

Enterprise M3 Programme Management Group

10th September 2020

Clean Growth Pilot Programme – Item 6d

PMG is requested to:

AGREE the allocation of £135,000 of Local Growth Fund to the Enterprise M3 Clean Growth Pilot Programme.

AGREE the allocation of £131,000 for ClearBlue Energy Ltd Heat Enabled Virtual Power Plant project

AGREE the allocation of £41,032 for the PowerQuad Battery Storage trial at BASE Bordon project

CONSIDER the options outlined in the paper and agree the proposed funding approach.

AGREE delegated authority to the Chief Executive of Enterprise M3 to approve any further projects under this fund (in line with the agreed funding approach) up to a maximum request of £100,000 from Enterprise M3

1.0 Background

- 1.1 In June 2020 LEPs were asked by Government to submit an application to the Getting Building Fund. LEPs were required to identify shovel ready projects that would help kickstart the economy following the COVID19 pandemic.
- 1.2 Enterprise M3 LEP was awarded an allocation of £13.3m. As part of this was a £200,000 allocation for a Clean Growth Pilot Programme. This £200,000 is comprised of £65,000 from Getting Building Fund and £135,000 from Local Growth Fund (LGF). This funding comes with a carbon reduction output target which is 48 tCO2 pa.
- 1.3 The Clean Growth Programme objectives are to invest in renewable energy generation on public buildings, and innovative decarbonisation of transport and buildings. It is an investment of £200,000 into a pilot scheme for renewable energy and low carbon initiatives in the Enterprise M3 area that will start a Green Recovery. Proposals include renewable energy generation on public buildings, energy efficiency and innovation to support decarbonisation of transport and buildings.
- 1.4 The aim of this fund is to trial a relatively small amount of funding on Clean Growth projects. Since the LEP's focus on Clean Growth -within the Strategic Economic Plan and emerging Local Industrial Strategy, the LEP has become aware of an increasing number of potential projects. This Pilot Programme is an opportunity to trial some of these ideas and to test the demand from partners for the LEP to run a potentially larger scheme with future capital funds.

2.0 Process

- 2.1 Due to the relatively small sum of funding available and the condition that the funding had to be spent quickly, it was decided the best approach was to invite those who had submitted relevant project proposals to us as a result of the June 2020 call for projects to provide us with further detail on their projects.
- 2.2 This was to ensure that we could progress projects swiftly to ensure that government's criteria around 'shovel ready' was met. We have also been keen through this process that we did not raise expectations by launching a Fund with a relatively small budget. However, this Fund is deliberately positioned as a Pilot with the intention that as further funding becomes available a larger Fund will be developed and subject to an open call.
- 2.3 Six organisations were invited to apply for the specified projects. Two organisations had several projects and they were asked to prioritise given the level of funding available.

3.0 Project Assessment

- 3.1 Six applications were received from five organisations. Total project value was £745,901 with total grant request of £449,152 and match funding of £296,750 with projected 250 tCO₂ savings per annum.
- 3.2 The applications were reviewed by independently two members of the EM3 LEP team. They then convened to agree joint scores for each project. This joint assessment was then moderated by another member of the LEP team.
- 3.3 All projects have also been reviewed by the Governance and Assurance Manager.
- 3.4 The six applications (details can be found in Annex 1) proposed a range of Clean Growth and Low Carbon activities, from innovative, digitally based smart heating proposals to installation of renewable energy generation technologies.
- 3.5 We received two proposals, from Clear Blue Energy Ltd and PowerQuad, that were innovative and demonstrated the ability to scale up and commercialise. Both are smart heating type projects which aim to decarbonise buildings through more efficient use of energy.
- 3.6 A further grouping of projects involved renewable energy and low carbon heating installation. These involved installation of solar PV on public buildings as well as a solar and air source heat pump system at Marwell Zoo. These projects offer the opportunity to make carbon savings, be used to kick start further installations across estates as well as supporting the installation supply chain.
- 3.7 Our view is that we should look to support the projects in the first category if they were strong projects as they meet our Clean Growth ambitions and are both digital and innovative. The opportunity to support projects in the second category helps us achieve our carbon savings targets and gives the portfolio a range and mix.

4.0 Options for Decision and Consideration

- 4.1 We wish to seek the following from PMG:

- Approval to fund the ClearBlue Energy Ltd Heat Enabled Virtual Power Plant project
 - Approval for the PowerQuad Battery Storage trial at BASE Bordon project
 - The views of PMG and agree an approach on the renewable energy installation type projects
 - In line with the approach used for the Supporting Town Centres Fund, to seek approval that the Chief Executive can use delegated authority under £100k.
- 4.2 The ClearBlue Project seeks funding to support the development and demonstration of the Heat Enabled Virtual Power Platform (HEVPP). The total project cost is £257,000 and they are seeking £131,000 from EM3, providing 49% match funding. The anticipated carbon reductions are 130 tCO₂ pa.
- 4.3 The project will develop and demonstrate a software platform which acts as the virtual power plant. They will also install 20 low carbon heat solutions across the Enterprise M3 area to test and demonstrate the HEVPP.
- 4.4 The applicant has developed a strong partnership with Osaka Gas, Igloo Energy, SES Water Home Services Ltd and Daikin Air Conditioning Limited. This project is very innovative and has the potential to scale up and commercialise significantly through the partners.
- 4.5 The PowerQuad project is a pilot and demonstrator project which will develop and the software and install PowerQuad's current battery storage product in part of BASE Bordon. The total project cost is £41,032.56 and they are seeking 100% funding. The anticipated carbon saving is 0.45 tCO₂ pa.
- 4.6 PowerQuad have developed an innovative self-contained, energy storage technology specifically designed for businesses who have little additional space and other large energy storage products are unsuitable. Distributed around a building in small units, powerQuad sync together to optimise and control the battery storage system as a whole.
- 4.7 The key objective is to create the first service which enables SME businesses to reduce their carbon footprint from electricity use even without solar panels installed.
- 4.8 This project is scalable, and the next stage would be to make BASE the UK's first fully battery storage powered office, underpinning the EV charge point expansion for the site. The technology could then be used across any office building with shared access and shared office space.
- 4.9 The remaining 4 projects can be grouped as renewable energy installation projects and as the total funding requests exceed the existing budget, we seek the view of PMG on how to proceed.
- 4.10 These projects meet the Programme Objectives set out in section 1.3. They provide clear carbon reductions, enable the applicant organisations to demonstrate energy savings and potentially roll out further installations across their estates.

- 4.11 They are all deliverable within the timeframe. They each would help stimulate the supply chain in terms of renewable technology and installation, demonstrate public sector commitment to carbon reduction and help meet the relevant local climate targets.
- 4.12 However, the total amount of funding means that we are currently unable to fund all the projects. If we were to fund all proposals, then we would require a further £249,152.

5.0 Conclusion and Recommendations

- 5.1 This Clean Growth Pilot Programme has resulted in the submission of a range of innovative and interesting projects that meet our strategic aim of achieving Clean Growth. This Pilot Programme gives the LEP the opportunity to test trial some of these ideas and to test the demand from partners for the LEP to run a potentially larger scheme with future capital funds.

Jennie Pell – Sector Specialist Clean Growth
3 September 2020

Annex 1

Applicant	Brief Description	Project Value	Grant Request	Match Funding %	tCO2 pa saving
Clear Blue Energy Ltd	To develop and demonstrate the Heat Enabled Virtual Power Plant (HEVPP) platform	257000	131000	49	130
PowerQuad	Develop software to enable their battery storage product to respond to grid carbon-intensity forecasts. To run a small pilot at BASE Bordon centre to confirm the model with real data.	40228	40228	0	0.45
Winchester City Council – Council Depot	The project will install solar panels on the Council's waste depot site. The beneficiary of the renewable energy will be Biffa, the current waste contractor for the Winchester District.	77520	50920	34	11
Spelthorne Borough Council – Solar PV installation	Supply and installation of a Solar PV system on to the roof of SBC's main operations building the White House Depot.	21924	16524	25	5
Winchester City Council – Marwell	Remove the oil-fired boiler and wet central heating system which currently heats the Giraffe House and to replace them with renewable heat in the form of an air source heat pump in addition to 23.5kWp of triangular solar photovoltaic panels on the Wild Explorers roof. The intention is to install 90 kWp of standard solar photovoltaic panels. These solar panels will be procured by the Council and owned by the Council.	238425	144675	39	87.5
Waverley Borough Council	The Woolmer Hill Pavilion Energy Efficiency Project is a project to transform an important community building to an environmentally sustainable public asset through investment in green technology.	110000	65000	41	16.1
Totals		£744,097	£447,347		