Kells Office

St. Brigid's, Ardee, Co. Louth Decarbonisation Pathway



We're taking climate action

Built in 1930s as a Mental Health facility. Currently, it mostly serves a HSE admin function, with some health services also.

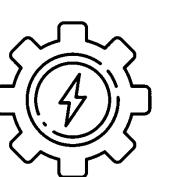
A number of Energy Projects were carried out on site from 2019 to 2022.



Lighting Upgrade



Steam Boiler Retrofit



Pump Upgrades

Capital Cost: €102,074
Saving: 121,000 kWh/yr

Capital Cost: €72,276.8 Saving: 295,552 kWh/yr

Capital Cost: €22,047 Saving: 89,705 kWh/yr

Heating System Re-zoning and Heat Pump Integration: 2022 to 2024

Before

- Gas Boilers provided all space heating loads
- Single pipe heating system >60 years old
- Whole building heated 24/7, but only 20% of building is only used outside office hours
- Cast Iron radiators (protected), no controls
- Windows used to control room temperatures

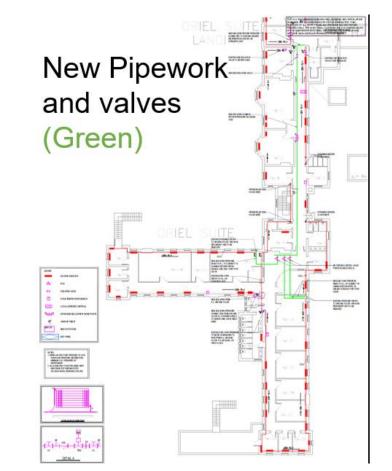




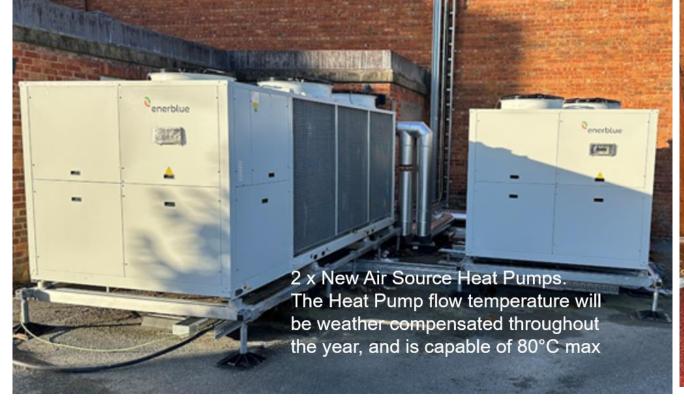


After

- New Heat Pumps will deliver >90% heating load
- Strategic installation of new control valves
- Heating system re-zoned into 22 zones. Each zone now has time and temperature controls
- 400 new TRVs fitted to the heritage radiators
- Each room now has reasonably efficient controls

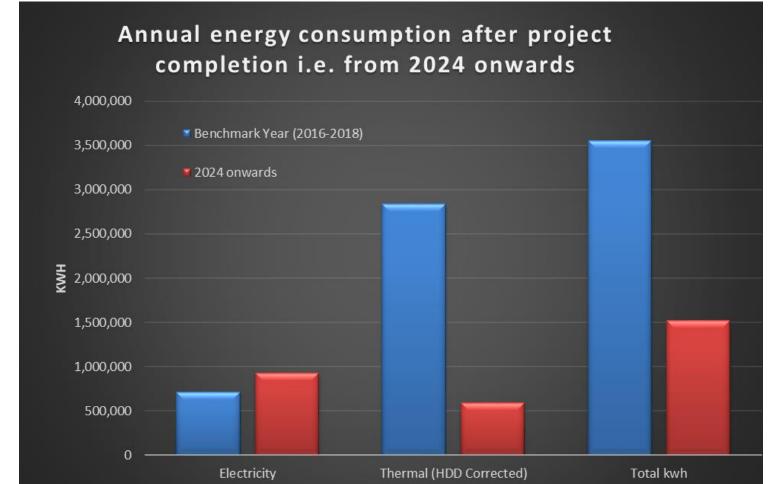


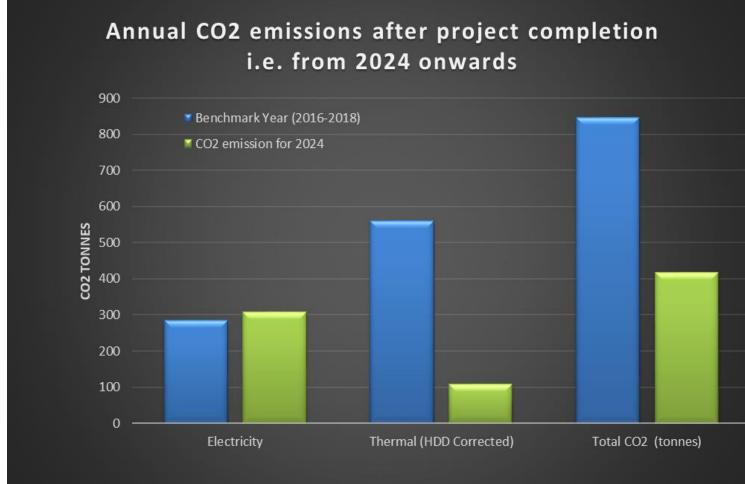






Total Energy and CO2 Savings for the Campus





Energy Savings 2,028,933 kwh/yr 57.2 % reduction

CO2 Savings
428 Tonnes/yr
50.6 % reduction

The site is on track to exceed it's 2030 Climate Action Plan Targets by 2025