

RECURSOS HUMANOS ALTAMENTE QUALIFICADOS

Reference	NORTE-06-3559-FSE-000182
Priority axis	Employment and mobility of workers
Thematic objective	Promote sustainability and quality of employment and support labor mobility
Intervention Region	Norte
Beneficiary	515754544, VASCO DA GAMA COLAB - ENERGY STORAGE - ASSOCIAÇÃO
Approval date	06-07-2020
Start and conclusion date	02-11-2020 31-10-2023
Total eligible cost	2 520 000,00 EUR
EU financial contribution	FSE – 2 142 000,00 EUR
National/Regional financial contribution	378 000,00 EUR
Summary	<p>Vasco da Gama (VG) CoLAB aims at contributing to the implementation of the European energy transition agendas: electrochemical energy storage, power electronics conversion and intelligent energy management.</p> <p>VG CoLAB has as its main goals the development of technologies related to electrochemical energy storage in particular redox flow batteries and supercapacitors, power electronics and energy management.</p> <p>VG CoLAB aims to promote the Portuguese economy by developing, producing and commercializing internationally energy storage technologies.</p> <p>Alongside, VG CoLAB will employ highly qualified human recourses, contributing to attracting and securing talent in Portugal.</p>
Roadmap summary	<p>A1.1 Reduction of overpotentials and shunt currents of the stacks</p> <p>A1.2 New methods for production of components for redox flow batteries</p> <p>A2.1 Tailor made supercapacitors: Self healing and flexible electrodes, exploration of new design architectures</p> <p>A3.1 Hybrid energy storage systems through converters of power with multiple sources</p> <p>A3.2 Control strategies for micro-grid with multiple converter based inverters</p> <p>A3.3 Interface based upon solid state transformers for energy storage</p> <p>A3.4 Operational tools for micro-grids with machine learning type resources</p> <p>A3.5 Multi-purpose energy router</p> <p>T1 Hybrid energy storage stationary system based on redox flow battery, supercapacitor and power electronics</p> <p>T2 Redox flow batteries with power electronics</p> <p>T3 Energy storage system digital management tool for multi-technology and grid integration scenarios</p>