

Case Study-

Wood Chips to Climate Control



History of Astellas Ireland - From wood chips to climate control

The company *Astellas Ireland Co. Ltd.* in Killorglin, located on South Western part of Ireland, uses wet wood chips with moisture content 30%-50% as fuel for steam production, used for process control and climate control in production facilities.

The Astellas Group are committed to reducing the groups carbon footprint and the introduction of a biomass boiler to replace the existing gasoil boilers reinforced this commitment.

Wood Chip is the only viable alternative to gasoil in the South West of Ireland and the selection of a biomass boiler, with all fuel sourced locally to the plant resulted in significant cost savings for Astellas and stability from the volatile oil market

One of the major advantages of Weiss system is that its operation is fully automatic and manned only in the working hours. At nights and weekends the system is run automatically which results in substantial savings related to labour costs.

The combustion system has an advanced cleaning facility which meets all national and locally emission demands easily.

Green energy – environment

The flue gas is cleaned by means of the latest techniques used in filter systems. Therefore, WEISS fulfills all national and local emission requirements.

Project Facts

• Commencement year	2012
• Fuel	Wet wood chips
• Moisture content	30 -50 %
• System size	1,6 MW (Thermal)
• Power generation	N/A
• Fuel consumption	0,8 t/h (6.400 ton / year)
• Steam production	2,5 ton / hour
• Operating hours yearly	8.000 hours
• Operational pressure	10 bar
• Efficiency	79% without economizer

Turn-Key installation

WEISS offers a 100% turn-key delivery: custom design-production-mounting-commissioning and service.



Due to the fact that waste or biomass based fuels are used to generate thermal heat and power, the cost reduction of fossil fuels usage are tremendous.

Another great advantage for the customer is to be independent of the volatility of energy prices and to have the return on their investment in a few years' time.

WEISS Range of boiler capacity burning wood chips

Thermal energy	: 1MW – 20MW
Steam pressure	: from 10 to 20 Bar
Generated electricity	: Contact Weiss

Proven technique

WEISS Biomass Boiler Plants utilise only well proven technologies and components. It guarantees the durability of the system without unexpected shutdowns and unforeseen expenses.

WEISS Biomass Boiler Plants have very low maintenance requirements and are fully automatic operated, which results in lower labour cost.

1.0 T/Steam - 667 kW			
Fuel	Consumption	Fuel price/unit	EUR/T steam
Straw	200 kg	€ 0.03	€ 5.00
Woodchips	300 kg	€ 0.04	€ 11.00
N gas	667 kw	€ 0.04	€ 26.68
Oil	60 l	€ 0.58	€ 34.80

