

GEMS

Demystifying the New Rules for Commercial Refrigeration

What is GEMS?

The Greenhouse and Energy Minimum Standards (GEMS) sets the bar for energy efficiency and environmental performance in equipment like commercial refrigeration in Australia and New Zealand.

The rules were due to be updated in August 2020, but have been deferred to May 2021.

In the meantime, manufacturers have to register their products with the GEMS authority on a new public database that shows how efficient (or inefficient) the products are.



What's Changing?

The GEMS determination of 2021:

- Replaces previous MEPS ratings
- Broadens the scope to most types of commercial refrigeration
- Aligns the rules with international standards

The changes scheduled for May will also introduce a new 0-10 energy star rating on each product.

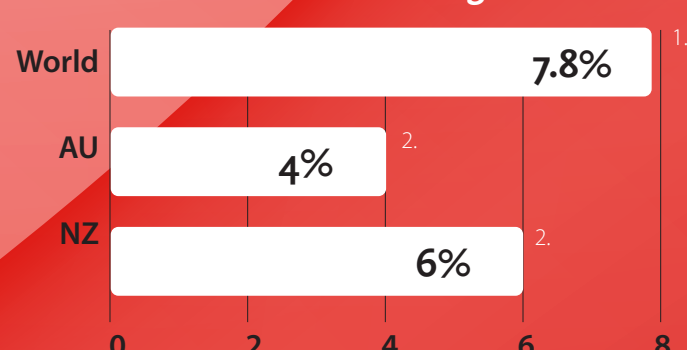
This will provide businesses with an easy shorthand for understanding which fridges are the most efficient.

The new standards created are:
Display refrigeration – ISO 23953
Storage refrigeration – EN 16825

Why is GEMS Changing?

Commercial refrigeration inefficiency has an outsized impact on global warming. This also generates hugely unnecessary power bills for businesses that rely on commercial refrigeration.

Share of Global Warming Emissions

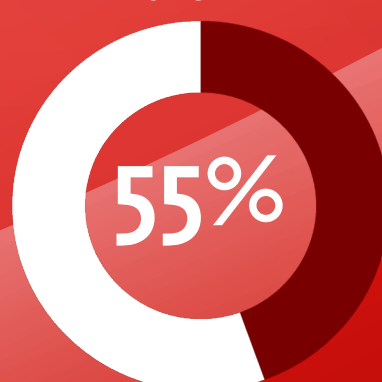


Comparison 3.

11% AU passenger & commercial vehicles

Share of Avg. Convenience Store Power Bill 4.

Refrigeration
55%



Everything Else
45%

What Should I Do?

Unfortunately it's not as easy as just picking a fridge with the best energy star rating. You need to compare apples with apples!



Use the GEMS Database

www.energyrating.gov.au

- click on Registration database, then choose "Refrigerated Cabinets"

1. Compare Climate Class and M Package Temperature, not star rating, so you know the unit will fit your needs
2. Next, look at Total Energy Consumption (TEC) to compare real-world efficiency
3. If you're running a fleet, don't forget to check Net Volume and Total Display Area (latter only available after CSV download)

Use Data in Your Decisions

- RFPs/tenders - specify Climate Class and M Pack rating requirements
- Approval documents & presentations – focus on lifetime cost
- Sustainable Procurement best practices - align strategy with corporate responsibility

If in doubt, ask an expert
skope.com