



Project Title/Subject: Digital Innovation in Climate Resilience

Project Type: Inter-Regional Project

NPA: Meridian International Center

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Why San Diego:

The San Diego region ranks #1 greenest city in America , #9 U.S. Cleantech Innovation Hub, and #21 global startup ecosystem. San Diego is at the forefront of sustainable and tech-driven solutions. The region's Mediterranean-like climate and diverse natural landscapes, including 70 miles of coastline and a renowned biodiversity hotspot with over 1,500 native plant species, create a rich backdrop for innovative climate resilience strategies. San Diego's climate also supports a robust agricultural sector, with over 5,000 farmers utilizing 250,000 acres to produce high-value crops despite the challenges of high water and land costs. This combination of environmental richness and agricultural expertise positions San Diego as a leader in integrating technology with sustainability. Moreover, San Diego's vibrant ecosystem of research institutions, cleantech companies, and sustainability initiatives offers a fertile ground for pioneering digital solutions. All-in-all, San Diego's commitment to advancing clean technologies and its strong startup culture positions the city as a hub for demonstrating where cutting-edge climate resilience technologies can be developed and tested.

Innovation in Climate Change

CleanTech San Diego

www.cleantechsandiego.org

CleanTech San Diego is a member organization that aims to stimulate innovation and advance the adoption of clean technologies and sustainable industry practices to augment the cleantech incubation cluster in San Diego. They accomplish this through a series of programs including education and outreach, policy advocacy and leadership opportunities. Their membership spans business and financial leaders, academic and research institutions, and government and non-profit organizations.

Meeting Focus: Learn how CleanTech San Diego is fostering a platform to accelerate clean technology innovation and how energy entrepreneurs are leveraging digital technologies in this field. Engage in discussions about the impact of digital solutions on the advancement and implementation of sustainable technologies.

Sempra Energies

www.sempra.com/

Sempra U.S. Gas & Power is a leading developer of innovative energy solutions using sustainable fuels. Formed in 2012 through a merger of Sempra Energy's U.S. operations outside of its California utilities, Sempra U.S. Gas & Power develops renewable power facilities and natural gas infrastructure, with a commitment to environmental stewardship and community partnerships. Sempra Energy, based in San Diego, is a Fortune 500 energy services holding company with 2012 revenues of approximately \$10 billion. The Sempra Energy companies' nearly 17,000 employees serve more than 31 million consumers worldwide.

Meeting focus: Explore how Sempra Energies is developing and managing energy solutions that use sustainable fuels. Gain insights into the company's strategies for combating climate change from a corporate perspective.

BHE Renewables - Imperial Valley Geothermal Area

<https://www.bherenewables.com/projects/geothermal>

The Imperial Valley Geothermal Project consists of 10 generating plants in the Salton Sea, in Southern California's Imperial Valley. The project has a combined capacity of approximately 327 net megawatts. Geothermal plants can generate emissions-free, renewable electricity constantly using the Earth's natural heat to generate clean energy, unlike solar panels or wind turbines. To meet California's energy goals by 2045, geothermal energy is rising in popularity. A meeting in

this region may be supported by a driving tour, accompanied by a representative to discuss the growing and evolving renewable energy movement in California and the U.S.

Meeting Focus: Participate in a workshop focused on the technological innovations driving geothermal energy. Discuss how these advancements contribute to California's climate goals and explore their potential for enhancing climate resilience.

Sustainable Energy & Green Building Solutions Tenaska Imperial Solar
<https://www.tenaska.com/>

As California electricity providers strive to meet the requirements of the state's Renewables Portfolio Standard, Tenaska has been developing solar energy projects in Imperial County. Tenaska Solar Ventures, LLC (TSV) manages solar projects in North America. TSV has several utility-scale projects in Imperial County in Southern California. Current projects range from 130 to 160 megawatts (MW) and are among the largest solar generating facilities in California powering almost 100,000 homes. Tenaska Imperial Solar Energy Center South was the first large-scale solar project to begin construction in Imperial County, and it is the first large-scale solar project to transmit power from the Imperial Valley via San Diego Gas & Electric's (SDG&E) new Sunrise Powerlink transmission line. It is also one of the largest commercially financed solar projects in the U.S. to date.

Meeting Focus: Delve into the solar projects managed by Tenaska Solar Ventures (TSV) to understand their role in advancing clean and sustainable energy. Discuss how solar energy projects are addressing global climate challenges and contributing to a more sustainable future.

Nonprofits Combating Climate Change

Climate Action Campaign

<https://www.climateactioncampaign.org/mission>

Climate Action Campaign's mission is to stop the climate crisis through effective policy action. Climate Action Campaign (CAC) was founded in San Diego in 2015 by their Executive Director, Nicole Capretz to ensure the City of San Diego's draft landmark Climate Action Plan (CAP) became law, which Nicole authored while working in the Mayor's office. A broad-based and non-traditional coalition of elected officials, businesses, community planning groups, civic organizations, labor unions, and environmental and social justice organizations emerged, unified behind the trailblazing plan. Through the lens of equity and justice, they are fighting for a Zero Carbon future with all-electric homes, world class transit, resiliency, 100% clean energy, and bike-able, walkable neighborhoods. They believe change happens from the group up.

Meeting Focus: Learn about CAC's strategies for addressing the climate crisis through effective policy action and the extensive coalitions formed under its leadership. Engage in discussions on how civil society is shaping local government agendas and driving change on climate-related issues.

The Maritime Alliance

<http://www.themaritimealliance.org/>

The Maritime Alliance (TMA) is a leading non-profit industry association dedicated to advancing the San Diego maritime technology sector. As a cluster organizer, TMA focuses on promoting innovation and economic development within the Blue Economy. Their mission centers on fostering BlueTech and advancing sustainable, science-based practices within ocean and water industries through education, policy advocacy, and technology resources.

Meeting Focus: Explore how The Maritime Alliance facilitates collaboration between civil society and international organizations to tackle climate change issues. Discuss the role of these partnerships in promoting sustainable practices and innovations within the maritime sector. Gain insights into how the BlueTech community is working together to address environmental challenges and advance climate resilience in ocean and water industries.

Grid Alternatives

www.gridalternatives.org

Grid Alternatives is a non-profit solar installer that leads teams of volunteers and job trainees to install solar electric systems exclusively for low-income homeowners. Through their core program, the Solar Affordable Housing Program, they have installed more than 12 mega-watts of clean, renewable power for over 4,000 families, preventing the release of 340,000 tons of greenhouse gasses over the systems' lifetimes and providing more than \$110 million in energy cost savings. More than 15,000 volunteers and job trainees have also received hands-on solar installation experience to-date.

Meeting Focus: Examine the social, economic, and environmental impacts of solar power programs in the United States. Learn about Grid Alternatives' strategies for mobilizing volunteer networks and targeting communities to expand access to affordable solar energy.

Education Resources

University of California San Diego, Adaptation and Solutions
[Adaptation and Solutions \(ucsd.edu\)](http://adaptationandolutions.ucsd.edu)

The University of California San Diego, Adaptation and Solutions program supports positive change in the future through social engagement and offers mitigation strategies for the current negative impacts of climate change. This research theme encompasses energy alternatives, infrastructure, engineering, urban planning, sustainable food production and green industry. In addition, sociologists, psychologists, artists and communications researchers focus on the social implications of adaptation.

StartBlue

StartBlue, an accelerator program by the Scripps Institution of Oceanography and the Rady School of Management, supports the development of advanced science and engineering startups focused on ocean-related challenges. The program aims to drive innovation and address critical issues affecting ocean ecosystems through entrepreneurial ventures.

Center for Energy Research

The Center for Energy Research at UC San Diego is dedicated to solving society's energy supply challenges through interdisciplinary research. The center focuses on a range of energy solutions, including fusion energy, renewable resources, and advanced technologies to meet growing energy demands.

UC San Diego Deep Decarbonization Initiative

The Deep Decarbonization Initiative at UC San Diego aims to guide the global economy towards net-zero carbon emissions. The initiative focuses on understanding the transition from existing energy systems to new, sustainable ones and the pace at which these changes occur, providing valuable insights for policymakers and investors.

Meeting Focus: Explore UC San Diego's comprehensive approach to addressing climate change through its Adaptation and Solutions program, which integrates research on energy alternatives, infrastructure, and sustainable practices with social implications. Engage with its multiple start ups and incubator hubs to learn more about the research and digital tools students are using to build resilience against climate change.

San Diego State University, AI and Climate Change - Professor Sam Shen

<http://shen.sdsu.edu/>

Professor Sam Shen, a distinguished expert in Mathematics and Statistics at San Diego State University, leads research on utilizing AI to address environmental issues. His work includes modeling geophysical processes and developing 4-dimensional data visualization tools to enhance atmospheric sciences and AI applications in climate research.

Meeting Focus: Examine how Professor Sam Shen is applying AI to model geophysical processes and tackle climate change. Discuss the development of advanced data visualization tools and the role of AI in improving climate science and extreme weather research.

University of San Diego, San Diego Regional Climate Collaborative Hub

<https://www.sandiego.edu/soles/centers-and-institutes/nonprofit-institute/signature-programs/climate-collaborative/>

Established in 2011, the San Diego Regional Climate Collaborative is a network of public agencies focused on advancing climate solutions to mitigate greenhouse gas emissions and adapt to climate impacts. The Climate Collaborative acts as a resilience hub, addressing energy efficiency, coastal resilience, climate adaptation, and water issues through collaborative and cross-jurisdictional efforts.

Meeting Focus: Explore the San Diego Regional Climate Collaborative's role in advancing climate change solutions across the San Diego region. Discuss its focus areas of energy efficiency, coastal resilience, climate adaptation, and water management, and how collaborative partnerships are driving regional resilience and sustainability efforts.

Government Resources

City of San Diego Our Climate Our Future

<https://www.sandiego.gov/climatefuture>

The City of San Diego's "Our Climate, Our Future" initiative is a plan to achieve net zero greenhouse gas emissions citywide by 2035. This initiative focuses on equitable and sustainable solutions, aiming to enhance economic opportunities, protect vulnerable communities, and improve both urban and natural environments. Key strategies include increasing the use of renewable energy, expanding green infrastructure, promoting sustainable transportation, and building climate resilience. The plan underscores the city's commitment to addressing climate change while ensuring a healthy, thriving future for all residents.

Meeting Focus: Explore how the "Our Climate, Our Future" initiative collaborates between local governments, civil society, and nongovernmental organizations in tackling climate change. Understand the implementation of climate policies and initiatives in San Diego and how different stakeholders work together to achieve these goals.

United States Environmental Protection Agency (EPA) – Border Liaison Office, San Diego - Border 2025

<https://www.epa.gov/usmexicoborder/what-border-2025>

Established in 1994, the EPA Border Liaison Office in San Diego supports binational efforts to address environmental issues along the U.S.-Mexico border. The U.S.-Mexico Environmental Program: Border 2025 is a five-year initiative (2021-2025) aimed at protecting the environment and public health in the border region. The program focuses on energy efficiency, reducing air pollution, and improving access to clean water, while engaging with border stakeholders for long-term environmental conservation.

Meeting focus: Examine the goals of the Border 2025 initiative, particularly in relation to energy efficiency, air pollution reduction, and clean water access. Discuss the binational perspective on environmental protection and explore ways to enhance environmental initiatives with neighboring border countries.

Department of Energy - San Diego Regional Clean Cities Coalition

<https://cleancities.energy.gov/coalitions/san-diego>

The San Diego Regional Clean Cities Coalition works with vehicle fleets, fuel providers, community leaders, and other stakeholders to identify community-driven choices that save energy and promote the use of alternative fuels and advanced vehicle technologies in transportation.

Meeting Focus: Learn how the federal government works with the local government to create policies and advocate partnerships to support sustainable transportation solutions and energy efficiency.

Home Hospitality can be offered for the group, as well as a volunteer activity (Saturdays only)

San Diego Zoo

[San Diego Zoo | Home page](#)

Price: \$68-\$79 for one Adult Ticket

The 100-acre (40-hectare) Zoo is home to over 3,700 rare and endangered animals representing more than 650 species and subspecies, and a prominent botanical collection with more than 700,000 exotic plants. It is located just north of downtown San Diego in Balboa Park.

Harbor Cruise

[Flagship Cruises & Events | San Diego, California \(flagshipsd.com\)](#)

Price: Starting at \$24.75 for one Adult Ticket for one-hour tour

Their deluxe tour covers it all: Harbor and Shelter Islands, Point Loma, Cabrillo National Monument, North Island Naval Air Station, the Submarine Base, as well as the Coronado Bridge, and much more.

Balboa Park

[www.balboapark.org](#)

Home to 15 major museums, renowned performing arts venues, beautiful gardens and the San Diego Zoo, Balboa Park has an ever-changing calendar of museum exhibitions, plays, musicals, concerts, and classes—all in the beautiful and timeless setting of this must-see San Diego attraction.

Coronado

Consistently voted one of America's finest beaches by The Travel Channel, Coronado's beaches glisten year round due to the mineral Mica in the sand, while gentle waves caress the shoreline. From the shores of Silver Strand State Beach to the tip of the Coronado Municipal Beach, you'll find plenty of wide open sand, gentle waves and gorgeous views.

SeaWorld San Diego

[SeaWorld San Diego Theme Park - Aquarium, Zoo & Theme Park in California](#)

Price: Starting at \$71.99 for one single day Adult Ticket

Come celebrate the wonders of the sea at SeaWorld San Diego. Experience the Shamu show, One Ocean, and thrilling rides like Journey To Atlantis, Shipwreck Rapids and Wild Arctic. Feed and touch dolphins and get up-close to beluga whales, polar bears, sharks and penguins. Enjoy fascinating aquariums and exotic birds from around the world. Then dive into the world of sea turtles at the all-new Turtle Reef attraction.