

GAZEY, R., ALI, D., AKLIL, D. and FINNEY, S. 2012. Enabling the uptake of renewables through economical hydrogen energy storage systems: studentship case study. Presented at the 2012 Energy Technology Partnership (ETP) annual conference, 21-23 March 2012, Glasgow, UK.

Enabling the uptake of renewables through economical hydrogen energy storage systems: studentship case study.

GAZEY, R., ALI, D., AKLIL, D. and FINNEY, S.

2012

Studentship Case Study

Ross Gazey, MPhil, MIET

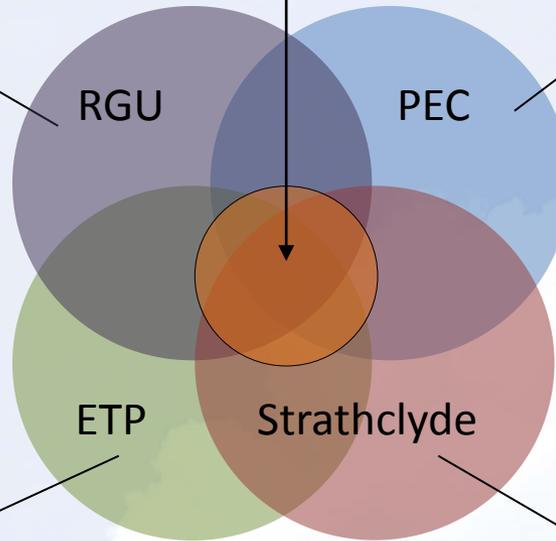
PhD Research, Robert Gordon University

- Introduction
- The Research Project
- Benefits of ETP
 - Personal/Professional
 - Industry
 - Academia.

Introduction

Research Partners

Research Output



The Project Team

- Organisations involved in the project:
 - (RGU)
 - (PEC)
 - (Strathclyde)
 - Ross Gazey - (RGU - PhD Research)
- Supervisory Team

The Research Project

Renewable H2 Energy storage systems for enabling projected increase of renewables onto electrical power grids

- More details can be found on the poster in the poster presentation area.

Collaborative working

Has two distinct advantages

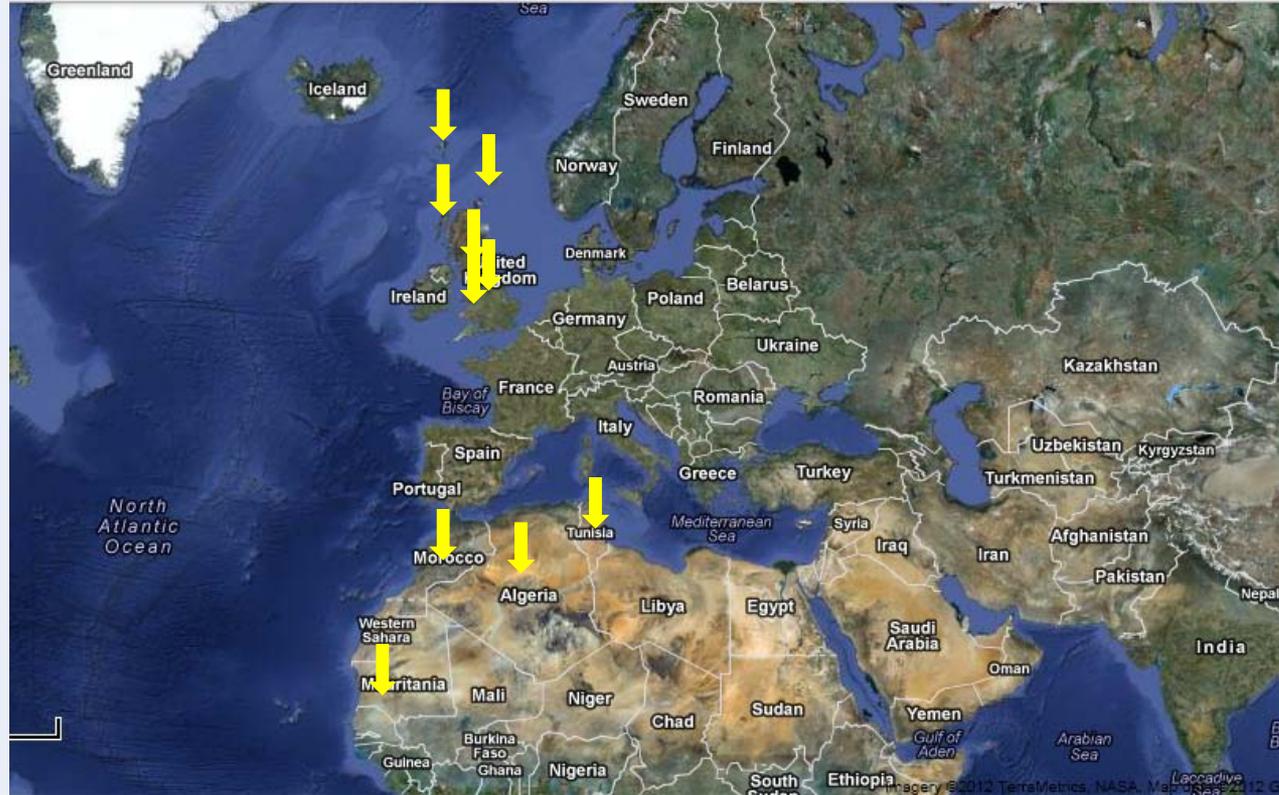
1. Academic research becomes focused on an industrial problem
2. Research student gets real world experience of applying academic rigour to tackling real world problems.

Benefits of collaborative working

- Industrial collaboration provides solid, solution focused foundation for career in sector
- Researching alongside industry allows research to progress towards a practical solution
- Working with teams of industry professionals greatly develops practical experience
- Also develops the research students ability to apply academia to solve real-world problems.

Personal Benefits

- Improved Project management skills
- Improved People management skills
- Greatly enhanced technical ability
 - Research
 - Peer review process
- Significant Contribution to Charter, (CEng)
- Exposure to a wider technical knowledge base.



- Professional Network
- Different Cultures

Developing Technology

Opportunity to prove modelling on ground
breaking technology operating in the field



Company Benefits

- Embedding of new knowledge
- Enhanced knowledge and capabilities
 - Knowledge used in other projects
- Presentation of work in technical & academic forums
 - World Hydrogen Technology Conference
 - All Energy
 - IET Renewable Power Generation
 - Energy Technology Partnership
- Development of financial modelling (as presented at the IET RPG) has already provided benefits

Academic Benefits

- Applied research
 - technology transfer from industry to the University
- Publication of research
 - Publication of conference papers
 - Presentation at conferences
- Industry Access
 - Introduced into commercial Hydrogen as well as Fuel Cells systems

ETP industry engagement model provides many benefits:

- Academic
- Personal/Professional
- Industrial.

...Thank you...