

## Sustainable Energy (Can water be our future fuel?!)

### Video Scripts: (6 segments)

1<sup>st</sup> segment: "A motivation beginning"

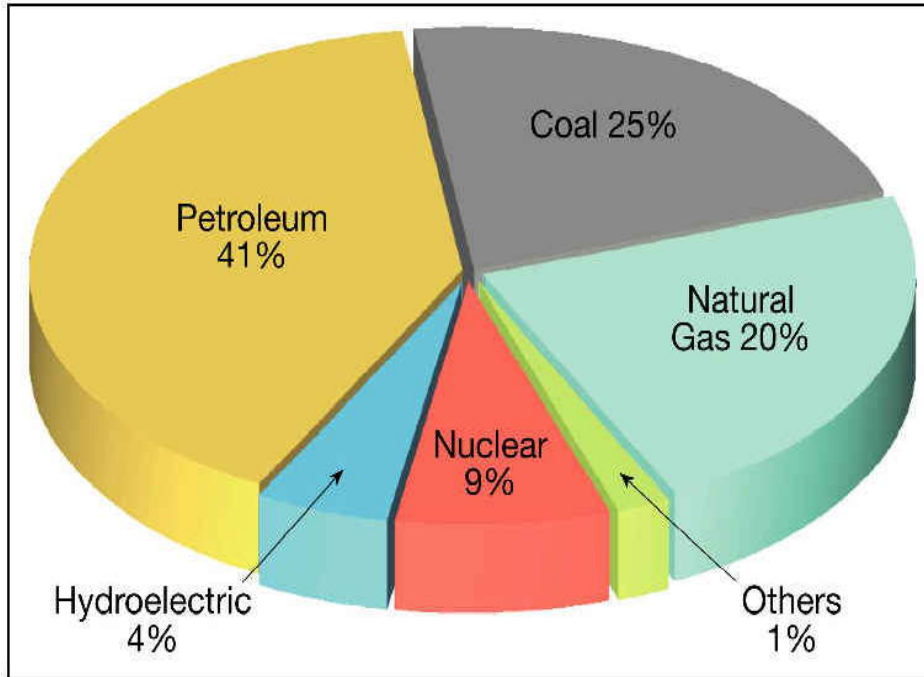
(No. illustrations in this parts)

2<sup>nd</sup> segment: "A creative idea"





3<sup>rd</sup> segment: "Current sources and challenges"





- Clean and sustainable sources of energy:



4<sup>th</sup> segment: "Solar energy and how it can be utilized"

- Examples on solar energy conversion:

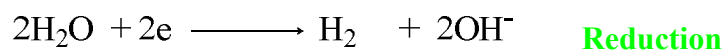
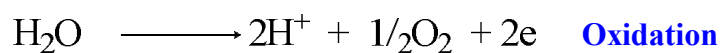
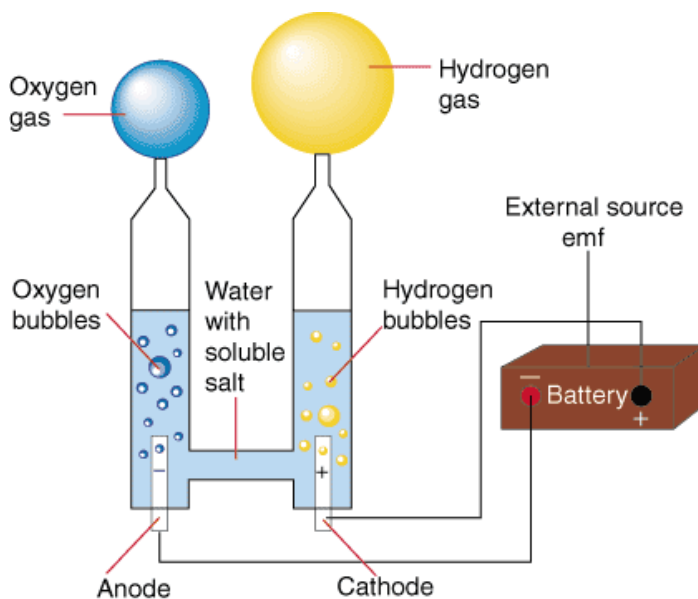


NASA Dryden Flight Research Center Photo Collection  
<http://www.dfrc.nasa.gov/gallery/photo/index.html>  
NASA Photo: ED01-0209-6 Date: July 14, 2001 Photo by Nick Galante/PMRF  
The Helios Prototype flying wing is shown near the Hawaiian islands of Nihoa and Lehua during its first test flight on solar power from the U.S. Navy's Pacific Missile Range Facility.

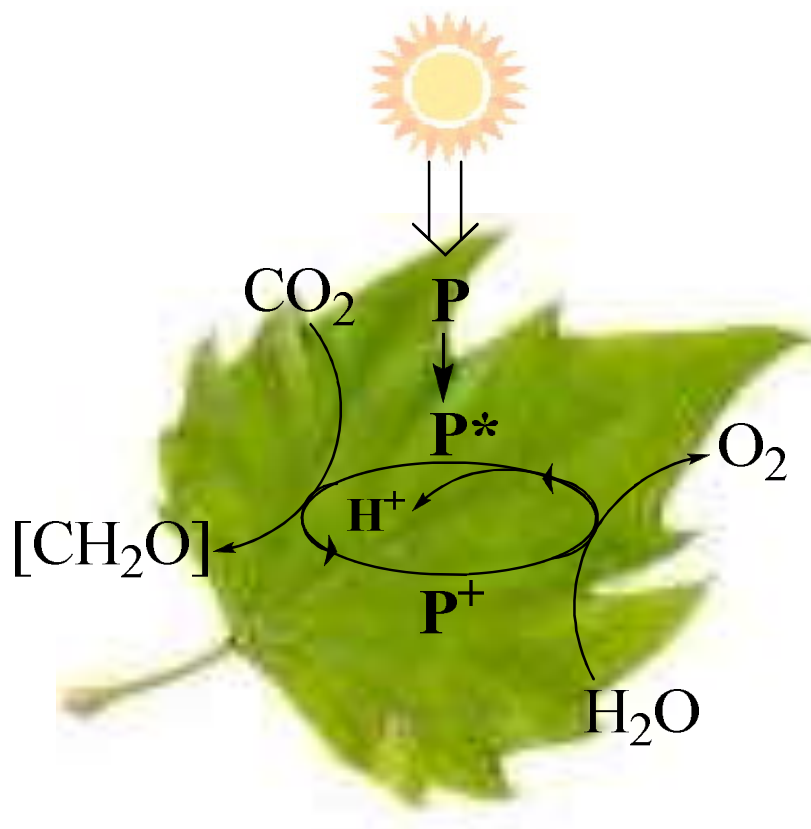


5<sup>th</sup> segment: "The idea of hydrogen as a fuel"

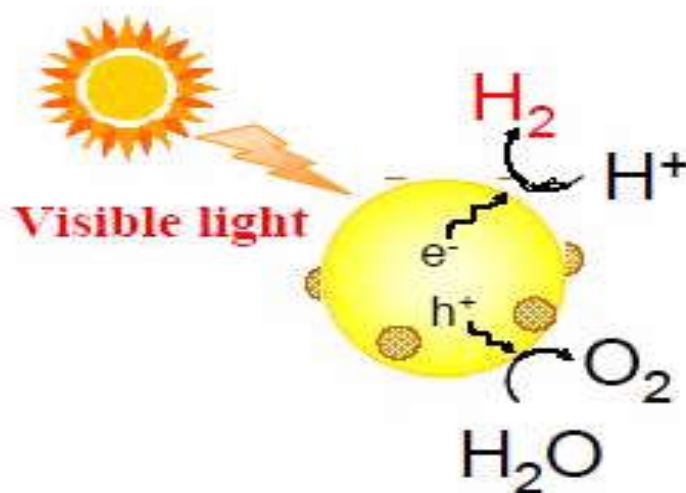
- Electrolysis of water



-Illustration of the photosynthesis process:

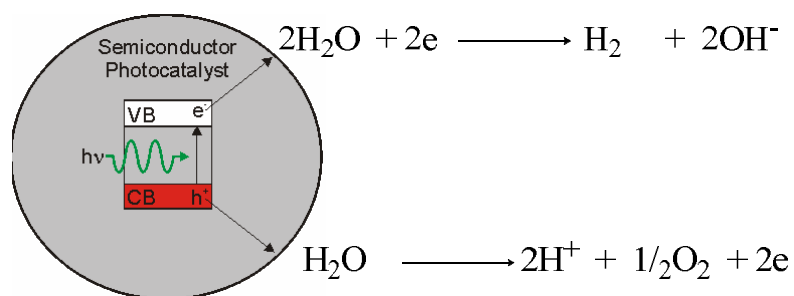


**-Water splitting by photocatalyst:**

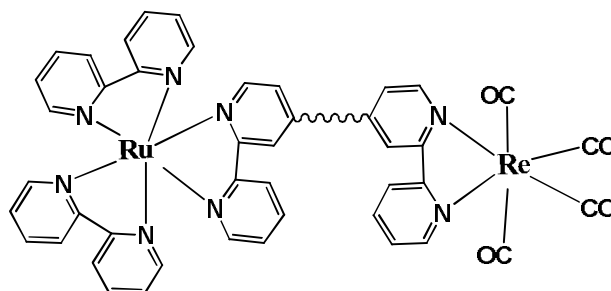
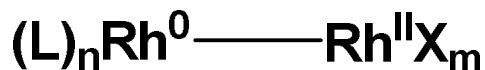
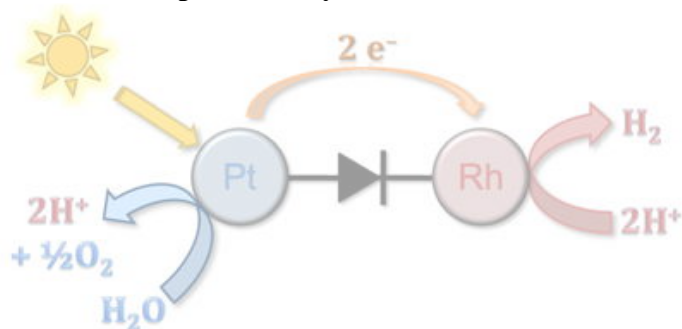


6<sup>th</sup> segment: "A suitable photocatalyst will put us in business"

**- Semiconductors photocatalysts:**



**- Examples on chemical photocatalysts:**





- Summary of the whole process:

