



### Barpro Basics - Mobiles and energy savings

Unfortunately, the price of electricity is only going up. In the past, with the cheapest electricity in the world, South African cold stores did not pay sufficient attention to electricity consumption. Indeed, it's cheapness led, in many instances, to waste. Storax mobiles, although electrically powered, are designed to save energy. A cold room with fixed selective racking, for example, will hold about half the number of pallets that can be stored on a Storax system. As the electricity cost to refrigerate the cold store with either type of racking will be much the same, with Storax mobiles, the energy cost per pallet is effectively halved. Storax mobiles do rely on electrical motors to operate. The energy required to move a Storax mobile with 360tons of product is about the same as boiling an electric kettle because of the gearing ratio used. Storax mobiles can also be fitted with aisle light switching which turns the lights on only in the open aisles where they are required. The lights remain off in the rest of the cold room with the exception of the access gangway. Lights use electricity when on, but the heat they introduce must also be removed by the refrigeration system. A 400 watt bulb, for example, will have an actual energy cost of about 600watts. By using aisle light switching on mobiles the energy cost of lighting can be reduced by over 80%. Make no mistake, Storax mobiles are the energy efficient storage solution.



Motors are geared

If you'd like more information, please contact James Cunningham. [james@barpro.co.za](mailto:james@barpro.co.za) or 083 658 6455



#### Welcome to the Barpro Team

Danie Coetzee has joined the Barpro Team as our new workshop manager. We hope you enjoy many happy years with Barpro Storage.

#### You're Invited to: the SARDA breakfast meeting

**TOPIC:** "Benchmarking of Energy of Cold Stores"  
**DATE:** Tuesday 22 February **TIME:** 07h30 for 08h00  
**VENUE:** Pitch & Putter Restaurant,  
Vodacom Golf Academy, Tygervalley  
**COST:** R70,00 (includes breakfast)  
**RSVP:** (021) 555 1120 or [sardanat@mweb.co.za](mailto:sardanat@mweb.co.za)

### Cold Storage Energy Benchmarking

The rapid increases in electricity cost and the pressure to reduce carbon emissions are two recent additions to all the other challenges of a typical South African business, especially in a cold storage operation with a relative high energy consumption. Many cold storage operators are battling with the following questions:

- How can we save energy & reduce carbon emissions?
- How can we reduce electricity cost?
- Where do we begin? How much will it cost? etc.

One way of finding answers to the above questions is to participate in an energy benchmarking exercise. Benchmarking is an analysis technique whereby certain predefined parameters of an operation are compared with other similar facilities, with the purpose of efficiency improvement as an end result. A well-structured benchmarking exercise will link the electricity consumption with the operational outputs of a facility on the appropriate level, to provide useful results for management to introduce energy efficiency improvement measures. Barpro is proud to be part of the steering committee to create this benchmarking initiative for cold storage operations. The idea is to have two groups: Freezer stores (<-18°C) and Chiller stores (-0.5 to 8°C). Electricity unit cost and consumption levels will be benchmarked. Another benefit for a participating cold store is that the most potential improvement areas will be identified supported by quantified results. These quantified results can be used to structure an energy improvement plan, to motivate future improvement programs and it can be used as input to carbon calculators and performance management programs. SARDA has taken the initiative to arrange a meeting for interested parties. Please contact them (see above) if you'd like to attend.



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