

Project FME-Koppenberg

Sustainable mushroom cultivation at FME-Koppenberg: reduction of CO₂ emission and improvement of quality



FME-Koppenberg's question

Increased production, reduced CO₂ emission and sustainable production.



For you too

Koppenberg is switching to fully sustainable heating/cooling production. The company is part of the FME group and has a production capacity of 100 tonnes per week. The increase of production goes hand in hand with an improvement of the quality as a result of the completely sustainable installation of ENGIE Refrigeration. You too can profit from these advantages.

Lower costs, higher yield

ENGIE Refrigeration is building a fully sustainable cooling system at Koppenberg. The system runs on natural coolants and the residual warmth after cooling is retrieved and reused. Due to higher ambient tempera-



tures, in summer more cold is required to refrigerate the cold stores. During this period particularly large volumes of heat remain after the cooling process. ENGIE stores this heat in an underground tank. In winter, a heat



pump boosts this stored heat to 70 degrees, which is what Koppenberg uses to heat the whole company. In addition, ENGIE has replaced the existing cooling compressors with a much more efficient, innovative cooling system. This system allows the products to retain moisture, which is good for the quality and weight of the mushrooms.

Improved quality

With this new cooling system, Koppenberg is switching to completely sustainable energy. As a result of a special method of cooling, ENGIE is also able to stop the growth of the mushrooms the moment that they are ready for marketing. This allows the maximum retention of the weight and the freshly picked quality. In addition to saving costs,

“Reduction of CO₂ emission and an improvement of quality”



Benefits

- Sustainable production
- Substantial reduction of CO₂ emission
- Increased yield as a result of quality retention

this sustainable cooling technique also substantially reduces the emission of CO₂.

Investment

Any company in the mushroom sector can use this technology. One of the major advantages is that the main components of existing cooling systems – the operating system, the air handling units and the air distribution systems – do not need to be replaced. For this investment the period to cost recovery is shorter than three years in many cases.



ENGIE's solution

An innovative cooling solution guarantees the retention of the freshly picked quality of the mushrooms. The residual warmth from the cooling process is fully reused. The system uses natural cooling agents.

More information?

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