

2022

Impact Report



LAUNCH ALASKA

A
YEAR
OF
IMPACT

20

22

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Letter From Our CEO

The point of technology – developing it, manufacturing it, using it – is to help us do things.

A car or a plane can move us around faster than our legs can. A computer can store memory better than our brains can. Even a kitchen stove can be viewed as an extension of our stomachs – helping to get food ready for digestion. This is the right way to think of technology; in terms of what it can do for us.

You can think of the report that follows as an effort to keep human beings at the center of our work.

At Launch Alaska, the thing we care most about is not the technology itself, but how that technology can be integrated into energy, transportation and industrial systems to drive outcomes that are good for people. Does it lower our costs, ensure access to light and heat, keep pollution out of our bodies? That's how technology – and our work – should be evaluated.

The need for this work has never been greater, or the timing more urgent. Luckily, the technologies we need to make rapid improvements in Alaskans' lives are ready today. Renewably powered microgrid technology can reduce community dependence on expensive, polluting diesel. Digital twin technology can support vital infrastructure projects while cutting maintenance costs and associated emissions. The list goes on; the solutions are plentiful.

At Launch Alaska, we help introduce these solutions to Alaska customers during our Tech Deployment Track. We build them into our infrastructure via innovation projects developed alongside dozens of indispensable Alaska business partners. And we see their daily impact on Alaskans' lives. That's what this is all about – accelerating the technologies that serve our communities, now and into the future.

Let's do it together.



Isaac Vanderburg
CEO

What We Do

Launch Alaska is a technology deployment accelerator focused on decarbonizing systems of energy, transportation, and industry.

We're on a mission to accelerate the energy transition and decarbonize the globe, starting in Alaska. We connect climate tech companies and customers in Alaska, catalyze Alaska's clean energy economy, and build a regenerative future for all.

We do it in four different ways:



**TECH DEPLOYMENT
TRACK**



**LAUNCH ALASKA
PORTFOLIO**



**INNOVATION
PROJECTS**



**PARTNERS
& PEOPLE**

**Our programs and projects made a big impact
in 2022: Dive into the details in the pages ahead.**



Tech Deployment Track



Tech Deployment Track is an eight-month program designed to help climate-focused tech companies forge partnerships and identify projects in Alaska.

The program works with mid- to late-stage companies whose products aim to decarbonize Alaska’s energy, transportation, and industrial systems.

Tech Deployment Track introduces cohort companies to influential Alaska decision makers and subject matter experts – program panelists.

These panelists help determine technology fit and identify potential projects in Alaska.

Then, over the next several months, companies receive individual support and mentorship as they work to deploy technology and build projects in Alaska.



Tech Deployment Track

Highlights

Welcomed 13 cohort companies from all over the world, including Scotland, Israel, and across the United States.

Received insight from 52 panelists

2021: 43
2020: 40

Convened in-person in Anchorage for the first time since 2019.

Panelists generated 213 project leads for cohort companies.

33 panelists chose to mentor a cohort company.



“The [Launch Alaska] staff have done a really great job of curating highly targeted customer introductions and conversations that we can take advantage of.”

- Vince Wong, COO and Co-Founder, ElectricFish,
2022 Tech Deployment Track Cohort



Our Portfolio



Companies that successfully go through the Tech Deployment Track are invited to join the Launch Alaska Portfolio. We work closely with these companies to deploy their game-changing technologies in service of transformative Alaska infrastructure projects.

The portfolio grows larger every year. Eight of the companies that participated in the 2022 Tech Deployment Track program went on to earn spots in our portfolio in April 2023. These eight new companies are exploring 13 potential projects in Alaska, from the North Slope to Dutch Harbor to Ketchikan.

Of the eight new companies being added to our portfolio, 75% of them have an executive team member from a traditionally excluded group.*

**Traditionally excluded groups include non-white, female, and LGBTQIA+ people, veterans, rural residents, and those living with a disability or affected by low socioeconomic status; this is voluntarily self-reported data.*

Meet our new portfolio companies.

ENERGY



SAGE GEOSYSTEMS
Geothermal Everywhere.

SAGE GEOSYSTEMS, Houston, Texas, USA - Designs and installs geothermal power plants.

TRANSPORTATION



AVARI AEROSPACE, Cincinnati, Ohio, USA - Manufactures drones for professional use educating and equipping the workforce, and leading industry disrupting technology integrations for global adoption.

TRANSPORTATION



ELECTRICFISH, Fremont, California, USA - Develops and deploys resilient EV charging infrastructure where others cannot.

TRANSPORTATION



ZEROAVIA, Hollister, California, USA - Building a zero emissions hydrogen-electric aviation powertrain; a fully electric propulsion system powered by hydrogen fuel cells.



INDUSTRY



EBB CARBON, San Carlos, California, USA - Reverses ocean acidification while capturing and permanently storing CO2 as oceanic bicarbonate.

INDUSTRY



FLUITEC, Dordrecht, Netherlands - Converts industrial lubricants and hydraulics to Fill-for-Life(TM) fluids: reducing CO2 emissions and waste oil as well as saving money.

INDUSTRY



IVALDI, San Leandro, California, USA - Provides software and services to heavy industries, enabling them to source locally manufactured spare parts, on-demand.

INDUSTRY

THE Crop Project

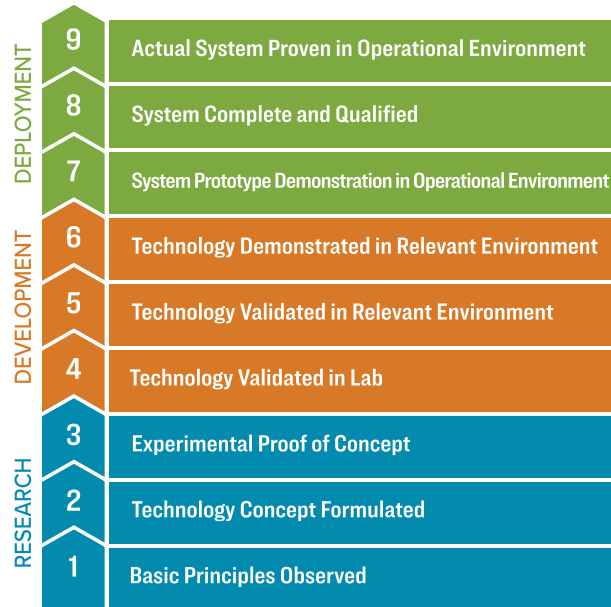
THE CROP PROJECT, Brooklyn, New York, USA - A regenerative ingredients business with sugar kelp as the first crop.



With these additions, there are currently 32 companies in the Launch Alaska Portfolio.

6.9 Average Technology Readiness Level (TRL)

TRL is a measurement system used to assess the maturity level of a particular technology.



TECHNOLOGY READINESS LEVEL (TRL)

Adapted from NASA, Cyclotron Road, and the European Union TRL Frameworks



44%
Energy

31%
Industry

25%
Transportation

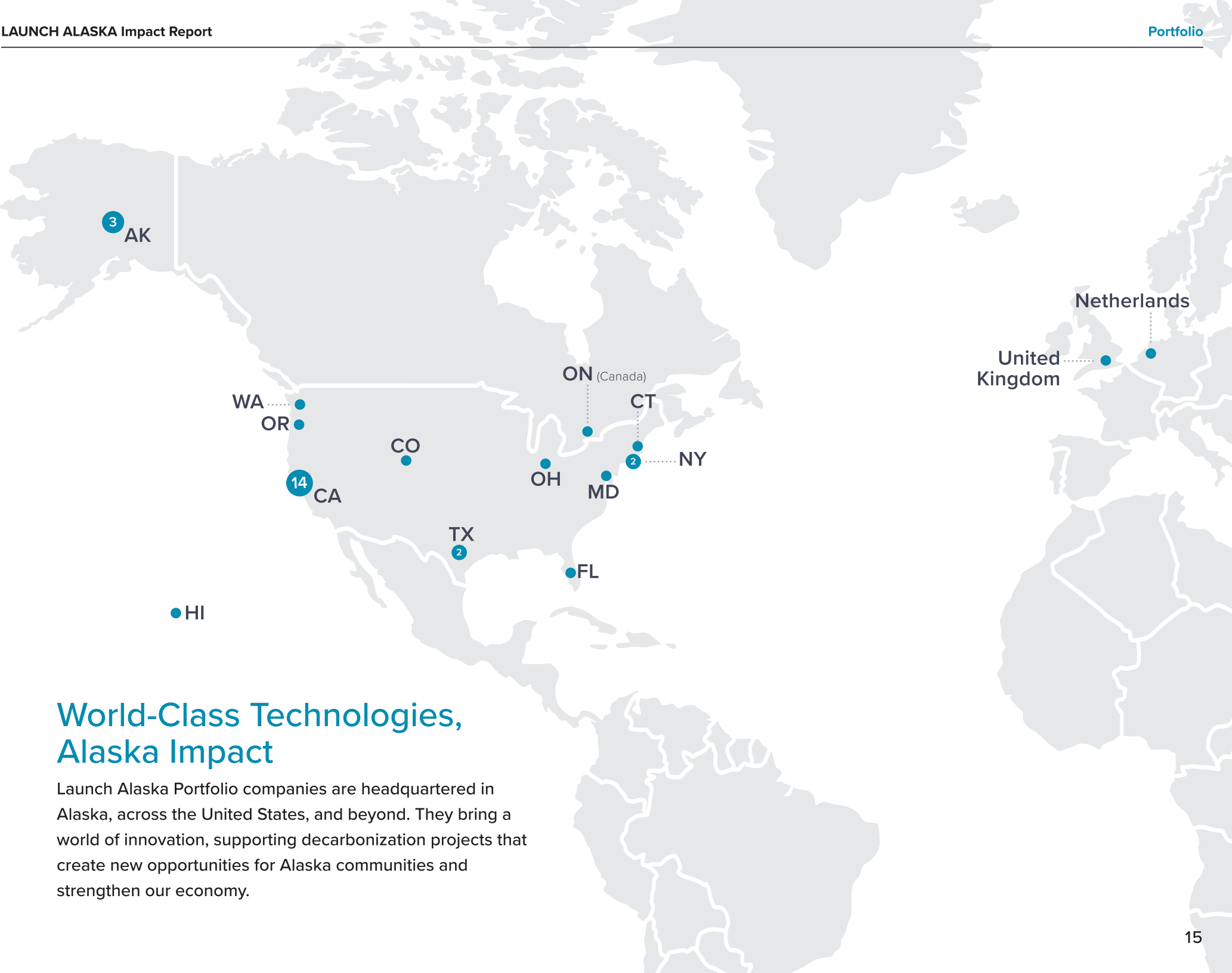
30 Average Employees

2021: **13** 2020: **8**

\$16.5M Median Valuation*

2021: **\$10M** 2020: **\$8M**

**Median valuation only includes companies with a set valuation.*



World-Class Technologies, Alaska Impact

Launch Alaska Portfolio companies are headquartered in Alaska, across the United States, and beyond. They bring a world of innovation, supporting decarbonization projects that create new opportunities for Alaska communities and strengthen our economy.

ENVIRONMENTAL, SOCIAL,
& GOVERNANCE (ESG)

Environmental Impact



50% of our Launch Alaska Portfolio companies track their global environmental impact.

The results from 2022:



38,000

Lifetime Energy Savings (MWh)
This is equivalent to the annual energy use of 3,500 homes. (EIA.gov)



80,000

Lifetime GHG Reduction (metric tons CO₂e)
This is equivalent to taking 17,400 cars off the road for a year. (EPA.gov)



19,000

Lifetime Renewable Energy Generated (MWh)
This is equivalent to the annual energy use of 1,800 homes. (EIA.gov)

ENVIRONMENTAL, SOCIAL, & GOVERNANCE (ESG)

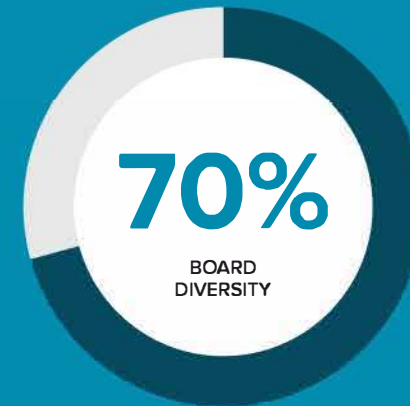
Team & Board Member Makeup

We've taken a closer look at the social and governance components of ESG over the last year. As part of this effort, we've asked our portfolio companies about the composition of their executive teams and their board members to make sure they equitably serve diverse populations.



Executive Team Diversity

75% of our portfolio companies have at least one member of a traditionally excluded group on their executive team.



Board Diversity

70% of our portfolio companies have at least one member of a traditionally excluded group on their board of directors.

Economic Impact



75% of our portfolio companies are earning revenue.

Our portfolio companies

raised \$77.3M

in 2022 through grants, federal funding, and private capital.

79 new hires

in 2022, equating to about 3 new hires per company.

2 exits

through acquisition in 2022.



Alaska Impact



PROJECTS **DEPLOYED** IN ALASKA

6

Projects deployed in Alaska
by portfolio companies in 2022.

\$309k

Revenue earned by portfolio
companies in Alaska in 2022.

PROJECT **COMMITMENTS** IN ALASKA

27 ↑ from 17 in 2021

Project commitments in Alaska
received by portfolio companies in 2022.

\$3.8M ↑ from \$3.2M in 2021

Revenue generated by these projects
in Alaska, once completed, for our portfolio
companies in 2022.



Deploy, Deploy, Deploy!

Launch Alaska's Innovation Team works with portfolio companies and local partners to enable deployment projects that strengthen Alaska communities.



PROJECT SPOTLIGHT:

Kotzebue Electric Association

Kotzebue is on the front lines of climate change.

Communities like Kotzebue, on Alaska's northwest Arctic coast, are increasingly exposed to the risks of global warming. These dangers prompted Kotzebue Electric Association (KEA) to partner with Launch Alaska to identify a roadmap to 100% clean energy.

By working with Launch Alaska Portfolio companies Kartorium and 60Hertz Energy to reduce its reliance on diesel, the cooperative can minimize the impact of volatile fuel prices, increasing the long-term resiliency of the power system and improving the overall health and well-being of the community.



Innovation Project Spotlight: **Energyshed**

The Alaska Energyshed project is a collaboration between Launch Alaska and the Alaska Municipal League, in partnership with local communities, Alaska Native corporations, and others.

Partners include Sealaska, NANA, Southeast Conference, Northwest Arctic Borough, DeerStone Consulting, and the National Renewable Energy Lab.

Funded by the U.S. Department of Energy's Energyshed grant program, this project will deploy the Alaska Energyshed Tech Stack – a set of tools to identify and package project opportunities and generate >\$10 million for private sector energy development in Northwest Arctic and Southeast Alaska.

More Portfolio Company Progress

Launch Alaska Portfolio companies are building sustainable solutions for communities and businesses across Alaska: Here are a few examples.

Ageto (Microgrid Control Systems) - Ageto's ARC microgrid controller has deployed in over 50 locations, from Africa to Alaska. The company's first Alaska project – the Shungnak Community Microgrid – has operated successfully for over a year, reducing community dependence on diesel. In summer 2022, the project generated solar energy for 24 hours straight, allowing the site to turn its generator off for over 12 hours. Ageto is now working on a second remote community microgrid in Noatak.

Blue Planet Energy (Energy Storage Solutions) - Blue Planet Energy helped design and commission the Shungnak Community Microgrid, which uses solar panels and Blue Planet Energy's Blue Ion LX to reduce the village's dependence on its generator and fossil fuels. It's a smart solution that's drawing national attention: This project won Solar Builder Magazine's 2022 Project of the Year award in the Microgrid category.

Kartorium (3D Digital Twin Platform) - Successful projects with partners like Kotzebue Electric Association and Alaska Native Tribal Health Consortium have helped expand Kartorium's impact in Alaska.

"Launch Alaska has proven itself over and over to be a partner that actually gets things done. The team doesn't just talk about things, they lead with action (although they're also great at talking about things!). From advocating for relevant policies to securing funding for steel-in-the-ground projects, Launch Alaska provides enormous benefits to its portfolio companies and to Alaska more broadly." - Jay Byam, founder & CEO, Kartorium

See more at LaunchAlaska.com/Portfolio



Partners & People



Collaboration catalyzes impact.

Meet the organizations and people who make Launch Alaska’s work possible.

MISSION PARTNERS:



U.S. DEPARTMENT OF
ENERGY

Office of
TECHNOLOGY TRANSITIONS

INFRASTRUCTURE PARTNER:



>83 COMMUNITY PARTNERS

Major corporations, small businesses, nonprofits, research institutions, utilities, and other groups who support Launch Alaska’s programs and deployment projects around the state.

See more at LaunchAlaska.com/Partnerships



Board of Directors



Mary Miner, Board President
Vice President of Community Development, McKinley Alaska Growth Capital



Michael Bourdukofsky
Program Director, Alaska Native Science & Engineering Program (ANSEP)



Dane A. Boysen, PHD
CEO, RedoxBlox Inc.



Chad Estes, Board Treasurer
Office Tax Managing Partner, BDO USA



Tom Hsieh
President, FLOAT Alaska LLC



Joe Jacobson
Vice President of Private Equity, McKinley Alaska Private Investment



Daniel Mitchell
CFO, Cook Inlet Region Inc. (CIRI)



Angela Rodell
Volunteer, Juneau, Alaska

Our Team



Isaac Vanderburg
Chief Executive Officer



Frances Ball
Chief Operations
Officer



Pam Kauveyiakul
Chief Partnerships Officer



Rob Roys
Chief Innovation Officer



Tracy Bye
Chief Financial Officer



Penny Gage
Managing Director



Brij Hall-Potnis
Deployment Lead



Matt Nejati
Energy Lead



Tim Leach
Transportation Lead



Suzanna Caldwell
Tech Deployment
Track Lead



Nuzhah Tarsoo
Climate Technology
Fellow



Janelle Ocampo
Business Manager



Kirsten Swann
Communications Manager





Engagement & Outreach



OUTREACH & ENGAGEMENT

Between in-person and virtual events, social media engagement, and earned media coverage, Launch Alaska more than doubled its reach in 2022.

7 WITH **500+**
events attendees

3.9k followers
@launchalaska



EVENT SPOTLIGHT: ARCTIC ROAD RALLY

With support from the Department of Energy Office of Technology Transitions, Launch Alaska partnered with multiple industry groups and major Alaska businesses to lead a convoy of 10 electric vehicles on a journey from Fairbanks to Oliktok Point, Alaska, the northernmost drivable point in the United States – a technology demonstration where no EV has gone before.



Learn more at
LaunchAlaska.com/Events



LAUNCH ALASKA

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