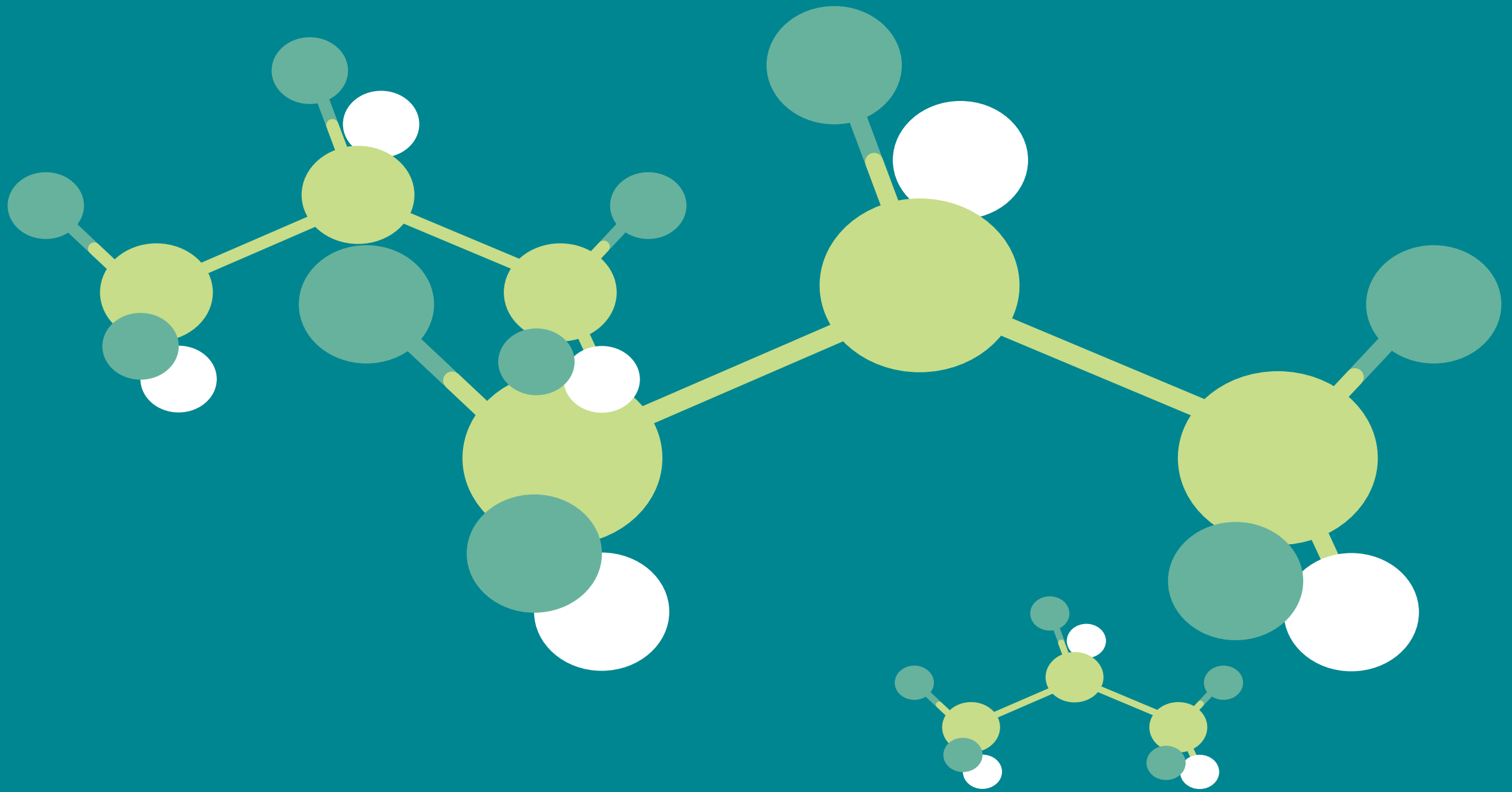




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Variable capacity technology
applied to light commercial
appliances using natural
refrigerants:
The best option for fast
growing economies

Andre Paz Rosa



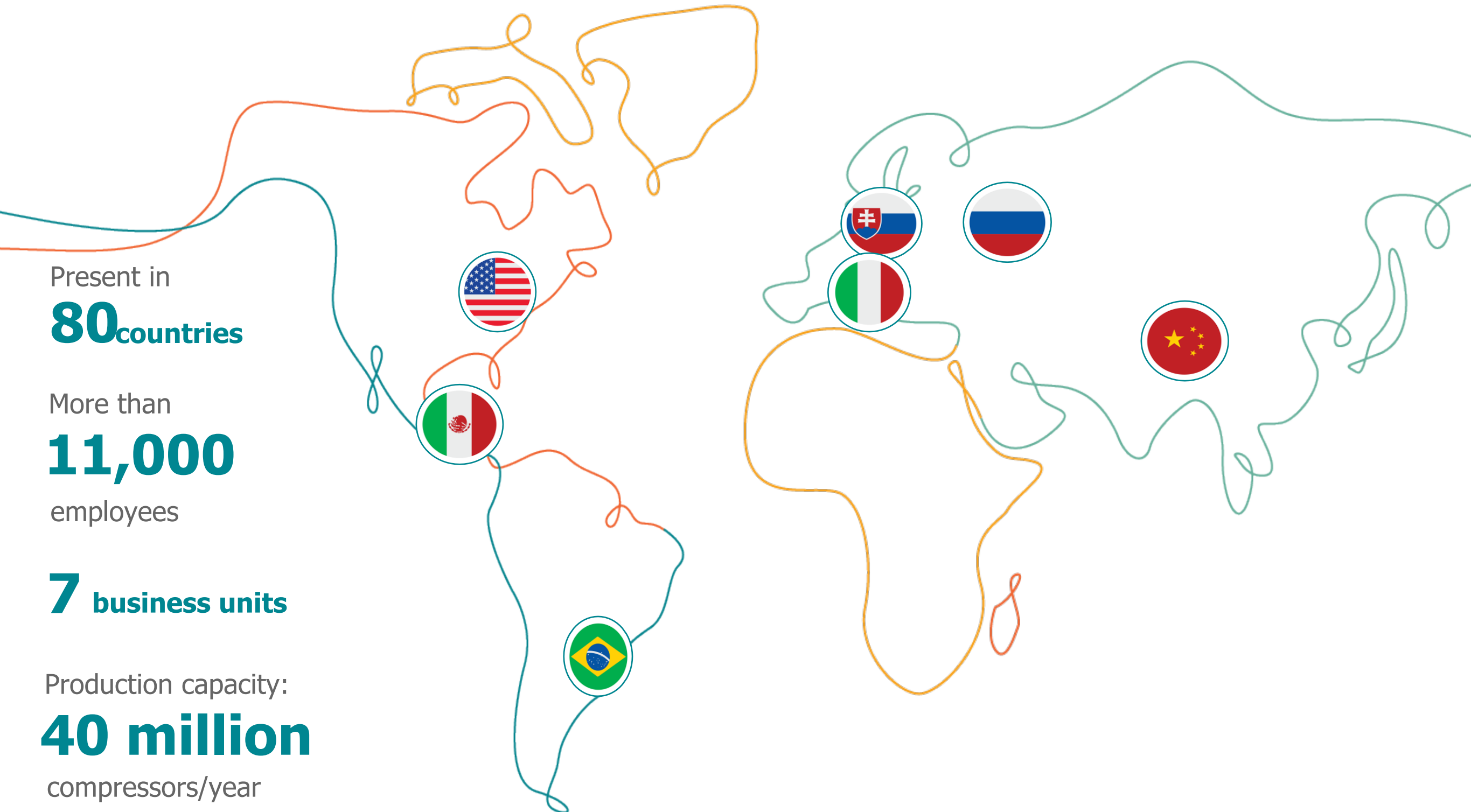
embraco

Present in
80 countries

More than
11,000
employees

7 business units

Production capacity:
40 million
compressors/year



Energy Regulations For Refrigeration Applications



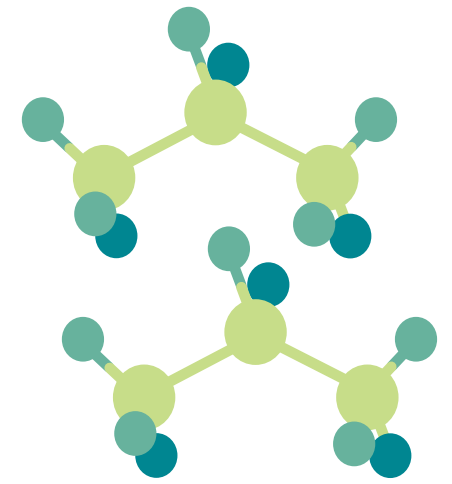
ALL REGIONS HAVE TO ADOPT ENERGY USAGE REGULATION TO MEET RECENT KIGALI AMENDMENT OBLIGATIONS

What is

the best option

for Household and Light Commercial

systems in low GWP for the future?



Hydrocarbons

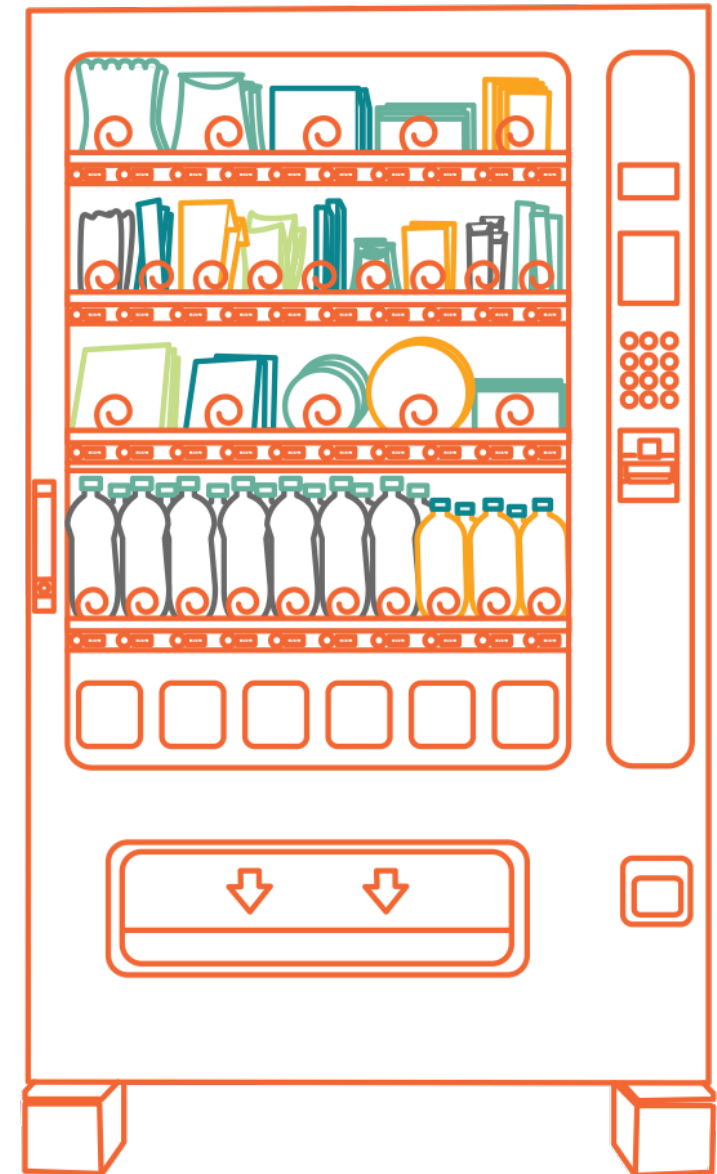
are the most sustainable choice.

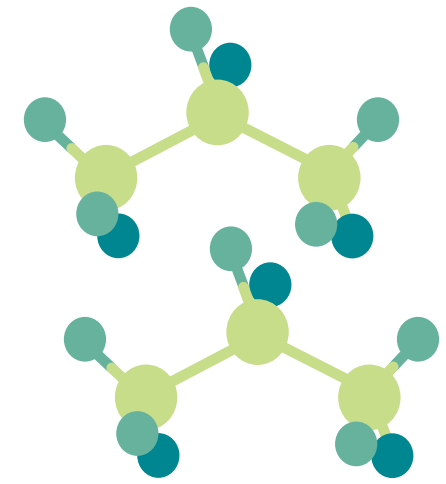
Why Natural Refrigerants?

Light commercial applications

With the 150g limit
Natural Refrigerants (R290)
already can cover most
light commercial applications
as well as supermarket merchandizers
up to 1500 l freezers.

Multiple circuits can be used for
equipment requiring more
than 150 g of R-290





They are safe.

Most of the household and light commercial application's refrigerant charge are **equivalent to the charge of 2 or 3 cigarette lighters.**

Technology that evolves with consciousness

Ideal combination of new technologies and miniaturization with natural refrigerants.

ON-OFF
12kg



FULLMOTION
8 kg



WISEMOTION
5kg



HIGH
EFFICIENCY

UP TO
40%
ENERGY
REDUCTION



LOW NOISE
LEVEL



FLEXIBILITY &
SMALLER SIZE



GREENER
(OIL FREE)



CHALLENGING NEW
POSSIBILITIES

A complete range of products designed for HCs



128 W


CAPACITY

3620 W






Efficiency



High startability



Size & Weight



Noise level



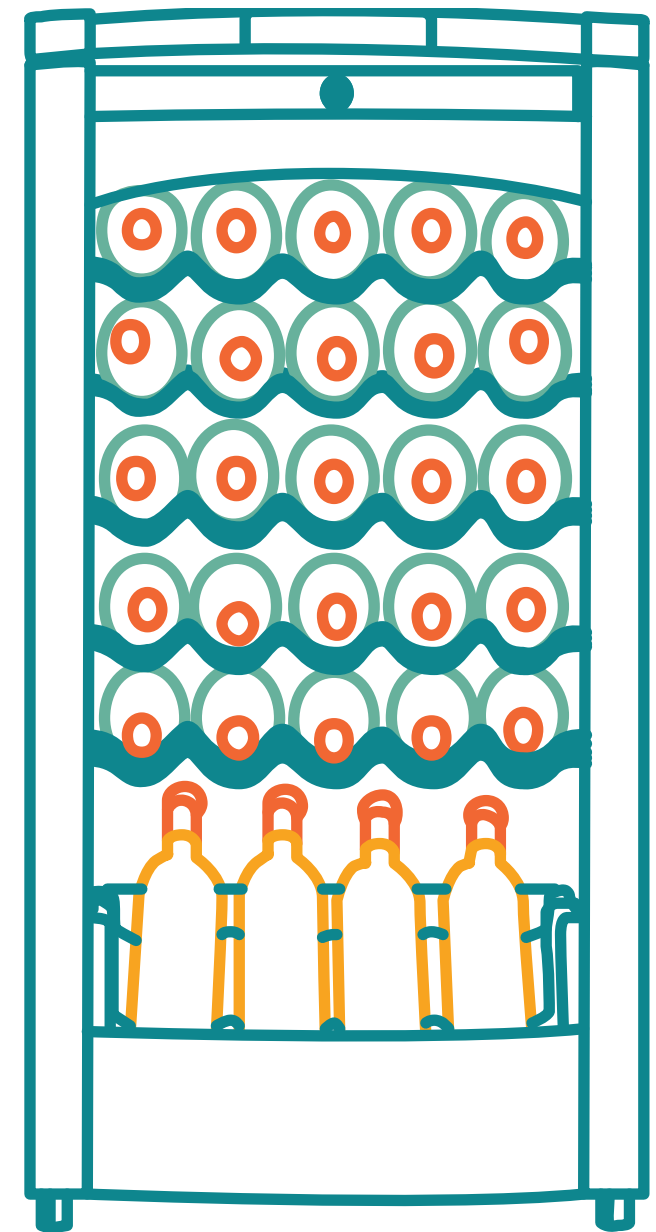
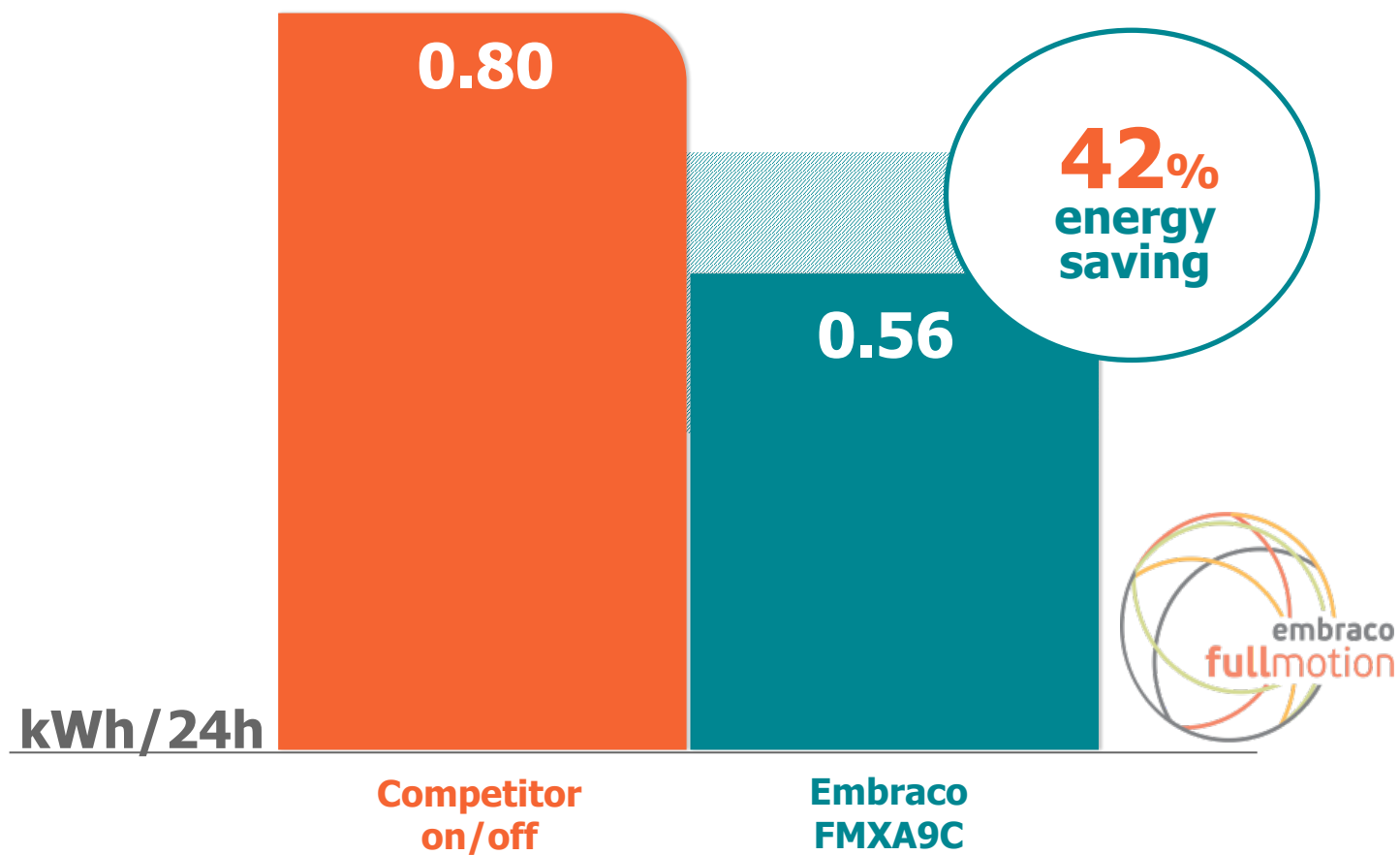
Vibration



Pulsation

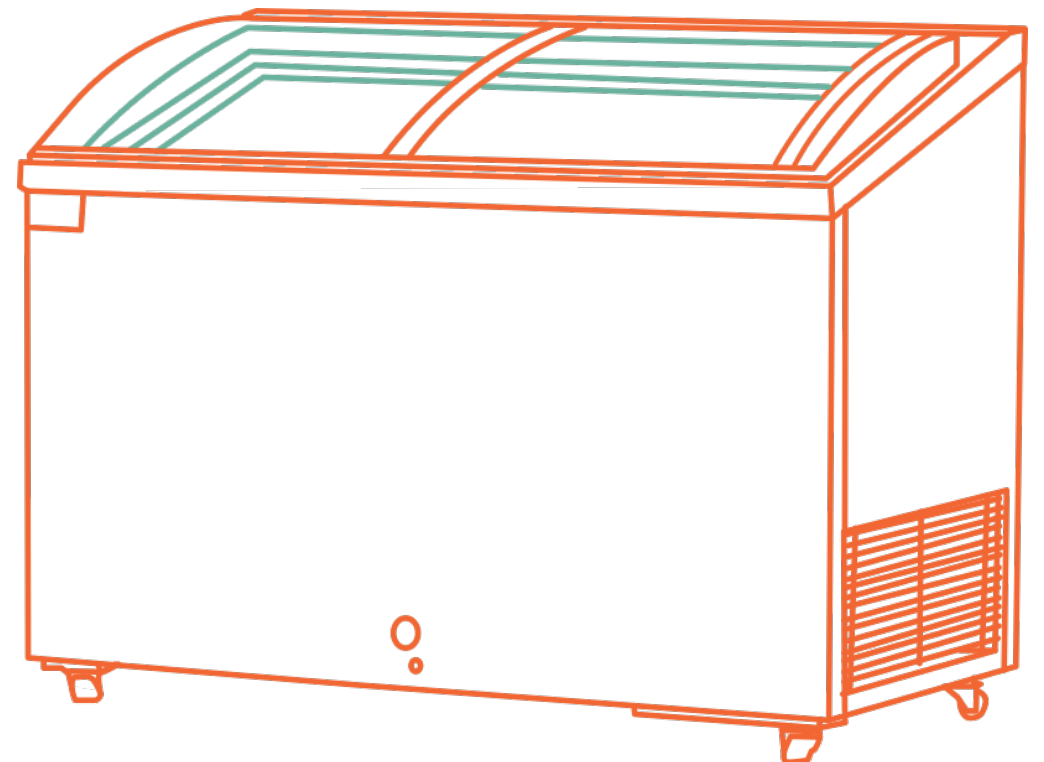
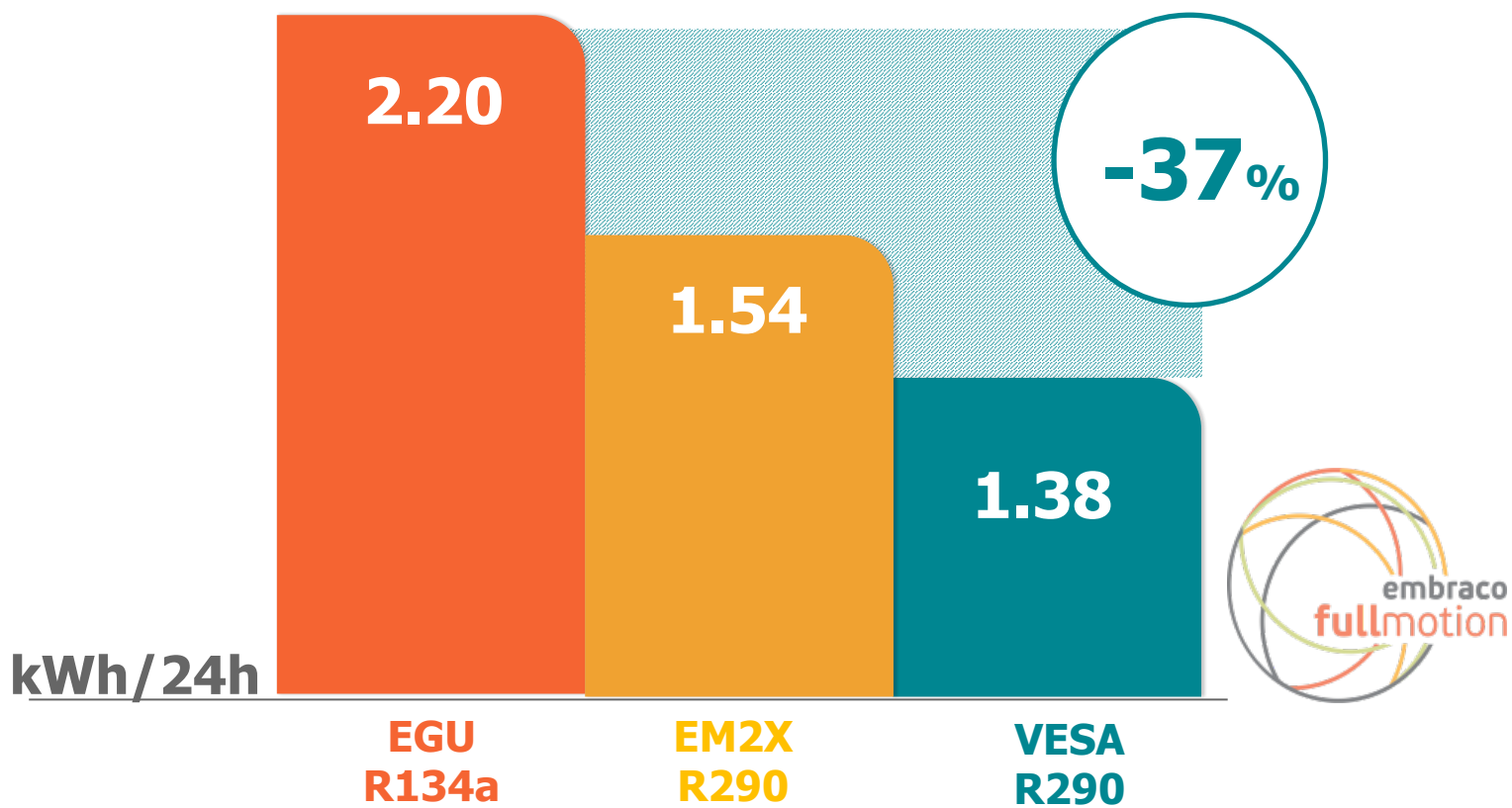
Fullmotion technology & hydrocarbons for wine cooler

On/off vs FMX compressor



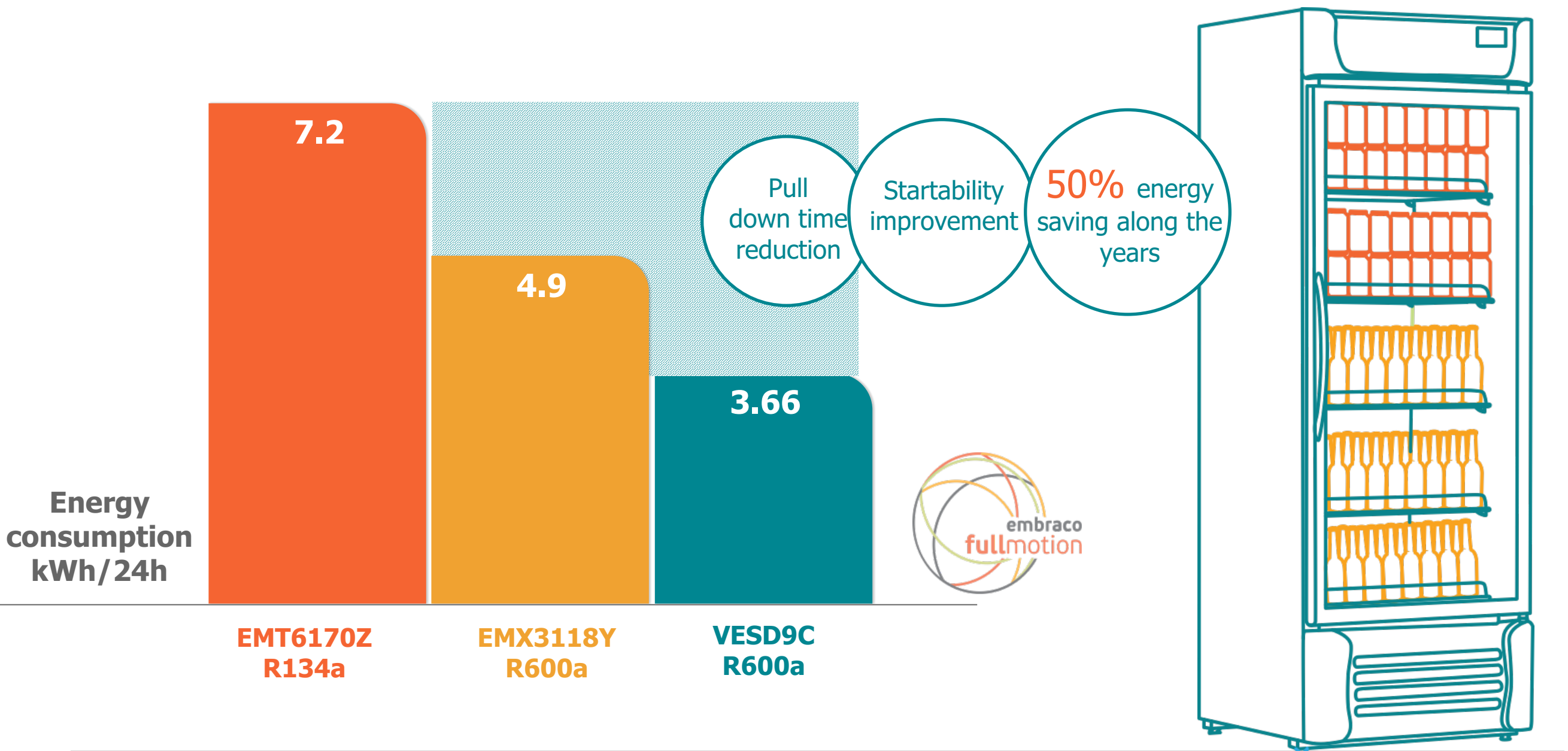
Fullmotion technology & hydrocarbons in an ice cream freezer (325L)

Keeping pace with toughest energy requirements coming from Specifiers every new season



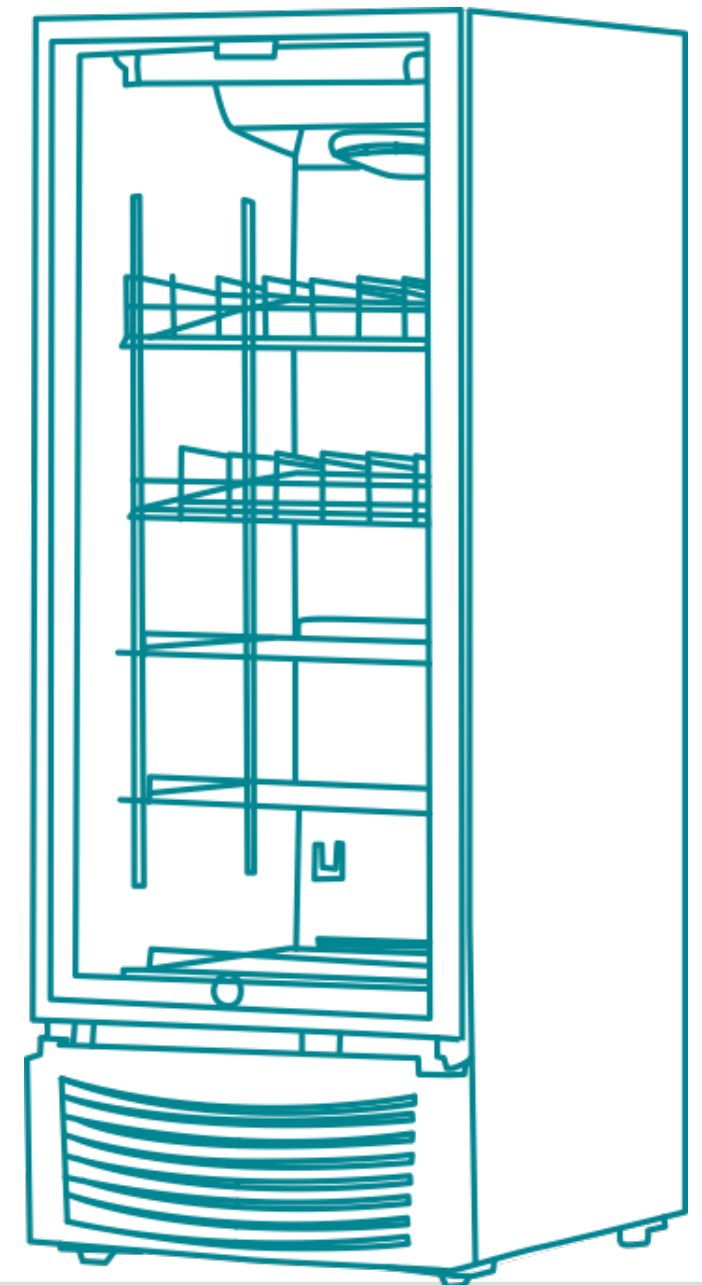
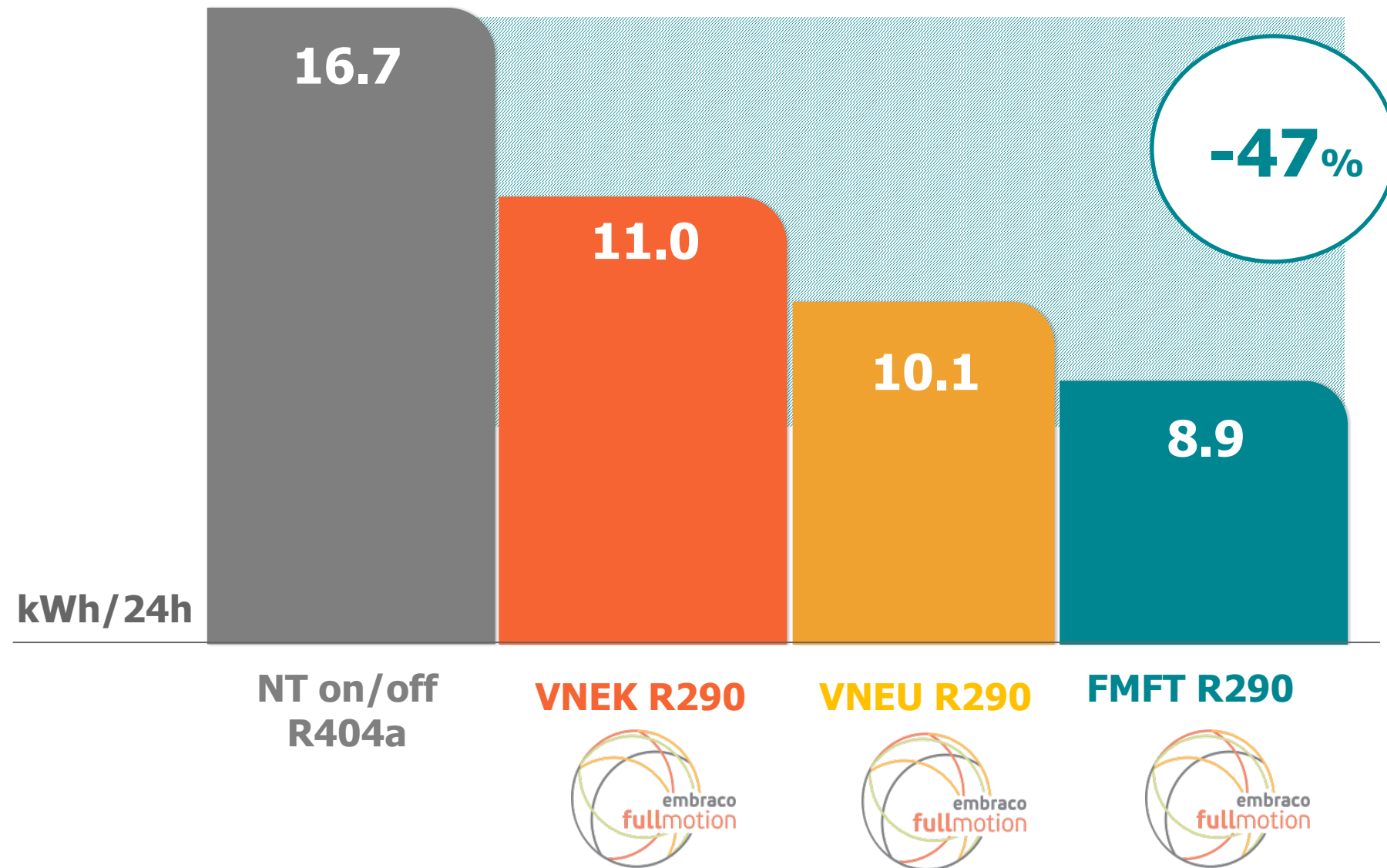
Fullmotion technology & hydrocarbons in a bottle cooler

Variable speed coming to Bottle Cooler segment



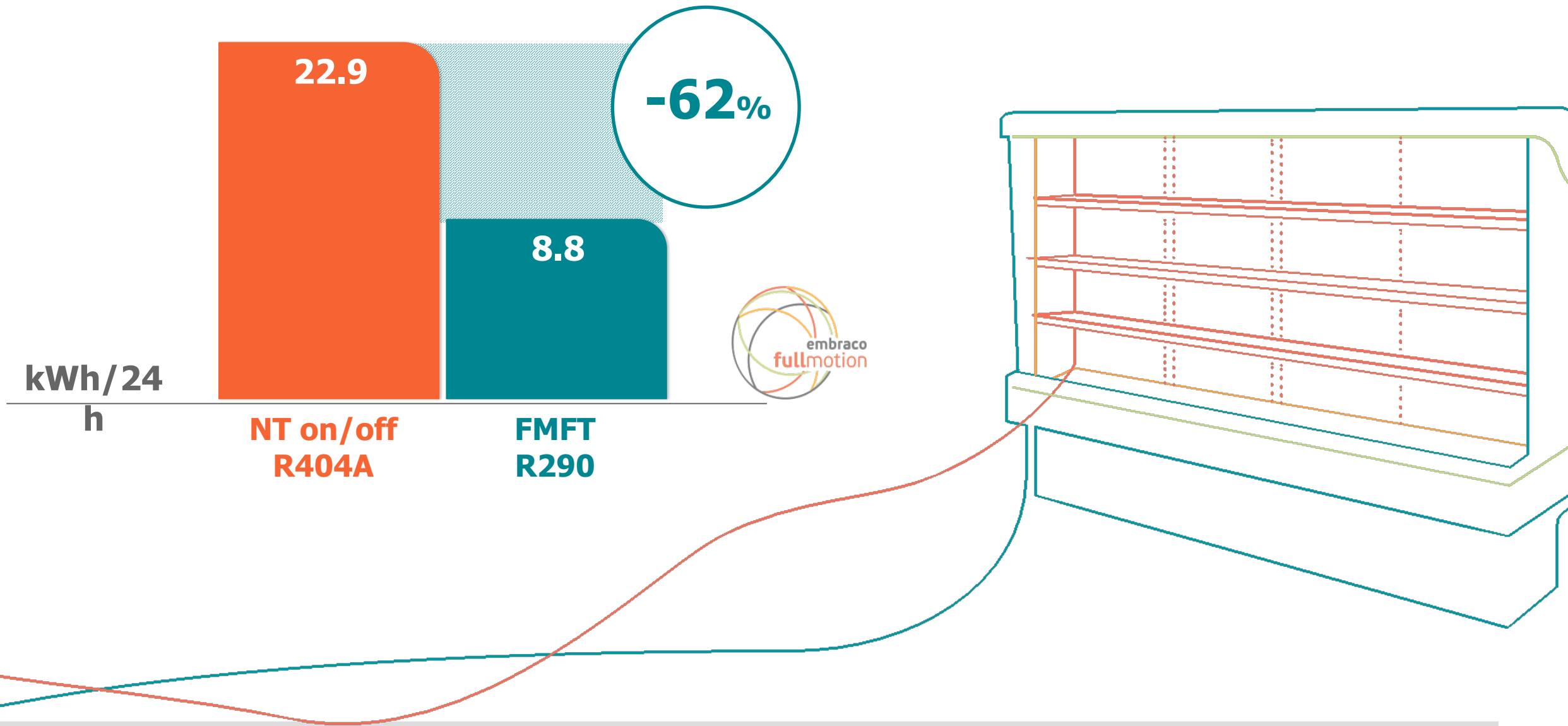
Fullmotion technology & hydrocarbons on vertical freezer

Constant energy improvement



Fullmotion technology & hydrocarbons in a supermarket vertical freezer (2.5m)

Constant energy improvement





FMFT



Model	Aplication	Cooling	COP	Inverter
FMFT313 U	L/MBP	(460 – 860) W 1800 – 4500 rpm	(1,70 – 1,75) W/W	1000W Bivolt

Embraco top efficiency R290 Fullmotion for Light Commercial



PLUG N' COOL

A NEW AND COMPLETE SOLUTION IN COMMERCIAL REFRIGERATION



SIMPLE AND FAST MAINTENANCE

- Plug N Play concept with quick replacement.
- Does not require brazing.

FLEXIBILITY

- Its modularity allows for ease in layout changes.

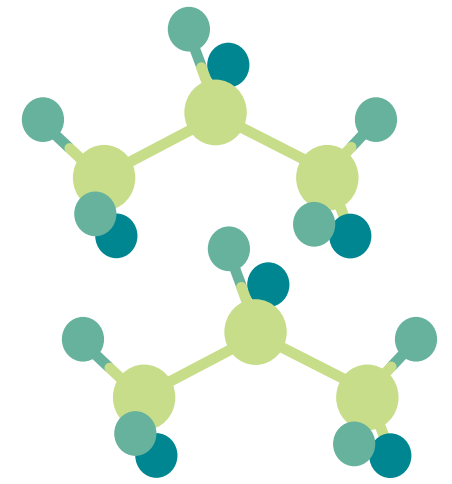
ECOLOGICAL

- Uses R290 gas, which has a negligible impact on global warming.

LOWER TOTAL COST OF OWNERSHIP (TCO)

- Negligible refrigerant leakage.
- Low energy consumption.
- Low maintenance and replacement cost.

INCREASED INTERNAL SPACE IN A VALUED PLACE



The best option

for Household and Light Commercial

is combination of HC refrigerants and Fullmotion technology
minimizing direct and indirect impact to global warming and bringing
more efficiency to your business.



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Thank you very much!

