



Mobile Latent Heat Storage System for Waste Heat Utilization



Storage of Thermal Energy

- **Sensible Heat, Water**

» **100 MJ/m³**



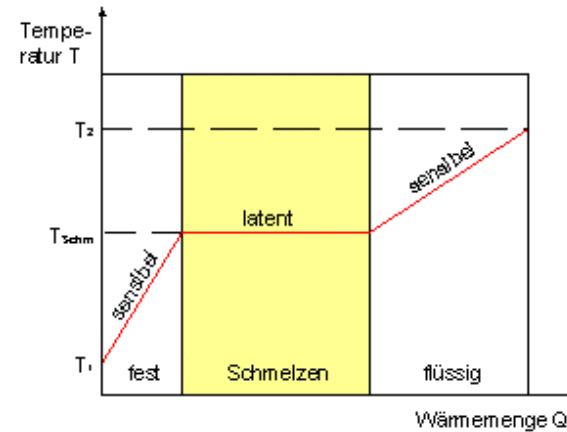
- **Latent Heat, PCM**

» **300 - 500 MJ/m³**





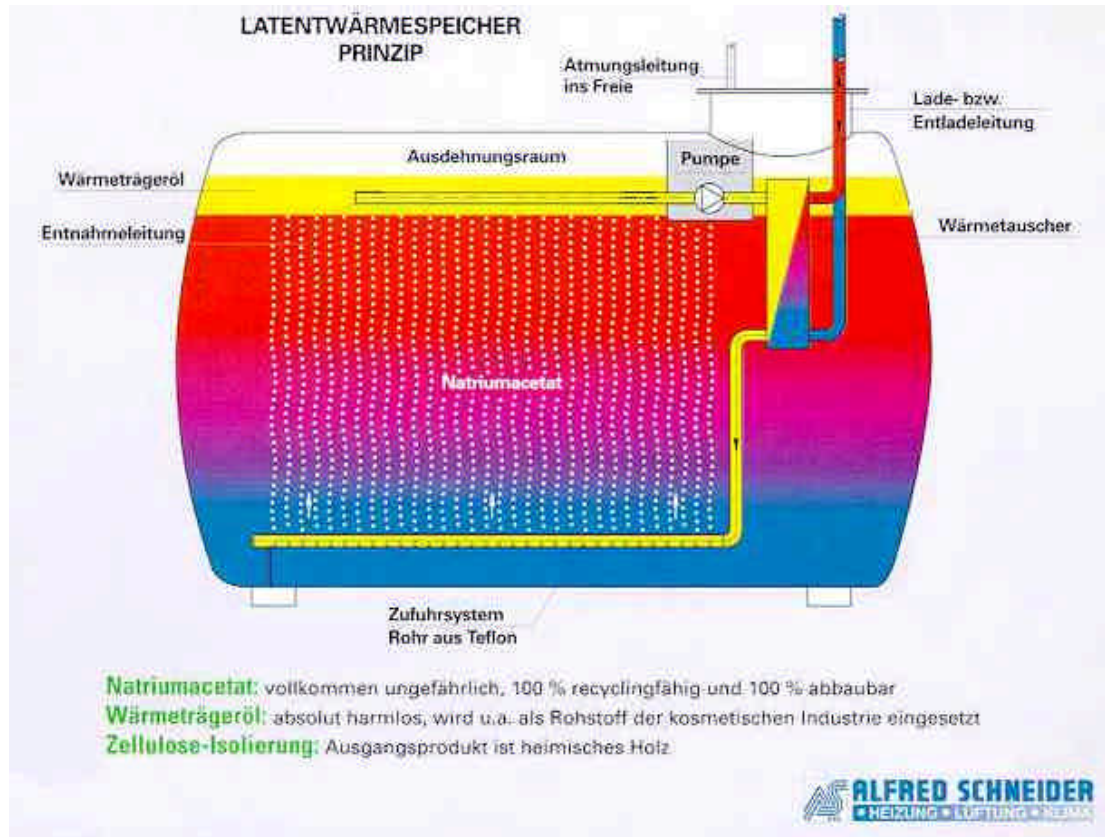
- Phase Change Material Latent Heat



- Application „Pocket Warmer“ (Sodium Acetate Trihydrate)

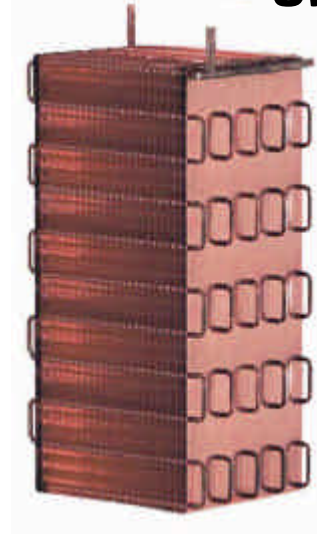


Deutsche Forschungsanstalt für Luft- und Raumfahrt (DLR)





LWS Module for Thermal Solar Energy Storage



Heat Exchanger

Storage Capacity	122 kWh (100°C - 40°C)
Dimensions	750 x 750 x1590 mm
Weight	1165 kg
Power Example	1740 W at 47 / 52°C
PCM	Sodium Acetate Trihydrate



LWS Standard Container Module, 20''

- Steel Container
- Isolation and
- Stainless Steel Housing

will be replaced by

- Wood Concrete**



Storage Capacity	2.500 kWh (100°C - 40°C)
Dimenions	6.058 x 2.438 x 2.591 mm
Weight	26.000 kg
Power Example	125 kW at 38 / 48°C
PCM	Sodium Acetate Trihydrate



Advantages

- Water usage instead of Thermal Oil for Heat Transfer
- Easy to adapt to existing Installations
- Possible Emergency Heating



Standardized Mobile System



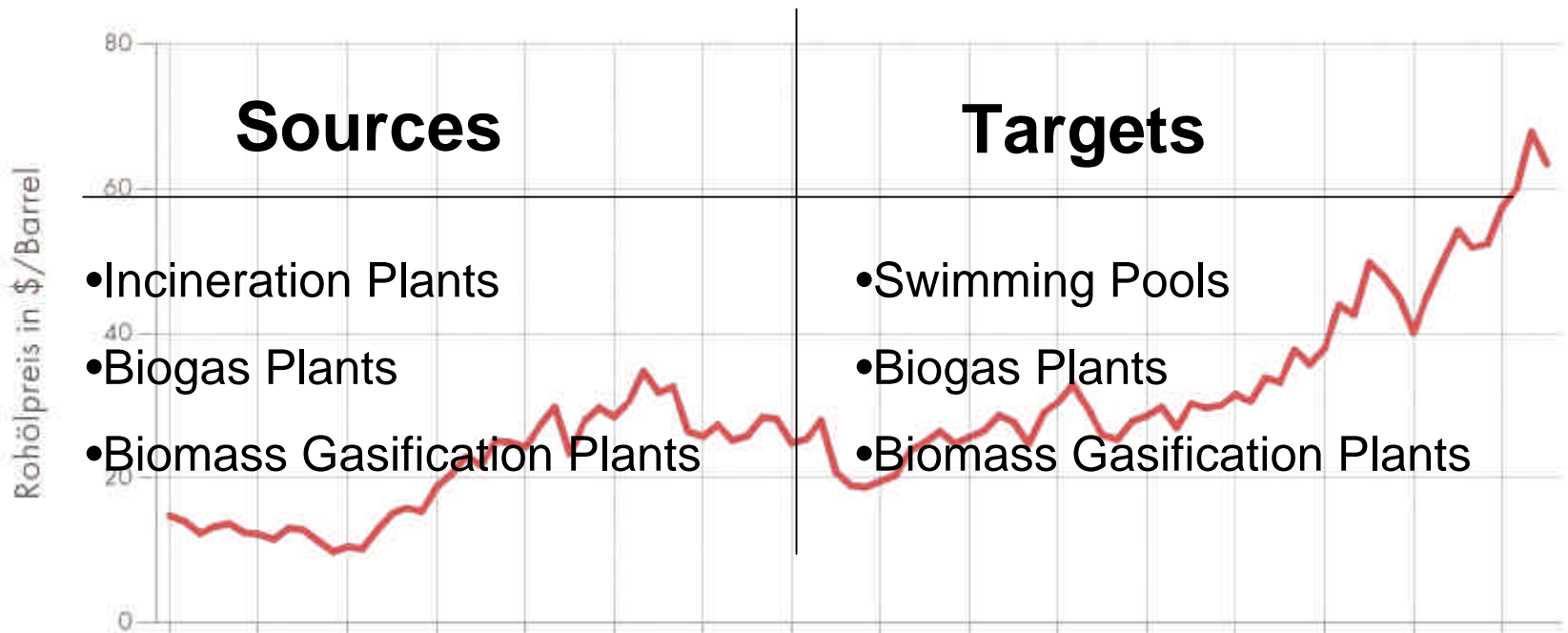
Mobile Storage built for use with a standardized change-over system.

Stabile standard chassis designed for frequent change-overs.





Projects are ready for Realization





Thank you for your attention

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