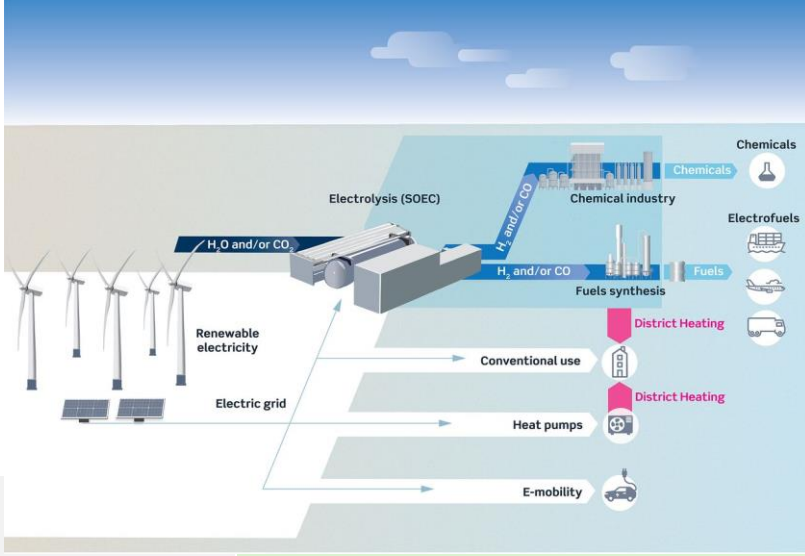
NOUVEAU

NOVEL ELECTRODE COATINGS AND INTERCONNECT FOR SUSTAINABLE AND REUSABLE SOEC



THE PROJECT

NOUVEAU focuses on making Solid Oxide Electrolysis Cell (SOEC) technology more sustainable and reusable by developing NOVEL ELECTRODE COATINGS AND INTERCONNECT. NOUVEAU will work on **alternative materials** to be used in SOEC and the **recycling of REE** for SOEC.
Besides the SOEC materials, the largest part of the cost of an SOEC stack is caused by the metal interconnects. These interconnects suffer also from corrosion and degrade the SOEC stack. To overcome these challenges NOUVEAU will work on a **lower-cost metal interconnect** with a **protective coating.**

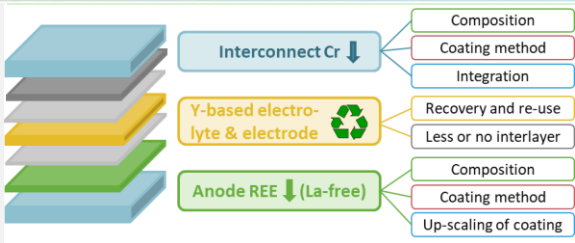
The **NOUVEAU** project will **develop solid oxide cells with novel electrode materials and interconnects with a reduced amount of REE, PGM and Cr by employing innovative coating methodologies and modelling, in combination with sustainable-by-design aspects and recycling options up to TRL 5**.

Materials breakthrough: 20% reduced amount of Cr, Recycling target of 50 to 70%, 30% reduced amount of REE (La)

Materials modelling: NOUVEAU virtual database on electrode materials; Guidelines for electrode material selection in line with "sustainability- and safe-by-design" approach

Materials sustainability: eco-design and circularity concepts in the design of the new metal coatings, with focus on reduced toxicity; recommendations for the end-of-life of the new material,

Faster and more efficient coating process



€ 3 880 641
BUDGET

36
MONTHS

11
PARTNERS

7
COUNTRIES

www.nouveau-project.eu

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