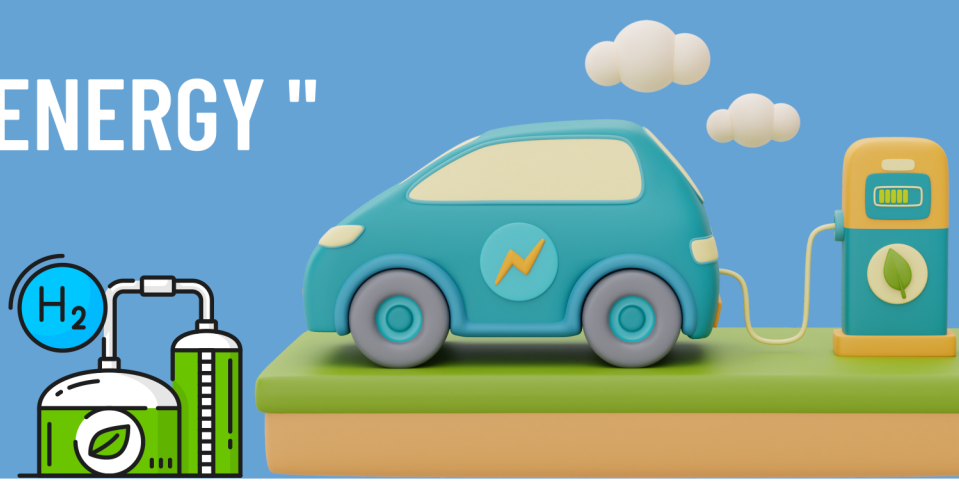
FIRST SAUDI ARABIA

Jawatha AI Center

" HYDROGEN TO ENERGY "

FLL Innovation Project 2023



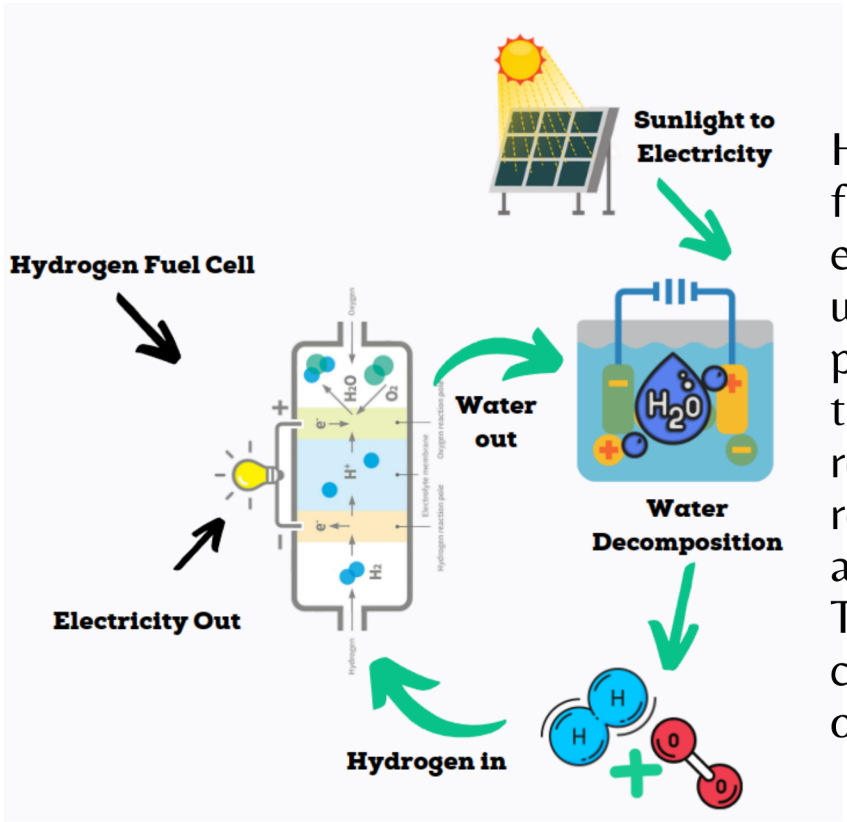
DURING OUR JOURNEY, WE HAVE IDENTIFIED THREE PROBLEMS

Energy storage faces challenges such as high cost, limited capacity, and environmental concerns.

Pollution is a global issue that negatively impacts the environment, human health, and biodiversity, requiring sustainable solutions.

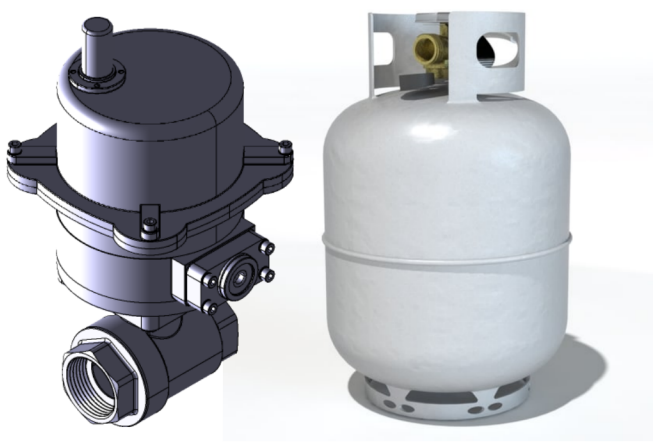
The high cost of energy is a problem with many causes and effects. Therefore, our solution needs to be cost-effective.

WE DECIDED TO PRODUCE HYDROGEN FROM WATER USING ELECTROLYSIS, AND GENERATE ELECTRICITY USING THE HYDROGEN FUEL CELL



Hydrogen is produced from water through electrolysis and then used in a fuel cell to produce electricity through a chemical reaction with oxygen, resulting in only water and heat as byproducts. The water produced could be reused to obtain hydrogen.

USING BLENDER, WE CREATED A 3D MODEL PROTOTYPE FOR OUR PROJECT AND RECEIVED VALUABLE FEEDBACK FROM DR. SAED SALMAN, A PHYSICS DEPARTMENT EXPERT AT KING FAISAL UNIVERSITY, DURING OUR PRESENTATION.



We developed a process that addresses the three issues we identified, namely energy storage, high cost, and pollution.

FLL Team 289
Jawatha Robot Champions