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REDHY

Redox-Mediated economic, critical raw material free, low capex and highly efficient green hydrogen production technology

REDHY - Deliverable report

DELIVERABLE 6.1 – Design of novel REDHy stack

The project is supported by the Clean Hydrogen Partnership and its members.

Clean Hydrogen Partnership

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Public Summary

The REDHy project focuses on a hybrid electrolysis system. In this system, a redox flow battery and an electrolyser are combined. One advantage of this is that gas evolution can take place outside the cell. This increases safety, as the gas can be generated at a different location and is not confined to the cell. A bipolar membrane that can split water to a proton and a hydroxide ion is to be used, meaning this step does not have to take place at the electrode.

In order to fulfil the requirements of the hybrid system, the stack design must be adapted. This deliverable presents two such designs.

7 Acknowledgement

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Project partners:

#	Partner short name	Partner Full Name
1	DLR	DEUTSCHES ZENTRUM FUR LUFT – UND RAUMFARHT EV
2	CNRS	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIC
3	UNR	UNIRESEARCH BV
4	UPV	UNIVERSITAT POLITECNICA DE VALANCIA
5	IDN	INDUSTRIE DE NORA SPA-IDN
6	CENMAT	CUTTING-EDGE NANOMATERIALS CENMAT UG HAFTUNGSBESCHRANKT
7	CNR	CONSIGLIO NAZIONALE DELLE RICERCHE

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