



VASCO DA GAMA COLAB

INNOVATION FOR A BETTER WORLD

SCALABLE ENERGY STORAGE TECHNOLOGY INNOVATION



VASCO DA GAMA COLAB — ENERGY STORAGE

Vasco da Gama CoLAB (VG CoLAB) was established in 2019 as a collaborative laboratory, recognised by FCT (Foundation for Science and Technology) and supported by ANI (National Innovation Agency) in Portugal.



VG CoLAB is positioned in the centre of the electrochemical energy storage value chain.

OUR MISSION

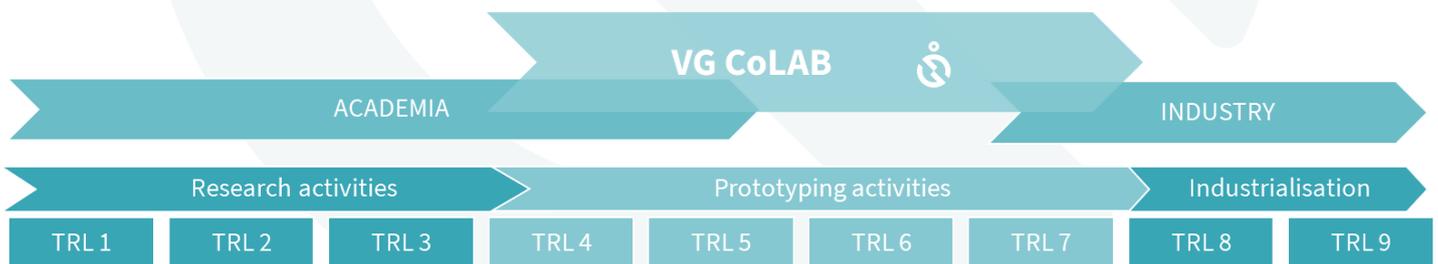
We develop value-adding innovative technologies, techniques, and prototypes in scalable energy storage, power conversion, and software (interfaces, configuration and sizing tools).

Integration

Hybridisation

Interface

We accelerate and derisk the technological **scale-up** and the **time-to-market** for our associates and ecosystem partners to foster the overall societal effort to **facilitate the energy transition**.



VG CoLAB POSITIONING IN THE VALUE CHAIN



Cell scale-up

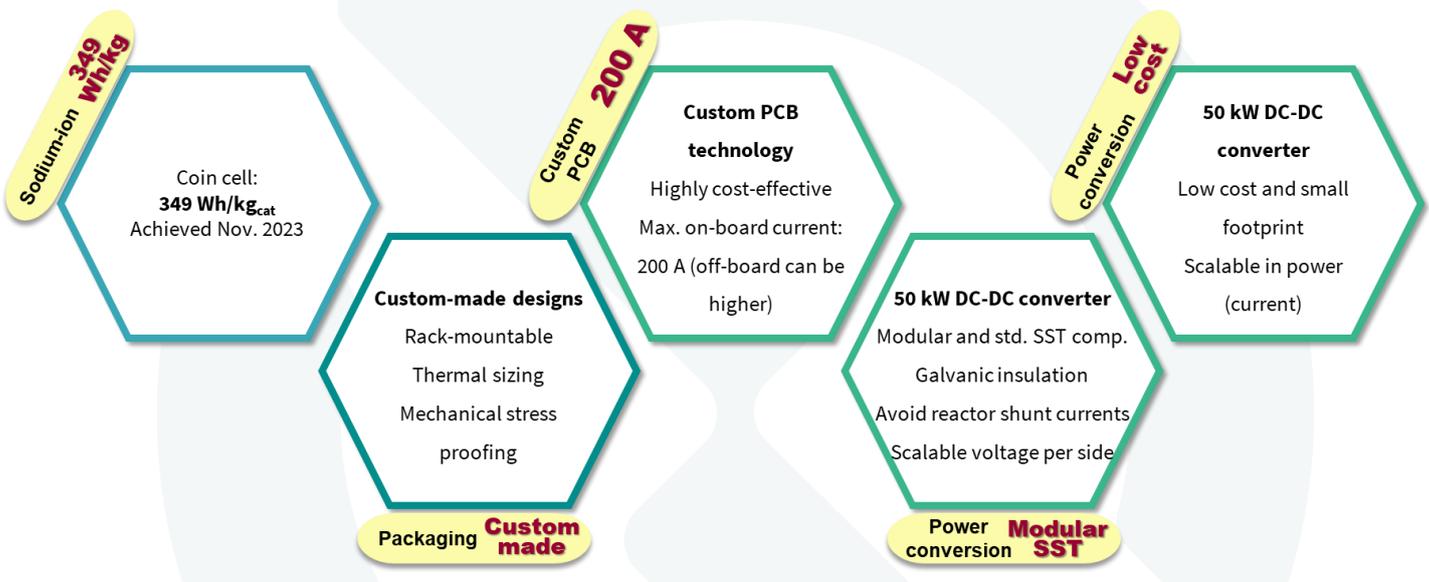
- Sodium-ion Batteries
- Supercapacitors
- Redox Flow Batteries

Modules and Packs

- Design & development of modules and packs
- Battery Management Systems

Power Electronics and Grid Interface

- Modular configurable converters
- Distributed & decentralised control in microgrids
- BESS sizing tools



INNOVATIVE SOLUTIONS SHOWCASES

Automated Tools for Battery Testing

Battery Scale-up: Optimisation of Materials and Processes

Sizing Tools for BESS

INPUTS	Energy Storage System sizing tool	OUTPUTS
<ul style="list-style-type: none"> Load Profiles Generation profiles Energy Cost Contracted power Goal (NZE, peak shaving, load shifting, etc.) 		<ul style="list-style-type: none"> Battery optimal solution (power/energy) Financial metrics System performance metrics

Hybrid Energy Storage Systems

Tailor-made Modular Converters for Advanced Applications

Cell-Agnostic Battery Management Systems

COME AND NAVIGATE WITH US!

Join VG CoLAB to drive progress and innovation towards providing technical and business energy storage solutions for a sustainable energy transition.

SPECIFIC COLLABORATION OPPORTUNITIES FOR ASSOCIATES AND PARTNERS

R&D and Technology Transfer:

- Collaborative R&D projects
- Prototype incubation & dev.
- Market intelligence services

Business Support and Networking:

- Scientific and supply chain partnerships
- Market access support
- Business networking events/workshops

Training:

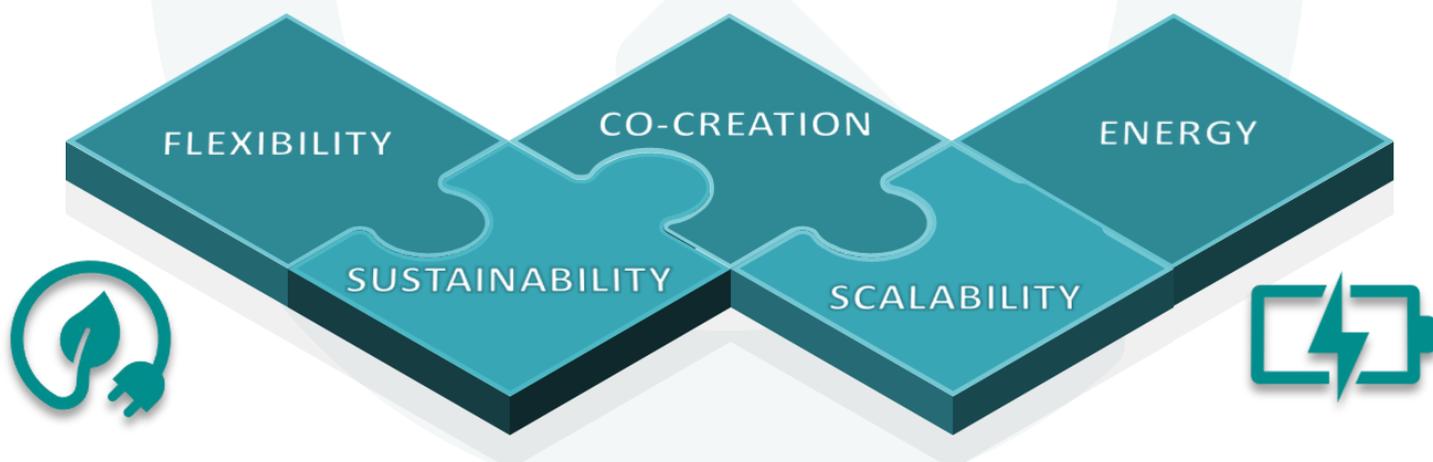
- On-the-job and off-the-job training.
- B2B hiring (hire, train, and transfer)

Services:

- Electrochemical characterisation
- Solution testing and validation
- Pilot testing and pre-SAT support
- Support to innovative regulatory implementation (e.g., battery passport)
- Tailor-made system design

International Collaboration and Regulation:

- Strategic proxy and soundboarding
- Interface to EU relevant stakeholders
- Regulatory compliance support



CONTACT US

Vasco da Gama CoLAB — Energy Storage — Associação

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