



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



ACADEMIA

INDUSTRY

Research activities

Prototyping activities

Industrialisation

TRL 1

TRL 2

TRL 3

TRL 4

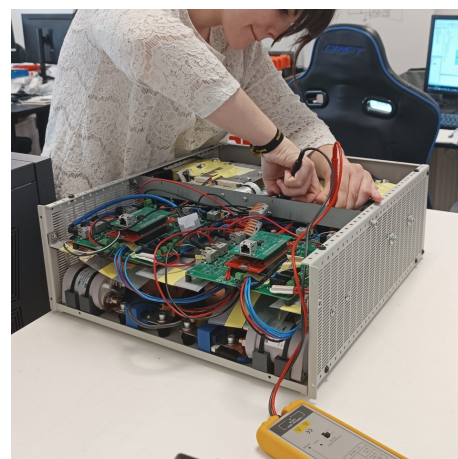
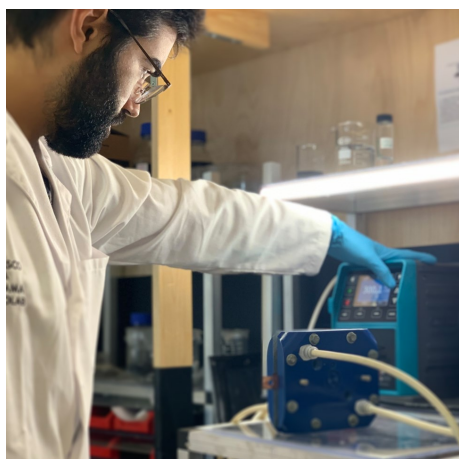
TRL 5

TRL 6

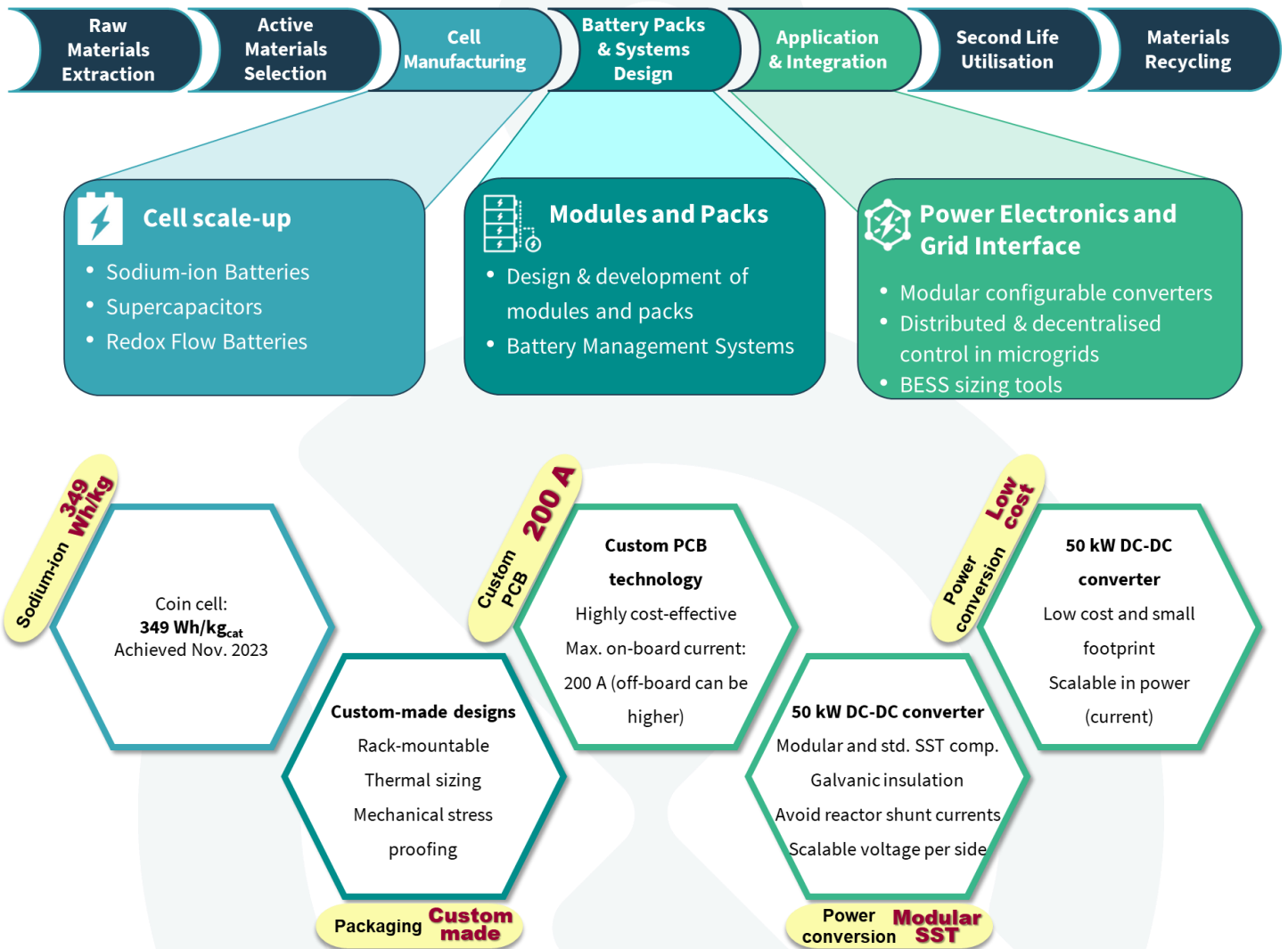
TRL 7

TRL 8

TRL 9



VG CoLAB POSITIONING IN THE VALUE CHAIN



INNOVATIVE SOLUTIONS SHOWCASES

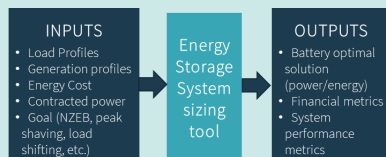
Automated Tools for Battery Testing



Battery Scale-up: Optimisation of Materials and Processes



Sizing Tools for BESS



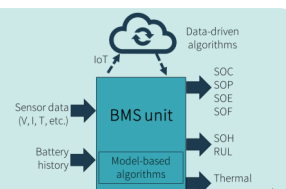
Hybrid Energy Storage Systems



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:

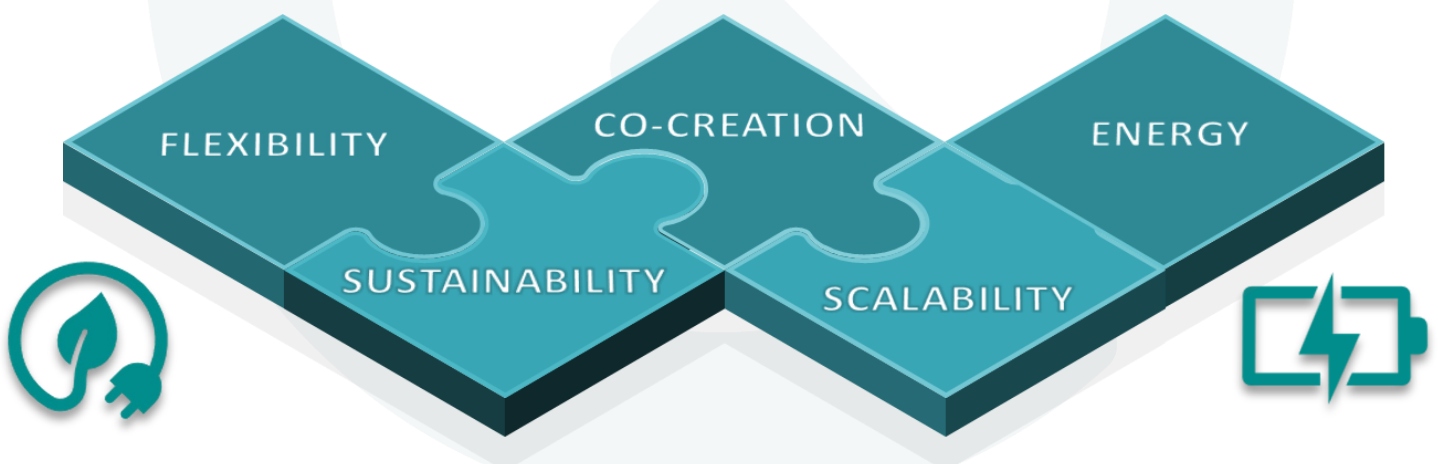
- On-the-job and off-the-job training.
- B2B hiring (hire, train, and transfer)

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

Headquarters: Rua Dr. Roberto Frias, s/n, 4200-465 Porto, PT

Offices and Electrochemistry labs: PORTIC, Rua Arq. Lobão Vital, n.º 172, 4200-374 Porto, PT

Power Electronics labs: UPTEC Asprela I, Rua Alfredo Allen n.º 455-461, 4200-135 Porto, PT

E-mail: info@vgcolab.com

www.vgcolab.com





Main NextGenerationEU / RRP Projects 2024

NGS

New Generation Storage



- Microgrids for **EV charging supported by stationary batteries**
- **Detachable/swapping** battery module solutions
- **Hybrid energy storage systems:** complete packaging, energy conversion and grid-tie solutions

CVB

Battery Value Chain – Portugal



- Scale-up of **sodium-ion batteries** without toxic or critical raw materials
- Designing and building of a pilot production line, to accelerate battery development in Portugal

Prototypes and Demos 2024



Luís Miguel Costa, PhD, MSc, SMIEEE
CEO & Managing Director @ VG CoLAB
tel: +351 96 11 92 508
mail: luis.costa@vgcolab.com

João Paulo Sousa, MSc
Business Developer @ VG CoLAB
tel: +351 93 55 45 017
mail: joao.sousa@vgcolab.com