



OPEN-SOURCE TECHNOLOGY FOR SUSTAINABLE OPPORTUNITIES (OTSO)

Mission

OTSO exists to reduce planetary risk by ensuring that decisions about molecular hydrogen and climate-critical energy systems are constrained by the most current, verifiable physical evidence available.

The Problem

Global energy and climate decisions are frequently made using outdated references, fragmented information, or selectively curated narratives. In Earth systems, time lag equals damage. Atmospheric chemistry, ocean warming, and emissions accumulation do not wait for policy cycles, market optimism, or institutional consensus.

What OTSO Does

OTSO operates as a continuously refreshed verification layer for hydrogen and energy-transition knowledge by republishing pages daily to surface some of the youngest available references, prioritising OEM, scientific, and institutional sources, and referring age, origin, and update cadence explicit. **OTSO does not generate opinion; it exposes current reality.**

Why It Matters

Hydrogen and energy-transition pathways interact directly with atmospheric emissions, resource extraction, infrastructure lock-in, and long-lived environmental consequences. Decisions made using stale or selective information propagate irreversible system-level effects. **OTSO** reduces this risk by compressing the gap between knowledge availability and decision action.

Who It Serves

OTSO serves active scientists, engineers, regulators, policymakers, researchers, educators, investors, and infrastructure planners whose decisions materially affect Earth systems. By providing a shared, up-to-date factual baseline, **OTSO** enables accountability across disciplines.

Guiding Principle

Earth responds to physics, not narratives. **OTSO** exists to keep decision-making aligned with that constraint.

In a nutshell

OTSO reduces irreversible environmental risk by ensuring that molecular hydrogen and energy decisions are governed by the freshest available physical evidence, not delayed or distorted information.

- [Robert Cole Basford](#) (UNSW Alumni)