

Agenda item 8

For decision – to procure solar panels for the Ranger Base

Authors: Matt Mellen, Climate Action Lead; Will Reynolds, Renewable Energy Coordinator

Summary (incl. recommendations)

FTC can save money and decarbonise by rolling out solar panels on suitable FTC-owned roofs. A first quote has been secured for the installation of solar panels and a battery for the Ranger Base in Victoria Park and approval is sought to complete the procurement exercise.

Recommendations

1. Approve the procurement of solar panels and battery for the Ranger Base to be funded from the General Reserve
2. Delegate authority to the Town Clerk in consultation with the Climate Action Lead to obtain competitive quotes and let a contract for supply and installation
3. Report back to Council on the outcome.

Background

Frome Town Council (FTC) has declared a climate emergency and is therefore committed to reducing its own greenhouse gas emissions as much as possible as part of the drive to achieve Net Zero. A fundamental part of this transition is ensuring that we are generating and using as much renewable energy as possible and this is clearly set out in the Council Plan and the current work programme. This can be achieved in part by installing solar panels on all available FTC owned assets with suitable solar potential.

Another objective is for FTC to provide services to the town in as cost effective a way as possible and to ensure we save money wherever possible. Installing solar panels onto suitable roofs is a win-win for FTC because it both achieves our decarbonisation goals whilst saving money. Powering our activities from clean energy that we generate on our estate is cheaper than buying electricity from the grid and once the equipment has been paid for, they then offer years of free, low carbon electricity.

Rolling out new renewable energy assets across our estate is therefore an excellent investment and it is proposed that we use FTC reserves for this purpose wherever opportunities present themselves. This logic is significantly bolstered by the current geo-political context and the fact that energy prices are currently rising and may continue to do so for the foreseeable future. The more expensive electricity from the grid is, the greater the saving FTC is making by generating our own power.

Solar potential at the Ranger Base in Victoria Park

Will Reynolds, FTC's Renewable Energy Coordinator has carried out an initial scoping exercise to assess whether the Ranger Base in Victoria Park is suitable for a new solar array. By using

the Solar Wizard tool, we can see that the main office building is not suitable due to shading from the surrounding large trees. However, the storage containers at the back of the plot have good solar potential and could hold up to 19 panels. An advantage of this set up is that the installation would not require scaffolding, and so would be cheaper than a rooftop solar installation representing better value for money and a shorter payback period.

Will has secured a quote from a Frome based company, to give an indication of costs. If Council approves this plan, Will is to secure two more quotes so that we have three in total and the best value option can be selected.

The quote we have is for an 8.7kW PV system (19 panels) with an 11.5kWh battery. Panels would be installed across all the storage containers at the back of the yard with the battery and inverter on the outside wall of the office building. The main use of electricity at the site is the electric heating in the office and charging the two electric vehicles. The system would be expected to generate around 7,900kWh of electricity over a year, saving about 1.5t of CO₂ emissions per year, the equivalent of planting about 70 trees. About 90% of the clean electricity generated would be used at the site, the rest would be exported to the National Grid. The PV system would supply about 60% of the total electricity used at the site.

An initial quote from a local supplier estimates the installation costs to be £11,000. The system is predicted to save about £2,000 per year on electricity bills and so would take 5 to 6 years to pay for itself. After the payback period, the panels will generate free electricity for FTC operation for the remainder of their lifespan which could be 25 years or more. We highly recommend installing solar panels on every available FTC roof where this electricity can be used replacing the need to buy electricity from the grid.

Other options considered	All FTC owned buildings are being assessed for their solar potential
Key considerations for the Council	This will save the Council money and progress our climate action
Consultation and feedback	FTC's Solar and Beyond initiative is well received in the town. We should "walk our talk" and also roll out our own solar initiatives
Links to Council Plan and Medium-Term Financial Plan	This proposal is in line with Aim 3 in the Council Plan which is to cultivate environmental sustainability by reducing our greenhouse gas emissions. It will also save the Council money by making use of cheaper locally generated electricity
Financial and Risk Implications	There is a risk of the system failing which can be mitigated with suitable insurance
Legal / HR Implications	Ensure the company we use is certified and offers a good warranty
Equalities Implications	Helps us to meet our Public Sector Equality duty objectives. Town wide adoption will have a positive impact on equalities in Frome.

Community Safety Implications	More local renewable energy makes Frome more resilient in the face of climate changes
Climate Change and Sustainability Implications	Builds resilience
Health and Safety Implications	None
Constitutional Requirements	N/A
Background Papers	N/A
Report Sign-Off	Peter Wheelhouse, Town Clerk 01/09/26

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