

CASE STUDY: PONTYPRIDD COTTAGE HOSPITAL

Three Dachs units were installed at the hospital. This diagram shows the resulting economics.

Heating and electricity supplied by gas boiler and grid

| Fuel supplied kW | Supply efficiency | Power used kWe | Heat generated kWe | Carbon intensity tonne CO ₂ |
|--------------------|-------------------|----------------|--------------------|--|
| 77778 | 90% | | 70000 | 15.09 |
| 233333 | 90% | | 210000 | 45.27 |
| 30800 | 100% | 30800 | | 17.49 |
| 92400 | 100% | 92400 | | 52.48 |
| Costs | | £9,240 | £7,000 | |
| Total costs | | £16,240 | | 130.33 |

Heating and electricity supplied by three Dachs units

| Fuel supplied kW | Supply efficiency | Power used kWe | Heat generated kWe | Carbon intensity tonne CO ₂ |
|--------------------|-------------------|----------------|--------------------|--|
| 114545 | 88% | 30800 | 70000 | 22.22 |
| 343636 | 90% | 92400 | 210000 | 66.67 |
| Costs | | | | |
| Total costs | | £10,309 | | 88.89 |

Energy savings: £5,931 pa; Emission savings: 41.4 TCO₂