VENUZA
VENUZA FUTURE ENERGY LTD

Stepping into Year 3:
Venuza's Hydrogen Progress + Your Invitation

Building the Hydrogen Future, Together

Our Gratitude and Vision

Dear Valued Stakeholders, Partners, Funders, Collaborators, and Future Teammates,

Today, 11 February 2026, Venuza Future Energy Ltd steps into its 3rd year from our base in Aberdeen, Scotland. We are profoundly grateful to each of you – our stakeholders who believed early, funders who took risks on our vision, academic and industry partners who co-created with us, and emerging talents who brought fresh energy to our mission.

We have not yet transformed the world, but we are winning slowly – prototype by prototype, partnership by partnership, recognition by recognition. Your support has carried us from idea to advanced concept validation of Venuza H2Atraa, our AI-driven hydrogen energy management and storage ecosystem that makes green hydrogen accessible, affordable, and scalable for businesses, communities, and off-grid pioneers.

This newsletter is both a progress report and an invitation. We share where we stand, celebrate what we've built together, and ask for your ideas, introductions, pilot sites, and talents as we push toward real-world deployments in 2026.

Solving Tomorrow's Energy Crisis Today

The Challenge: Businesses and communities face soaring energy costs, unreliable supply, and net-zero deadlines – yet renewables remain intermittent, batteries don't scale economically for long-term storage, and hydrogen solutions lack smart integration.

FACT: DID YOU KNOW, MORE THAN 50% THE ENERGY BILL YOU PAY IS NOT FOR THE ENERGY YOU CONSUME BUT FOR THE SERVICE, LOSS, TAX AND GLOBAL DEMAND!

Our Solution: Venuza H2Atraa bridges this gap with an integrated hardware + software ecosystem to promote decentralised self-resilience in the energy sector:

- H2Atraa Interface – AI software that orchestrates solar, wind, biogas, grid power, and hydrogen storage with predictive analytics, real-time monitoring, and automated switching for optimal cost and carbon savings.
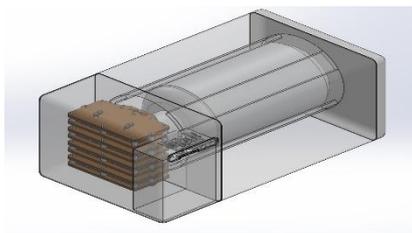
- H2Atraa Storage – Modular, stackable units using metal hydride technology and *reversible electrolysers* to store excess renewable energy as hydrogen *and* generate electricity on demand.

- Community H2 Hubs – Decentralised microgrids where large sites produce hydrogen for smaller users, and smaller sites return electricity – creating resilient, bidirectional local energy economies.

The Impact: Lower bills, energy independence, and verified carbon reductions for industrial sites, SMEs, councils, remote resorts, and smart communities.

Year 2 Progress – Proof We're on the Right Path

Your belief made these milestones possible:

✅ Technical Validation

- Delivered £7.5k Interface-funded proof-of-concept with Robert Gordon University (RGU) School of Computing, Engineering & Technology (Sep 2024-Mar 2025), validating our AI energy management concepts.

✅ National Recognition

- Selected for Converge Hydrogen Challenge cohort among Scotland's top innovation-led hydrogen startups. (**Link to Cohot list**)
- Won Best Pitch Award at University of Aberdeen's "Sparking Change" event.
- Recognised by Innovate UK as one of 15 UK hydrogen entrepreneurs for GBIP Hydrogen in Transport mission to Germany, connecting us with European industry leaders. (**Link to GBIP Brochure**)

✅ Talent & Pipeline Building

- Grew multidisciplinary core team + 9 interns (5 UK-based + 4 summer 2025 engineering/computing) advancing interface prototypes, storage design, and go-to-market planning.
- 3 Scottish SME pilot customers identified; advanced prototype stage with reversible electrolyser casing materials under research.

✅ Strategic Partnerships Forming

- Active MoU discussions with engineering firm for fabrication/deployment.
- Pilot site negotiations with eco-friendly remote stay-cation operator for off-grid H2Atraa demonstration.

2026: From Prototypes to Pilots – Where We Need You

Our Year 3 Focus: TRL 6→7, first pilots, European expansion.
Technical Roadmap (Months 1-12):

- Finalise H2Atraa Interface MVP to IoT control & peer-to-peer energy trading.
- Fabricate/test stackable H2Atraa Storage units with integrated electrolysers.
- Launch 1-3 live pilots collecting performance data for commercial validation.

Market & Growth Priorities:

- GBIP follow-up: Convert Germany mission leads into joint European pilots.
- Project & Engineering: Secure mentorship/fellowship on scaling strategy.
- Plan first revenue Q3 2028 via SaaS licensing (Interface), unit sales/leases (Storage), EaaS subscriptions, and consulting.

Immediate Needs:

- Pilot hosts (industrial parks, business estates, remote sites)
- Technology partners (EPC firms, hydrogen component suppliers)
- Talent (hydrogen regulations, advanced manufacturing, sales)
- Strategic funding for MVP-to-pilot bridge

The Ask – Let's Build Together

We invite you to help us turn slow wins into fast impact:

- Stakeholders & Funders: Can you introduce us to pilot-ready sites or European hydrogen players from your network?
- Potential Collaborators: Does your organisation need hydrogen integration for net-zero goals? Let's co-design a pilot.
- Future Talents: Join our mission – engineers, AI specialists, sales leaders, we're hiring selectively.
- Everyone: Share this newsletter – every connection accelerates the hydrogen economy.

Thank you for being part of our journey.

From Venuza Future Energy Ltd, we remain committed to building practical hydrogen solutions that deliver real decarbonisation, energy security, and economic opportunity.

Together, we create the hydrogen economy – step by step, pilot by pilot, community by community.

The Venuza Future Energy Team

Contact us: **GetEnergy@venuza.uk** | venuza.uk | Aberdeen, Scotland

Appendix: Work in Progress

Below is the work package breakdown with tasks, timeline, cost estimates, and associated Technology Readiness Levels (TRL):

Work Package	Task(s)	Timeline	TRL Level	Progress
WP1: Feasibility & Requirement Analysis	- Conduct market research and stakeholder interviews- Define functional & technical specifications	1-2 months	TRL 2 (Concept Formulated)	Completed
WP2: System Architecture & Design	- Design overall hardware/software architecture- Develop initial prototypes & simulation models	2 months	TRL 3 (Proof-of-Concept)	Completed
WP3: Hardware & Sensor Setup	- Procure IoT devices, sensors, and smart meters- Install and integrate with building systems	2 months (parallel to WP2)	TRL 4 (Validated in Lab)	Planning
WP4: Software Development & AI/ML Model Training	- Develop backend APIs, databases, and dashboards- Build data pipelines- Train predictive models using AI/ML frameworks	4-6 months	TRL 5 (Validated in Relevant Environment)	Work started
WP5: Integration, Testing & Optimization	- Integrate hardware and software components- Conduct comprehensive testing and system validation- Optimize algorithms and models	2-3 months	TRL 6 (Demonstrated in Relevant Environment)	Not started
WP6: Deployment & Monitoring	- Deploy the system in a live environment- Provide user training and create system documentation- Set up continuous performance monitoring	1-2 months	TRL 7 (Prototype Demonstration)	Not Started