



**IMPACT
2022**

OUR MISSION



Founded in 2011 as an outcome of a public-private partnership with the City of Los Angeles and its Department of Water & Power (LADWP), LACI, the City's official nonprofit cleantech incubator, is focused on clean energy, zero emissions transportation, and sustainable cities. Our mission is to create an inclusive green economy through our three-pillar model: Unlocking Innovation, Market Transformation, and Enhancing Communities. LACI aims to build a regional innovation ecosystem that supports the discovery and commercialization of clean technologies by creating new companies, derisking the go-to-market process, and helping companies successfully deliver market-ready cleantech solutions with accompanying jobs, in Southern California and beyond. The organization utilizes a unique and integrated approach to spur the green economy to reduce statewide greenhouse gas emissions, improve air quality, create jobs, and generate local economic impact.

375

startups served

\$1B

in funding

\$335M

in revenue

2626

jobs created

\$587M

in long term
economic impact



LACI was fortunate during the pandemic, as we continued to grow our team and expanded offerings to our startup entrepreneurs, program partners, workforce training participants, and those we work with to create an inclusive green economy.

As we moved into 2022, we welcomed many special guests and leaders to the campus to learn more about our work. Then Speaker of the House Nancy Pelosi visited LACI to celebrate the Inflation Reduction Act and meet our founders and workforce graduates. California Governor Gavin Newsom came for a tour, as did U.S. Energy Secretary Jennifer Granholm and U.S. Labor Secretary Marty Walsh, who both joined us for two hours to learn about the cleantech ecosystem. And I and newly elected Los Angeles Mayor Karen Bass joined our board for a conversation about the green economy.

In the face of the worsening climate crisis, LACI's team and programs delivered impactful results, including:

- LACI portfolio startups scaled to meet the moment and the needs for clean energy and transportation electrification, including LACI startup Sparkcharge raising a \$30 million Series A, and their CEO introducing President Biden at the signing of the CHIPS & Science Act
- LACI's Clean Trucks for All campaign helped secure \$100 million from the State of California for zero emissions drayage truck charging, and \$1.5 million in federal funding for a public charging depot at the Port of Los Angeles.
- A national coalition of cleantech incubators led by LACI kicked off a DC fly-in with entrepreneurs and innovative leaders from across the U.S. to advocate for funding a \$75 million national clean energy incubator program authorized in the CHIPS & Science Act.
- LACI was proud to be recognized on Fast Company's Annual List of the 100 Best Workplaces for Innovators selected from among more than 1500 global companies.
- LACI startups raised in excess of \$1 Billion in funding a major milestone that will help our ecosystem advance the next generation of cleantech solutions that are good for our environment, our economy, and our communities!

Creating an inclusive green economy means ensuring that everyone has access to and can benefit from clean air, green jobs, zero emission transportation, and reliable clean energy resources. On the pages that follow, you'll see just how LACI addressed these needs in 2022 and delivered solutions that make an impact.

With sincere thanks to LACI's public and private partners, donors, Board of Directors, and team members for their vision, support and dedication to our mission.

Gratefully,
Matt Petersen

ENHANCING COMMUNITIES

LACI's Enhancing Community (EC) pillar is focused on creating pathways for historically marginalized communities throughout Los Angeles to participate in the green economy. This initiative is realized through **LACI's Green Jobs Workforce Development Programs** that offer unemployed and underemployed participants free technical training, industry-recognized certifications, career coaching, case management, and job retention services to help them succeed in the green economy. LACI's unique ecosystem of partners and startups offers additional hands-on training in LACI's state-of-the-art Advanced Prototyping Center and on-site at partner locations, as well as access to paid internships and job opportunities.

LACI launched five **Green Jobs Workforce Training and Fellowship Program** cohorts in 2022 and served 122 participants – up from three cohorts and more than twice the number served in 2021 – including those from the first ever All-Women Electric Vehicle Supply Equipment Fellowship. Among the 106 (87%) participants who successfully graduated these programs, an average of 80% earned industry-recognized certificates, 57% were placed in paid internships, and 60% were placed in jobs or advanced to post-secondary education. LACI's workforce programs were also highlighted by Mayor Karen Bass in her Affordability policy agenda.



WOMEN IN CLEANTECH

As part of our work in Enhancing Communities, **LACI's Women in Cleantech** ("WICT") program is focused on intentionally recruiting and supporting more women in accelerating their cleantech solutions, sector expertise, and career growth. WICT fosters equity through distinctive support and resources for women and historically underrepresented individuals, and empowers members with thought leadership, network access, and community building, to help them thrive. In 2022, WICT hosted a series of six Coffee Meetups with FOUND/LA, all hosted in local, women-owned coffee shops. This series covered critical topics facing women entrepreneurs and provided participants with actionable resources and a supportive community to help their businesses thrive.



STEM PROGRAM

LACI's Middle School Girls in STEM Program is focused on building a pipeline for future women innovators in the STEM + Sustainability space. LACI aims to light a spark for middle school girls – particularly those from underrepresented groups and in disadvantaged communities – to learn more about sustainability challenges at a young age and find their agency as problem-solvers. LACI's Middle School Girls in STEM Program inspires girls through hands-on prototype development to address real-world problems, community engagement, and ultimately, solutions for global climate change. In December 2022, LACI wrapped up the third program Cohort with a Demo Day on campus to present their electric school bus challenge prototypes, share reflections from their experience, and learn about opportunities for continued learning via partner organizations. The girls also presented their completed projects to Mayor of London and Chair of C40 Cities, Sadiq Khan, and Los Angeles City Mayor Eric Garcetti, during their visit to LACI in the summer.



LACI has helped create 2,626 new jobs throughout Los Angeles County.



Tess Paige

A graduate of LACI's 2022 All-Women EV Supply Equipment Technician Training Course. Since graduating from the course, Tess has transitioned into a six month business development internship with MOEV Inc., a LACI Startup that offers advanced AI software for smart electric vehicle fleet management and charging. She's been tasked with expanding MOEV's customer base and demonstrating their product at various events and conferences. Additionally, Tess officially passed the intensive Project Management Professional certification exam and spoke to California State Legislators in Sacramento about the importance of green workforce training programs. She's now working full-time as a Grants Incentives Manager at Forum Mobility.



Marvin Valencia

An outstanding representative of LACI's Workforce Training and Fellowship Programs and the tiered growth and career opportunities that are available to participants as they advance through their training and career development. Marvin is a graduate of LACI's 2022 Micromobility and Microgrid Maintenance Training Programs. He took on an extended internship with Plus Rides, a LACI Startup that makes foldable light EVs. Marvin's duties included outreach to eScooter and eBike brands to coordinate bulk pre-order sales, building a network of brand ambassadors and social media influencers, and managing business development with universities and battery companies. The skills Marvin developed during LACI's technical bootcamps positioned him to successfully interview for and accept a full-time business development position with Green Commuter, another LACI Startup that offers all-electric vanpool services.

MARKET TRANSFORMATION

LACI's Market Transformation pillar convenes policymakers, innovators, and market leaders to accelerate system change and climate solutions through key initiatives across the zero emission transportation, clean energy, and sustainable cities sectors. The impact of this work is realized through pilots and policies that are equity-driven, create quality jobs, grow the green economy and lead the way to a decarbonized, sustainable future for all.

To broaden regional understanding of cleantech solutions and challenges we released two reports in 2022. The Gaps & Opportunities report identifies the most pressing challenges across our priority areas and guides LACI's startup recruitment pursuits. The Market Landscape report analyzes investor, corporate, policy and emerging technology activities. Both Market Transformation reports offer key insights and thought leadership that identify strategic technology, policy action, and skilled workforce needs that help shape the market in the year ahead.



ZERO EMISSION TRANSPORTATION

To advance our impact through Market Transformation, the **Transportation Electrification Partnership (TEP)** was formed as an unprecedented public-private partnership of more than 25 members committed to accelerating transportation electrification and zero emissions goods movement throughout the Los Angeles region in advance of the 2028 Olympic and Paralympic Games.

In 2022, TEP advanced progress toward their targets and equity goals through legislative and funding victories:

- \$100M in new funding was secured in the California state budget for zero emissions drayage charging infrastructure as the result of an effort LACI organized with the mayors and ports of Los Angeles and Long Beach, labor and community groups.
- The nation's first statewide Zero Emission Vehicle (ZEV) Equity Advocate position was created through Senate Bill 1251, legislation sponsored by LACI and authored by Rep. Lena Gonzalez. SB 1251 will facilitate coordination across agencies as they advance state ZEV goals, and ensure state ZEV programs are equity centered and support underserved Californians.
- The 2022 Omnibus Spending Bill passed by the U.S. Congress includes two items that LACI developed with Rep. Nanette Barragán to advance transportation electrification in frontline communities. The first item directs the U.S. Department of Energy to "prioritize funding for EV car share programs at public housing facilities," modeled on LACI's successful EV car share pilot with the Housing Authority of the City of Los Angeles (HACLA) in San Pedro; the second item secured \$1.5M for a public heavy-duty drayage truck charging hub at the Port of Los Angeles, which LACI expects to break ground on in 2024.





PILOTS

Additionally, Market Transformation has advanced key pilot initiatives to identify zero emission transportation solutions that can be scaled across the region, state and nationally:

- LACI expanded our transportation community pilot programs by extending our collaboration with HACLA, and partnering with LACI startup Pedal Movement, to launch a first-of-its-kind ZE micromobility pilot, making e-bikes/cargo bikes available for affordable rental to residents. This marks the fourth community benefit pilot LACI has launched in recent years, including EV car sharing programs in Pacoima and San Pedro, and an EV Shuttle pilot in Leimert Park.
- LACI concluded our first-of-its-kind Zero Emission Delivery (ZED) Zone pilot with the City of Santa Monica, surfacing key insights for the deployment of ZED solutions in other localities. Building on this initiative, LACI began working with the cities of Los Angeles and Pittsburgh, via funding through the U.S. Department of Energy, to integrate curb management solutions to help scale their ZE deliveries.
- LACI made a pledge at the Clinton Global Initiative Annual Meeting to partner with an additional five to seven metropolitan areas to deploy ZED solutions that will help reduce harmful emissions, traffic congestion, and create more sustainable, healthier futures for communities across the nation, by 2025.

CLEAN ENERGY

Building on the success of the TEP model, in October 2022, LACI launched the Clean Energy Partnership (CEP) to advance the greater Los Angeles region's clean energy goals and accelerate the transition to a 100% clean energy grid by the 2028 Olympic and Paralympic Games, via building and transportation electrification, clean distributed generation, and grid resiliency. CEP is co-chaired by LACI CEO Matt Petersen and California Energy Commission Chair David Hochschild. The partnership launched with founding partners City of Los Angeles, County of Los Angeles, California Independent System Operator (CAISO), Clean Power Alliance, Los Angeles Department of Water and Power (LADWP), Southern California Edison (SCE), Sunrun and SWELL. CEP will release their Clean Energy Roadmap in fall 2023 with targets aimed at helping the region innovate, deliver, and scale collaborative, equitable clean energy solutions and pilots that benefit our communities and the environment.

Market Transformation also hosted The Future of Cooking: An Induction Stove Demo with the Building Decarbonization Coalition to demonstrate the efficiency of cooking with induction stovetops alongside professional chefs Katie Chin and Mary Sue Milliken. LA City Councilmember Nithya Raman kicked off the event, which included community members from Avocado and Basset Heights, who helped LACI develop an induction stove pilot for low-income residences launching in 2023.

UNLOCKING INNOVATION

LACI's Unlocking Innovation pillar works with early-stage startups to incubate and scale their innovations through programs that support the commercialization of their technologies, market entry, customer acquisition, team growth, and capital opportunities. Program curriculum is enhanced with hands-on mentorship, pilot projects with up to \$150K in funding, access to LACI's Advanced Prototyping Center, introductions partners, access to LACI's pipeline of trained green jobs workforce development program graduates, and a community of like-minded founders. This holistic model supports and accelerates startups and their cleantech solutions in direct alignment with LACI's climate, equity and economic priorities. Aligning with LACI's mission of creating an inclusive green economy, we place great emphasis on intentionally recruiting more diverse and underrepresented program candidates, including women, founders of color, and LGBTQ+ entrepreneurs.



In 2022, 48 new companies joined our cleantech incubation and small business impact acceleration programs, with 70% of cohort participants identifying as People of Color, 53% identifying as Women, and 14% identifying as LGBTQ+.

To help cleantech startups move at the speed and scale needed to meet the climate crisis, we launched the LACI Cleantech Debt Fund, a financial tool to give early stage cleantech founders a timely, affordable alternative to expensive venture capital and slow-moving bank debt. This first of its kind, \$6 million, nationwide LACI Cleantech Debt Fund offers low-interest, no collateral loans of up to \$500,000, and helps reduce barriers to capital for underserved founders from historically underrepresented communities - who too often, cannot access traditional bank financing as they lack adequate personal assets, or the networks needed to secure early-stage investment. The founder demographics of the current LACI Debt Fund portfolio underscore a commitment to inclusivity, with 27% identifying as women, 36% as Hispanic or LatinX, 9% as Black or African American, and 27% as Asian or Asian American.

In 2022 the LACI Impact Fund I (LIF I) was also fully deployed, with investments totaling \$4.2M across 17 LACI portfolio companies and a Total Value to Paid-In Capital (TVPI) of 1.9. LIF I is already increasing in value with investees like Incubation program alum Xeal raising a \$40M Series B.

LACI has also implemented an Equity Impact Earnback Framework for startups, to reward them with returned equity when they improve their scores in environmental, economic, and social impact metrics. And, in April of 2022, LACI launched the Equity Innovation Program to provide additional support to founders from historically marginalized communities and enhance diversity, equity, and inclusion (DEI) into our curriculum and programmatic support.



The impact of our work in Unlocking Innovation is measured in part by the success of our startups. In 2022, LACI startups were awarded \$10 million in grants and hit a major milestone by crossing the \$1 billion mark in funds raised. Included among the capital raises secured by LACI portfolio startups are a \$140M Series D raise for Freewire, a \$40M Series B raise for Zeal, a \$23M Series A raise for SparkCharge, a \$9M bridge round for Automotus, and a \$1.1M Pre-Seed raise for Olokun Minerals. These robust funding rounds demonstrate the strength of LACI portfolio companies and are a powerful market signal that cleantech innovation continues to grow amidst a downturn in general venture capital investments.

Unlocking innovation program results are also demonstrated through partnerships and pilots that bring cleantech innovations to market. In 2022, Incubation Cohort 3 startups developed and deployed commercial pilots with \$20K in funding made possible through a grant by the Department of Energy (DOE OTT EPIC) and with support from LACI's ecosystem of private and public partners, including LADWP, Edison International, Pando, LA County, City of LA/LA DOT, LA Metro, California Energy Commission, and the Housing Authority of the City of LA (HACLA). These pilots serve as proving grounds for new technologies that will ultimately move to full-scale market solutions, advancing our region's progress toward our clean energy, transportation electrification and sustainable city goals and benefit the communities we serve.

Each year, Unlocking Innovation convenes California's clean energy ecosystem bringing together LACI startup entrepreneurs, policymakers, industry leaders and investors for Power Day celebrations. The 2022 spring and fall events showcased innovative startup technologies from the latest LACI cohort of cleantech founders and featured discussions on Southern California's building electrification efforts and lessons learned from grid operations to improve safety and reliability.

FOUNDER SPOTLIGHT

Lacey Reddix, CEO, Olokun Minerals

Olokun Minerals is a LACI incubation program startup that provides mineral-based products for public infrastructure maintenance and renewable energy generation and storage. These solutions divert toxic drainage water away from ocean life and marine ecosystems and provide sustainably-sourced minerals for solar energy, applied road surface treatments, and a reliable source of power. Lacey and Olokun consistently raised pre-seed rounds throughout 2022 which subsequently closed for \$1.1 million. Olokun Minerals was named to the 2022 Diamond List of impactful climate companies.



RECOGNITION

Since our inception in 2011, Los Angeles Cleantech Incubator has embraced a central role in the Los Angeles cleantech ecosystem. We are able to do so through the strength and support of our network of partners, donors, Board of Directors, and staff, and gratefully acknowledge them below.

LACI BOARD OF DIRECTORS

Jim Casselberry
Board Chair

Tom Soto
Board Vice Chair

David Nahai
Board Treasurer

Sarah Rienhoff
Board Secretary

Members

Allison Holmes

Mary Leslie

Paul Jennings

Daniel Tallalian

Alfred Fraijo

Thomas Emacora

Nancy Sutley

LACI ADVISORY COUNCIL

Karen Richardson

Rosario Dawson

Brandon Hernandez

Craig Russell

Frank Quintero

Stan Washington

Noah Mamet

Ana Guerrero



GRATEFUL FOR OUR COMMUNITY SUPPORT

FOUNDING PARTNERS

CITY OF LOS ANGELES | LADWP

**BROAD FOUNDATION | CALIFORNIA ENERGY COMMISSION
PAUL JENNINGS | STATE OF CALIFORNIA U.S. DEPARTMENT OF ENERGY**

**AUDI | BMW GROUP | COUNTY OF LOS ANGELES
JPMORGAN CHASE | LOS ANGELES METRO | PCS ENERGY
SHELL RECHARGE | SOUTHERN CALIFORNIA EDISON
UNITED AIRLINES | WELLS FARGO**

**BIMBO BAKERIES USA | ENERGY FOUNDATION | GOLDHIRSH FOUNDATION
ELECTRIFY AMERICA | NATHAN CUMMINGS FOUNDATION | UBER | US BANK
WATER AND POWER COMMUNITY CREDIT UNION | WAYMO**

**AMPLY Power | Arrival | California Community Foundation
Cheryl Saban Self-Worth Foundation for Women & Girls
East Bay Community Energy | Ernst & Young | Highland Fleets**



laci.org

525 S. Hewitt Street, Los Angeles, CA 90013