

Absorption Chilled Automobile Climate System

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Today the transport sector is responsible for roughly 30% of the CO₂ emissions in Denmark. A way to reduce this is to optimize the fuel efficiency of automobiles.

In an average combustion engine automobile, more than half of the fuel energy released upon combustion, is lost through dissipated heat. By employing the principle of absorption cooling, our project aims to utilize this excess heat to provide the cooling needed for the car's climate system. This would in turn increase the fuel efficiency of the average car with up to 10%, as the conventional cooling system in today's cars is a compressor driven system, that uses mechanical power provided by the engine.