

CASE STUDY - FISH PROCESSING



Introduction

This case study is based on a fish processing plant located in the Connemara area of Co. Galway. The main fish processed here are salmon, trout and char. The facility operates approximately 240 days per year with a staff complement of 35. Production typically varies from 45 – 175 tonnes per week.

Waste Management

During 2008, 19 tonnes of waste was generated by the processing facility, 30% less than the same period during 2007.

Prevention was achieved through the implementation of the following actions:

- Removal of skip and replaced with receptacles for waste segregation
- Education and awareness campaign
- Improved practices on-site
- Increased level of staff participation

Although the waste arising in general decreased, a slight increase still occurred per tonne of production. This was due to a large facility clear-out during 2008.

Energy Management

The processing plant has successfully reduced their energy consumption following participation in the Galway Waste Prevention Programme from 152 kWh/m²/yr in 2007 to 102 kWh/m²/yr in 2008. Although production did decrease during 2008, this figure has been achieved through improved housekeeping and an on-site energy awareness programmes.

The processing plant now has access to a comprehensive energy monitoring system through their service provider which allows them to monitor energy usage on line.

Water Conservation

There is significant potential for water conservation in the fish processing industry.

Following the installation of water restrictors and improved water management in general, water use has reduced in this processing plant from 17,000 m³ in 2007 to 10,000 m³ in 2008.

Outputs

	Kg waste / T	kWh / m ²	m ³ water / y
2007	6.9	152	17,000
2008	7.8	102	10,000

Conclusion

This fish processing plant was provided with hands-on expertise from the programme team who undertook an assessment of the plants environmental performance, made recommendations on cost-effective action plans, and assisted staff with the development of environmental management programmes.

This process proved very successful with environmental improvements being evident throughout the business.

This process is extremely useful as it can aid the quantification of resource use in comparison to the processing plant output.

