







Mission

HydraBox is a portable, atmospheric water generator designed to unlock **clean, drinkable water directly from air** — anytime, anywhere. Our mission is to deliver water independence to remote, off-grid, and climate-challenged communities worldwide.

The Problem

-  **2+ billion** people lack access to safe drinking water.
-  Infrastructure is costly, centralized, and slow to deploy.
-  Climate change and population growth are intensifying scarcity.
-  Existing AWGs are bulky, power-hungry, and not field-ready.

The HydraBox Solution

A **thermos-sized, solar-powered AWG** that condenses atmospheric moisture into safe drinking water without plumbing or infrastructure.

- ✓ **Portable:** Backpack-sized and deployable in minutes.
- ✓ **Efficient:** Solar, battery, or grid-powered for off-grid use.
- ✓ **Clean:** Built-in carbon + UV-C purification.

Applications

- Humanitarian aid & disaster relief
- WASH & rural development projects
- Military & field operations
- Outdoor, expedition, and research use
- Consumer off-grid water solutions

Partnership Opportunities

We're seeking collaborations with universities, investors, NGOs, and field organizations to pilot HydraBox and accelerate development in real-world environments.

Core Technology

HydraBox integrates a **multi-stage water-harvesting system** to maximize yield per watt:

- **Thermoelectric Condensation (TEC):** Peltier modules cool surfaces to condense vapor.
- **Adsorptive Sorbents:** Silica gel / MOFs capture humidity and release it with low heat.
- **Vapor Compression Cycle:** Micro-compressors accelerate condensation for higher efficiency.
- **Capillary Filtration:** Moves water passively without pumps.
- **Hybrid Power:** Solar, battery, or grid compatible.
- **Multi-Stage Purification:** Activated carbon + UV-C ensure potable water output.

Development Roadmap

- **2025 Q4:** Finalize V1 prototype (200–500 mL/day)
- **2026 Q1:** Field pilots with NGOs & universities
- **2026 Q2:** File full patent & pre-manufacturing
- **2026 Q3-Q4:** Commercial launch & B2B deployment

About Hydratech Industries

Founded in California, Hydratech Industries is pioneering decentralized water solutions with a mission to make **water independence a universal human right** — one drop at a time.

 **Website:** hydratechindustries.org

 **Contact:** partnerships@hydratechindustries.org

 **Founder:** Izaeyah De La Cerda — Founder & CEO

