

## ABERDEEN CITY COUNCIL

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COMMITTEE	Enterprise Planning & Infrastructure
DATE	21 January 2014
DIRECTOR	Gordon McIntosh
TITLE OF REPORT	Aberdeen City Hydrogen Energy Storage (ACHES) Project
REPORT NUMBER:	EPI/13/266

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### 1. PURPOSE OF REPORT

The purpose of this report is to seek approval of the required match funding for this project to proceed and for the Hydrogen Station to be built in the South of the City within close proximity to the AWPR, which was brought to Committee attention in November 2013 (EPI/13/208). It also seeks approval for Aberdeen City Council to sign the Charter on HighVloCity which is based on establishing A European Network of Clean Hydrogen Bus Centres of Excellence.

### 2. RECOMMENDATION(S)

1. It is recommended that the Committee approve the request to confirm match funding of £1,136,500, from the ear-marked reserve identified for Regeneration of the South of the City. This reserve currently stands at £1.35 million.

2. It is recommended that Committee approve the request to sign the Charter on HighVloCity.

### 3. FINANCIAL IMPLICATIONS

Quotes have been received in order to estimate the total project costs. Total project costs are identified as £1,894,130. An application for ERDF Funding has been successful and an award of £757,630 has been offered subject to securing the required match funding. This represents 40% of the total project costs.

There is a requirement for ACC to confirm match funding of £1,136,500 in order for this grant to be made available, and the purpose of this report is to confirm to the European Unit of Scottish Government that this money is available and confirmed by committee for this project or else they will pull their offer of grant for this project.

In addition a request to Scottish Enterprise has been made to fund 50% of this £1,136,500 and if this is approved by Scottish Enterprise the Council's contribution will be £568,250.

It is proposed that the funding comes from the ear-marked reserves of £1.35 million for Regeneration of the South of the City.

There are no state aid implications arising from this project. Private sector involvement is limited to the delivery of products and services which will be subject to procurement processes. The Council will own the infrastructure therefore no competitive advantage will be gained by any commercial undertaking during the delivery of the project.

Ongoing maintenance of the facility is included within the estimates received to ensure that The Council is not liable for maintenance costs during the demonstration phase of the facility.

#### 4. OTHER IMPLICATIONS

Legal implications will arise as any award of Structural funds will be subject to a grant agreement. This will be based on a standard template and should only require a small resource input from legal services to ensure they are content with the conditions.

Staff resources will be required to manage the project. As this is a capital project the staff costs will not be recoverable through the project. Staff costs will therefore be met from existing resources.

The physical infrastructure will be owned by Aberdeen City Council and used for demonstration purposes.

Planning permission will be required for the infrastructure and shall be sought immediately after match funding is confirmed. The Strategic Infrastructure Plan identifies the regeneration of Torry to include an extension of low carbon initiatives, and this may be an option for the site of the infrastructure to be considered.

The proposed project will help to support a number of existing Council policies including the Carbon Management Plan, and also the recently launched Hydrogen Framework Strategy.

#### 5. BACKGROUND/MAIN ISSUES

##### **5.1 ACHES Project**

At EPI Committee in November 2013 approval was given to proceed with the ACHES Project subject to securing additional external funding. Officers have since worked to confirm external funding with the need

for match funding from Aberdeen City Council now required to be confirmed by committee for those external grants to be received.

The ACHES project is part of a wider Strategic Hydrogen Programme which was outlined at EPI Committee in November 2013. The Strategic Hydrogen Programme was prepared following approval by Full Council of the Strategic European Hydrogen Transport Projects paper on 20 January 2012. This paper recommended that there be a phased roll out of projects with a longer term view of developing a network of hydrogen refueling stations. The ACHES project will support delivery of this, not only through the provision of hydrogen refueling infrastructure, but also because it will produce hydrogen from green electricity.

## **5.2 Charter, HighVloCity**

The High VLOCity Project, co-funded by EU Fuel Cell and Hydrogen Joint Undertaking, is a large scale demonstration project for fuel cell electric buses and refuelling infrastructure, in order to meet these challenges and offer sustainable solutions. It is believed that the ultimate success will depend on the level of general acceptance of the technology. Hence, the importance to learn and share information.

One of its main dissemination objectives is to create a European Network of Clean Hydrogen Bus Centres of Excellence, initiated at the three operator's sites (De Lijn, Flanders ; Riviera Trasporti, Imperia and Aberdeen Scotland) but intended to be a point of reference on the deployment and operation of fuel cell buses in public transport and to reach out to the regions, to bus operators, to students as well as to the general public. The Centres of Excellence will be key in linking new sites to the existing ones, thus creating a knowledge based exchange network between all the stakeholders, including data and information.

## **6. IMPACT**

The Strategic Infrastructure Plan (SIP) of Aberdeen City Council, at page 32, discusses the Aberdeen Hydrogen Project. This plan includes the need for "additional refueling infrastructure", and therefore this project will support implementation of the SIP.

In 2013 "A Hydrogen Economy For Aberdeen City", a framework strategy for hydrogen in the area was launched. This strategy outlines the vision of a future low carbon economy with hydrogen playing a key role in this. The ACHES project supports implementation of this strategy through the provision of refueling infrastructure which is identified within the strategy as a key requirement.

## **7. MANAGEMENT OF RISK**

A risk assessment has been undertaken for this project and forms part of the project documentation. This is in line with the Aberdeen City Council Risk Management Strategy.

Measures to reduce risk are identified and ensure that any potentially negative impact on the Council are minimised as far as possible.

## 8. BACKGROUND PAPERS

Strategic Hydrogen Programme – EPI Report November 2013  
(EPI/13/208)  
Hydrogen Framework Strategy  
(<http://www.hytrec.eu/Resources/Resources.aspx>)

Appendix 1: Charter HighVloCity

## 9. REPORT AUTHOR DETAILS

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Appendix 1: Charter HighVloCity

### CHARTER on establishing A European Network of Clean Hydrogen Bus Centres of Excellence

Throughout the world, 24% of CO<sub>2</sub> emissions are generated by transport. Since 1990, harmful emissions increased by more than x %. One fourth of the energy produced is used for transport.

Regions and Cities worldwide are therefore searching for ways to reducing CO<sub>2</sub> and meet EU emission reduction targets (20% by 2020 and 60% by 2050). The sense of urgency to ACT NOW is growing rapidly.

The High VLOCity Project, co-funded by EU Fuel Cell and Hydrogen Joint Undertaking, is a large scale demonstration project for fuel cell electric buses and refuelling infrastructure, in order to meet these challenges and offer sustainable solutions. It is believed that the ultimate success will depend on the level of general acceptance of the technology. Hence, the importance to learn and share information.

One of its main dissemination objectives is to create a European Network of Clean Hydrogen Bus Centres of Excellence, initiated at the three operator's sites (De Lijn, Flanders ; Riviera Trasporti, Imperia and Aberdeen Scotland) but intended to be a point of reference on the deployment and operation of fuel cell buses in public transport and to reach out to the regions, to bus operators, to students as well as to the general public. The Centres of Excellence will be key in linking new sites to the existing ones, thus creating a knowledge based exchange network between all the stakeholders, including data and information on :

*Best practice in FC bus integration in bus fleets, data assessment (fuel consumption, emission savings), safety guidelines, workshop equipment, hydrogen production and distribution, bus refuelling, bus maintenance, training guidelines, authorization procedures etc.*

*On a policy level, topics such as effective tax and market incentives, rulemaking proposals, financing schemes etc. will be of interest.*

By using modern media technology, the Network of Clean Hydrogen Centres of Excellence will contribute to sharing knowledge online and interact with the stakeholders within the High VLOCity project objectives.

The Centres of Excellence will be open to any and all stakeholders as well as to companies and the general public who, by registering and accepting the general objectives of this Charter, agree to share information and to use it in the best interest of future clean public transport.

The co-signatories hereunder pledge to use their best effort to contribute to the objectives of the Centres of Excellence contained herein and to promote its values whenever possible.

Signed :  
R, 17 January 2014

Riviera Trasport SpA

Vlaamse Vervoermaatschappij - De Lijn

Aberdeen City Council