



Architectural Design Challenge

SHAPING THE FUTURE OF WATER USE AT HOME



Apply Now

An international design competition to reimagine water-efficient living spaces.

Applications Open Thru December 5, 2025 | Challenge Runs Dec 11, 2025–Feb 8, 2026







OVERVIEW



The **Shaping the Future of Water Use at Home** competition invites architects, engineers, and designers to create innovative, water-efficient living spaces. By reimagining residential design, participants will propose scalable solutions that optimize water use while maintaining comfort and convenience.

This global challenge seeks practical, implementable designs that align with **UN Sustainable Development Goal 6**, emphasizing sustainability, resilience, and efficiency. Solutions must address both **indoor and outdoor water use** and be adaptable within the next **1-3 years**, ensuring a direct path to real-world impact.

Professionals and students will explore **high-efficiency fixtures, smart water management systems, landscaping solutions, and low-carbon designs** to minimize water and energy waste. Winning concepts will seamlessly integrate with daily routines to make conservation effortless and intuitive.

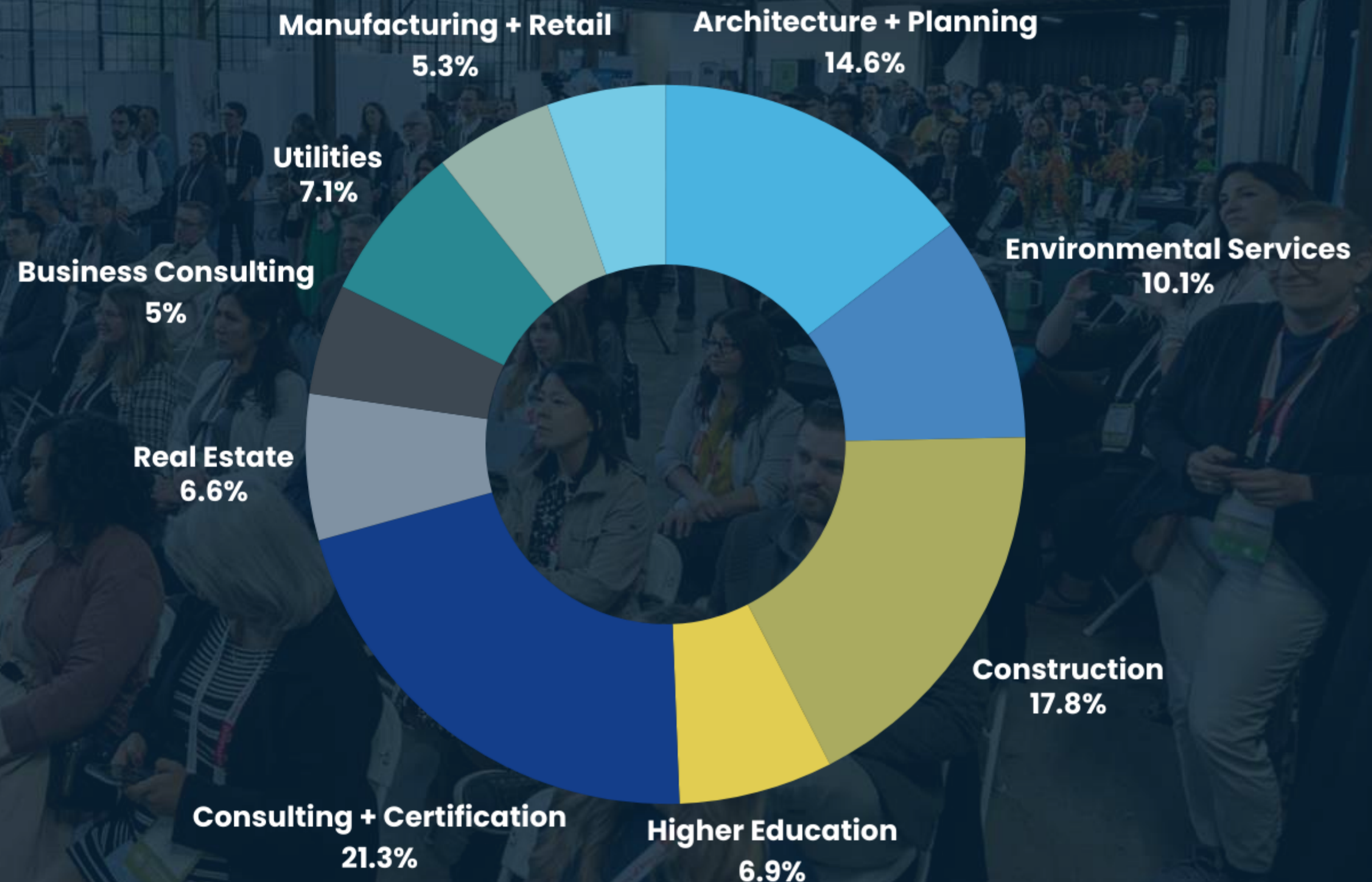
With cash prizes and industry recognition, the competition will spotlight emerging and professional designers **showcasing cutting-edge solutions** in and outside homes. The initiative will foster collaboration between thought leaders, startups, and other innovators committed to a sustainable future.

OUR AUDIENCE

Grow your **visibility** through the Challenge

This design challenges unite members of our community, including **architects, engineers, startups, and emerging professionals**, to develop and celebrate scalable, water-efficient, and smart home solutions aligned with net-zero goals.

Moreover, with **industry leaders guiding and judging** the process, it offers opportunities for **cross-sector collaboration** to drive practical innovations.



KEY FEATURES

This competition seeks **practical, scalable solutions** that reduce water use intensity while replenishing local sources and accelerating progress toward a **water-positive future**.

Participants will develop implementable designs that seamlessly integrate efficiency, technology, and sustainability — from **water-saving fixtures and smart home systems** to **smarter irrigation strategies for lawns and gardens** — making conservation not only effortless and desirable but positively irresistible.

- Innovative Water-Efficient Designs
- Market-Ready, Scalable Solutions
- Integration of Smart Home Technology
- Landscaping and Nature-Based Solutions
- Passive and Net Zero Design Principles

- Solutions for New and Retrofit Homes
- Industry Leaders as Judges
- Cash Prizes for Top Entries
- Students & Professionals
- Global Participation & Recognition

Supporters include **Accelerate Resilience LA, East Bay Municipal Utility District, Los Angeles Department of Water and Power, Metropolitan Water District**, the **World Business Council for Sustainable Development**, and other community members, all committed to driving sustainable innovation.

SAMPLE DESIGN PROMPTS – INDOOR

How can your design reduce indoor water use to 50 liters per person per day, particularly in kitchens and bathrooms?

Prioritize ultra-low-flow fixtures, recirculating hot water systems, and smart controls that balance efficiency with ease of use. Explore greywater reuse strategies?

What intuitive design features or technologies could trigger behavior change by making users aware of their water consumption in real time?

Incorporate feedback systems, gamified interfaces, or app integrations that promote awareness and habit formation?

How might you incorporate smart leak detection and shutoff systems to prevent water loss and build trust in low-use designs?

Propose solutions that work across both new builds and retrofits, with minimal disruption and high user confidence?

What passive design principles (orientation, ventilation, thermal mass) can be applied to reduce reliance on water-cooled systems or evaporative cooling?

Align water strategies with passive architectural approaches that simultaneously reduce energy and water demand?

In what ways can your design integrate household appliances (e.g., dishwashers, washing machines) that use minimal water while supporting cold-water cleaning and auto-dosing technologies?

Identify appliance strategies that align with shifting consumer behaviors and emerging water-efficient product ecosystems?

DESIGN PROMPTS – OUTDOOR

How might your design integrate low-maintenance, climate-appropriate landscaping that requires little to no irrigation, while still delivering aesthetic, ecosystem, and community appeal?

Explore watershed-wise landscaping with native and climate-appropriate plants, xeriscaping strategies, and shaded outdoor zones that capture stormwater, provide cooling, reduce water demand, and enhance livability?

What methods can be incorporated to retain, filter, and reuse rainwater and stormwater onsite for non-potable purposes such as irrigation or toilet flushing?

Think about integrating bioswales, aboveground or underground cisterns, rain gardens, or permeable hardscaping into your site strategies. Consider linking these systems to sprinkler systems for wildfire protection?

How can your site plan contribute to replenishing local aquifers and/or mitigating runoff, especially in urban or wildfire-affected areas?

Incorporate infiltration techniques such as gravel beds, vegetated swales, or green roofs that support water infiltration and storage?

What role could edible landscaping or regenerative gardens play in reducing household water use while supporting food resilience and biodiversity?

Design water-efficient, food-producing landscapes and pollinator-friendly gardens that strengthen sustainability and community health?

How can outdoor spaces be designed to educate residents and visitors about water efficiency and inspire conservation behaviors through interactive or visible cues?

Include elements such as signage, smart irrigation visualizations, or visible storage tanks with real-time data to make water conservation tangible ... and even irresistible?

KEY DATES & DETAILS

Applications Open

September 24, 2025

Applications Close

December 5, 2025

Challenge Launch

December 11, 2025

Submissions Close

February 8, 2026

Finalists Announced

March 23, 2026

Winners Announced

May 28, 2026

(California Green Building Conference)

Prizes

Six prizes (three professional, three student) totaling **\$50,000**, with the professional and student first-place winners receiving **\$15,000** each.

Eligibility

Open to architects, engineers, landscape architects, industrial designers, and undergraduate/graduate students worldwide.

Key Design Goals

- Achieve a benchmark of 50 liters per person per day for indoor water use.
- Integrate water- and energy-efficient appliances, fixtures, and smart home technologies.
- Support resilient, net-zero-carbon, and fire-resistant home design principles.



Architectural Design Challenge

SHAPING THE FUTURE OF WATER USE AT HOME



LET'S GO!

USGBC-CA.org/Water-ADC



Apply Now