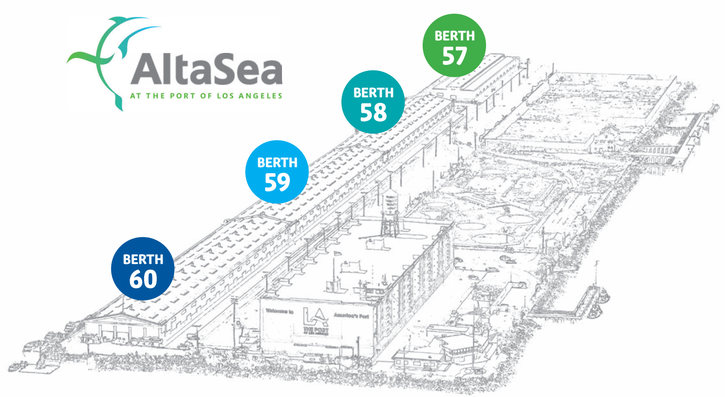

OUR
FUTURE
IS
BLUE
THE CAMPAIGN FOR ALTASEA

"…the city's original pier dating to the early 1900s is being converted to a sprawling center for new eco-friendly businesses building the ocean's "blue economy."

Los Angeles Times



WEST CAMPUS

OUR FUTURE IS BLUE
THE CAMPAIGN FOR ALTASEA

"AltaSea means opportunities for our community—members of all ages—to connect with the ocean, learn about new developments in ocean science, and participate in a pipeline to well-paying jobs is transformational. Working together to ensure equity in the marketplace is a serious win for the next generation."

Barbara Stanton, Executive Director, Entrepreneur Educational Center, Inc.

"The ocean is essential for our planetary health and our longterm survival. That's why AltaSea's work is so important. Its vision to combine the talents of science and business sets us on a fresh path for the future."

James Cameron, Explorer and Filmmaker

"I love being a part of the AltaSea community because they give me hope for the future of our planet. Through AltaSea I have had the opportunity to connect with scientists and professionals who are doing work to enact real change and make an impact on our climate. Every time I reconnect with people through AltaSea I am inspired to continue fighting for our environment because I know I have a whole network behind me."

Naomi Scott, Next Generation Environmentalist

Previous Spread, Left: Blue Hour original artwork by Taiji Terasaki **Right:** Students from Al Wooten Youth Center visiting AltaSea **Below:** Blue Hour original artwork by Emma Akmakdjian **Bottom:** The Pacific Alliance vessel moored off the AltaSea deep water channel

A Message from Campaign Chairs
Melanie Lundquist, Wendy Abrams, and Wendy Neu

"The world is not getting better by itself. Making the world a better place demands more and better leaders."
Rosabeth Moss Kanter, *Think Outside the Building*

AltaSea is where cutting edge science and business meets the ocean, expanding the Blue Economy, while training the next generation of climate leaders to ensure a more sustainable, just, and equitable world.

AltaSea is the engine of innovation that will help us combat climate change and live more sustainably on our precious planet. Our goal is to ensure that AltaSea's 35-acre waterfront campus will become an environmental beacon for the nation and beyond.

Thanks to the incredible vision of philanthropist Wallis Annenberg for what AltaSea could become, that future is beginning to take hold today.

Leading educational institutions from the University of Southern California (USC) to the University of California, Los Angeles (UCLA) to Caltech/JPL are spearheading new ocean-based research at AltaSea.

Aqua businesses have discovered a new home where their fresh ideas to create change—while creating the jobs of the future—are being incubated and launched. Importantly, community organizations and schools throughout Southern California are introducing young people to the wonders and sustainability of the ocean, where internships and fellowships can lead to exciting careers.

Every generation discovers its own frontier and the technology to drive it—from wagon trains to the telephone, from aviation to automobiles, from the space age to the internet. AltaSea is leading on the newest frontier—70% of the earth's surface—the place where humanity needs to innovate and address climate change by preserving our ocean.

In order to fully realize AltaSea's potential, we are proud to lead *Our Future is Blue: The Campaign for AltaSea*, a critical effort to fully renovate its West Campus. At nearly 14 football fields in size, the West Campus includes historic warehouses and 3,000 linear feet of wharf space in the Port of Los Angeles.

When complete, AltaSea will provide even more scientists, business entrepreneurs, and students with the modern facilities and tools they need to realize their dreams of a clean and sustainable future. Finally, our campaign will create an endowment that will ensure AltaSea's future stability for generations to come.

With your help, we believe AltaSea's best days are ahead. Our planet and future generations will be its lucky beneficiaries. Please join us!

Top: Teens from Palos Verdes Intermediate School exploring RCAM Technologies 3D concrete printing model **Above:** USC PhD candidate Jordan Chancellor is selectively breeding local mussel species for resilience to climate change **Right:** Students from Oscar de la Hoya Animo High School operating underwater robotics

A Message from
Terry Tamminen, President and CEO
Jenny Krusoe, Executive Vice President and COO

At a recent AltaSea Open House showcasing aquaculture, a young girl asked "If you can farm on the ocean, can you live there too?" She understood that two-thirds of our planet is covered by ocean … and that our future is blue!

With daily reminders in the headlines about the impacts of climate change, AltaSea is uniquely positioned to educate and inspire those who will provide solutions, creating career pathways in exciting new fields for our youth and harnessing cutting-edge research to become new products and services that will drive our economy.

In fact, there is no other place on earth with our purpose and location to accomplish these important, urgent goals. With catalytic seed funding from the Annenberg Foundation, our 225,000 square feet of historic warehouses are already home to visionary innovators that remind us of the early days in Silicon Valley. They are making discoveries that will fundamentally change the way we eat, power our homes, and learn about how the planet can—or cannot—sustain us.

If we act now, we can turn those discoveries into solutions that will assure a brighter future for all living things on the planet we share.

But we can only fulfill these promises by fully renovating these very special places to give researchers, entrepreneurs, and educators along with their students the modern tools they need to go even farther:

- To explore, from the microlayer where air meets water to the inky depths where entire ecosystems of alien-like life forms are waiting to be discovered
- To sustainably harness the vast resources of our oceans in ways that will restore the planet and its people
- To make the invisible, the massive world beneath the waves, visible and accessible to that girl who wanted to know if we could live there one day

Curiosity gets us started. Threats to our very existence urge us to move immediately. That's why we created *Our Future is Blue: The Campaign for AltaSea*.

Your investment in AltaSea will turn ideas, hopes, and dreams into reality. Join us to ensure that Our Future is Blue.

THE CHALLENGE

The ocean *is* the solution to our planet's climate crisis. The impacts of climate change can be tackled by ocean-based renewable energy and carbon capture technologies. Ocean farming is a low to no-carbon solution to produce adequate food for our growing population. Ninety percent of our ocean remains unexplored and these promising solutions need places, people, and investment to be fully realized. These sustainable industries are the core of the emerging Blue Economy.

THE OPPORTUNITY

AltaSea—thanks to its extraordinary partnership with the Port of Los Angeles—is uniquely positioned to place Southern California at the global center of the Blue Economy. Founded in 2014, AltaSea is a nonprofit ocean-focused science, business, and education center. At AltaSea innovators collaborate to develop solutions critical to obtaining climate resiliency, healing the marine environment, achieving food security, and creating a clean energy supply for our growing populations. At the same time, AltaSea imparts that knowledge to students who will be the ocean innovators, entrepreneurs, explorers, and researchers of tomorrow.

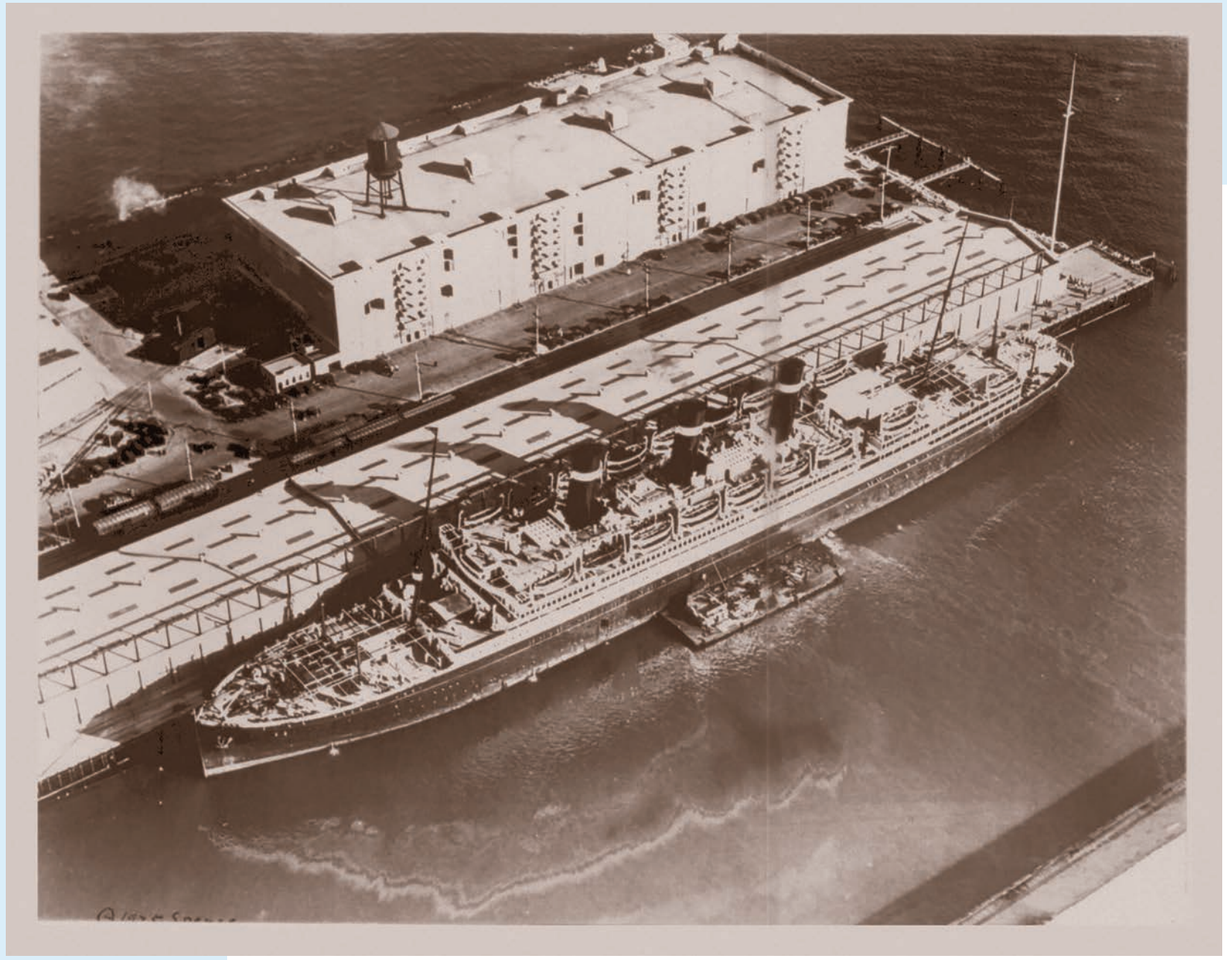
PORT OF LOS ANGELES
BERTH 58·59·60

58

58

59

AltaSea
AT THE PORT OF LOS ANGELES



Above: S.S. *Belgenland*, on December 11, 1925 docked alongside Berth 60 **Left:** The Red Car Rail along Berth 57 and the Outer Harbor Café on November 28, 1933 **Below:** Angels Gate Light-house at the entrance to the Port of Los Angeles

WHERE WE WORK

We are located on a 35-acre site at the famed "Angels Gate" entrance to the Port of Los Angeles, one of the busiest seaports for international trade in the Western Hemisphere. AltaSea's substantial campus also offers unparalleled access to the deep ocean. In 2017, the organization finalized a 50-year lease on the property from the Port of Los Angeles, securing this unique location and significant financial commitments. Once completed, AltaSea will become an urban, ocean-focused institute where Blue Economy innovators work together.

The organization is currently completing its West Campus where professionals and students will enjoy a state-of-the-art facility that includes 3,000 feet of linear dock space, circulating seawater, and marine life support systems. Inside the West Campus' four warehouses, there will be 225,000 square feet of laboratories, research facilities, and hands-on educational and job skills development areas.

"Every day, we look out over the ocean and know that the answer to a lot of the earth's challenges is out there somewhere. At AltaSea our goal is to encourage fresh thinking, new ideas, and a real commitment from business and science to uncover those answers and put them to work improving our lives and the health of our planet."

Dr. Geraldine Knatz, PhD, Chair, AltaSea Board of Trustees

WORLD CLASS LOCATION

AltaSea, at the Port of Los Angeles, with hands-on education programs located throughout the campus and on the water, is a unique public-private venture with assets unlike any other:

35 acres of land with over half creating the West Campus

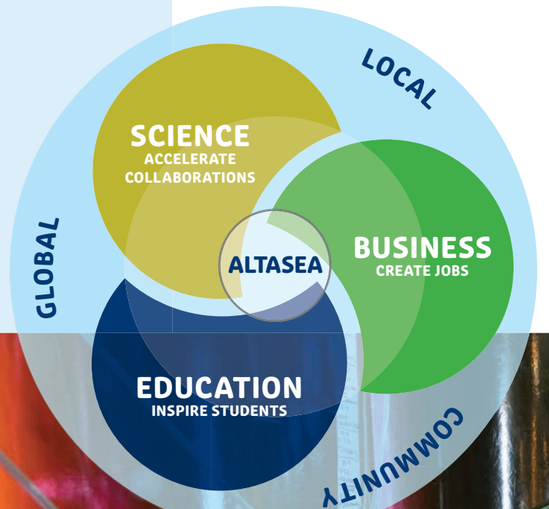
180K square feet of business incubator space dedicated to the Blue Economy (Berths 58-60)

45K square feet of science and education space (Berth 57)

3K linear feet of deep-water dock space for exploration vessels and research barges ten minutes from open ocean

Right: Ann Lee Carpenter, CEO and Co-Founder, with Jim Cooper, CTO and Co-Founder, Braid Theory
Below: Mollusks from Holdfast Aquaculture
Bottom: Holdfast Aquaculture staff member, Zannat Zannatul examining plankton—dinner for the mollusk larvae.

OUR VISION IS AN OCEAN THAT WILL SUSTAIN FUTURE GENERATIONS



WHAT WE DO

Science: We bring the world's finest climate and marine scientists and engineers together to conduct breakthrough research and discover solutions to food and energy supply, climate change, and ocean exploration. Today more than 30 leading universities are involved with AltaSea including the University of California, Los Angeles; University of Southern California; Scripps Institution of Oceanography at the University of California, San Diego; Cal Tech's Jet Propulsion Laboratory; and the Southern California Marine Institute.

Business: AltaSea nurtures new and existing commercial ocean-related products, services, and jobs. Among our more than 40 active business leaders are EcoWave Power, Pacific6, RCAM, Blue Robotics, and Holdfast Aquafarms.

Education: AltaSea is pioneering programs that immerse children and adults in the ocean's critical role for the future of our planet. In addition to the Los Angeles Unified School District (including Inglewood and Lawndale), 15+ community-based organizations work with AltaSea including: Boys and Girls Clubs of the LA Harbor, Santa Monica College, Wilmington's Strength Based Community Change (SBCC), and the Watts Entrepreneur Education Center.

"LAEDC truly believes that AltaSea is transformational for the Los Angeles regional economy and will impact the world through innovations in the ocean economy."

Stephen Cheung, President and CEO, Los Angeles County Economic Development Corporation

MISSION

AltaSea at the Port of Los Angeles is dedicated to accelerating scientific collaboration, advancing an emerging Blue Economy through business innovation and job creation, and inspiring the next generation, all for a more sustainable, just, and equitable world.

VISION

AltaSea's vision is to develop solutions for some of the planet's most pressing challenges, such as the climate crisis, energy supply, and global food security. We will prepare today's generation of students for future jobs in science, technology, engineering, business, and the ocean.

THE CAMPAIGN FOR ALTASEA

AltaSea recently launched *Our Future is Blue: The Campaign for AltaSea*, a substantial investment to complete its West Campus. To date, active fundraising has been initiated. Thus far all activities on site have taken place in 100-year-old warehouses and windowless trailers with inadequate power, and insufficient Wi-Fi access. All partners eagerly await the day when the site is fully renovated so they can accelerate their critical work in a state-of-the-art facility.


AQUAFARMING
BERTH 58

CENTER FOR INNOVATION BERTHS 58, 59, 60

We have completed full construction documents, environmental clearances, engineering studies, and bid packages for 180,000 square feet in these buildings.

When finished, tenants will enjoy an open work-space featuring their own offices and labs within a warehouse shell construction. Additionally, all science and business partners will have full access to the waterfront. Hands-on education experiences will provide students an interactive opportunity to collaborate with ocean scientists from around the world.

The entire rooftop of Berths 58, 59, 60 has been replaced and solar developer True Green has installed a 2.2 megawatt solar array, enough to power 700 homes and the nation's largest solar installation at an ocean research and development facility. Renovation of Berths 58, 59, 60 is set for completion in 2023.

WHAT IS THE BLUE ECONOMY?

As defined by the World Bank, the Blue Economy represents "the sustainable use of ocean resources for economic growth, improved livelihood, and jobs while preserving the health of the ocean."

"AltaSea represents the mission of our foundation, investing in the future of our community in areas that truly make a difference. AltaSea is totally in the interest of Southern California, its economy, the people of the region, and will provide benefits far beyond its local reach."

Martin H. Blank Jr., AltaSea Trustee, CEO and Co-Trustee, The Rosalinde and Arthur Gilbert Foundation

Previous Spread: AltaSea's state-of-the-art campus after renovation **Top:** AltaSea Wharf after renovation **Left:** Berth 58 interior research facility after renovation

CENTER FOR EDUCATION AND ENGAGEMENT BERTH 57

Our fourth warehouse—Berth 57—is designed to be the ocean facility for partner universities and businesses. This 45,000 square foot warehouse will be home to clean marine energies and engineering laboratories for AltaSea's partners, as well as providing flexible education and exhibition spaces throughout. Completion is expected by 2025.

"AltaSea is repurposing obsolete port cargo facilities and infrastructure into a completely new educational and economic engine for Southern California. They sit squarely in the path of progress toward a sustainable future."

Eric Johnson, AltaSea Trustee, Crail-Johnson Foundation Trustee

Above: Entrance to Berth 57 after renovation **Right:** Berth 57 interior laboratories and classrooms after renovation

ACCOMPLISHMENTS TO DATE

2017
50-YEAR LEASE SECURED

2017
LA WATERFRONT STEM NETWORK LAUNCHES

2018
WEST CAMPUS PLANNING BEGINS WITH GENSLER

2020
SOLAR INITIATIVE LAUNCHES: 180,000 SQUARE FOOT SOLAR ARRAY

2021
USC SEAWEED LAB OPENS

2022
OCEAN RESEARCH BARGE OPENS

2022
WEST CAMPUS RENOVATION BEGINS

REACHING THE NEXT GENERATION

As the West Campus comes to life, we will transform 20th Century university education into a 21st Century model, where students have the opportunity to tackle real-world problems, positioning themselves for professional success and the potential of well-paying jobs. AltaSea Ocean Pathways Program (ASOP) is the only program of its kind in California that aims to expand formal and informal ocean STEM learning from a young age to develop a skilled workforce for this emerging sector in the global ocean economy.

Previous Spread: Students from Dana Middle School in San Pedro welcome Dr. Robert Ballard and OET's EV *Nautilus* to AltaSea **Top:** Student from Stephen White Intermediate School examining mollusk larvae **Right:** Campers from Al Wooten Youth Center **Far Right:** Dr.Robert Ballard engages the next generation of ocean explorers

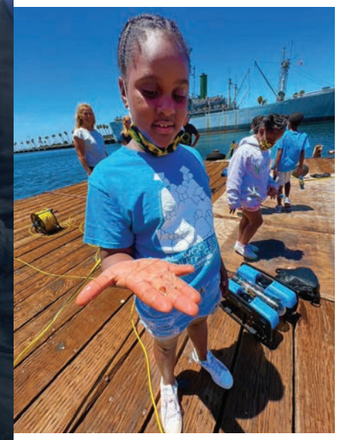
DR. ROBERT BALLARD AND THE OCEAN EXPLORATION TRUST

AltaSea is proud to be the home port for E/V *Nautilus*. The ship is owned by the Ocean Exploration Trust (OET), which Dr. Robert Ballard—most noted for his work in underwater archaeology and geology—founded in 2007. Ballard is best known for the discoveries of the wrecks of the RMS *Titanic* in 1985, the battleship *Bismarck* in 1989, and the aircraft carrier USS *Yorktown* in 1998 in addition to the 1977 discovery of hydrothermal vents. OET is one of AltaSea's original education partners offering ocean technology and exploration programming from the decks of his ship E/V *Nautilus* and within AltaSea warehouses where OET remains as a longtime tenant. No matter where the ship is located worldwide, students will be in live contact with its scientists.

"I think the age of exploration is just beginning, not ending, on our planet. AltaSea is perfectly positioned to be at the center of ocean discovery and we are delighted and proud to call it our home."

Dr. Robert Ballard, Oceanographer, Marine Geologist, and Discoverer of the wreck of the *Titanic*

Top: OET's E/V *Nautilus* **Left:** Students from kindergarten through college join Dr. Robert Ballard at AltaSea's Open House. Photo: Taso Papadakis



"What excites me about AltaSea is how it is creating a pipeline for thousands of jobs in an innovative, emerging industry—the Blue Economy. Through AltaSea, Angelenos will have equitable opportunities to explore 21st Century careers and gain valuable experience protecting the world's oceans."

Carolyn M. Hull, AltaSea Trustee, General Manager, Economic and Workforce Development, City of Los Angeles

Top: Zannat Zannatul leads students from Oscar de la Hoya Animo High School on a wharf tour **Right:** USC graduate student analyzing research data in the Holdfast Aquaculture hatchery lab **Opposite Top:** Student from Al Wooten Youth Center studies a crustacean found living in a kelp bed

UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

In 2015 all United Nations Member States adopted a blueprint for peace and prosperity for people and the planet, for today and into our future. The "2030 Agenda for Sustainable Development" has at its heart 17 goals which are an urgent call to action by all countries—developed and developing—in a global partnership. Working to "preserve oceans" is central to the goals. Therefore AltaSea has embraced seven of these goals as central to its work:

BUILDING EQUITABLE ECONOMIC IMPACT FOR THE BLUE ECONOMY

Los Angeles County's most recently published unemployment rate is about 30% higher than that of the rest of the US. AltaSea believes this challenge can be answered in large measure through the Blue Economy. California's vast coastline is still the state's greatest natural competitive asset. In this regard, the Blue Economy is predicted to double in monetary worth by 2030.

The inherently diverse population of Los Angeles coupled with the serious need for equitable economic growth in the wake of Covid-19 presents an unprecedented need and opportunity to build the regional Blue Economy from the ground up with diversity, equity, and inclusion at the forefront. AltaSea employs a holistic approach to amplify the equitable development of use-inspired, disruptive ocean-focused technologies and to create the capacity and workforce necessary to implement them across the region.

AltaSea's existing and planned programming primarily serves low-income and BIPOC communities in the South Bay and Harbor areas of LA. The Port of Los Angeles is the busiest shipping port in the United States, yet the surrounding communities are some of the most vulnerable in the LA area. Since its founding, AltaSea has maintained a strong commitment to creating equitable economic impacts together with these communities.


BLUE
MARKET
D.D.

WHERE WE ARE GOING

"Never before have we had a better chance to make peace with nature, make peace with the ocean, make peace with the atmosphere, and maybe even make peace among ourselves."

Sylvia Earle, Marine Biologist, Oceanographer, Explorer, Author, and Lecturer

FORWARD LOOKING PARTNERSHIPS

30+ Leading universities operating world-class ocean programs

50+ Founding Supporters

40+ Marine-based small businesses

15+ SoCal community-based organizations serving students of all ages

Previous Spread: A eager shopper visits AltaSea's merchandise store, Blue Market **Above:** Fernando Giron, Zannat Zannatul, and Ian Jacobson from Holdfast Aquaculture **Left:** USC graduate students working at the Nuzhdin Seaweed Lab **Below:** Mason Bell from RCAM Technologies shares recent success with 3D Printing.

The site has attracted champions from both the Blue Economy and ocean protection communities—including corporate, academic, civic, and philanthropic leaders. They all see AltaSea's potential.

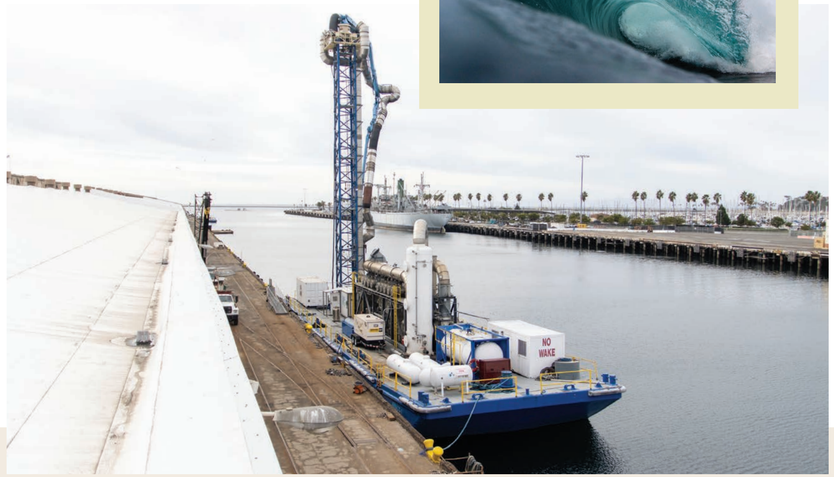
Our vision is to create a dynamic campus where business will fuel science, science will stimulate business, and both will educate and inspire generations to come, fortifying Southern California as the global leader of the emerging Blue Economy.

The need to address climate change and a sustainable future is more urgent than ever. This means the blue future needs you. There are many ways to engage with the promise of AltaSea. The AltaSea team looks forward to talking with you personally about *Our Future is Blue: The Campaign for AltaSea.*

THE ALTASEA FOCUS CLUSTERS

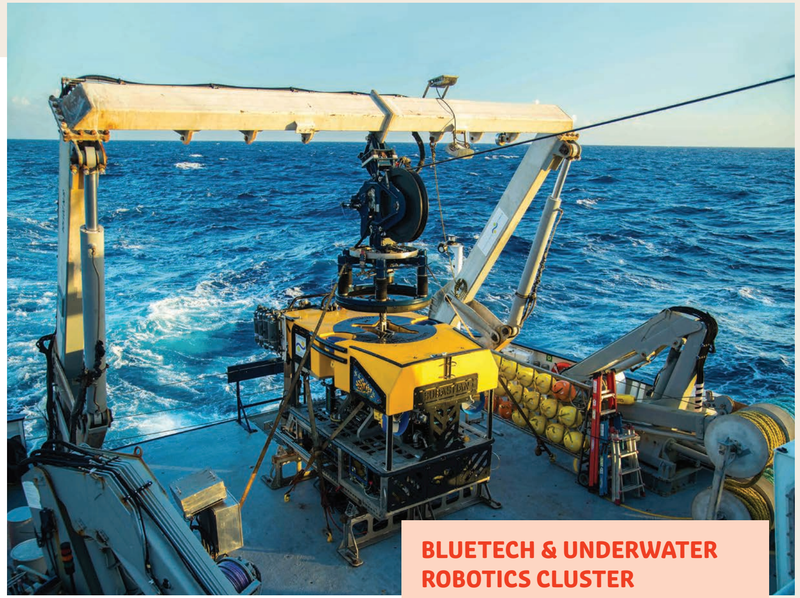
REGENERATIVE AQUACULTURE CLUSTER

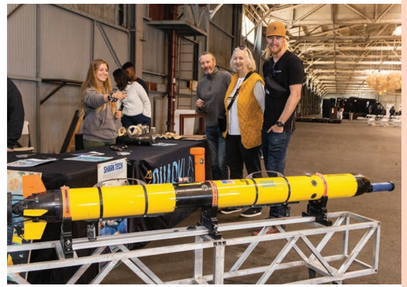
With a global population expected to reach ten billion by 2050, it is imperative that we develop responsible, sustainable food sources that do not deplete natural resources or damage the environment. The Regenerative Aquaculture Cluster at AltaSea is at the forefront of developing ocean-related solutions to the critical challenges of food security and environmental sustainability.



RENEWABLE ENERGY CLUSTER

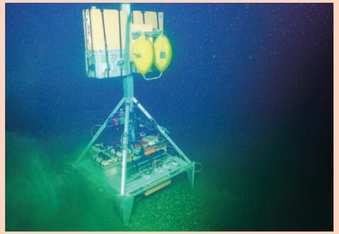
By now, it is clear that greenhouse gas emissions and air pollution are disastrous to earth's ecosystem and human health. The Renewable Energy Cluster focuses on different forms of energy such as kinetic wave energy, algae fuel technologies, carbon capture, and hydrogen. Also, AltaSea is one of the leaders in a statewide net-work (H2 Hub) to bring hydrogen technologies for ports and goods movement to scale in California.





BLUETECH & UNDERWATER ROBOTICS CLUSTER

Our need to find solutions to global challenges such as energy supply and climate change has never been greater. The Blue Tech Cluster at AltaSea advances solutions to a wide range of ocean challenges where experts will utilize underwater robotic technology for remote monitoring, sensing, and ocean exploration.



Above: Mollusks grown by Holdfast Aquaculture hatchery **Top:** Ian Jacobson from Holdfast Aquaculture **Right:** Mollusk nursery **Middle Bottom:** Greener Port Solutions Barge for Carbon Capture **Far Page:** Oceanic Robotics

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"The Pacific Ocean may be the most precious public resource we have, a life source unlike any other on the planet. We became a founding partner of AltaSea because Angelenos can do so much more to protect it, and benefit from it. And what AltaSea has achieved in its first years is nothing short of extraordinary—uniting scientists, business leaders, and educators in creative new partnerships, to turn the Port of LA into the mecca for jobs and discovery and sustainability that it should be. I know it will create even more opportunities for Southern California's workforce in the years to come, and will help make Los Angeles an unquestioned global leader in protecting the earth we share."

Wallis Annenberg, Chairman, President, and CEO, Annenberg Foundation

AltaSea
AT THE PORT OF LOS ANGELES

altasea.org