TESTIMONY OF DAWN LIPPERT, CEO OF ELEMENTAL EXCELERATOR

BEFORE THE SUBCOMMITTEE ON COMMUNICATIONS, TECHNOLOGY, INNOVATION AND THE INTERNET

“BETTING ON THE REST: EXPANDING AMERICAN ENTREPRENEURSHIP OUTSIDE TRADITIONAL HUBS”

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Hello, Chairman Thune, Ranking Member Schatz, Senator Klobuchar and members of the Committee. Thank you so much for the opportunity to testify before you today. My name is Dawn Lippert and I am the CEO of Elemental Excelerator.

About Elemental Excelerator

Elemental Excelerator is a non-profit growth-stage accelerator program headquartered in Honolulu, Hawaii and East Palo Alto, California. We accelerate solutions to climate change and deploy them in communities that need them the most. Each year, we find 15-20 companies that best fit our mission and fund each company up to $1 million to improve systems that impact people's lives through project deployment. We have focused on funding projects in three locations that will be central to solving climate change: Hawai'i, California's frontline communities, and the Asia Pacific. To date, we have seen over 5,000 new technologies, awarded over $40 million to over 115 companies, and have deployed over 70 projects in energy, mobility, agriculture, water, and the circular economy.

In 2008, the Hawaii Clean Energy Initiative (HCEI) was enacted by the State of Hawaii and U.S. Department of Energy and a piece of funding was set aside for innovation. Stakeholders realized that in order to reach those energy goals and transform an economy dependent on oil, we needed innovative solutions. We initially modeled our program after ARPA-E but quickly learned that startups require more than funding to succeed and that innovation requires a systems thinking approach. That insight led to what is now known as Elemental Excelerator. Back in the early 2010's, there were tech accelerators kickstarting the next Airbnbs and Ubers of the world creating new markets for technology. And on the other end of the spectrum, there were environmental justice and community organizations advocating for social and environmental rights and policies. However, there wasn't an organization bridging the two - so we saw that as an opportunity to build one. We zeroed in on working with entrepreneurs to deploy their technologies for two reasons: 1) deployment is where technology, markets, policy, and communities converge and it's at that intersection that change and transformation happens; and 2) there was a gap in available project funding to bring the innovations being developed in a lab into the real world to have actual impact on people's lives.

Over the past 10 years, we have worked with some of the world's largest utilities and corporations, as well as public-sector partners like the Navy, and philanthropic organizations like Emerson Collective and the Kauffman Foundation to commercialize these world-changing technologies. And in 2017, we started a Hui of local businesses that were committed to innovation in Hawaii. These are groups interested in the insights we glean from deploying transformative projects in our place, and who are dedicating their time and funding to build an innovation ecosystem in Hawaii with us. We believe the Elemental Hui is much greater than the sum of its parts. For example, we hosted the Pacific Water Innovation Workshop, which brought together 75 members of Hawaii water utilities, wastewater stakeholders, landowners, entrepreneurs, and community organizations to identify opportunities for innovation in Hawaii's water and wastewater systems.

Elemental not only invests in startups with the potential to address climate change, but they also co-fund projects alongside the startups they invest in. Here are two examples:

- CarbonCure Technologies collaborated with HDOT and Hawaii concrete producers to install its retrofit technology that chemically mineralized waste CO2 during the concrete manufacturing process to make greener and stronger concrete. The carbon-infused concrete from those producers was used in a local infrastructure project saving 1,500 lbs. of carbon dioxide, offsetting the carbon dioxide emissions from 1,600 miles of highway driving. Following this project, in April 2019, Honolulu, Hawaii became the first municipality to pass a resolution that “requests the city administration to consider using carbon dioxide mineralization concrete for all future city infrastructure projects utilizing concrete.”
- SOURCE (formerly Zero Mass Water) worked with an indigenous majority-owned and -managed business called Waddi Springs to prove a new community scale water purchase agreement in drought-ridden Queensland, Australia. With our funding, SOURCE was able to deploy 600 hydropanels in the span of 4 months where a conventional water treatment plant would've taken at least a decade. This project has the capacity to produce 119,000 gallons of drinking water and displace approximately 748,000 plastic water bottles per year and also created new workforce opportunities for native Aboriginals in the area. SOURCE is now pursuing a similar project in the Philippines armed with the learnings from their project and partnered with an Elemental innovation partner.

At Elemental, we understand that climate change and social inequities are directly related. In 2017, we started developing the Equity & Access Track with the goal of fostering equitable companies in order to meet our ultimate goal to have a positive impact on frontline communities, communities which are disproportionately “communities of color...whose neighborhoods often lack basic infrastructure to support them, who are increasingly vulnerable, and will experience climate change “first and worst” (Ecotrust). The Equity & Access Track addresses climate change and inequality together. This is about innovating in between “what already exists” and “why people don’t have it,” as portfolio CEO Jessica O.

Matthews says. Today, we focus on supporting companies in operationalizing two key approaches, Equity In Equity Out, and understanding how they are interconnected. On any given day you might hear our team describing them: building Equity INside the company, and creating Equity OUTcomes in the communities they impact.

We also believe that workforce development is a crucial tool for fostering the next generation of environmental stewards and preparing more people, especially those underrepresented in the technology sector, for good quality jobs. One of our portfolio companies - KIGT - launched the Electric Vehicle Network Technician Training Fellowship Program, which helps people develop the skills to launch a new career in the electric vehicle ecosystem. KIGT's CEO Paul Francis says, "We want to use this project to achieve lower emissions, lower individual and organization mobility operating expenses and as a result better air quality for Californians. KIGT is resolute to reshape 100 years of human habit by revolutionizing the car fueling experience for all those who drive, commute, or use public transit." Paul knows that we will not be able to reach our goal of getting 1 million electric cars on the road in California without exposing the technology to underserved populations, placing charging stations in strategic locations, and hiring from those communities to help spread the word. Programs like KIGT's are a creative way to bring in new people and reach our goals.

The Importance of Federal Funding and Programs & Their Role in Supporting Regional Innovation Hubs

The U.S. federal government has a unique role to play in addressing this challenge and advancing clean technologies that will enhance U.S. competitiveness as well as national security. Many organizations have placed emphasis on the federal government’s support of US DOE National Laboratories and ARPA-E (and the newly proposed ARPA-C), but it is also critical to find ways to bridge the gap for scientists and entrepreneurs to scale startups - which is often done with support of trusted intermediaries such as incubators and accelerators that have a track record of success with commercialization. This is becoming increasingly important in the pilot and demonstration stage for startups when they are perhaps not quite ready for traditional VC, or are not yet bankable and do not have a dense network of trusted partners. Finding new ways for the federal government to more nimbly and rapidly support these companies not supported by traditional funding networks and local and state partners is key to growing innovation hubs and will ultimately accelerate the impact of government funded research from laboratory to marketplace.

The unique capacity of the federal government to invest in long-term R&D is critical for the flow of new ideas and discoveries that fuel our economy. While private sector R&D investments through VC have increased, the government is often the first investor for long-term funding for early-stage technology startups. With limited resources from government funding, it is more important than ever that available funds are targeted effectively. The growing need for federally supported technology transfer and

commercialization, and regional innovation hubs and technology clusters can help diversify our nation's R&D portfolio and further ensure competitiveness in the market across regions in the U.S. These regional innovation hubs can help close geographic opportunity gap created by world-leading hubs for technology development in the large West and East coast megacities.

COVID-19 & Geographic Diversity

Traditionally, large tech companies prefer to headquarter themselves in places with lots of startups, which they can acquire and whose engineers they can hire. In turn, the likelihood of acquisition only increases the incentive for startups to move to tech clusters, creating a snowball effect that can greatly enrich a tech hub, but creates greater disparities for non-traditional tech meccas. The pandemic has created an opening for many tech companies to go fully remote. By virtually expanding their geographic footprints, firms can widen their talent pool, recruiting from a variety of schools, areas and backgrounds, making it significantly easier to create a diversity and inclusion-focused culture.

Embracing remote work is a game changer, shifting the tech industry mindset that concentration of talent was a necessary condition for success. The pandemic has accelerated the migration out of tech clusters into secondary cities as the transition to remote work has made physical proximity increasingly irrelevant. An investment in federal funding to support new hubs could potentially precipitate a more healthy geography of tech firms across the nation. Federal innovation money should be spread out more broadly to these cities and across institutions from local universities to private sector companies and local government in order to produce a pool of talented engineers and managers. Because innovation proceeds faster in research clusters where universities and firms work in close proximity. The federal government can work with local and regional authorities to help build these clusters.

The pandemic has brought many changes to our lives, but they have also brought opportunities to reflect on how we can improve our current system. As students of the COVID-19 crisis, we have been learning from innovators, entrepreneurs, businesses and community about how to adapt to a new reality. We have observed an incredible resiliency of the entrepreneurial spirit that lives in all of us to tackle today's most urgent challenges. An example of a local company meeting the needs of the community is Farm Link Hawaii. FLH operates an onsite logistics platform that connects local farmers to residents to deliver thousands of pounds of local produce each week. In the first few weeks of the pandemic, their online marketplace exploded past their maximum capacity due to the increase in demand for produce deliveries and quickly needed to find more space to run its operation. Farm Link's journey has been supported by the entrepreneurial ecosystem every step of the way, which has led them to rapidly pivoting and improving their service to support thousands of residents and local farms in a time of crisis.

Entrepreneurs are an important part of the communities we call home and will be key to rebuilding our economy. Beyond Hawaii, Elemental's company Goodr is using its food chain data tracking software to bring meals to thousands of students and seniors in Atlanta. Another company called Numina has been using its data platform to help cities across the country make decisions to help reduce the spread of COVID-19. Especially in times of crisis, an entrepreneurial mindset and ability to rapidly prototype solutions are invaluable assets for building community resilience.

Now is the time to double down on the commitment to the entrepreneurial ecosystem. We must prioritize investing in our innovation infrastructure — which includes education, human capital, and other sectors — because it will be key to providing the future jobs and economic growth needed to build a more resilient nation.

At Elemental, we embark on our mission because we love our home - Hawaii. This is a place where people value long-term impact over short-term gain, treat neighbors as ohana rather than as strangers, and willingly embrace their kuleana to care for our islands that in turn care for us. We've expanded these ideas to communities throughout Hawaii, but also in the Asia Pacific region and throughout California. No matter where we've gone, we've found incredible community organizers and entrepreneurs ready to do what's best for their neighborhoods but often unable to connect to the networks and funding they need in order to succeed. We were founded here in Hawaii and are committed to the future of our state - a local mindset that has potential for global scale.

To close, we'd like to share the following suggestions from a coalition of incubators and accelerators across the nation - LA Cleantech Incubator (LACI), New Energy Nexus, Elemental Excelerator, VertueLab (formerly Oregon BEST), Greentown Labs, IN2, NYU Urban Future Lab, Clean Energy Trust, Powerhouse, BRITE Energy, Prospect Silicon Valley, Third Derivative, Launch Alaska, Activate, Forge, Tennessee Advanced Energy Business Council (TAEBC), Austin Technology Incubator (ATI), Cleantech Open (CTO).

Below provides some key actions that we believe federal government should consider:

1. Support regional clusters of energy innovation including an emphasis on disadvantaged communities and underrepresented entrepreneurs.
    - Create a $50M National Innovation Pilot Fund in the U.S. Department of Energy for cleantech solutions in disadvantaged communities.
    - Enhance and accelerate a National Initiative to support regional cleantech innovation ecosystem partners with $25M across regional ecosystems.
    - Utilize the Small Business Administration (SBA)'s Small Business Investment Company (SBIC) $4B in annual debt authority to support regional incubator investment funds.

2. Create a Cleantech Innovation Task Force ensuring federal government programs align with and support early stage innovation and needs of diverse entrepreneurs.
    - For task force and launch
    - Review and evaluate existing programs as well as new programs
    - Within 180 days, come back with set of actions
3. Dedicate funding to the innovation ecosystem via SBA, Economic Development Administration (EDA), and DOE for cleantech incubators, startups, small businesses, job training and pilots to accelerate small business innovation in response to the economic impact of COVID
    - Dedicate $2.5 billion to the early stage clean energy innovation ecosystem (direct funding to startups as well as through intermediary organizations) to do the following:
        - Enable funding especially for pilots and demonstrations
        - Emergency loans and grants
        - Targeted funding for diverse founders
        - Operational funding
        - Job training and workforce trades and internships
4. Dedicated focused fund on a major climate challenge transportation-energy nexus. To accelerate zero emissions mobility via Department of Transportation, DOE to provide funding for national and regional infrastructure, workforce development and technology advancement.
    - $25 billion investment in the assembly and adoption of electric and zero emissions vehicles along with supply chain development.
    - $85 billon for electric vehicle charging and related infrastructure investment
    - $25 billion for zero emissions public transit, active transit and safe streets
    - $12.5 billion for workforce development, safety standards and job training
    - $2.5 billion in innovation ecosystem for cleantech startups and related small businesses, prioritizing those created by underrepresented founders.

Thank you so much for the opportunity to testify on this important topic.

Sincerely,

Dawn Lippert
CEO, Elemental Excelerator

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