

National Assembly for Wales Cardiff



The sustainable Senedd is built from sustainable materials and heated by a biomass boiler - all contributing to its 'Excellent' BREEAM rating

The Senedd is the Debating Chamber of the National Assembly for Wales and as such is the main centre for democracy and devolution in Wales. It has been designed and built along sustainable principles and is built of sustainable and traditional Welsh materials such as slate and Welsh oak.

The design brief requirements for the Senedd were set to ensure that the building met and exceeded the Assembly's constitutional requirements for sustainable development and current good practice. In terms of environmental performance, the Senedd achieved an 'Excellent' certification, the highest ever awarded in Wales under the Building Research Establishment Environmental Assessment Method (BREEAM), as required within the design brief.

The Assembly building is heated by a single 360kW Binder boiler fitted with underfed hearth combustion system designed and installed by Wood Energy Limited. The boiler features include automatic cleaning of heat exchanger tubes and exhaust gas recirculation. The boiler is equipped with a gas ignition burner to allow a 'smokeless start'. The fuel store is subterranean to allow easy tipping of either wood pellets or wood chips and is fitted with a modular walking floor system to transport the fuel to the boiler system, which is designed for wood fuels up to 35% moisture content.



Name of project	National Assembly for Wales, Senedd Building
Location	Cardiff
Boiler Type	Binder RRR/RRF 400-600
Maximum rated output	360kW
Wood fuel specification	Wood chip and pellet
Maximum moisture content	35%
Maximum particle size	G50
Wood fuel storage volume	40 m ³
Commissioned	January 2006