

Solas Energy® provides independent expertise across the hydrogen value chain — from project concept to deployment. With proven experience in permitting, stakeholder engagement, technical advisory, and regulatory frameworks, we help clients navigate complexity with clarity, trusted insights, and actionable strategies. Our work spans hydrogen production, storage, transport, refueling, and end-use applications, supporting projects of any scale.



Expert Advisory
& Market Insights



Fleet Decarbonization
Strategy



Project Feasibility
& Assessment



Development &
Regulatory Support



Canadian Hydrogen Association | Association Canadienne de L'hydrogène

Solas Energy is an active participant in Hydrogen Alberta, a subset of CHA (Canadian Hydrogen Association)

Permitting & Regulatory Strategy

- Permitting and regulatory matrices (municipal, provincial, federal, Indigenous)
- Roadmaps and flowcharts for approvals
- Permit applications (building, facility alteration, pressure equipment)
- Independent code and fire compliance reviews

Stakeholder Engagement & Consultation

- Stakeholder mapping and consultation strategies
- Information packages and engagement materials
- Stakeholder communications database management
- Community and Indigenous engagement support

Project Planning & Management

- Integrated project schedules and interdependencies
- Permitting and stakeholder strategy memos
- Risk matrices and mitigation strategies
- Document control, change management, reporting

Engineering & Owner's Advisory

- Technical support for building permits
- Engineering report preparation/authentication
- Mechanical/electrical advisory with partners
- Owner's engineering and due diligence

Safety & Risk Management

- Hazard and quantitative risk assessments
- Emergency response and safety code compliance
- Integration of CSA, ISO, SAE, NFPA standards
- Risk mitigation for permitting, construction, operations

Technology & Market Advisory

- Evaluation of production technologies (PEM, AEL, ATR+CCS)
- Storage and transport systems (tube trailers, cryogenic, LOHC)
- Refueling station design (H35, H70, modular, mobile)
- Fuel cell, HICE, and dual-fuel system advisory

Carbon Intensity & Life Cycle Analysis

- CI calculations for hydrogen pathways under LCFS, and other regulatory frameworks
- Life cycle assessment (LCA) for GHG, water, and land use impacts
- Integration of CI results into permitting, financing, and offtake agreements

Policy & Guidebook Development

- Authoring hydrogen refueling station guidebooks
- Practical translation of codes, standards, and policies
- Advisory to governments, associations, and utilities

We authored the Alberta Hydrogen Refuelling Station Guidebook

Feasibility & Site Selection

- Site selection for hydrogen production and stations
- Integrated feasibility and economic assessments
- Early-stage project concept development

"Solas Energy has been a key partner in project site selection and feasibility, enhancing our efforts to guide heavy industry through the great green upgrade. The Solas Energy team is highly responsive, with the expertise needed to move forward in the rapidly evolving hydrogen market."

CEO and Co-Founder
Ambient Fuels, LLC

Contact Us Today to Learn More

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*Navigating Complexity.
Powering the
Hydrogen Economy.*

*Innovative.
Comprehensive.
Trusted.*

