



Supply Chain Research Associated To Clean Hydrogen

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SCRATCH Workshop – 16/09/09

Overview

- What is SCRATCH
- Who can be involved
- Areas of research
- Project Progress
- Project Examples

What is SCRATCH?

£1.5million EPSRC & AWM Project

Outline possible supply chains leading to the hydrogen economy

Focus on biomass, hydrogen storage, fuel cell chp, and economic barriers

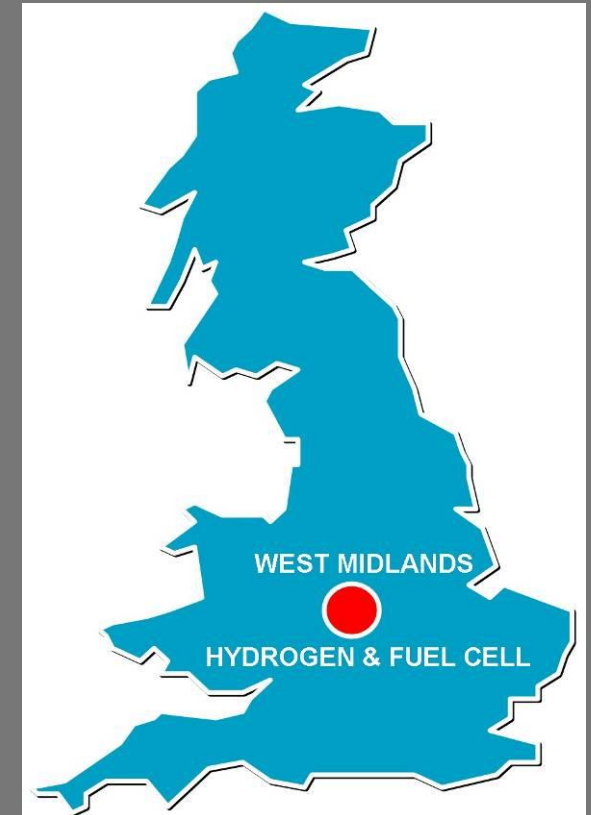
Bring SME's together in a supply chain and assist companies

Educate the general public and school children

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Which SME's

- West Midlands Based SME's
- Different backgrounds:-
 - Engineering
 - Materials
 - Chemicals



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SME' Benefits

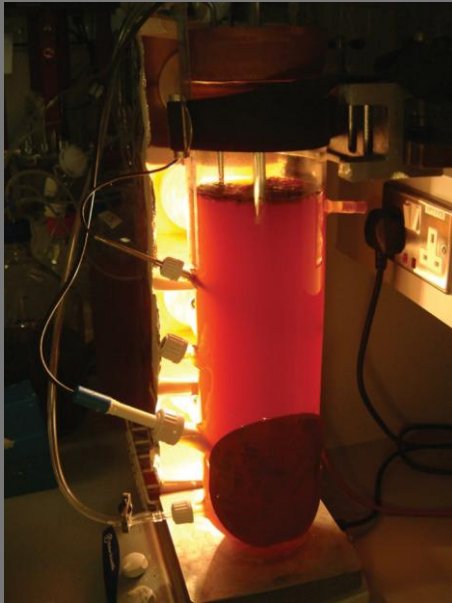
- Experience New Technology
- Enhance opportunity in a new field
 - Free advertising
 - www.hydrogen-wm-scratch.info
- Significant commercial potential
- Interaction with other SME's

SME's

- ❑ 60 Companies have joined
- ❑ 8 hours Consultation, Advice & Knowledge transfer
- ❑ FREE 5 day collaborative project
- ❑ Completed 23 Projects
- ❑ Undertaking another 9 projects

What's involved?

Production



Storage



Applications



Economics

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Problems to be Solved

Source of hydrogen

Distribution & Infrastructure

- Supply
- Storage
- Separation

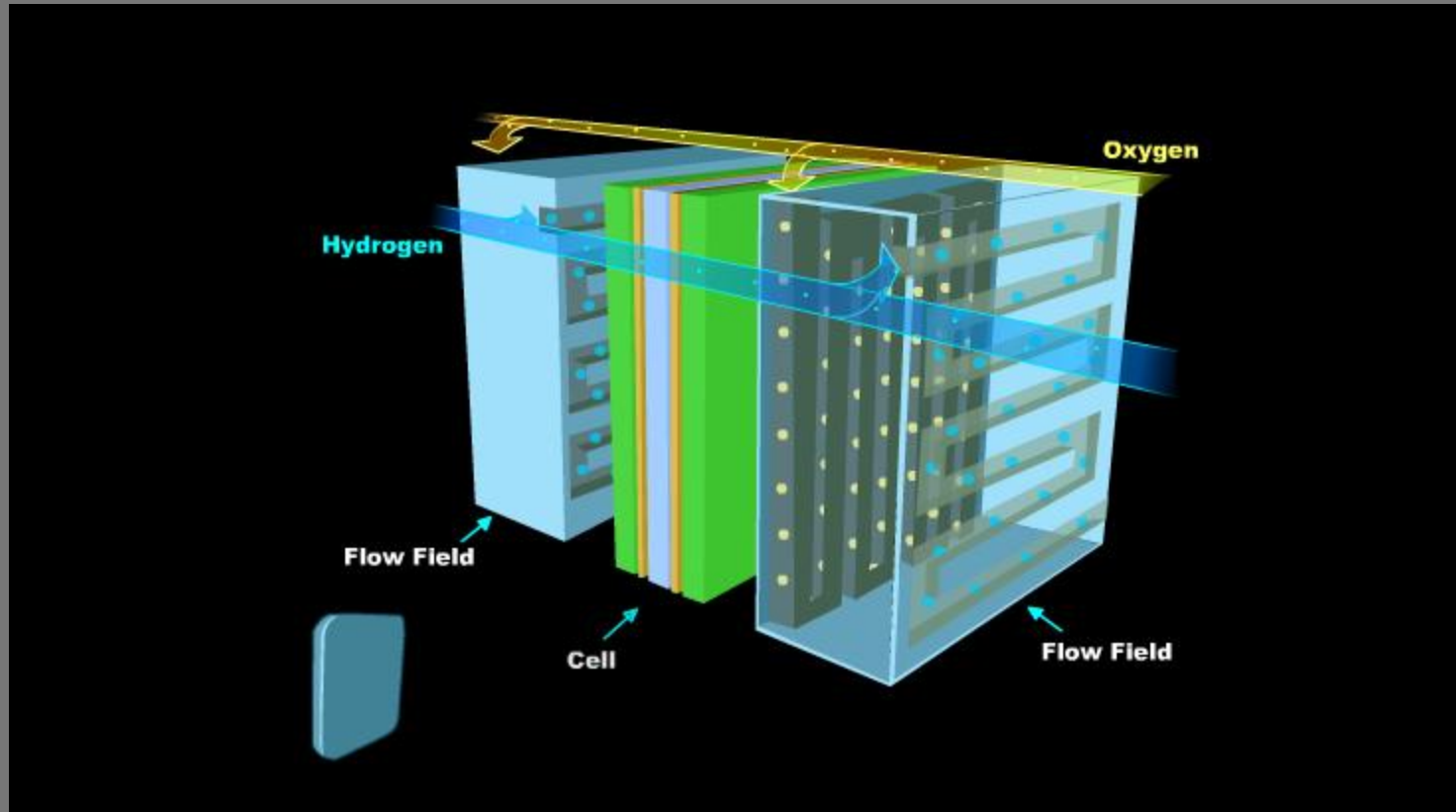
Utilisation by fuel cells

Economic drivers

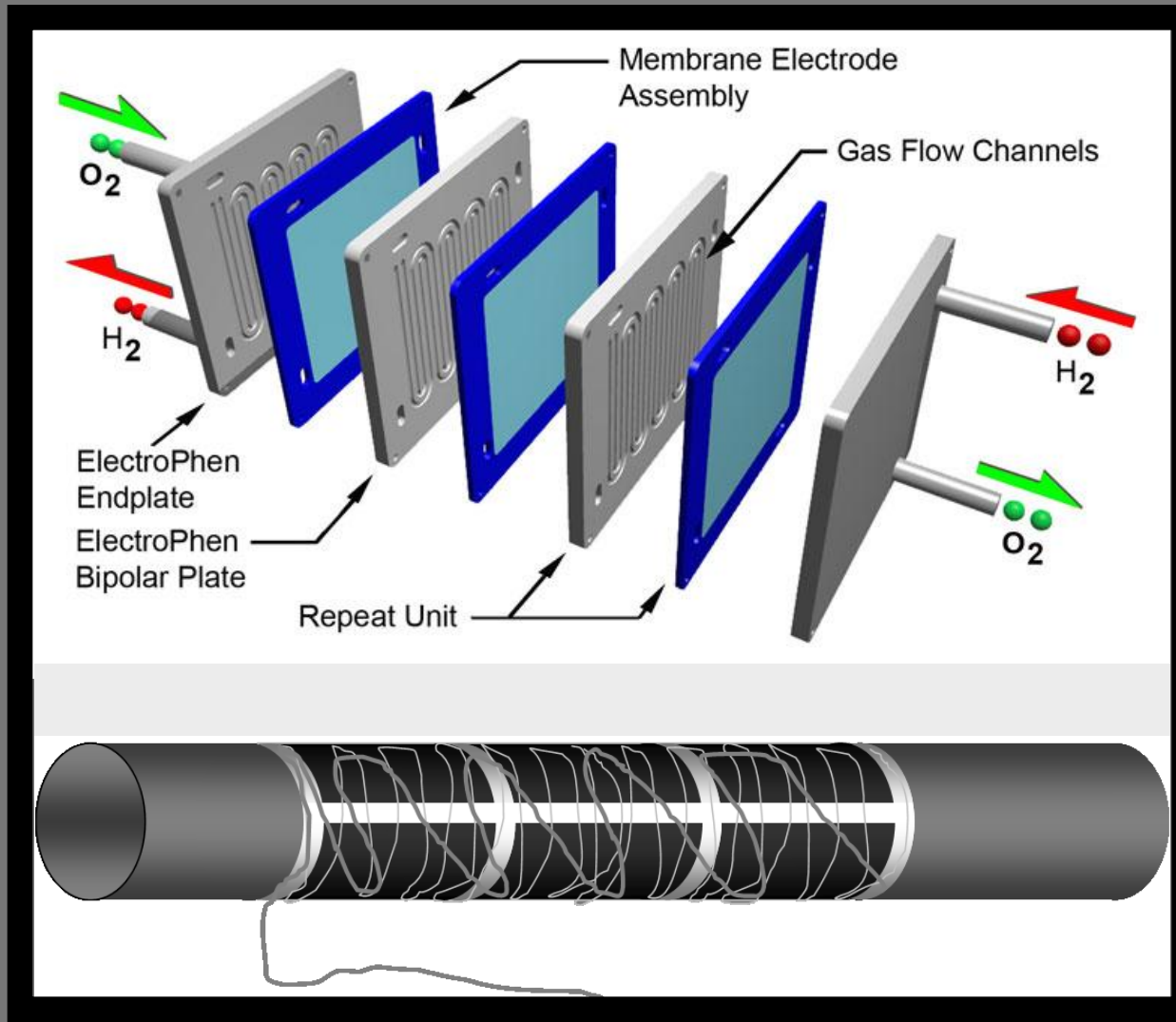


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The Technology



The Technology



Project Examples:- Langford Electronics



□ Ultrasonics

□ NanoParticles

Project Examples :Beeches Recovery



□ More Vehicles

□ Need Training

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Project examples



Valeswood ETD
卫尔斯伍德



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Other Activities

- ❑ Working with tomorrows engineers and scientists
- ❑ Research publications



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Acknowledgments



EPSRC

Engineering and Physical Sciences
Research Council

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