

Building Blue and Green Tech Talent Through New Industry-Driven Regional Collaborative Grant

September 2025

San Diego and Imperial Counties' blue and green economies are expanding rapidly, driving demand for talent in marine energy, aquaculture, clean energy and water technology. Yet, employers struggle to find workers with the hybrid technical, digital and sustainability skills needed to keep pace. Without targeted upskilling, the region risks slowing industry growth, losing competitiveness and leaving residents without access to quality jobs in the green economy.

To meet this challenge, the San Diego & Imperial Counties Regional Consortium (SDI RC) is partnering with the San Diego Regional EDC, Imperial Valley EDC, Grossmont-Cuyamaca Community College District and San Diego & Imperial Center of Excellence (COE) to empower colleges and employers to address these talent needs.

Together, the organizations secured a **FY2025-26 Industry Driven Regional Collaborative (IDRC) Grant** to launch ***Advancing San Diego and Imperial's Talent Connection – Blue and Green Tech***. The initiative will operate under [Advancing San Diego](#) framework and will align training with employer demand and grow a future-ready workforce.

Why this matters: In San Diego, “Blue Tech” industries encompass over 1,400 companies, 45,000 jobs and \$14 billion in sales, while the clean-tech sector employs nearly 40,000 and generates \$8.8 billion annually. In Imperial County, the region is advancing large-scale renewable energy projects and emerging as “Lithium Valley,” yet faces high unemployment and a lack of skilled labor. The shortage of job-ready candidates threatens industry growth, economic competitiveness and equitable access to high-quality careers across both counties.

Without targeted upskilling, many residents risk job displacement in an already high-cost region. Employers consistently call for training that keeps pace with evolving technologies and industry trends, as well as programs to advance incumbent workers into roles that are more technical.

Community colleges are positioned to meet these needs by aligning curricula with employer demand, expanding access to entry-level pathways and increasing representation of historically marginalized groups. Addressing these gaps will be essential for sustaining the region's leadership in marine and clean technology, driving economic growth, and ensuring that all communities benefit from the transition to a green economy.

The ***Advancing San Diego and Imperial's Talent Connection – Blue and Green Tech*** seeks to address these challenges in the following way:

- Curriculum Co-Development: Partner with industry using the Talent Pipeline Management (TPM) model to align training with current labor market needs.
- Talent Demand Reports: Produce three reports based on employer surveys, interviews and focus groups to define critical blue and green sector roles, skills and knowledge, building on a regional green jobs framework.
- Gap Analysis: COE will assess current community college offerings, employment data, demographics and support services to identify gaps and barriers for adult learners and incumbent workers.
- Program Alignment & Development: Update existing programs and create new certificates, degrees and pathways (credit and noncredit) in marine technology, clean energy, sustainable construction and water systems management.
- Work-Based Learning (WBL): Expand internships, job shadows, apprenticeships and project-based placements, especially with small- and medium-sized employers (over 90% of local businesses), leveraging alternative funding for paid experiences.
- Equity & Outreach: Provide targeted support to historically underserved populations, including adult learners, low-income individuals and students of color, to improve participation, persistence and completion.