The Aberdeen Hydrogen Bus Project

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• The project
• What will the project do for Aberdeen?
• Who is involved?
• How is the project funded?
• Where is the project currently?
• Next steps.....
Project Overview

- Operate 10 hydrogen fuel cell buses over a 3 year project period
- Build a state of the art hydrogen re-fuelling station using cutting edge technology
- Prepare a maintenance facility where the buses can be maintained
- Use hydrogen storage as a means of managing electrical grid constraints
Aberdeen Hydrogen Bus Project

Power generation

- Wind generation
  - 1MW wind farm

Conversion

- Intermittent generation
- Alkaline electrolyser
  - 1 MWe electrolysis

End use

- Refuelling station
  - Fuel cell car bus
- Transport
Re-fuelling

2 x 228b / 366 kg Tube Trailer Bays & Associated Decanting Systems

2 x IC 90 Compressors

~ 270kgs / 500b Static Storage

2 x Fast Flow H2 Dispensers
Kittybrewster:

- Council owned site
- Currently used for Council waste & fleet vehicles
- 24 hour security
- City centre location
- Accessible
- Meets bus operator & BOC requirements
Project funding

• £20 million budget
• Contributions from:
  – EU (Hytransit, Highvlocity projects)
  – The Scottish Government
  – Scottish Enterprise
  – The UK Technology Strategy Board
  – SSE Low Carbon Networks fund
  – SGN Innovation funds
  – Aberdeen City Council
  – First
  – Stagecoach
  – BOC
Why Aberdeen

• City well placed to host a demonstration project – the energy city
• Opportunity to address grid balancing / intermittency
• Improvements to air quality
• Contribute to Scotland’s green transport targets
• Skills & Expertise
The project today

- Contracts
- Planning permissions
- Operational planning
- Procurement
- Marketing & Communications
- Funding project deliverables