
Meeting of the Cabinet - 28th June, 2023

Report of the Deputy Chief Executive

Energy Development Fund

Purpose of Report

1. To propose the creation of an Energy Development Fund, which consists of £1M borrowing approval for investment in renewables to reduce the Council's carbon footprint and make financial savings.

Recommendations

2. That the Cabinet approve:-
 - That the Council be recommended to include up to £1m of Climate initiatives within the Capital Programme which are self-financing over the life of the projects.
 - Subject to the above, that Council authorises the Director of Finance and Legal, following consultation with the Cabinet Member for Climate Change and the Deputy Chief Executive, to approve individual schemes which have a business case incorporating a payback of less than 7.5 years.

Background

Climate Policy

3. The Council declared a climate emergency in 2020 and committed to be Net Zero by 2030. Whilst some progress has been made, this has been largely predicated on funding streams such as the Public Sector Decarbonisation Scheme and SALIX funding.

4. Both funding streams have been re-profiled and now only support a certain percentage, typically 35%, with an expectation that the council will meet the remaining financial deficit. This has proven difficult given the available resource internally to support funding rounds.
5. Delivery against the Council's Net Zero aspirations need to be accelerated if the Council is to deliver its target and become a Net Zero Council by 2030.

Energy Policy

6. Dudley consumes 97.88GWh of energy per year, this equates to 21,161 tonnes of CO₂ per year; this represents the amount of carbon that needs to be mitigated annually.
7. The energy management team is building capacity and resource to meet the needs of accurate billing and monitoring of the councils' emissions; this includes investing in renewable energy where a business case exists
8. The cost of energy is also rising and in the 2023/4 budget, the Council approved additional expenditure of £3.1M to reflect increasing energy costs. The Council can do little to influence the overall cost of energy, which is impacted by global factors but it can influence the amount of energy it uses as a result of local policy, both investment decisions in renewable energy sources and changes to energy use behaviour.

Energy Development Fund

9. An example of the types of schemes that may be considered are included in the table below for illustration only, if any of these initiatives are progressed then a business case will be developed to test the robustness of the proposal.

Detailed Measure Identified	Applicability	Identified Energy Saving Yr 1 (kWh)	CO ₂ e Saving	Averaged annual saving (£)	Capital cost to instigate (£)	Payback period
Solar PV Array	Stourbridge Town Hall	159,120	41	23,708	117,000	4.94
Solar PV Array	Dudley Town Hall	73,780	19	10,907	54,250	4.97
Solar PV Array	Corbyn Road Offices	106,352	27	15,793	78,200	4.95
Lighting and Controls	St James	345,193	88.2	51,779	141,991	2.74
Pool Cover	Crystal Leisure Centre	351,995	64.7	8,799	25,994	2.95
Direct Drive Pumps	St James	402,564	102.9	60,385	241,039	3.99
Cavity Wall Insulation	Ednam Road Offices	4,656,333	856.1	116,408	579,954	4.98

Duncan Edwards Leisure Centre

10. The first example of this approach is the installation of Solar PV panels at Duncan Edwards Leisure Centre. The roof space can accommodate a total of 281 solar panels. Elsewhere on this Council agenda is a proposed update to the Council's capital programme to allow this investment to be made and, subject to Council approval, these solar panels will be installed in the summer of 2023. This will reduce carbon emissions from this building by 69,000 kg per year. It is anticipated that this project will reduce annual electricity consumption at Duncan Edwards Leisure Centre by 147,000 KWh from the baseline of 933,000 KWh saving £45,000 per annum.

The financial appraisal of this investment is summarised below:

Cost of Investment	£192,000
Annual repayment of MRP & Interest	£15,361
Annual Maintenance cost	£1,914
KWH's per annum saving = 146,830 x £0.31 per KWH	-£45,517
Net Annual Savings	-£28,242
Pay Back period (years)	4.2

Finance

11. A full business case will be required for each proposal, outlining the initial capital investment, the expected consumption reduction, energy saving and the payback period of the proposed project. The payback period will then be stress tested based on an agreed set of criteria.
12. The scheme will only be recommended for approval if the scheme is self-financing meaning that the initial investment cost and resulting debt charges are recovered from energy savings because of the reduced consumption over the useful life of the asset.
13. It is proposed that the Energy Development Fund set out above be approved in principle, and subject to approval of the delegation outlined in the recommendations, the Director of Finance and Legal be authorised in consultation with the Cabinet Member for Climate Change and the Deputy Chief Executive to review schemes to access this funding where a robust business case of self-financing is clear.

Law

14. This proposal adheres to Climate Change Act 2008 and the government's path to Net Zero by 2050.

Risk Management

15. The material risk is electricity costs are volatile and therefore payback rates will be driven by energy prices; rates are reviewed annually within our corporate contracts and therefore, rates may fall below the assumptions made in our payback calculations. The impact of this won't be evident for some time.
16. The environmental impact and risk towards achieving Dudley MBC's Net Zero target is also critical and any benefits a scheme can deliver to reduce carbon emissions is high priority..

Equality Impact

17. The proposals contained in this report are consistent with the Council's Equality and Diversity Policy.

Human Resources/Organisational Development

18. The Council is in the process of assembling a new Sustainability, Energy and Climate Change team with the skills and capacity to meet future challenges.
19. As this team is assembled, the Council will need to consider addressing organisational issues to allow the team to perform and succeed, for example, energy management is presently fragmented across the Council, despite the Council having a budget of £11.3m (£8m Electricity, £2.7m Gas and £0.7m Water Supply). In addition, with the new Power Purchase Agreement (PPA) that was put in place from February 14th to sell the electricity generated by the Energy from the Waste facility.
20. The Council is in the process of establishing a professional and corporate energy management function.
21. Phase one of the Environment Directorate's restructure established the post of Energy Manager to head up this team and now, under phase two, populates this team's structure.

22. In addition to building a team, it is proposed to transfer the processing of utility bills from the finance team to the Energy team from the 1st of September 2023, so that the Energy Management team has full oversight of the Council's energy expenditure and allows the team to influence spend decisions, both from a financial and sustainability viewpoint.
23. Under the Energy Manager's leadership and subject to employee consultation, a new team will be created consisting of:

Energy Analyst
Energy Projects Officer
Utilities Performance Officer
Technical Officer (Energy Management)

Commercial/Procurement

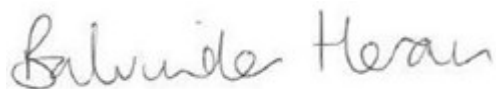
24. In line with social and environmental values set out by our procurement process.

Environment/Climate Change

25. The proposals contained in this report are consistent with the Council's approach to achieve Net Zero by 2030.

Council Priorities and Projects

26. Falls within the remit of Dudley MBC achieving Net Zero by 2030.



Balvinder Heran
Deputy Chief Executive

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List of Background Documents:

Procurement and Contract Documentation