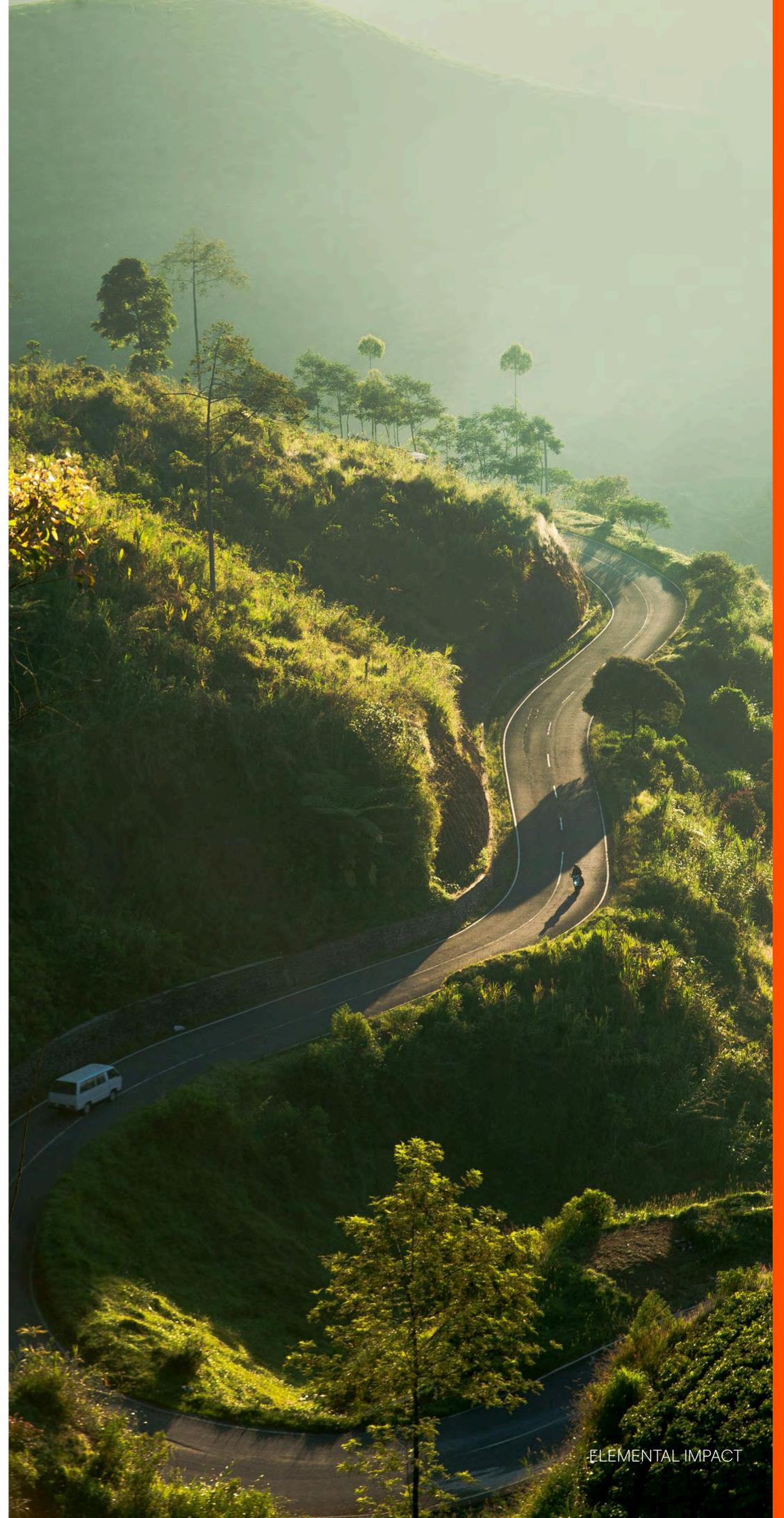
We unite investors, insurers, financiers, and customers to foster the collaborative ecosystem needed to scale successfully.

3.1

HOW WE INVEST

Catalytic Capital

With grant funding from our philanthropic and government partners, Elemental can invest where traditional capital markets won't. This means we can respond meaningfully to critical needs from our entrepreneurs, invest at the frontiers of climate innovation, and create new financial tools that fill gaps and unlock commercial-scale deployment. And our non-profit model means returns from our investments are recycled back to create more impact.



Right Funding, Right Time

Elemental companies are nearly 2.5x more likely to succeed compared to others in the climate technology ecosystem.¹²

Every year, Elemental analyzes the gaps in technology innovation and the biggest opportunities for impact, evolving our investment thesis to address market failures. We are relentlessly focused on finding entrepreneurs working in hard-to-abate sectors and creating the most meaningful local impact—helping them scale and reach bankability through upfront investments and follow-on funding.

Over our history, we've invested into the Scale Gap by supporting entrepreneurs in:

- Validating their growth strategy and solidifying pre-project expertise
- Entering new geographies
- Attracting new customers
- Refining business models
- Introducing new product offerings;
- Developing first pilot, demonstration, and/or commercial-scale facilities

With every investment, Elemental works collaboratively with the startup team to scope the project and design tailored support. We align our payments to milestone deliverables and ensure consistent communication as projects unfold and unexpected changes arise.

In 2024, we created and tested a new financial product with catalytic properties that would help companies address the Scale Gap. The Development SAFE (D-SAFE) is specifically designed for this tricky stage to help companies pay for pre-development costs—engineering studies, permitting and siting—while providing optionality on how it is repaid.



What is a D-SAFE?

Modeled after Y Combinator's SAFE, the D-SAFE is an innovative funding mechanism designed to streamline development funding.

The funding is directed to the parent company, but can be specifically allocated to a project with an innovative conversion and redemption clause. This makes it more flexible for startups and helps to de-risk the investment for the financier given the potential to convert to equity should the project not come to fruition. This creates a low-friction way to finance pre-project activities that attract additional funding without linking outcomes to any sole project and its distinct risk.

HEAR FROM A FOUNDER

"We need funders like Elemental who are super responsive to the market, innovative and nimble, and who can channel private and public funding to catalyze money into projects and really help them scale for maximum community impact."



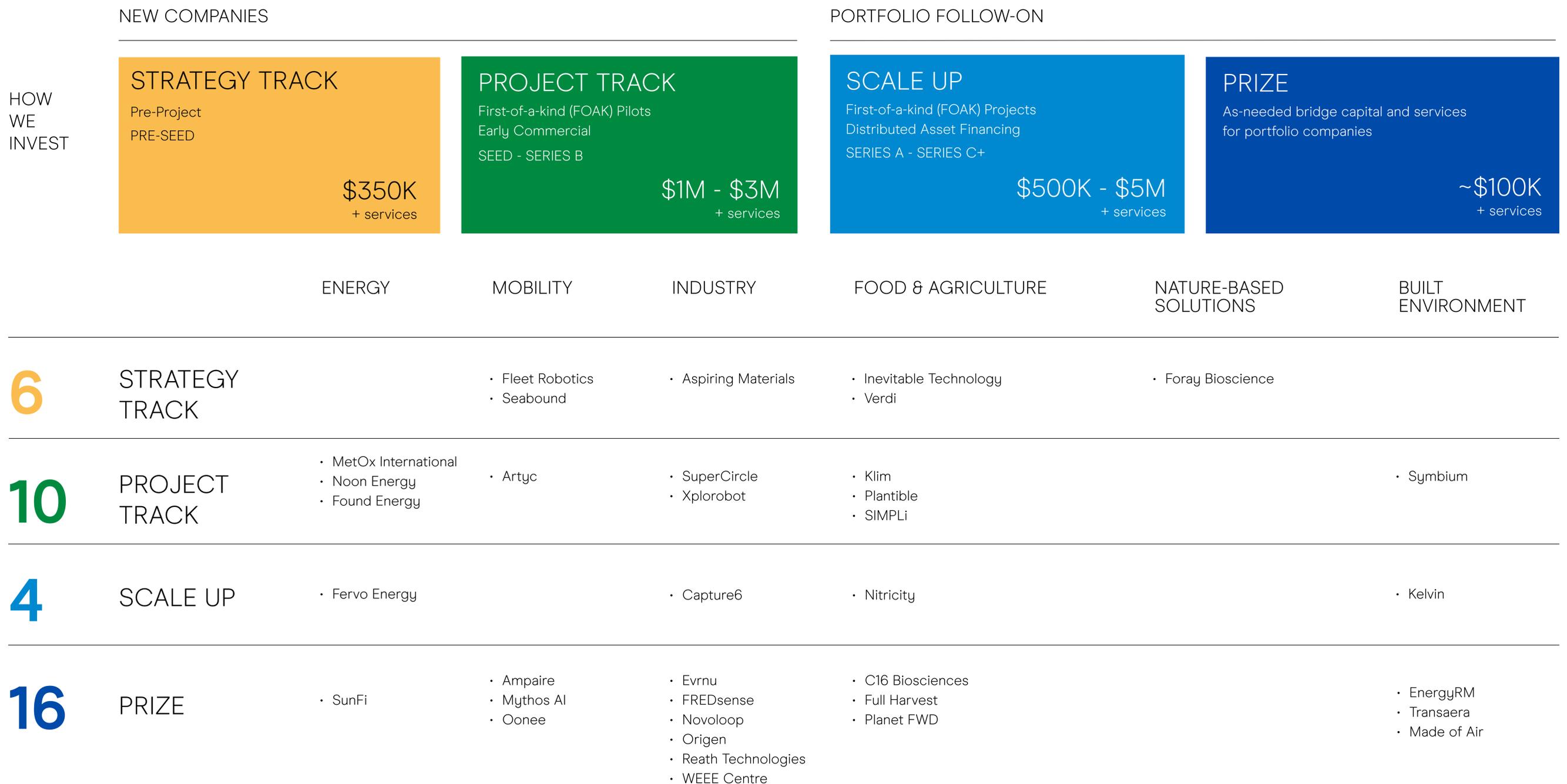
- Matt LeDucq, Co-Founder and CEO of Forum Mobility

Our Investment Strategy

We Invested \$23M in 36 Innovative Companies in 2024.

In 2024, through our annual investment cycle, our team evaluated applications from over 700 startup companies from Pre-Seed to Series C designing innovative technology solutions across industries.

We selected 16 new companies to either work on pre-project foundations via the Strategy Track or deploy a FOAK pilot or early commercial project via the Project Track. As companies mature and need blended capital for FOAK projects and distributed assets, we provide catalytic follow-on funding and services via our Scale Up investments. Last year represented our largest amount of capital invested into the Scale Gap to date.



Our First-of-a-Kind Pilots & Commercial Facilities

As our portfolio companies grow, so does Elemental. Over the past five years, we have expanded our investments into first-of-a-kind pilots and commercial facilities through our Project Track and follow-on Scale Up investments. Leveraging innovative tools—like the D-SAFE and other loan products—we catalyze co-investment and create a bridge to bankability for critical climate technologies.

14 FOAK pilot-scale & commercial-scale facilities

\$15.3M Total direct investment

20+ Community partners

10+ Commercial offtakers
(Public Utility, Corporate)

40+ Co-investors
(Investors, Utilities, Government)

PROJECTED IMPACT OF FOAK FACILITIES

\$181.9M near term co-investment¹³

\$1.9B long term follow-on capital unlocked¹⁴

7.4K jobs created

2.2M metric tons CO₂e avoided per year¹⁵

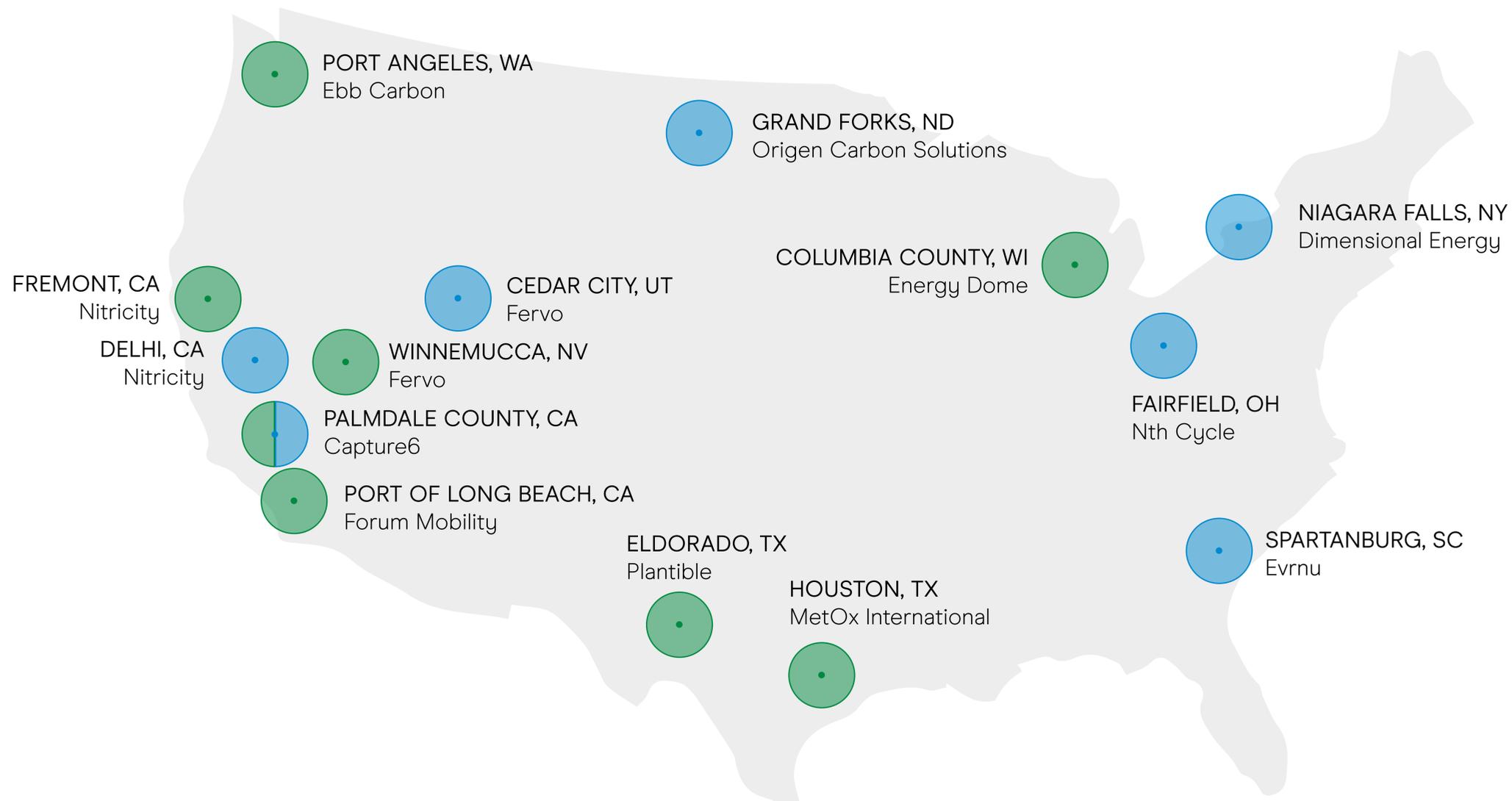
FOAK PROJECT LOCATIONS



PROJECT TRACK



SCALE UP



FOAK PROJECT IN ACTION

Dimensional Energy

scales sustainable aviation fuel with tribal partnership in New York.

When we first met Jason Salfi, he shared how his journey from sustainable skateboard pioneer to energy innovator shaped his bold vision: transform CO₂ into sustainable aviation fuel (SAF). Together, we saw how Dimensional Energy's breakthrough technology could revolutionize aviation, and we committed to helping them scale beyond the lab.

Elemental's initial investment came early in the company and helped strengthen their team and value proposition. Dimensional grew from 6 to 17 employees and achieved successful technology demonstration in Tucson. This momentum led to a 300-million-gallon fuel purchase agreement with United Airlines in 2022. That same year, they forged a partnership with Seneca Holdings, the investment arm of the Seneca Nation, to develop their first commercial facility in New York State.

In 2023, we grew our support with a D-SAFE investment to advance the facility and deepen the partnership between Dimensional and Seneca Holdings. Our funding enabled Dimensional to successfully complete their Technical Plant Configuration Optimization Study (FEL-1), finalize a site location for their plant in Niagara Falls, source a CO₂ feedstock, and secure a cost-competitive 26 MW allocation of hydro-electric power from the New York Power Authority (NYPA).

Beyond our financial support for their facility, Elemental has made introductions to strategic partners along the way. For example, we introduced Dimensional to Elemental portfolio company, Ampaire, out of which a partnership was born to advance both of these sustainable aviation technologies. In February 2024, Ampaire ran a ground test in their hybrid electric plane using 100% sustainable aviation fuel (SAF) produced by Dimensional Energy.



FOAK

SCALE UP

- Grants
- ▲ Catalytic
- Equity
- Commercial



Niagara Falls, NY

generates millions of kilowatts of hydroelectric power every second for both the U.S. and Canada.¹⁶



73,000 barrels

of sustainable fuel per year, offsetting 30,000 metric tons of carbon annually. At a greater scale, this model could serve hundreds of domestic airlines that currently use 1.65 million barrels of jet fuel daily.¹⁷

3.2

HOW WE DEPLOY

Project Expertise

Entrepreneurs excel at technology innovation, yet often tell us that constructing and financing a startup's first set of commercial installations requires a high degree of project development expertise that their team may not yet have. We equip companies with specialized expertise needed during deployments—from local stakeholder engagement and engineering and procurement—helping them scale their business models and implement in local communities.



Project Expertise that Goes the Extra Mile

Beyond capital, 71% of Elemental portfolio companies named internal expertise, including policy and regulatory support—as critical needs for readying projects.

After proving their technology works, entrepreneurs face two herculean tasks: 1) building and 2) financing a commercial project. Not only are these first commercial installations risky for traditional lenders and underwriting, making it difficult to secure project financing, they also bring a host of new challenges for startups. Now they need to know how to handle the engineering, permitting, procurement, construction, underwriting, insurance, offtake—the list goes on.

Elemental leverages a suite of coaching and technical services—tapping internal team members and external expertise—to help companies scale faster. While CEOs and founders certainly do need to get smart on projects, sometimes the most effective way to accelerate deployment is by engaging experts with decades of experience, rather than trying to train entrepreneurs to be experts overnight.

ELEMENTAL COACHING SERVICES, 2024 FOCUS AREAS IN **BOLD**

- **Capital Stack Formation & Fundraising**
- Carbon Finance
- **Communications & Events**
- Executive Coaching
- Fractional CFO
- Market Intelligence
- People & Operations
- **Policy & Regulatory**
- **Project Development**
- Sales & Growth
- Talent Recruiting
- **Workforce & Local Engagement**



SPARKCHARGE
INVESTED IN 2023

Demand for Coaching is Rapidly Increasing

In 2024, demand for our coaching services surged, nearly doubling engagements from the year prior.

Elemental's team and coaches bring decades of experience that help entrepreneurs cross the Scale Gap. Every year, our portfolio requests specific and time-sensitive support from Elemental. We are seeing firsthand the growing need for tailored support as companies navigate complex challenges.

2000+

Coaching hours delivered

240+

Coaching engagements

Debt Accelerator with NYCEEC Green Bank

In 2024, Elemental and the New York City Energy Efficiency Corporation (NYCEEC), the leading 501(c)(3) nonprofit green bank providing loans for clean energy projects in communities throughout the Northeast and Mid-Atlantic—collaborated on new ways to build “debt readiness” for climate technology startups.

Elemental spent the year bringing early-commercial projects from our portfolio for the NYCEEC diligence team to evaluate. Many of these entrepreneurs were navigating the loan underwriting process for the first time and were missing several key requirements. With new understanding of their needs, Elemental provided tailored support—placing a Fractional CFO to help build a company's financial infrastructure and secure funding, and a Financier-in-Residence to help entrepreneurs prepare for and land project finance.

HEAR FROM A FOUNDER

"Elemental's financial advisory and fractional CFO helped Dollaride refine our business model and financial projections. This allowed us to successfully unlock debt financing for the first time, along with a commercial contract. Elemental's support had a profound impact on Dollaride's trajectory and my personal growth as a CEO."



- Su Sanni, Founder and CEO of Dollaride

Amplifying Local Impact with Strategic Storytelling

Showcasing real projects on the ground is key for successful project implementation.

In 2024, we helped our companies showcase real projects on the ground through 8 ribbon cuttings and groundbreakings in cities, towns and rural communities, generating 20+ media placements. By amplifying local impact, we de-risk projects during last mile implementation by building buy-in across party lines and in communities where quality jobs and economic development are needed most.

As part of our coaching, we include expert guidance on how to best engage local, state, and federal stakeholders. These policymakers and agency leaders shape the regulatory landscape that can accelerate or inhibit technology adoption—making their support as crucial as investment capital.

HEAR FROM A FOUNDER

“The partnership with Elemental not only aided significantly in funding the development of our project, but the team at Elemental was instrumental in taking our groundbreaking event with the Palmdale Water District to the next level and attracting extensive media coverage for our deployment.”



- Ethan Cohen-Cole, Co-founder and CEO of Capture6



LONGBEACH, CA
Ampaire



AUSTIN, TX
Bedrock Energy



PALMDALE, CA
Capture6



DUCK, NC
Vesta



FAIRFIELD, OH
Nth Cycle



LONG BEACH, CA
Forum Mobility



TUCSON, AZ
Dimensional Energy



FREMONT, CA
Nitricity

FOAK PROJECT IN ACTION

Nth Cycle

opens first domestic nickel and cobalt scrap refining production facility in Ohio.

When we first met Megan O'Connor, she was leading a four-person team, developing an initial pilot, and closing a \$3.2M seed round. As Nth Cycle's co-founder and CEO, she shared her vision to revolutionize critical mineral production through a new modular electro-extraction technology. Together, we saw how this breakthrough could transform recycling and mining: it will create a domestic supply chain for the essential materials that enable batteries, solar panels, semiconductors, medical devices and more, while creating quality jobs in communities transitioning from traditional industries.

Elemental's initial investment and coaching helped strengthen both fundraising and sales strategies, helping to accelerate their timeline by 6-8 months, expand their customer pipeline from 1 to 8 potential partners, and secure a successful \$12.5M Series A in 2022. This momentum positioned Nth Cycle to scale their refining system from pilot to commercial capacity at an existing facility in Fairfield, Ohio. We deepened our support during this scale-up phase with a D-SAFE investment to tackle critical pre-development needs, including building a local workforce plan that would satisfy prevailing wage IRA tax credit requirements.

The impact of this comprehensive support became clear quickly. Following our strategic investment and support, Nth Cycle announced a \$44M Series B round and secured a \$7.2M investment tax credit for the Ohio deployment.

Nth Cycle's refining process achieves up to a 92% reduction in GHG emissions compared to traditional nickel mining processes, and a 44% reduction in GHG emissions compared to current mineral recycling methods. Their facility has become the first in the United States to produce a domestic supply of premium Nickel Cobalt MHP (mixed-hydroxide-precipitate), a key material for multiple industries and applications.



Fairfield, OH

is an industrial town. In the mid-1900s, auto and parts manufacturing; and steel, concrete, and metal production drove its economy.



Reduction in GHG production

using Nth Cycle's refining process vs. traditional nickel mining processes

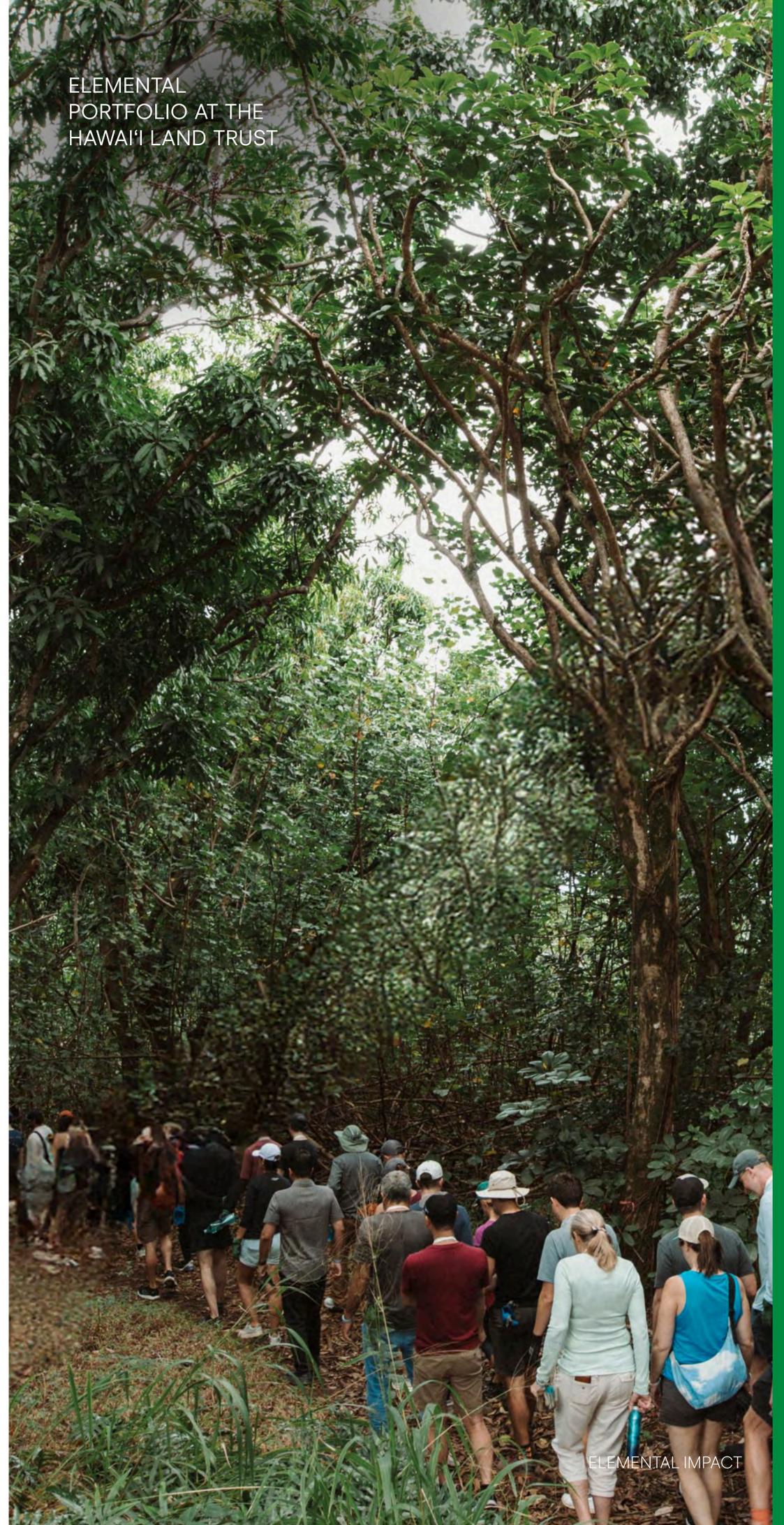
3.3

HOW WE PARTNER

Local Partnership

Technology deployment succeeds when it's rooted in the community. We've learned that early engagement—with local residents, leaders, customers, and policymakers—helps design projects with local context and place-based needs at the center. Our hands-on approach to community engagement helps entrepreneurs build authentic partnerships that ensure both technology adoption and local benefits.

ELEMENTAL
PORTFOLIO AT THE
HAWAII LAND TRUST



Rooting Technology Deployment Locally

90% of Elemental companies say working with community partners drives project success.

Identifying and developing strong local partnerships before and during technology deployment is necessary for long-term community adoption and project success. This is one of Elemental's key de-risking strategies for early commercial projects and has been informed by years of bridging the gap between technology and community in Hawai'i.

We've learned that early local engagement—from workforce development to stakeholder relationships—transforms promising solutions into lasting community assets.

During project scoping, we sit down with our companies, assess the scope of their project, and map out a customized plan on how to ensure their technology is deployed with high-quality local engagement.

With the support of local workforce organizations, we identify our companies' workforce needs. Accounting for the life cycle of a successful career, we support the hiring of interns, fellows, apprentices, entry-level, and managerial roles.

SHIFTED ENERGY
INVESTED IN 2018

3.3 LOCAL PARTNERSHIP





MOBILITY HOUSE,
ELEMENTAL INTERN EMPLOYER

New Pathways to Enter the Workforce

In 2024, Elemental placed 70 interns at technology startups and organizations across industries.

In addition to supporting portfolio companies on local community and workforce plans for project deployment, Elemental runs an Internship Program to generate new pathways to enter the workforce. A strong local workforce is critical to technology deployment—we'll need the next generation of engineers, designers, and operators as we build new industrialized systems. Through our Internship Program, we've seen how real-world experience and career mentorship equips degree-seeking and non-traditional students with valuable skills and confidence.

To date:

240+

internships created through Elemental's program

150+

universities, colleges, and schools represented

Elemental cultivates strong partnerships with local organizations, educational institutions, and training partners to create a robust pipeline of new talent to meet the needs of a growing workforce. In addition to on-the-job and soft skill training, our curriculum focuses on:

- Energy Fundamentals and Grid Technologies
- Urban Mobility and Transportation
- Water and Sustainable Agriculture
- Artificial Intelligence (AI) Literacy

When students are equipped with the right skills, support, and opportunities, they don't just contribute to innovation, they accelerate it. The impact is clear—we are shaping the next generation of climate talent.

In 2024:

50% of interns (who are not returning to school) secured jobs or continued internships with employers.

95% of interns plan to work or explore careers in the climate sector.

91% of interns reported increased confidence in their career path after completing the program.

Creating Jobs and Spurring Local Industries

150+
Projects

Through our hands-on coaching, Elemental trains companies to prioritize community engagement with local stakeholders before, during and after deployment. This includes best practices for creating a robust workforce development strategy—from construction to contracting—to help drive domestic manufacturing, bolster critical supply chains, and support the creation of good-paying jobs.

260

Local organizations directly engaged during Elemental projects¹⁸

UP 30% IN 2024

17,200

Jobs created to date



SEATTLE, WASHINGTON
GLACIER
Sorting robots for every recycling facility



FREMONT, CALIFORNIA
NITRICITY
Making nitrogen fertilizer with only air, water, and renewable energy



PACIFIC, WISCONSIN
ENERGY DOME
CO₂ battery enabling efficient, long-duration energy storage



FLATBUSH, NEW YORK
DOLLARIDE
Digital rails for transit-starved communities



BON AIR, VIRGINIA
OLOKUN MINERALS
Recovering critical minerals from unconventional water resources



STERLING, VIRGINIA
MOLG
Tackling the growing e-waste problem by making manufacturing circular



WEST PALM BEACH, FLORIDA
MYTHOS AI
Advanced automation and self-driving for vessels to increase the resilience of the marine shipping industry



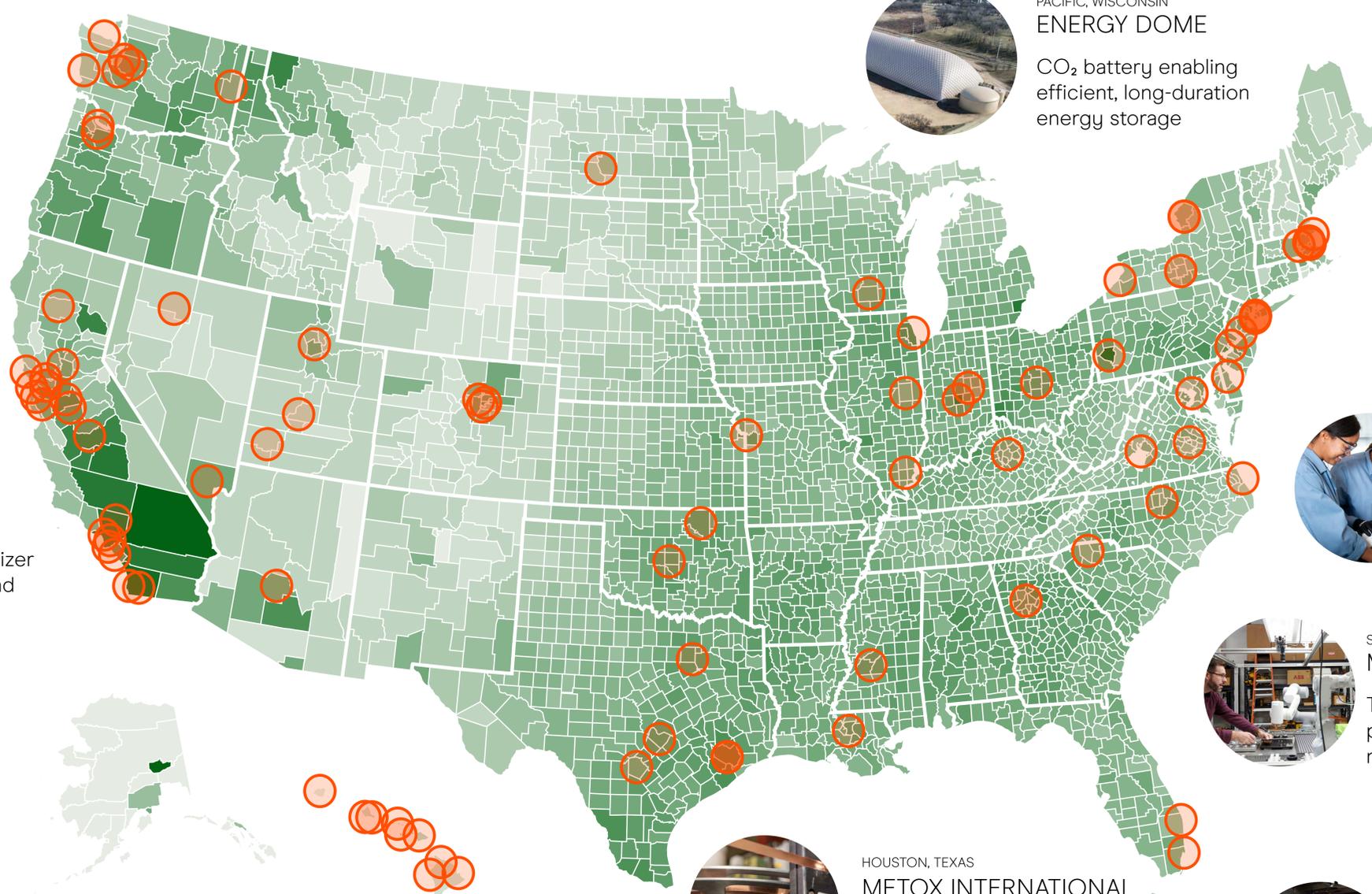
HONOLULU, HAWAII
SHIFTED ENERGY
Creating virtual power plants from existing infrastructure



AUSTIN, TEXAS
BEDROCK ENERGY
Geothermal for any building in any location



HOUSTON, TEXAS
METOX INTERNATIONAL
Revolutionizing the grid with high-temperature superconducting wire



0.9 5.1 9.3 15.6

PM2.5 concentration per county, micrograms per cubic meter

Company headquarters and project locations

FOAK PROJECT IN ACTION

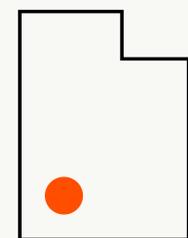
Fervo Energy

supports local job market with world's largest next-gen geothermal project in Southern Utah.

After years of drilling oil and gas wells in Texas, Tim Latimer saw an opportunity: apply drilling technologies to unlock geothermal energy at unprecedented scale. As Fervo Energy's CEO and co-founder, Tim brought his vision to Elemental in 2020. We provided both the flexible capital and technical expertise needed to transform his innovative approach into a proven commercial project.

Our initial investment supported Fervo's successful technology demonstration in Nevada, where their enhanced geothermal systems (EGS) generated 3.5MW of clean energy—beating performance estimates by decades. By 2023, this momentum led to Cape Station in southwest Utah, backed by two power purchase agreements with Southern California Edison totaling 320MW. The largest EGS development in history, it has the potential to power up to 2 million homes.

In 2024, we deepened our support with D-SAFE funding to establish a first-of-a-kind geothermal apprenticeship program administered by Southern Utah University, helping Fervo deliver geothermal jobs to communities across southwest Utah. This initiative also helped de-risk Fervo's access to prevailing wage and apprenticeship tax credits. Over time, the Cape Station development is expected to generate over \$437M in wages and \$1.1B in local economic activity supported by ongoing operations.¹⁹ In December 2024, Fervo secured an additional \$255M of corporate equity and debt financing, including a letter of credit and term loan facility from Mercuria, one of the world's largest independent energy and commodity groups.²⁰



Beaver County, UT

is diversifying its economy since its largest employer, a pork production company, announced it would cut jobs and contracts with local farms.

\$1B

projected local economic activity supported by ongoing operations

161

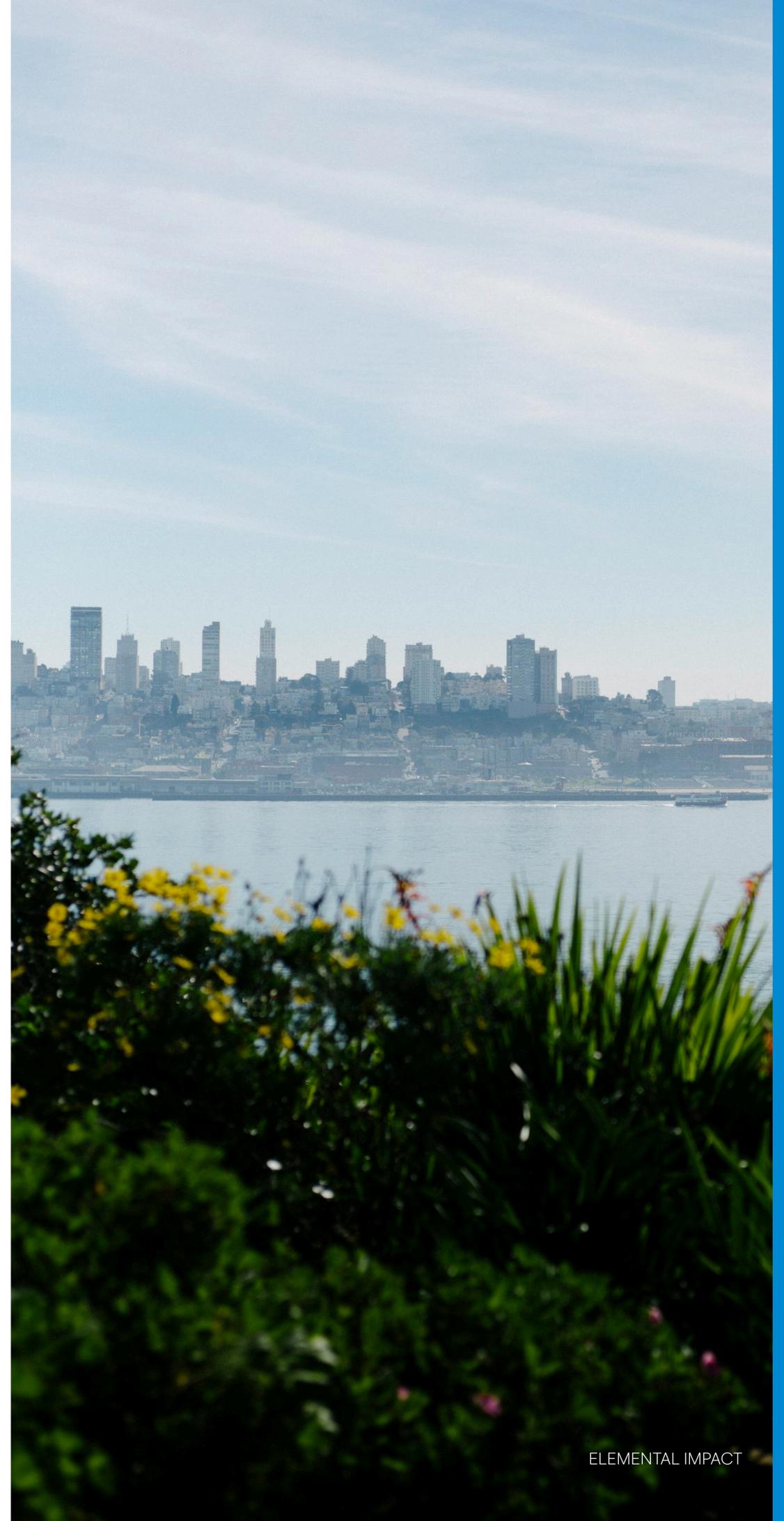
full-time operational positions and 6,602 temporary jobs through construction

3.4

HOW WE CONNECT

Mobilizing Investors

Scaling these critical technologies requires more than capital—it demands new market connections and creative financing approaches. We convene diverse capital providers, from green banks and insurance providers to institutional investors, to syndicate deals and create new pathways for financing early commercial projects.



Increasing Demand for Capital

In our portfolio alone, we have identified a \$4.7 billion pipeline of 300 energy, food, transportation, and building electrification projects across the United States.

These are high impact installations ready to be financed and built, but these deals are too small or too risky for traditional finance.

Most startups have been working with venture investors eager to jump in first into new breakthrough ideas. However, expecting traditional lenders or institutionally-backed infrastructure investors to agree to the uncertainties and limited upside of first-of-a-kind or second-of-a-kind project development is rare and would require new innovative thinking.

Core to Elemental's bridge-building is bringing later-stage investors and project financiers closer into the missing middle through unpacking real projects. We do this through annual convenings, like Elemental Interactive, New York Climate Week and hosting curated live deal convenings, like Traversing the Scale Gap.

WHO WE CONVENE

- Venture Capital
- Commercial Banks
- Corporate Strategies
- Government Agencies
- Green Banks, CDFIs, Public Financing Institutions
- Philanthropy
- Private Equity Firms
- Project Finance Firms
- Engineering, Procurement, Constructions (EPC Firms)
- Insurers





Mobilizing Investors in 2024

We work to bring real projects to life, drive investment into companies, and forge new partnerships with customers and corporate offtakers.

\$1.4B

Co-investment into Elemental Portfolio

UP 85% IN 2024²¹

\$11.5B

in follow-on funding into Elemental Portfolio

UP 16% IN 2024

200

Hosted 1:1 meetings at Interactive

STEADY FROM 2024

35

Pilots with Elemental corporate partners

UP 35% IN 2024

1,850

Investors in the network

UP 26% IN 2024

1,735

Investor interactions

UP 278% IN 2024²²



HEAR FROM A FOUNDER

“Elemental is really unique among investors—they don't ask, “How can we be helpful?” Instead, they know their portfolio companies deeply, they anticipate exactly how they can be helpful, and they come forward proactively with specific offers to support.”

- Shara Ticku, Founder and CEO of C16 Bioscience



ELEMENTAL PORTFOLIO
IN WASHINGTON D.C.

Building New Markets through Collaboration

In 2024, Elemental brought diverse stakeholders together to find new ways to finance projects and crack open new markets with policymakers, customers, and corporate offtakers.

SCALE GAP CONVENINGS

Traversing the Scale Gap at Bellagio and Interactive

We bring in leaders working across the capital stack to better understand how to finance the Scale Gap. In 2024, we partnered with The Rockefeller Foundation for a week-long convening at the Bellagio Center and hosted our second live deal workshop at Interactive.

INVESTOR ENGAGEMENT

Elemental Connect at Interactive

We bridge innovation and implementation through Elemental Connect—a highly curated matchmaking event. This program connects top-tier investors and project funders with startups from Elemental’s portfolio in exclusive 1:1 meetings. In 2024, we made 200 investor matches at the event.

INNOVATION CHALLENGES

“Microsoft Build Better” and “Resilient New Orleans”

We partner with both corporate sector leaders and public financing institutions to help solve a specific innovation challenge. In 2024, we worked with Microsoft, Bouygues, and Capgemini to source technologies that will decarbonize the building sector and Finance New Orleans to build more climate-resilient housing.

POLICY CONVENINGS

Clean Energy Business & Innovation Week

We brought over 30 CEOs from the Elemental portfolio to Washington, DC in March 2024 to meet their state’s representatives on the Hill. The goal was to share real economic and health impacts of climate projects on the ground, with the message: “We are ready to build.”

FIELD BUILDING

New York Climate Week

We teamed up with Sightline for their first live event, including hosting a conversation called “Partnering with Communities for Better Project Development” with Waverley Street Foundation and Dimensional Energy about building FOAK commercial facilities with new co-ownership business models with local communities.



ELEMENTAL INTERACTIVE - TRaversing the SCALE GAP 2024

Traversing the Scale Gap at Elemental Interactive

In April 2024, at our Elemental Interactive day-long experience and innovation showcase, we brought together 100 capital providers—investors, corporates, engineering, procurement, and construction firms (EPCs), and insurers—to meet visionary founders of climate startups. Together in four live deal workshops, the groups assessed risk and talked through ways to creatively finance their FOAK project, including:

ENERGY DOME is a long-duration energy storage technology and infrastructure company. Its proprietary technology uses CO₂ as a working fluid in a closed-loop thermodynamic process.

FORUM MOBILITY is the owner and operator of purpose-built heavy-duty electric-charging facilities offering charging-as-a-service and additionally offers truck-as-a-service to fleets.

LILAC SOLUTIONS designs, builds, and operates lithium-extraction systems globally using its proprietary ion-exchange material.

MITRA CHEM is innovating and commercializing iron-based cathode materials to enable mass-market electrification in transportation and energy storage.

Following our first successful convening during Climate Week NYC in 2023, Elemental continued the momentum in San Francisco.

HEAR FROM A CAPITAL PROVIDER

“We absolutely need convenings like this because it brings together investors from across the entire capital stack, as well as other key parties such as EPCs and insurers. To deliver projects at the scale and urgency required, we need to build partnerships that reach beyond the siloed approach that project finance has taken historically.”

- Stephan Feilhauer, Partner, Antin Infrastructure Partners

04

Our Nonprofit Investor Model

As a nonprofit investor, Elemental Impact relies on philanthropic and government grants to carry out our mission—investing in critical technologies and deploying projects that accelerate deep climate and local impact.



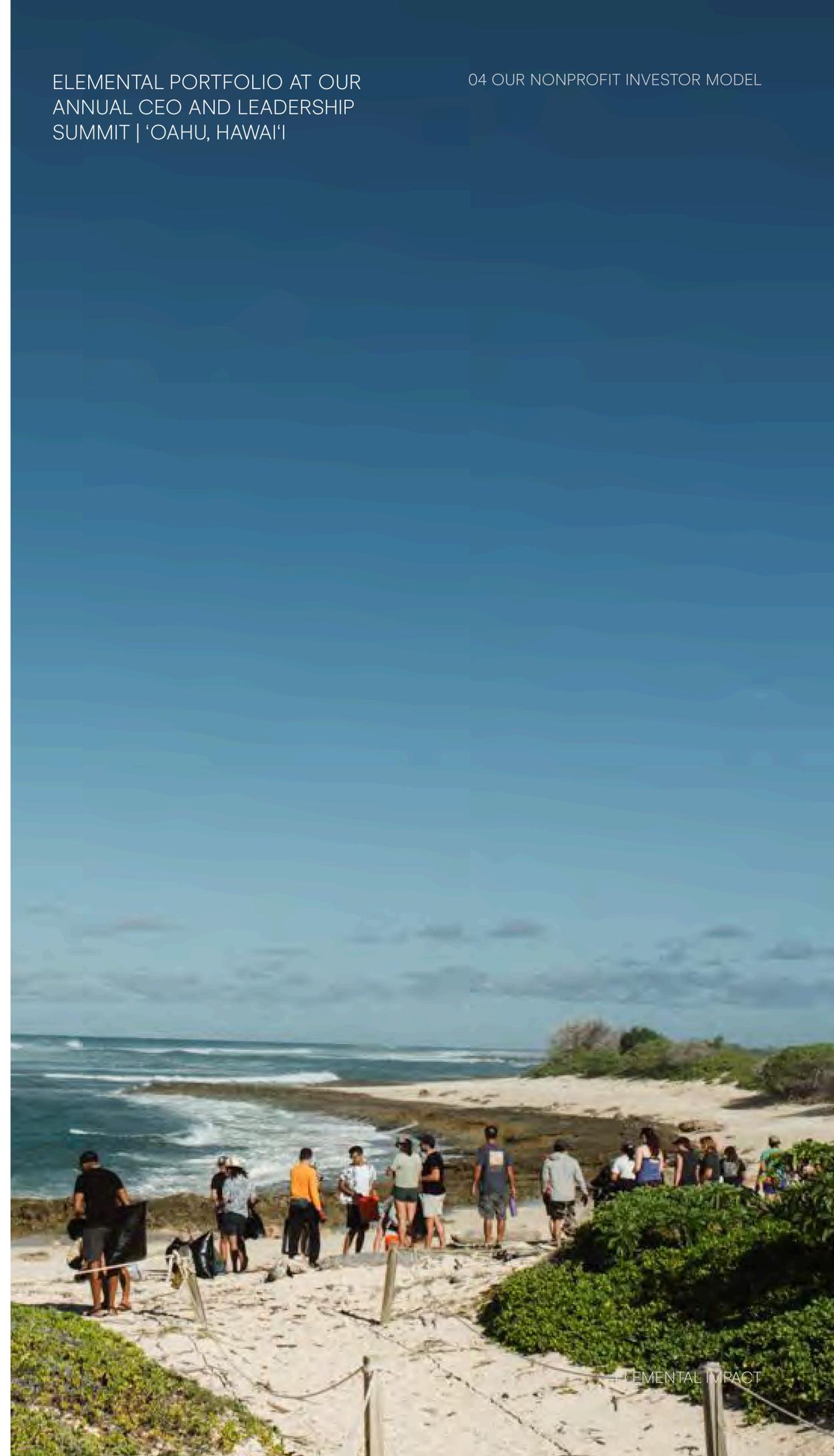
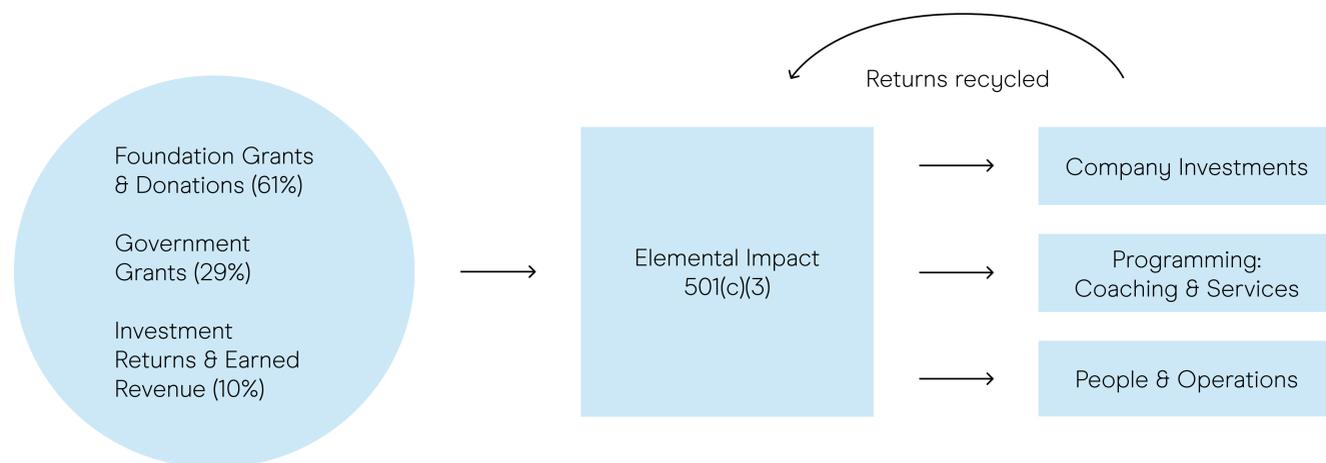
Investing at the Edge of the Market

As a 501(c)(3), Elemental Impact leverages philanthropic and government grants to carry out our mission—scaling critical technologies and deploying projects that accelerate deep climate and local impact.

What makes our model unique is that we use grant dollars to make impact-first, risk-tolerant investments in climate startups either as loans, equity investments, or hybrid products like the D-SAFE. We then provide robust technical services to de-risk these investments and ensure that technologies are deployed in close partnership with local communities.

As a nonprofit investor, we make investment decisions based on both climate and community impact—and the potential to attract later stage investment. We take small stakes in our portfolio companies—when they succeed through acquisitions or exits, those returns come back to our 501(c)(3) as earned revenue and are recycled into future projects.

ELEMENTAL'S NONPROFIT INVESTOR MODEL



15 Years of Impact

Since our founding in 2009, ambitious policy matched with strategic infusions of government and philanthropic funding has fueled Elemental’s growth and steadily scaled our impact.

FIRST HAWAI’I PROJECTS

2009

Dawn Lippert and Maurice Kaya, State of Hawai’i’s Director of Energy, launch early version of accelerator at the Pacific International Center for High Technology Research (**PICHTR**) seeded by our first government partner: U.S. Department of Energy.

FROM HAWAI’I TO CALIFORNIA

2017

With our proven community-informed technology deployment model, we grew to become **Elemental Excelsator** and expanded from Hawai’i to California through our philanthropic partner: Emerson Collective. We also diversified our investments from energy to mobility, water, food, and industry.

PUBLISHED 5 YEAR STRATEGY

2021

Elemental outlined our vision for scaling the nonprofit investing platform and impact from 2021 - 2026 through three pillars: Investing in Startup Success, Partnering Deeply and Inspiring Action.

2016
PARIS AGREEMENT
SIGNED

2008
HAWAI’I CLEAN ENERGY INITIATIVE
PASSED AND SETS 70% RENEWABLE
PORTFOLIO STANDARD

2021
BIPARTISAN
INFRASTRUCTURE LAW
(BIL) PASSED

FIRST EQUITY INVESTMENTS

2013

Office of Naval Research awards first multi-year grant. With a new name, **Energy Excelsator**, we deepened our approach to funding companies and projects, making our first equity investments.

FROM CALIFORNIA TO GLOBAL

2019

We expanded our investments to global markets. After deploying nearly 100 projects, we identified 1/3 as companies stuck between demonstration and their first-of-a-kind projects—eventually this would be known as the climate technology “missing middle” and Scale Gap.

CUMULATIVE PROJECTS FUNDED

5

40

74

104

In 2024, we marked the expansion of our commercialization platform by announcing our new name: Elemental Impact.

LAUNCHED EARTHSHOT VENTURES

2021

Launched a \$94M independent, for-profit venture fund on the Elemental platform, welcoming returns-seeking investors for the first time.

TRAVERSING THE SCALE GAP

2023

First investor, insurer, EPC, and financier convening for FOAK projects at Climate Week NYC hosted in collaboration with The Rockefeller Foundation. Later published Traversing the Scale Gap and quantified the \$150B+ opportunity with Boston Consulting Group.

EXPANDED ELEMENTAL PLATFORM

2024

We renamed to **Elemental Impact** to reflect our expansion from early-stage investments to later-stage deployments. The team prepares to launch additional funds for FOAK projects.

2022
INFLATION REDUCTION
ACT PASSED

ESTABLISHED POLICY LAB

2022

Elemental formalized our first policy team to help close the gap between federal policy creation and local technology implementation. First Policy Fellows announced.

2024
EPA ANNOUNCES GREENHOUSE
GAS REDUCTION FUND AWARDS

FIRST DEBT FINANCING

2023

Designed the first “Development SAFE” in partnership with WSGR as a financing tool for pre-development costs. Elemental’s structured finance team grows to seven.

CUMULATIVE PROJECTS FUNDED





ELEMENTAL
PORTFOLIO AT THE
HAWAI'I LAND TRUST

Board of Directors

Cheryl Martin

Dawn Lippert

Gayle Miller

Kelvin Taketa

Laurene Powell Jobs

Naveen Sikka

Vivian Yasunaga

OUR VALUES

Joyful Work

We find joy in our mission and in supporting others.

Growth Mindset

We seek to learn, iterate, and grow personally and professionally.

Kuleana

We embrace the responsibility and privilege of activating ourselves and others for our mission.

Humble Spirit

We approach the problems we are trying to solve with sincere and humble spirits.

ELEMENTAL PORTFOLIO AT OUR
ANNUAL CEO AND LEADERSHIP
SUMMIT | 'OAHU, HAWAII'

Thank You to Our Funders

Elemental's work is supported by a vibrant community of visionary foundations, family offices, individual donors, and corporate and government funders. In 2025, we will invite more partners to innovate with us and together, create lasting economic and environmental impact across communities.

The Alms Impact Fund
of the Tides Foundation

Autodesk Foundation

Breakthrough Energy

Cadence Giving Foundation

Chan Zuckerberg Initiative

Climateworks Foundation

U.S. Department of Energy

Emerson Collective

Grantham Foundation
for the Protection of the Environment

Harold K.L. Castle Foundation

Hindawi Foundation

NREL Wells Fargo

Innovation Incubator IN2

JP Morgan Chase & Co.

The Katsura Fund

The Lemelson Foundation

LinkedIn

John D. and Catherine T.
MacArthur Foundation

Makahakama Foundation

McClain Roberts Foundation

U.S. Office of Naval Research
Science and Technology

The David and Lucile
Packard Foundation

The Rockefeller Foundation

Salesforce Foundation

Stella Lee Family Charitable Fund

Taketa 'Ohana Fund 21

United Airlines

Waverley Street Foundation

Wells Fargo

WOKA Foundation

Methodology

Unless indicated otherwise, all data and insights presented in this report are from 2024 and are self-reported by Elemental Portfolio companies in a series of surveys (with a response rate of 96%) we conduct each year on their growth, opportunities, and challenges.

External Sources

1. Bloomberg New Energy Finance, 2021. "[Climate-Tech VC Investing Tops \\$17bn in 2020](#)"; Sightline Climate, 2025. "[\\$30bn and 14% fall as market finds new normal in '24](#)."
2. Vibrant Data Labs, 2025. Statistic compares Elemental companies to 1,000 random samples of climate tech companies that survived from "early stage" (pre-Series B) to "late commercial" (IPO or M&A during late venture).
3. McKinsey, 2023. [What would it take to scale critical climate technologies?](#)
4. Elemental Impact and Boston Consulting Group, 2024. [Traversing the Scale Gap](#).
5. Hawai'i Department of Business, Economic Development, and Tourism, 2025. [Fossil Fuel Consumption And Expenditures](#).
6. Hawai'i Department of Business, Economic Development, and Tourism, 2012. [State of Hawai'i Energy Data and Trends](#); U.S. Energy Information Administration, 2012. "[Annual Energy Review](#)."
7. Includes emissions both avoided or reduced.
8. Exits are defined as both M&As and IPOs. It is calculated based on the number of total investments to date. "Exit" indicates that the company is no longer an active holding in Elemental's portfolio, with such occurrence a result of, without limitation, an acquisition or merger, an initial public offering, a reverse merger with a special-purpose acquisition company ("SPAC"), secondary sale, and share buy-back and or other redemption mechanism. Exits signify that the company is no longer an active holding regardless of financial outcome, and may have resulted in financial return, loss, or no material proceeds. Exits do not include scenarios such as bankruptcy, dissolution, or the permanent cessation of operations.
9. IPCC, 2022. Climate Change 2022: Mitigation of Climate Change. [Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change, Chapter 2](#).
10. Community partners include: Local Governments or Agencies, State or Federal Governments or Agencies, Non-profit Organizations, Community-Based Organizations (CBOs), Local Small Businesses, Trade Associations, Colleges, Universities, Trade Schools, K-12 Schools, Tribal Governments or Tribal Entities.
11. Kate Larsen, Hannah Pitt, Mahmoud Mobir, Shweta Movalia, Alfredo Rivera, Emma Rutkowski, and Trevor Houser, 2023. "[Global Emerging Climate Technology Diffusion and the Inflation Reduction Act](#)."
12. Vibrant Data Labs, 2025. Statistic compares Elemental companies to 1,000 random samples of climate tech companies that survived from "early stage" (pre-Series B) to "late commercial" (IPO or M&A during late venture).
13. Represents funding for the facility that was directly enabled by Elemental's funding, at the time of our investment or shortly after. This includes co-investment, tax credits, and other funding opportunities accessed by the company due in part to Elemental's catalytic funding.
14. Represents the projected funding that will be unlocked for the facility within 5 years of Elemental's investment, either through tax credits or larger-scale project finance. This is what Elemental's catalytic funding is bridging to in terms of funding for the specific facility when operating at full-scale.
15. Includes emissions both avoided or reduced.
16. Niagara Falls State Park. "[Facts About Niagara Falls](#)."
17. U.S. Energy Information Administration, 2023. "[U.S. annual jet fuel consumption \(2016-2023\)](#)."
18. Defined as local nonprofits, businesses, government agencies, and schools
19. Data from Fervo.
20. Mercuria, 2024. "[Fervo Energy Secures Additional \\$255 Million Funding to Meet Unprecedented Energy Demand](#)."
21. Co-investments are defined as investments made in the same fundraising round.
22. Comprehensive tracking was implemented in 2024.



Honolulu, HI
New York, NY
San Francisco, CA
Washington, D.C.

Elemental Impact is a 501(c)(3) nonprofit investing platform with 15 years of experience advancing innovative technology that creates lasting economic and environmental impact across communities. Elemental deploys catalytic capital and provides expert services to a portfolio of 160+ companies across energy, agriculture, transportation, industry, and nature-based solutions. This work is supported by more than 40 funders from philanthropy, foundations, and government.

elementalimpact.com