

Case Study

Penywaun Infant & Junior Schools (Aberdare, Wales)

Project type: *New boiler installations in existing boiler house, School*

Boiler details: *2 x Ashwell GreenTec 150kW boilers*

Fuel type: *Wood Pellet*



Site background: *The school ran two coal boilers which were around 30 years old. Reliability was an issue with the cost of maintenance and breakdowns high. The boilers were dirty in operation and emissions of CO₂ high.*

Solution: *Two Ashwell manufactured 150kW boilers, independently sited - one for the infants school and a separate one for the junior school. The new biomass boilers were installed within the existing boiler houses and integrated into existing heat distribution system. The system was designed so that fuel stores were built within the existing coal storage area. No fossil fuel back up is required.*

Wood pellet was the chosen fuel to provide a consistent, controllable fuel source - achievable due to its uniform nature. Its high calorific value meant lower storage space was required.

Benefits to customer: *Installation was completed in 10 working days to fit in with school closing so that the shut down in the heating system did not affect pupils.*

Ashwell now provide servicing and maintenance training to a local company to allow them to service this installation. Ashwell continue to provide technical backup where needed.

The boilers have resulted in a reduction of day to day heating costs and improved reliability, thereby reducing overall running costs. The system has reduced the school's overall CO₂ emissions (coal replaced by biomass which is CO₂ neutral).

Highlights:

- *Installation was delivered within deadlines and within budget*
- *Installed in 10 days to fit around school holidays*
- *System designed to fit existing boiler houses and fuel stores*
- *Wood pellet to provide a consistent, controlled fuel source*
- *Reliability has been significantly improved*
- *Significantly reduced heating costs*
- *Training and technical backup supplied by Ashwell*