Public Policy: 
*Energy, Carbon, Water, and Resource Efficient Design*
Adopted November 15, 2019

Related National AIA Policies (May 2019)
1. Sustainable Architectural Practice and Sustainability
2. Energy and Carbon in the Built Environment
3. Materials and the Built Environment
4. Resilience and Adaptation
5. Design for Human Health in the Built Environment
6. Land Use and Environmental Planning
7. Livable Communities
8. AIA Resolution for Urgent and Sustained Climate Action (September 2019)
9. AIA Design Excellence Framework (September 2019)

Related AIA CA Policies
1. Livable, Resilient Communities (under review/development by Urban Design Committee)

Policy Statement
The American Institute of Architects California (AIA CA) recognizes that our planet is experiencing an urgent climate emergency. We believe that California should continue to elevate its position as a global leader in addressing the grave challenges of advancing climate change and natural resource depletion. Since buildings contribute more than 40% of the greenhouse gas emissions that lead to climate change, rapid reduction of these emissions is critical to ensuring a safe, resilient future for California and the world. By virtue of their central role in the design and construction process, architects are well-positioned to understand and address this challenge. Architects have both the opportunity and responsibility to protect and enhance the delicate interface between the natural and the built environment, while also stewarding our precious and limited resources.

AIA CA encourages all architects and related professionals to aggressively implement energy, carbon, water and resource-efficient design strategies and technologies.

AIA CA believes for environmental responsibility and the sustainable use of natural resources. It supports renewable energy sources, water reuse and advocates for building code development, and regulation toward that end.

Policy Background
California is a global leader in energy efficient design and in that light, AIA CA endorses the following principles regarding energy, carbon, water, and resource efficient design. These principles will be used to define AIA CA’s efforts in advocating for policies, laws, codes and regulations that support energy, carbon, water, and resource efficient design, construction and operation.

AIA CA further acknowledges that the architectural profession must take a leadership position in the development of energy, carbon, water, and resource related practices and policies that will lead to a viable future for all Californians.
PRINCIPLE 1: Take action to Support Rapid De-Carbonization of the Built Environment
AIA CA believes that effectively addressing the causes and impacts of climate change is one of the greatest challenges of our time. We recommend that the State of California move quickly to:

- Adopt the ZERO Code for California as soon as possible. We recommend this code apply to all new and retrofit commercial and multifamily buildings in the state to meet a goal of Net Zero Carbon, by utilizing both on-site and off-site grid-based renewable energy
- Support the electrification of all new and retrofit buildings in the state, phasing out the use of carbon-emitting natural gas and other fossil fuel sources as quickly as possible
- Encourage incentivizing state and local public utilities to rapidly increase grid-based renewable energy resources, phasing out natural gas electricity generation as quickly as possible
- Develop new financing mechanisms, including low or no-interest financing, to fund deep energy retrofits of the existing building stock

PRINCIPLE 2: Reduce Embodied Carbon
AIA CA recognizes that reducing the operational carbon emissions of our buildings is only part of the climate change challenge. We must also reduce the carbon emissions that are generated by the manufacturing, transport and assembly of building materials. We recommend that the State of California move quickly to:

- Incentivize adaptive reuse of existing building stock, thus “harvesting” existing built resources and their embodied carbon, while in many cases also preserving the cultural heritage of our communities
- Support rapid research and development of a new generation of building materials and systems that radically reduce energy consumption, greenhouse gas emissions, and resource depletion during their implementation and operation; materials of particular concern include cement and concrete products, steel and aluminum
- Promote rapid advancement of carbon-neutral pre-fabrication technologies

PRINCIPLE 3: Reduce Potable Water Waste
AIA CA recognizes that the availability of a secure, safe, and affordable water supply is already an issue for California and will become more so with climate change. We recognize the need to reduce the water footprint associated with the built environment, and recommend that the State move quickly to:

- Support and incentivize development of technologies and policies that allow the capture, treatment, and onsite reuse of water at every scale, revising current policies that make water reuse unaffordable
- Educate the public about potable vs non-potable water use, emphasizing the need to conserve potable water for drinking only

PRINCIPLE 4: Educate Clients, Policymakers and Communities
AIA CA advocates for legislation and regulations that encourage decisions based upon life cycle cost, and includes the societal, business, financial, institutional and environmental benefits of:

- Encouraging energy conservation, renewable energy systems, sustainable building practices, operational efficiency, and environmental stewardship
- Reducing “upstream” environmental costs, being cognizant of low energy and low waste manufacturing, distribution and implementation methods
- Reducing “downstream” environmental costs to reduce and eliminate waste
- Recognizing, evaluating, and mitigating financial risks associated with climate change, including responses to extreme weather events, fire, drought, etc.
PRINCIPLE 5: Support Innovative Practice, Policymaking and Implementation Strategies
AIA CA advocates innovation in policy, technology and implementation toward decarbonization and supports legislation that:

• Provides informed decision-making to implement energy, carbon, water, and resource efficient development practices
• Introduces metrics that track environmental, financial, and quality of life impacts and benefits
• Inspires a culture of collaboration, innovation and implementation throughout the planning, design, construction, and building operation processes, and sharing of best practices
• Advocates for public/private partnership that leverages investment toward these objectives
• Supports and incentivizes the development and implementation of education and training programs which prepare architects, other design and construction professionals, and labor forces to effectively address the challenges of implementing energy, water, and resource efficient design, construction, operation, and maintenance of buildings
• Promotes the power of design to influence human behavior in positive ways