

REPORT TO:	FINANCE AND MANAGEMENT COMMITTEE	AGENDA ITEM:17
DATE OF MEETING:	24 NOVEMBER 2022	CATEGORY: RECOMMENDED
REPORT FROM:	MATTHEW HOLFORD HEAD OF SERVICE – ENVIRONMENTAL SERVICES	OPEN
MEMBERS' CONTACT POINT:	JOHN KINDERMAN, CLIMATE AND ENVIRONMENT OFFICER john.kinderman@southderbyshire.gov.uk	DOC:
SUBJECT:	AMENDED D2N2 FUNDING PROGRAMME FOR A PILOT HYDROGEN FUELLED WASTE COLLECTION SERVICE	
WARD(S) AFFECTED:	ALL	TERMS OF REFERENCE: FM

1.0 Amended Recommendations

- 1.1 The Committee accepts the amended terms of the D2N2 Future Funding Programmes Grant.

Background Detail

- 1.2 The D2N2 Funding Programme for a pilot hydrogen fuelled waste collection service has developed because of the Councils carbon neutral commitments, necessitating the transition of its Refuse Collection Vehicles (RCV's) to low carbon emission vehicles. This transition is more complex than the remainder of the Council's vehicle fleet as their weight, geographical range and operational capability mean that electric alternatives are both prohibitively expensive and currently on a technical basis not fit for purpose.
- 1.3 On this basis the Council but forward a proposal for a pilot hydrogen project, funded by D2N2 and match funded by the Council to develop a 12-month programme to pilot the conversion of two diesel RCV's to a hydrogen/diesel blend and to monitor the operational performance, tailpipe emission reductions, gain experience of hydrogen refuelling and storage and to develop a cost benefit analysis of diesel hydrogen blend compared to diesel only and other low carbon fuels.
- 1.4 This matter was considered by Committee on the 28th of April 2022 and the terms of the Grant were accepted by the Committee. On further investigation it is apparent that the site of the initiative at Toyota Manufacturing (UK) in Burniston is not appropriate and the initiative would be better situated at the Council's Boardman Depot in Swadlincote. This has necessitated a revised Grant Offer. and not at as originally suggested.

- 1.5 Several feasibility studies on the Toyota site were carried out to determine the operational suitability by subject matter experts, as follows:
- 1.6 **A site investigation** was completed by a Hydrogen engineer who concluded that to ensure operational and safety suitability an increased surface hardstanding was required to ensure that the weight of the mobile hydrogen refuelling station and the ongoing 'scuffing' resulting from the turning circle of the two Refuse Collection Vehicles (RCV's) was accommodated. This increased surface hardstanding at the Toyota site was estimated to increase the costs of the Programme by between £85,000 - £125,000. As the Funding Programme is for a 12-month period only and the additional cost would be incurred by the Council, this was considered as not cost effective.
- 1.7 **The operational feasibility** of the Toyota site was completed by Head of Operational Services who concluded that the siting of the two Council RCV's would increase the operational service teams travel to work time, decrease the flexibility of the kerbside collection service and detrimentally effect the operational management of both the collection teams and vehicle maintenance because of the distance between the Toyota site and Boardman Depot in Swadlincote where the waste operations are based.
- 1.8 For the above reasons Officers have negotiated with the D2N2 Funding Programme for the Pilot Hydrogen Fuelled Waste Collection Service to be based at the Council's Boardman Depot alongside the existing waste collection service. The Funders have agreed the change and issued a revised Terms.
- 1.9 The changing of the site location has no impact on the delivery of this programme nor any other aspect of the Terms.

Financial Implications

- 1.10 There is no change to the funding because of this amended site location, which consists of the D2N2 Low Carbon Growth Fund (£310k) and the match funding (£395.8k) as shown below:

	Funding
Low Carbon Growth Fund (D2N2)	£310,000
South Derbyshire District Council (2 x RCV's)	£360,000
South Derbyshire District Council (use of Boardman Depot as site location)	£10,800
Dual Fuel Conversion Kit Suppliers (Training & subject matter expertise)	£25,000
Total	£705,800

Corporate Implications

Employment

- 1.11 There are no Employment Implications as the Operational Teams for the two RCV's as part of this pilot will continue to be based at the Boardman Depot.

Legal

- 1.12 None

Corporate Plan

1.13 This proposal continues to meet the Corporate Plan key aims “*Striving to make the Council carbon neutral by 2050*”, “*Working with residents, businesses and partners to reduce their carbon footprint*” and “*Support business development and new investment in the District.*”

Risk Impact

1.14 The primary risks identified in the original report will not change because of the change in site location. There is a risk of siting a hydrogen refuelling station at the Boardman Depot. These risk implications have been investigated by the Head of Operational Services and the risks can be mitigated and are offset by the benefits of locating this pilot programme on the Boardman Depot.

Community Impact

Consultation

1.15 Same as original report

Equality and Diversity Impact

1.16 Same as original report

Social Value Impact

1.17 Same as original report

Environmental Sustainability

1.18 Same as original report

Conclusions

1.19 That the Committee approves the change in location of the pilot project from the Toyota Manufacturing (UK) site in Burniston to the Council’s Boardman Depot.

1.20 That the Committee approves the acceptance of the D2N2 funding based on this amendment and continues to welcome the innovative approach the Council is taking with this Pilot Hydrogen Project.

Background Papers

[D2N2 Funding Programme for a pilot hydrogen fuelled waste collection service. Finance and Management Committee Report on the 28th of April 2022 \(FM08\).](#)