AIRVODA

FROM PROOF TO PLATFORM

We started with a working machine. We're ending with a better one.

Two systems, one direction: toward atmospheric water generation that's simpler, cheaper, and always on.

2024

AV007

Desiccant AWG. Built to prove the physics. Still running today.

2026

AV008X

Government-backed hybrid trial. Staged MOF adsorption, increasing MOF's role in the cycle.

AHEAD

MOF Platform

The same low-temperature MOF chemistry, applied beyond water — to industrial dehumidification at scale.

PROVEN, THEN IMPROVED

AV007, our first full-scale unit, answered the question: can we reliably pull clean water from air, on-site, without infrastructure? Running continuously since it came online in 2024 says yes.

AV008X answers the second: can we do it with less energy, lower regeneration temperatures, and a material Australia can manufacture itself? That trial is underway now, backed by Australian Government funding.

Real Data Collection and Digital Twin Verification Model

- Establishing the baseline for future designs and modification.
- Ability to model and tune system performance across different geographic locations.

Engineered for remote communities

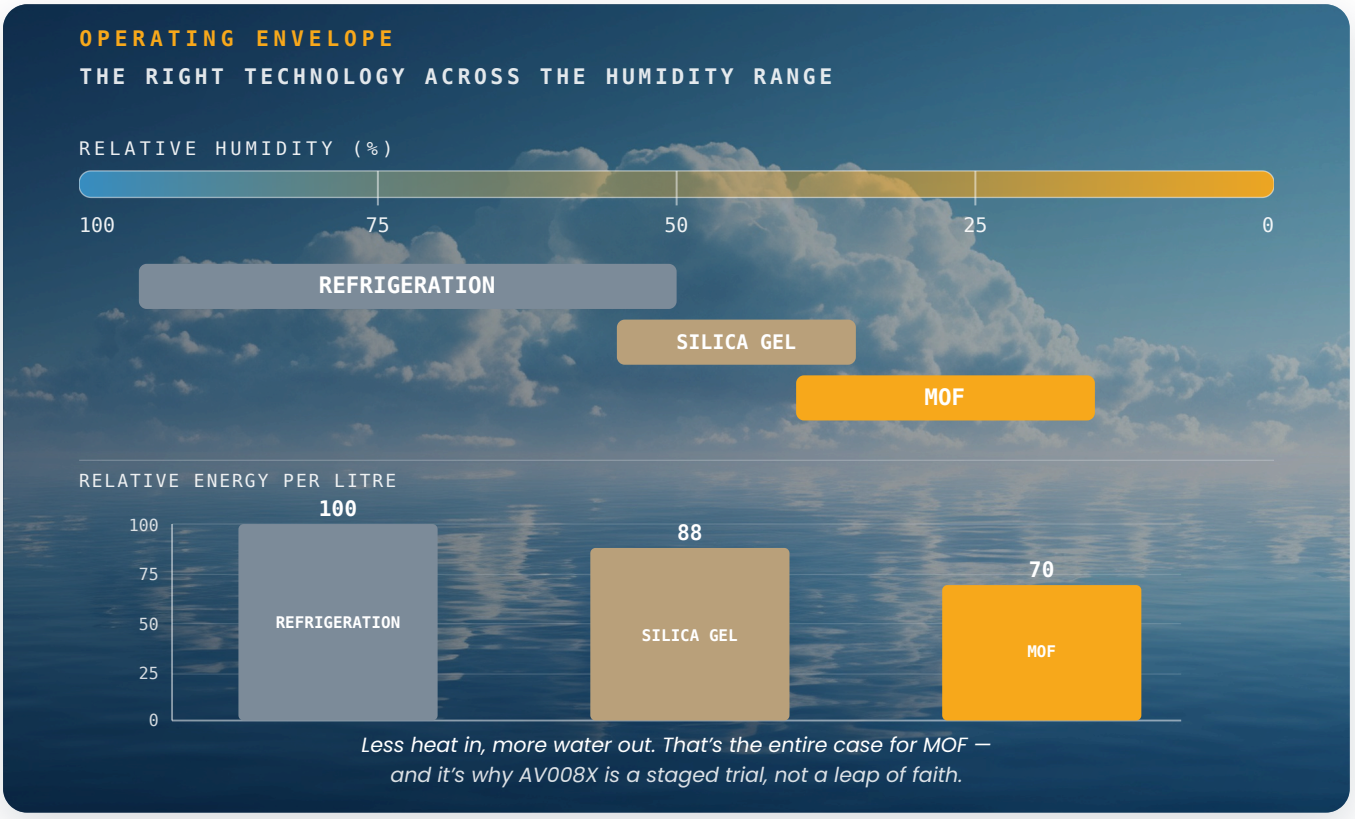
Decentralised water supply for vulnerable regions where trucking and bores fall short.

WHY WE'RE MOVING TO MOF CHEMISTRY

Desiccant proved the concept. MOF sharpens it.

Same underlying job — capturing water from air — but a MOF (metal-organic framework) is an engineered sorbent with an enormous internal surface area, so it does the work at a fraction of the energy cost.

	INCUMBENT **Desiccant** Silica Gel	NEXT **MOF** Advanced sorbent
REGENERATION	90–120 °C	**60–70 °C**
UPTAKE	Moderate	**Highest, incl. arid conditions**
ROLE IN AV008X	Proven baseline stage	**Increasing share of the cycle**



Less heat in, more water out. That's the entire case for MOF — and it's why AV008X is a staged trial, not a leap of faith.

ONE SORBENT, A LARGER FUTURE

AV008X is proving MOF's work for decentralised water.

We believe the same low-temperature chemistry has a second life: keeping moisture out of industrial spaces that can't afford the energy cost of doing it the old way.

Water is where we're proving it. Dehumidification is where we see it going.

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