



Trust Board Briefing Paper	
Reference Number:	TB152/10/D
Date of Meeting:	24th August 2023
Presenting Director:	Paddy Graffin, Divisional Director of Infrastructure
Subject:	Causeway Hospital 1.36MW Solar PV scheme
Purpose: Approval/Noting	Presentation of Business Case to gain approval for onward presentation at Trust Board for sign-off.
Background:	Causeway Hospital is located on the Newbridge Road on the outskirts of Coleraine. It is one of two Northern Trust Acute hospitals. This hospital has an Emergency Department, Surgical and Medical Wards and a number of other services provided at the site. A new state of the art gynaecological unit, The Meadows, opened at Causeway Hospital in 2018. The Northern Health and Social Care Trust's Estate Services Department strive to reduce the Trust's utility consumption and always seeking ways to lower the running costs of our estate, as per the Trust's Corporate Objective No.3. This includes delivering value by optimising resources and includes the service reforms outlined by the Trust to ensure we are using our teams, skills and resources in the best way possible, by streamlining pathways, avoiding unnecessary hospital admissions and ensuring earlier intervention. In some areas the Trust has identified the need for increased investment to take account of higher costs, demographic growth and new technologies, or to enable the transition to more effective service models. As part of this, the Trust will bring forward investment in renewable energy and energy efficiency improvements. Causeway Hospital site has an annual electricity consumption of 4,979,741kWh and produces 1.1million tonnes of carbon. Electricity costs for 2022-23 amounted to £1,194,943, £28,248 of which was paid as



part of the Climate Change Levy with current figures still to be formalised.

As a health and social care provider, we have increasing dependence on our buildings in order to deliver a quality and ever-improving service. Implementing energy efficient technology reduces our buildings operating costs and lowers carbon emissions.

Benefits

This scheme will reduce the NHSCT's electricity costs within the HLP budget. It is projected that the project will reduce the Causeway's Hospital's electricity consumption from the grid by 1MKWh/annum and reduce carbon emissions by 238,058kg's.

This scheme will reflect the NHSCT's Environmental Policy and strive towards reducing carbon emissions and will improve the Causeway's Display Certificate (DEC) rating.

This scheme will be funded by the Department of Economy's Invest to Save scheme. £1.8m has just been awarded to the NHSCT by DfE on the 2nd August 2023

RISKS

Electricity costs have been rising steadily as last few years mainly due to an unstable Geo-political situation across Europe as well as countries trying to invest in Green energy. So if the NHSCT does nothing to combat this we will incur raising energy bills for the foreseeable future.

Before applying for funding for this scheme the NHSCT engaged the market for accurate prices and through experience gained from other schemes we are confident that the money awarded to us through the Invest to Save scheme will allow for full completion of the scheme.

The Solar modules are secured to the Roof tiles using clips which hook underneath the tile onto the rafter. There is a risk when this clipping is taking place the roof tile could crack or break due to age and exposure to the North West weather.

Mitigation Measures – A roof survey will be carried out which will sample the condition of the roof tile in various sections of the roof. Also in the case of a running into brittle roof tiles our estates dept have been engaged to source replacement roof tiles.

The scheme risk is the electrical distribution boards within the Causeway hospital may require upgrading in order for them to function alongside the solar system. This is really an unknown until the system is up and running as it is impossible to visually identify worn equipment which may fail.



Mitigation Measures – We will and are working closely with our operational estates team to ensure spare components of Causeways distribution boards are in storage and can be replaced quickly.

With any Mechanical/ Electrical scheme of this size there is a risk of disruption to service. But with careful planning and good communication with all parties these risks will be minimised.

NIE has been liaised with and theoretic assumptions and projections have been used. The Trust is in the later stage of working towards the G99 connection which will ultimately determine system size and NIE network connectivity.

CONCLUSION

Implementing this scheme will assist the NHSCT in meeting Energy / Carbon reduction targets, as required in The Climate Change (NI) Act 2022, and also assist with lowering its Nett Energy consumption by 30%; as per the 2019 Energy Management Strategy and Action Plan for NI central government (EMS). In addition the Trust will be saving recurrent money which can be redeployed and finally there is the non-monetary gains of staff seeing investment in the Causeway Hospital and the public seeing the Trust as environmentally friendly.