

Economic and Environmental Benefits of the Best Available Technique Application in a Food Processing Plant

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Abstract : A cleaner production project was implemented in a bakery. The project is based on the substitution of the best available technique for an obsolete leaven production technology. The new technology enables production of durable, high-quality leavens. Moreover, 25% of flour as the original raw material can be replaced by pastry from the previous day production which has not been sold. That pastry was previously disposed in a waste incineration plant. Besides the environmental benefits resulting from less waste, lower consumption of energy, reduction of sewage waters quantity and floury dustiness there are also significant economic benefits. Payback period of investment was calculated with help of static method of financial analysis about 2.6 years, using dynamic method 3.5 years and an internal rate of return more than 29%. The supposed annual average profit after taxation in the second year of operation was incompliance with the real profit.

Keywords : bakery, best available technology, cleaner production, costs, economic benefit, efficiency, energy, environmental benefit, investment, savings

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