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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

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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.

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### Project partners:

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

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