

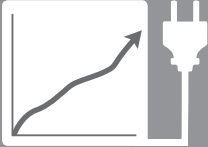
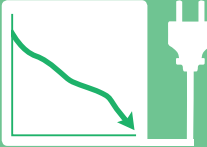


Cooling Systems in Barns

Comparison of Costs for Investment and Energy

Project: New free stall barn for 250 dairy cows

	Tunnel ventilation	Tube ventilation system
Investment costs:	<p>24 EC axial fans</p>  <p>High number of units, low unit price incl. delivery costs, excl. assembly</p>	<p>8 ventilation tubes a 50 m</p>  <p>Custom-made system, project-specific calculation incl. delivery costs, excl. assembly</p>
Total:	€ 19,700	€ 45,000

Running energy costs per year:	<p>24 fans à max. 1.5 kW → max. 36 kW</p>  <p>900 hours at 100 % 1500 hours at 90 % 2200 hours at 75 % 1500 hours at 60 % 2660 hours OFF</p> <p>172,800 kWh</p>	<p>8 fans à max. 1.5 kW → max. 8.8 kW</p>  <p>900 hours at 100 % 1500 hours at 90 % 2200 hours at 75 % 1500 hours at 60 % 2660 hours OFF</p> <p>42,240 kWh</p>
Gesamt:	€ 48,384*	€ 11,827*

*Electricity price: € 0,28/kWh (may vary by region)

✓ Result: Costs per year

Depreciation 10 years + running costs per year:	 <p>€ 50,354</p>	 <p>€ 16,327</p>
---	--	---