BEST4Hy

SustainaBlE SoluTions FOR recycling of end of life Hydrogen technologies



BEST4Hy focuses on the development and validation of existing and novel recycling processes for two key fuel cell and hydrogen products: proton exchange membrane fuel cells (PEMFC) and solid oxide fuel cells (SOFC).

The project aims to adapt two existing recycling processes applied already to other technologies and to validate a novel dismantling process for PEMFC. Furthermore, a novel SOFC recycling technology will be proved.

At the end of the processes, the materials will be validated in terms of quality and performance when re-used in new components and in new stacks, demonstrating the overall efficiency of recycling.

Ambitious targets for recycled content in new stacks/cells have been set and will be validated by fuel cell producers, to prove the viability of higher value, closed loop recycling.

Environmental impact and cost-benefits evaluations on the proposed technologies will be performed.

This will support a more efficient use of raw materials, including critical resources, and it will contribute to improve the end-of-life treatment of the hydrogen technologies and to foster a circular economy approach within the sector.



36 months 01/01/2021 – 31/12/2023

WEBSITE AND SOCIAL MEDIA www.best4hy-project.eu



PARTNERS

- Parco Scientifico Tecnologico per l'Ambiente ENVIRONMENT PARK TORINO SPA (Coordinator - IT)
- COMMISSARIAT A L'ENERGIE
 ATOMIQUE ET AUX ENERGIES
 ALTERNATIVES (FR)
- POLITECNICO DI TORINO (IT)
- Hensel Recycling GmbH (DE)
- ELRINGKLINGER AG (DE)
- AKTSIASELTS ELCOGEN (EE)
- RINA CONSULTING SPA (IT)
- UNIVERZA V LJUBLJANI (SI)

FUNDING INSTRUMENT

H2020-JTI-FCH-2020-1

BUDGET

Total: **€ 1.586.015**; **€** 272.812,50 allocated to POLITO

POLITO and DIATI's role:

Politecnico di Torino is a member of the Consortium.

Three departments are involved: DISAT (coordinator department for the University), DENERG and DIATI.

Scientific supervisor for DIATI:

Prof. Silvia Fiore





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