## Generating Ongoing Opportunity, Development, and Sustainability For LA's Goods Movement Ecosystem (GOODS for GME)

**Overarching Narrative** - Los Angeles County experienced historic economic devastation due to COVID-19 when our economy lost over 772,000 jobs within the first 2 months of the pandemic. Two years into the pandemic, LA County's unemployment rate remains high at 6.1% and over 308,000 residents of LA County are still unemployed<sup>i</sup> (one of the highest numbers in the country). Urgent economic recovery is needed to accelerate equitable growth and resilience within our regional economy. Our largest opportunity to expedite an equitable recovery effort is within the **Goods Movement Ecosystem** (**GME**), an essential cluster that is being rapidly transformed by



Blue and Green Industry solutions, originating from and flowing through the Port of Los Angeles (POLA). The unique opportunity provided by the EDA Build Back Better (BBB) Regional Challenge has brought together a diverse coalition of local and regional economic development leaders engaging our communities in a multi-dimensional effort to transform the LA GME in a ground-up approach. To catalyze economic development that will benefit our workforce, entrepreneurs and residents, our coalition developed the Generating Ongoing Opportunity, Development, and Sustainability for LA's Goods Movement Ecosystem (GOODS for GME) project to create high quality jobs, increase wages, and revitalize communities while building a resilient and equitable port of the future that reduces emissions and increases efficiencies in supply chains, thereby keeping Los Angeles and the nation competitive in the global economy. GOODS for GME is a comprehensive package of projects to stimulate the growth of the GME by completing the shovel-ready build of the AltaSea Center of Innovation (ACOI) at POLA to serve as a hub for goods movement innovations and the foundation for the Blue Economy in LA (ACOI Project); installing a green hydrogen fueling and an electric battery charging station for heavy duty trucks at the POLA to transition port drayage trucking operations to zero emissions by 2035 (GREEN Project); establishing workforce training programs to help underserved communities access living wage jobs in the GME; supporting entrepreneurship and commercialization programs to capitalize on Blue and Green innovations; and establishing long-term strategic plans and evaluation related to supply chain resiliency, environmental sustainability and equitable access to job and entrepreneurship opportunities in the GME (GME GROWTH Project). The GOODS for GME project will be led by the Los Angeles County Economic Development Corporation (LAEDC) with a governance coalition comprised of some of the most important anchor institutions and community based organizations (CBO) in the region, including the City of Los Angeles Mayor's Office, the LA City Economic and Workforce Development Department (EWDD), the Port of Los Angeles, AltaSea at the POLA, Los Angeles Cleantech Incubator (LACI), Entrepreneur Education Center, Inc. (EECI), Long Beach Economic Partnership (LBEP), PledgeLA, Long Beach Accelerator, Santa Monica College, USC, Urban Movement Labs (UML) and Jet Propulsion Laboratory(JPL), with commitments and collaboration with dozens of regional anchor institutions, private



companies, CBOs and governmental partners.

Global commerce is crucial to American prosperity, and our proposal aims to optimize supply chains for throughput, equitable growth, sustainability, and resilience critical to the nation's economic recovery and resiliency, and in the process make our region the world capital for technologies at the intersection of the Blue and Green Regenerative Economies. The Ports of Los Angeles and Long Beach (San Pedro Bay Port Complex – SPB Port Complex) together with transportation corridors throughout LA County comprise one of the most essential arteries of our nation's infrastructure and supply chain. More than 35% of waterborne cargo coming to America arrives in LA. Goods moving through the SPB Port Complex originate in or are destined for every congressional district in the US. One in 48 jobs throughout the United States is associated in some way with cargo moving through this vital gateway, with almost 500,000 jobs in the closest five counties<sup>ii</sup>. Investing in the LA GME will have reverberating impact on the rest of the nation.

Goods Movement as a cluster ecosystem is comprised of multiple industry sectors that produce and move essential goods across the U.S. Critical GME industries span the ocean and land, and include transportation, manufacturing, construction and trade to name only a few. Many of the solutions required to transform the GME and the SPB Port Complex into the model 'Port of the Future' will come from innovative technologies in the Green and Blue Economies. LA's Green Economy currently produces 338,000 total jobs (direct, indirect, and induced), accounting for one in twelve jobs countywide, and has the potential to grow to 600,000 jobsiii over the next 25 years. LA's Blue Economy produces 200,400 total jobs (direct, indirect, and induced) and \$20 billion in gross county product.<sup>w</sup> Both economies are critical drivers of GME jobs within the SPB Port Complex, which is responsible for 193,000 total jobs (direct, indirect, and induced) in Los Angeles and Long Beach, and just under 1 million jobs in the five-county region of Southern California - over 10% of all jobs in the region. The term 'Green Economy' generally refers to economic activities that aim to reduce air and climate pollution, environmental injustice, and toxins through sustainable development. Renewable energy and zero emission (ZE) transportation are the largest opportunities within GME, and sufficient charging infrastructure is the most significant barrier to reaching the region's ambitious goal of 40% ZE drayage trucks at the Port by 2028. The 'Blue Economy'v is focused on growth through sustainable use of resources, specifically from and in the ocean. Critical 'Blue' GME sectors include ports, shipping, marine energy, carbon capture, aquaculture, and coastal restoration. By creating a new Blue Industry and growing the developing Green Industry, LA will transform the GME resulting in significant regional growth of these important interrelated economies. GOODS for GME will construct the necessary infrastructure, and support the equitable growth of Blue and Green jobs and businesses that will make POLA and Los Angeles a model port for sustainable goods movement. The ACOI project will support the creation of over 1,000 quality, accessible Blue and Green economy jobs across the region, over 100 new Blue and Green-focused businesses from disadvantaged communities throughout LA, and approximately 4,000 one-year, FTE construction jobs across the 2-3 years needed to complete the ACOI renovation. AltaSea will also amplify innovations by running proof-of-concept demonstrations throughout the project, and two separate Innovation Challenges in Years 2 and 4. The GREEN project will directly support the development of 27 new jobs across the span of the 4-year project and provide critical infrastructure to allow for Green economic development in trucking jobs near the Port towards local and state goals in 2035. The GME Growth project will support more than 100 Green economy entrepreneurs, more than 1,000 workforce development trainees, and help companies access at least \$25M in capital.

In partnership with the County and City of Los Angeles, GOODS for GME complements **LA County's CEDS**<sup>vi</sup> and will leverage the programs and resources available to local governmental partners to support our small businesses and entrepreneurs with a focus on the high growth clusters of Blue and Green industries. The GOODS for GME component projects all have workforce development and entrepreneurship support to ensure our region will have a future pipeline of talented workers and businesses that will continue to advance innovation and sustain the growth of the GME. The long-term impact of building out this ecosystem will help our region build economic diversity and resiliency by accelerating the reduction of our dependency on petroleum-based fuels and increase the resilience and sustainability of the nation's goods movement and supply chain systems. EDA's investment will accelerate

the timeline for economic recovery, the closure of longstanding gaps in equity, and help the region become a national and global model for equitable and sustainable transformation of goods movement. Without substantial investment, the scale required for commercial success and sustainability may not be achieved at this critical moment and further advancement of this new GME could be delayed, limiting the economic and environmental improvements that our region's disadvantaged communities face.

<u>Geographical Region</u> – LA County has the largest population of any county in the nation – with over 10 million residents, who account for 27% of California's population. The primary location of services and activities under GOODS for GME is LA County, CA, FIPS Code 06037 (Congressional Districts CA23, 25, 26, 27, 28, 29, 30, 32, 33, 34, 35, 37, 38, 39, 40, 43, 44, and 47). Home to more than 140 cultures with over 224 languages spoken, residents served by our coalition throughout LA County are 48% Hispanic / Latinx, 25.6% Caucasian, 14.9% Asian / Pacific Islander, 7.6% African American / Black, and 3.9% who identify as other, with a 2019 Poverty Rate of 13.4%. Many of the component projects will directly target and serve the communities adjacent to POLA (Congressional Districts CA 44, 47, 43, 38, and 33), complemented



by countywide outreach, entrepreneurship, and workforce development activities. While the ports provide a large supply of well-paying jobs throughout the region, industrial activity associated with goods movement and the oil industries has led to blighted economic conditions in the surrounding communities. The demographics of Port-area residents served by the LA Coalition are 73% Hispanic / Latinx, 10% African American / Black, 5% Caucasian, 3% Asian / Pacific Islander, and 9% who identify as other. They are some of the most vulnerable communities in the Los Angeles area, with high rates of poverty, a median household income of \$24,728 - one of the lowest in the City of LA, and the target population that GOODS for GME aims to serve. Additionally, the reach of the GME stretches to the Counties of Orange, Riverside and San Bernardino (FIPS Codes 06059, 06065 and 06071), and this project will create additional positive economic impact in these counties.

This proposal builds upon a foundation of unparalleled regional assets critical to its success, including the largest port complex in the western hemisphere; more research universities and colleges for R&D, tech transfer and commercialization, higher education, and short term career training than any other county in the nation; national leaders in Green and Blue economy innovation; state and local governments firmly committed to equity and sustainability; and a diverse labor force exceeding 5 million in LA County alone. POLA and neighboring Port of Long Beach moved over 20 million twenty-foot equivalent units (TEU) of cargo containers in 2021 and control 74% of West Coast ports' market share and 31% of the entire nation. These two seaports have the most ambitious clean air action plans in the nation and are committed to equitable and sustainable growth of the LA GME. LA County is home to world class research institutions like Caltech, UCLA, USC, and JPL which house some of the nation's leading programs on Global Supply Chain and Logistics, Energy, Transportation, and Sustainability. In addition, more than 110 other colleges and universities, including five California State University (CSU5) campuses and 21 California Community Colleges (CCC), provide degree programs and career training certificate programs aligned with industry needs. Most of these CSU and CCC campuses are officially designated minority serving institutions and are committed to preparing pathways for women and black, indigenous, and people of color (BIPOC) students into the LA GME and Blue and Green Economies, and all of these anchor institutions have provided commitments as partners in the GOODS for GME proposal. LA also has unparallel access to the global market. LA is home to the world's 3rd largest Consular Corps with direct access to over 100

countries and their governments through the relationships established by LAEDC's wholly owned subsidiary, World Trade Center Los Angeles. This provides our workforce direct access to Foreign Direct Investment enterprises and our entrepreneurs to global export opportunities.

**Private-Sector Engagement** - LA Coalition members will utilize and leverage our expertise engaging private sector partners to ensure success for the regional growth cluster strategy. For example, LAEDC has been engaging private sector leaders in LA's range of key industries for the planning and execution of regional cluster growth strategies for four decades. LAEDC worked with the LA County government to develop the 2016-2020 LA County Strategic Plan for Economic Development that included facilitating engagement with more than 500 local leaders and stakeholders from the private and public sector. The resulting 5-year strategic plan was utilized as a guide for LA County's 2020-2025 CEDS document, and LAEDC will leverage those existing partnerships with private sector employers for this project.

POLA has established relationships with several significant GME industry partners with the express goal of driving the development of a ZE port market. In addition, POLA currently leads several large-scale technology development projects, including a truck and hydrogen fueling station demonstration project with global leaders such as Toyota. The regional transition to clean energy will largely be supported by investments from private companies. Urban Movement Labs has secured Zeti, a fintech scale-up, committed to amplify the Port's hydrogen-based logistics goals by accessing an estimated \$31 million in funds needed to purchase enough clean vehicles to fulfill POLA hydrogen station's maximum utilization.

LACI collaborates with industry partners through the Transportation Electrification Partnership (TEP), an unprecedented regional coalition of more than 30 private and public entities, including SoCal Edison, Proterra, Greenlots, and Electrify America, focused on achieving TEP's shared, ambitious ZE transportation goals by 2028. LACI also has a decade of experience supporting cleantech entrepreneurs—with a focus on underrepresented founders who face barriers in accessing capital--and working with venture capital investors, assisting 315 startups to date. PledgeLA, a collective of over 215 VC firms and tech companies, will leverage its strong connections to investors seeking opportunities aligned with innovation in the GME. Our coalition's network of investors includes the University of California Regents, Pegasus Capital Advisors, the United Nations' Green Climate Fund, Angeleno Group, BNP Paribas Bank, Bank of America, and several large foundations. Specifically in alignment with GOODS for GME goals, 7th Generation Advisors has committed to leveraging the \$150 million investment fund they are currently developing. This venture/growth investment vehicle will focus on commercializing Green and Blue technologies, especially in the port/maritime goods movement sector, and will prioritize companies and project deployment of minority and underserved entrepreneurs.

The LBEP is a leader in facilitating and coordinating with regional industry, employers and stakeholders to achieve economic and workforce growth that reflect equitable outcomes on behalf of the communities it serves. LBEP will establish a network of consultants, services and resources to affect the regional GME workforce and advance the growth of the regional Blue and Green economic clusters. This network includes established vendors with proven results in employer engagement, employer and educational faculty collaboration for training and program design, business outreach, business services including capability assessments and technology adoption and work-based learning and on the job training.

AltaSea works with an array of private-sector tenants, programs, and partners with commitments from important private-sector companies in the growing blue economy including Pacific6, Boeing, Blue Robotics and Holdfast Aquaculture. Pacific6 has invested millions of dollars to create the first offshore farm in the federal U.S. waters and is looking to create 50-75 jobs in the LA Blue Economy. In addition, several GME industry partners have committed to tenancy and/or docking use of AltaSea's renovated campus: SWITCH Maritime is committed to bringing the world's first zero-emissions vessel powered 100% by hydrogen fuel cell along with 50 new jobs; and Aquaai, a California B2B marine robotics service company,

is committed to bringing 160 jobs to AltaSea, as indicated in ACOI project commitments. Coalition partner Braid Theory will offer accelerator programs to add 100 startups to the region's blue economy entrepreneur ecosystem.

Regional Growth Cluster Sustainability - As the region capitalizes on this EDA BBB opportunity to propel inclusive economic growth, a strong and joint public and private investment is critical to increasing economic mobility and accessibility in many of the communities disproportionately impacted by the pandemic and its secondary economic impacts. To ensure sustainability, accountability and equitable growth of the GME, the LA Coalition has established a strong governance structure and a robust community engagement strategy that will span beyond the funding cycle of the BBB. LAEDC will lead the creation of a Governance Committee, responsible for managing the ongoing, month-to-month work of the GME cluster, and a Regional Advisory Committee (RAC) of community partners that will monitor, advise and guide activities and outputs of the project and develop a long-term strategic plan for the transformation of our GME. The Governance Committee, composed of the leaders from the component projects and the Regional Advisory Chair, will focus on project performance, compliance, and sustainability in alignment with the project's overarching goals. The group of non-profit, government, entrepreneurship, workforce and education, business, philanthropy, labor and economic development leaders will focus on attracting continued investments from both public and private sources to sustain and advance the projects. Each member on the Executive Committee must commit to: (1) connect three potential funding opportunities, (2) solidify new project partnerships with a minimum of 5 community-based organizations, and (3) lever resources within their organization to provide technical expertise to support the project's advancement and expansion.

In order to identify the most efficient, effective, and inclusive manners to support project implementation and sustainability, the Regional Advisory Committee will convene on a quarterly basis to operationalize opportunities with and in under-resourced communities. The RAC will include a network of leaders who can braid opportunities and partnerships to improve outcomes for our disconnected communities and also include the Governance Committee Chair. Leaders will represent workforce entities, education partners, community-based organizations, justice-related organizations, human services agencies, entrepreneurs, organized labor, employers, and additional partners committed to breaking down silos and focusing on strengthening resource and opportunity pipelines with and for under resourced communities. As system change requires perseverance and commitment, the RAC members will asked to serve for a minimum of 2 years.

Both committees will work together, as equal partners, to support sustainability. As the Governance Committee focuses on identifying resources and funding, the RAC will focus on ensuring the impact of the EDA and new funding is done in partnership with under-resourced communities. The chairs of both committees will be members of each other's committee to ensure seamless communication on the reporting of outcomes and impacts, alignment of priorities, and to provide immediate feedback to support progress. Both committees will review and contribute to a Goods Movement Report, as well as support the planning of and attend the annual State of the GME event. By focusing our governance on resource development and strengthening resource pipelines with under-resourced communities, the resources still required to close gaps and maximize impact will become the shared focus and vision for ongoing sustainability that will be captured in the ongoing committee meetings, reports, annual state of the industry.

Public-private partnerships and investments are a key component of the long-term sustainability of GOODS for GME. Therefore, as a major anchor institution in LA, POLA has committed to the long-term sustainability, viability, and success of GOODS for GME. POLA has granted AltaSea a historic 50-year lease for its 35-acre site. Since 2012, over \$50 million in contributions have funded the development of AltaSea's vision. AltaSea has already identified half a dozen significant businesses expected to be tenants

in the Business Hub facility. Following the expected opening of ACOI's Phase 2 in year 4 of GOODS for GME, there will be continued growth in employment from tenants and expanded marketing efforts for new tenants.

Engaging Specific Organizations - The LA Coalition will continue to engage community-based organizations (CBOs), labor unions and community partners to ensure BBB funding will benefit the people and communities that are most in need, while expanding existing relationships and building new ones. Coalition project partners have extensive existing relationships with CBOs in the project area and across LA County and will strengthen these and create others through this project. As examples, LACI actively works with more than 50 CBO partners; these relationships are central to its programs' intentionally recruiting from under-served and disadvantaged communities across LA. EECI has long-standing relationships with local CBOs located in LA County Supervisorial District 2 and 4, where the project's targeted underserved communities are located. AltaSea's long-standing relationships with CBOs in addition to unions help ensure that jobs on its campus are equitably filled, and it includes local hire provisions and wage provisions in the evaluation, selection, and final award of its construction contracts. CBO partners such as the South Los Angeles Transit Empowerment Zone (SLATE-Z) which won the Federal Promise Zone designation for South Los Angeles, and the Alliance for a Better Community which works to advance economic equity for the Latino communities in the LA region, both with missions to provide economic prosperity to underserved communities, have committed to partner with GOODS for GME to ensure longterm engagement with historically underserved and underrepresented communities.

LAEDC has secured commitments from regional anchor academic institutions such as the Los Angeles Regional Consortium - comprised of the 19 local community colleges, the CSU5 – comprised of the 5 California State Universities in LA County, USC, UCLA, and LMU. Each of these anchor institutions have extensive community engagement programs and strategies that target the underserved communities through LA County and have pledged their support of GOODS for GME to ensure their collective resources will be leveraged to support equitable growth of the GME. CBOs and Anchor Institutions will partner with the Coalition to leverage their extensive reach in the community and help our project reach our target population to develop and cultivate a workforce pipeline, ensuring underserved individuals have access to training, resources, and education in order to engage in equitable and sustainable entrepreneurial and living wage pathways.

Additionally, POLA has an active Project Labor Agreement (PLA) with the Los Angeles/Orange Counties Building & Construction Trades Council. The Council, along with the Southwest Regional Council of Carpenters, IBEW Local 11 and NECA Los Angeles have all committed to working with our coalition to equitably employ union members in the various construction projects included in our BBB cluster. IBEW Local Union 11 is a dynamic and progressive movement for social justice, safe jobsites, training, Green jobs, and opportunity for all based in LA, while the Southwest Regional Council of Carpenters works with developers and elected leaders to raise the standard of building and living for all workers as an affiliate of the United Brotherhood of Carpenters and Joiners of America. Both LACI and AltaSea have long-standing relationships with IBEW Local 11 and NECA Los Angeles, in LACI's case via the Green Jobs Fellowship and Training Courses and LACI's TEP; AltaSea also engages with the Carpenters Union, and the Los Angeles/Orange Counties Building & Construction Trades Council, representing positions that the ACOI project will create.

**Equitable Engagement** - To address the systemic inequities within LA's regional economy, our coalition is committed to building a workforce pipeline that reflects the diversity of our region, while also increasing entrepreneurship opportunities to reflect this same diversity, embedding equity in policy goals, and pursuing environmental and economic equity in the LA GME. To create the desired impact, the coalition members

have committed to implement entrepreneurship, workforce development and community engagement initiatives that support economic inclusion, diversity, and equity. The RAC and Governance Committee described above will provide critical governance of the Coalition's equity commitments.

EECI located in Watts will be a key coalition leader in the equitable development of all projects for economic and job growth under this opportunity, with an emphasis on BIPOC and women entrepreneurship and business incubation. Through EECI seminars and sponsored educational programs, thousands of BIPOC entrepreneurs from disadvantaged communities across LA learn how to develop their business plans, secure funding, and generate jobs for residents of their communities. Coalition partner Braid Theory's existing programs and activities are achieving close to 50% participation from women and BIPOCled startups and scale-ups in pitch competitions, panel discussions, and workshops, and LACI's entrepreneurship programs have reached a 41.5% female and 39.6% underrepresented BIPOC population of founders across its 2021 and 2022 cohorts. The Long Beach Accelerator BlueTech Entrepreneurs Project is designed to support minority- and women-led high-tech startups within the BlueTech. Each year, the LBA onboards 2 cohorts with 8 to 12 startups within each cohort. Importantly, 50% of the companies accepted into the accelerator have underrepresented (women, minority, etc.) founders. PledgeLA, via its Founders Fund program, provides early-stage entrepreneurs of color with non-equity capital, technical assistance, and business development support. In the program's pilot year, PledgeLA provided \$500,000 to 20 high-potential Black and Latinx-led businesses. After completing the program, this pilot cohort collectively raised more than \$10 million in follow-on capital, hired 29 employees, and 89% saw sustained increases in recurring revenue. PledgeLA will manage a team of capital advisors with the aim of helping underrepresented businesses in the GME raise at least \$25 million in funding over the project period.

The LAEDC Center for a Competitive Workforce program connects employers and jobseekers with the regions' 19 community colleges to strengthen economic opportunity and mobility and align talent development with the evolving needs of LA's employers. Most of these regional community colleges are focused on providing upskilling and reskilling opportunities for Low-Moderate Income (LMI) students in BIPOC communities and displaced workers impacted by the pandemic. The Long Beach Economic Partnership (LBEP), working in partnership with the City of Long Beach and the Port of Long Beach, supports the multiple businesses and community organizations of the diverse population of Long Beach, many of which have been hard hit by the pandemic and current economic impacts. Furthermore, the AltaSea Ocean Pathways Program (ASOP) currently leverages its extensive network to provide education and workforce opportunities in the regional Blue economy for BIPOC and women in the Port adjacent communities

## **Expected Outcomes**

**New Jobs**: Over 1,000 direct and indirect new jobs and approximately 4,000 construction jobs are projected for the AltaSea Center of Innovation project. The fueling and charging stations are estimated to result in 27 direct new construction jobs and 4 ongoing station maintenance jobs. Both the AltaSea and the POLA projects will also support indirect and induced jobs in the economically stressed Port-adjacent communities that will be created by the growing regional industry.

**New Businesses**: Entrepreneurship partners will grow the number of businesses focused on transforming the goods movement ecosystem. The ACOI project aims to establish up to 200 new businesses focused on Blue and Green goods movement during the project period. GME Growth will accelerate the growth and success of at least 110 cleantech and Blue tech companies over the first three years of the project. USC will engage 200 local diverse businesses in entrepreneurship development opportunities in the Blue and Green sectors and will prepare 100 local diverse businesses for procurement readiness. Entrepreneurs will be supported by multiple partners in accessing investment capital and/or grant funds, and Coalition partners expect a minimum of \$25M of capital to be

raised through the period. 7th Generation Advisors has committed to leveraging the \$150 million investment fund they are currently developing to focus on commercializing Green and Blue technologies.

**Workforce Development:** Coalition partners will ensure that more than 1000 individuals from underrepresented communities are trained as a skilled workforce to support the Blue and Green sectors – with a goal of placing more than 300 participants into sustainable living wage jobs and at least 100 interns placed in each of the project's four years with at least 10% from under-resourced communities.

Advancements in Equity: The dire need for economic recovery from Covid-19 coupled with global crises such as climate change have presented LA with an unprecedented need and opportunity to transform the regional goods movement ecosystem from the ground up with diversity, equity and inclusion at the forefront. While we cannot legally set metrics related to the inclusion of a specific population, our programming is heavily directed at BIPOC communities in Los Angeles County, especially those who have been historically disproportionately impacted by air pollution and other externalities of the GME – and excluded from the jobs and economic opportunity within it. To ensure this focus, our coalition will implement entrepreneurship and workforce development initiatives that support economic diversity, equity, and inclusion, as well as create a supportive learning environment that encompasses communication of diverse perspectives, experiences, and realities; make concerted efforts to conduct outreach and engage BIPOC individuals and CBO's for service on the Advisory Board, Committees and in activities, and establish inclusive and equitable practices for all to draw on their varied strengths and perspectives.

**New Infrastructure**: The ACOI Project will complete the major renovation of the 180,000 sf AltaSea Center of Innovation, designed to serve as an economic driver to spark connectivity between business and science as part of an overall endeavor to educate and inspire the next generation of ocean explorers, innovators, and researchers. The GREEN Project will construct publicly accessible infrastructure for early adopters of zero-emission goods movement vehicles in the form of two fueling/charging stations designed to fuel medium- and heavy-duty zero-emissions goods movement trucks.

**Innovative Technologies**: As a result of the focus on entrepreneurship, the Coalition anticipates the development, proof-of-concept, and deployment of many new technologies that employ Blue and Green solutions to transform the GME. As well, the project will leverage JPL's Al/Machine Learning technologies to enable a zero-emission drayage trucking approach to improve environment while increasing trucking capacities.

<u>Work conducted in Phase 1</u> - In the time between the submission of the Phase 1 concept proposal and this Phase 2 proposal, the Coalition has revised the project structure of our shared work, secured additional new partnerships, determined the specific commitments from project partners, and developed a plan for the establishment of a governance body to support the implementation of the proposed project. The Coalition also engaged with regional anchor institutions and governmental partners to secure and leverage additional support and resources to help us realize our goal to transform the GME.

Leveraging on this unique opportunity presented by EDA, the LA Coalition has been coordinating with the California Governor's Office of Business and Economic Development (GOBiz) to request financial support from the upcoming California Community Economic Resiliency Fund (CERF) program. The Coalition has proposed to GOBiz to support and fund GOODS for GME through the upcoming CERF program that could provide up to \$5 million per region for economic development planning, and will bolster the Coalition's ability to compete for the \$600 million designated for the 2<sup>nd</sup> Phase CERF process. GOBiz has communicated with the Coalition their interest in funding portions of the GOODS for GME through state funds.

AltaSea galvanized its cadre of partners to assess the best ways to amplify GME solutions through this opportunity, including the development of the proof-of-concept demonstrations and the Innovation Challenge. AltaSea also launched a ribbon-cutting ceremony featuring former California Governor Arnold Schwarzenegger and USC President Carol Folt announcing USC's commitment to establishing the USC Seaweed Lab at AltaSea, which will support the Macroalgae Seedbank for Biofuels included in Project 1, The event also unveiled the commitment plans for a 10,000 square foot interactive research center by Ocean explorer Bob Ballard at Altasea. These commitments further secure the long-term viability of the Altasea Innovation Center.

Additionally, the Coalition has secured commitments from major anchor institutions throughout Los Angeles. Specifically, the team has engaged the LA Regional Consortium, comprised of the 19 local community colleges serving the underserved communities throughout LA County, and secured its commitment to leverage valuable resources available to the community colleges to support our goal to transform the GME. The LARC will apply its many existing skills-driven certificate and associates degree programs from our region's consortium of 19 community colleges. Furthermore, the Presidents of the five California State Universities in LA County (CSU5), have collectively agreed to support our proposed project and will apply resources supporting innovation, international trade, alternative fuels research and Hispanic-centered innovation equity. UCLA has committed to applying its research expertise on carbon sequestration and storage, ocean systems, and coastal management solutions, as well as UCLA Extension's extensive program with more than 120 professional certificates, course and specialization program that serve more than 49,000 students annually. USC's offices of Diversity, Equity, and Inclusion and of Business Diversity and Economic Opportunity will jointly leverage its vast campus and community relationships to uplift DEI implementation in the GME, including via training and entrepreneurship opportunities in the Blue and Green tech sectors for emerging businesses in the region.

LACI has received support from GOBiz to serve as an Inclusive Innovation Hub (iHub2) in the LA region and as such, to further help diverse startup founders obtain capital to grow their businesses. LACI has staffed and launched the first year of Entrepreneurship Innovation Program (EIP), with funding from US Department of Energy's 'Energy Program for Innovation Clusters' (EPIC) program, and has advanced its CEC-funded Blueprint project to develop an investment blueprint for heavy-duty BEV charging depots along the I-710 freight corridor for trucks serving the San Pedro Bay Ports. LACI has also secured \$6M for the nation's first cleantech early-stage debt fund for startups, advanced discussions for State and regional funding for heavy duty truck charging and securing three sources of private funding to support aspects of its workforce development initiatives – all of which are aligned with BBB.

**Changes to the Phase 1 proposal-** - Upon commencement of the detailed planning for the Phase 2 proposal, the LA Coalition re-examined the most effective way to group the proposed construction and nonconstruction activities, which has resulted in shifting from the original Phase 1 concept proposal for six GME projects to the Phase II structure of three projects, to best focus on transforming the anchor institution that is the San Pedro Bay Port Complex into a model port and economic engine of the 21<sup>st</sup> Century. Our coalition also secured new partnerships and determined the specific commitments from project partners listed in the Phase 1 proposal. In addition, Phase 2 guidelines shed light on who is allowed to participate and receive funds under the BBB opportunity, which resulted in major adjustments to plans with some commercial partners.

In reducing to three projects, the Coalition combined several elements for Blue Industry Growth into one project that include the AltaSea Innovation Center, EECI's entrepreneurship program and Santa Monica College's Blue economy program. As a for-profit company, Braid Theory will not be seeking funding from this EDA Challenge but is a Coalition partner committed to providing in-kind business acceleration services and growing the regional Blue Economy and GME solutions. The GREEN project is concentrated

on the hydrogen fueling station and Battery Electric Vehicle charging station, led by POLA and LACI respectively, and both located on POLA property. Due to EDA's guidelines with respect to private sector partners, Shell and Toyota, originally a part of the POLA project, are no longer part of the application, though each maintains its support for this effort. As well, Urban Movement Labs will not be seeking funding from this EDA Challenge but will participate as an ecosystem partner to support our work to transform the GME. The proposed Blue and Green projects will transform the regional GME and create important and diverse opportunities for Los Angeles and port-adjacent communities. In order to ensure equitable access to those opportunities, the Coalition combined key components of entrepreneurship support, workforce development and strategic planning into the third component project, GME Growth. Together ACOI, GREEN and GME Growth are the three component projects supporting the overall vision of the GOODS for GME project.

<sup>&</sup>lt;sup>i</sup> California's unemployment holds at 5.8 percent for January 2022

i https://www.portoflosangeles.org/business/statistics/facts-and-figures

iii https://laincubator.org/wp-content/uploads/LACI-GREEN-JOBS-REPORT.pdf

v Ocean Economy - Los Angeles County Economic Development Corporation (laedc.org)

v Ocean Economy - Los Angeles County Economic Development Corporation (laedc.org)

vi Microsoft Word - Final 10.10.2020 - LACDA CEDS.docx