

24th April 2026

Source: PIMS Global Lubricants & Greases Supply Chain Benchmarking programme

Attributes of a champion lubricant plant – A North vs. South America perspective

Volumetric unit: **Kgals**

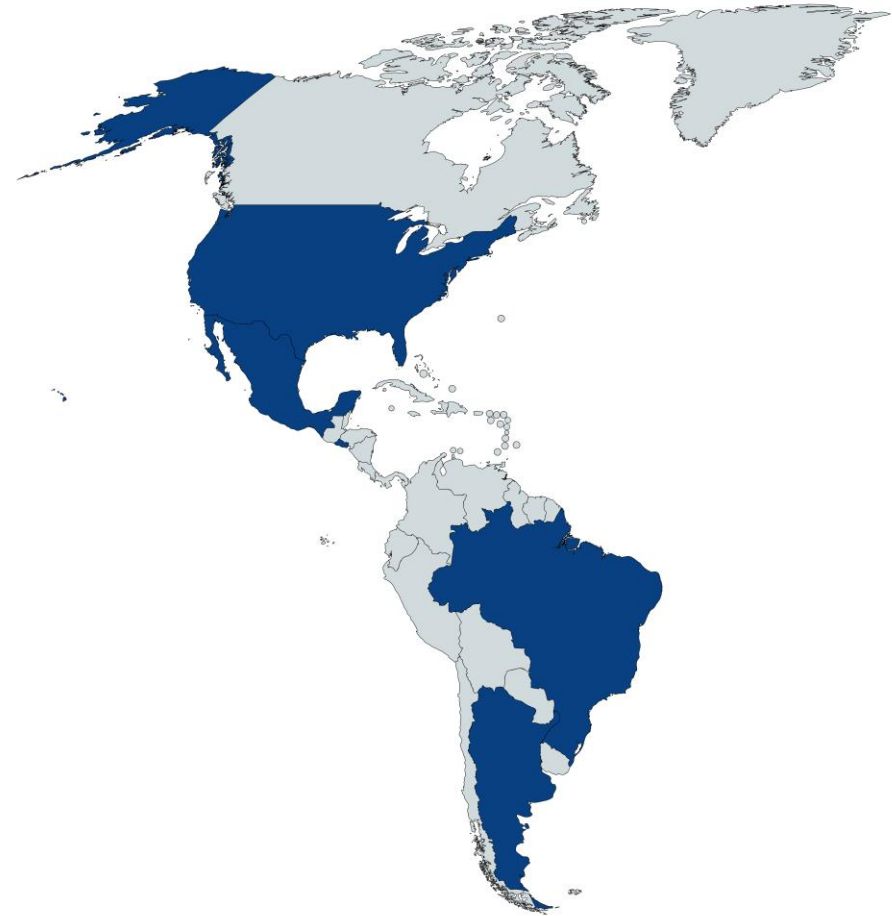
Criteria for selecting the regional champion lubricant plants

1 Manufacturing costs below regional Q1

2 Manufacturing costs lower than Par (expected) level

3 Top quartile labour productivity

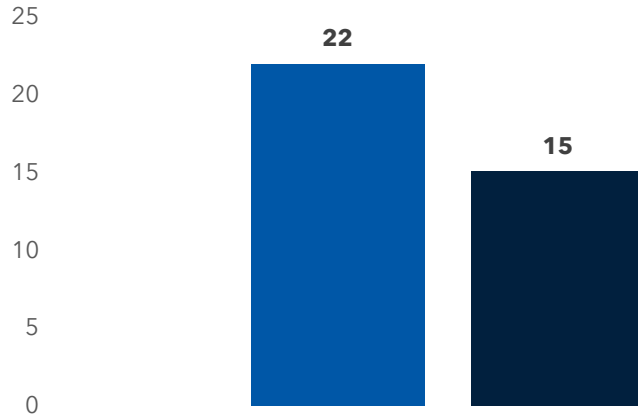
4 Includes lubricant blending, filling, and warehousing operation on-site



North America champions - mastering economies of scale

Average blending batch size

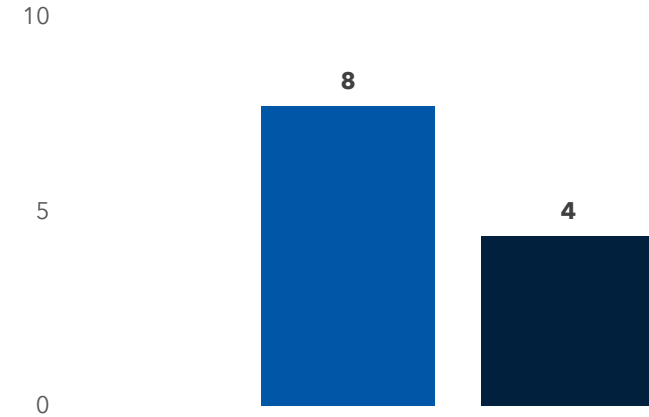
Kgals



Average filling run size

Large packs

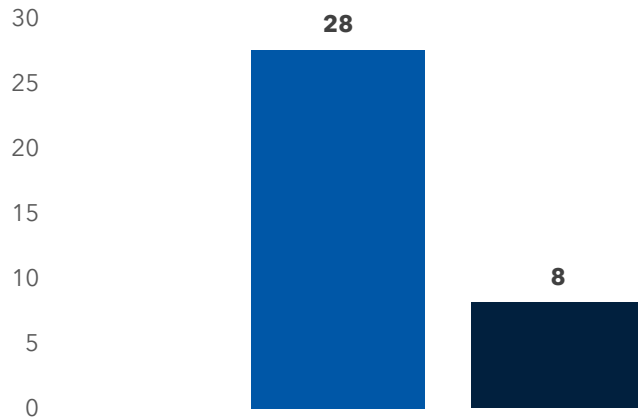
Kgals



Average filling run size

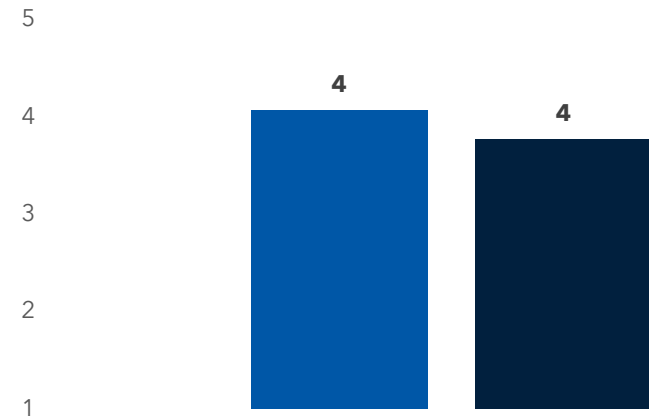
Small packs

Kgals



Average dispatched truck size

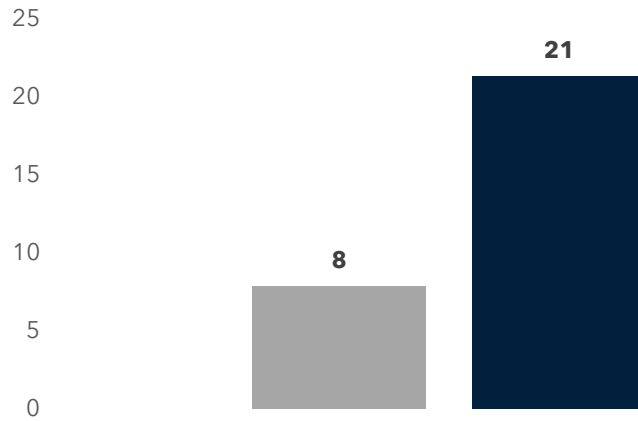
Kgals



South America champions - outperformance built on Operational Excellence, not scale

Average blending batch size

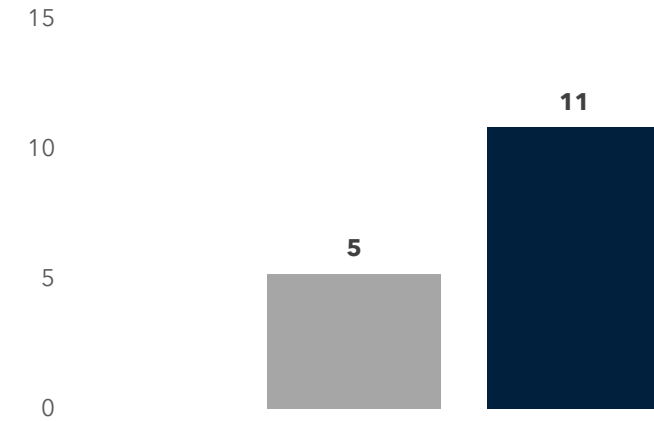
Kgals



Average filling run size

Large packs

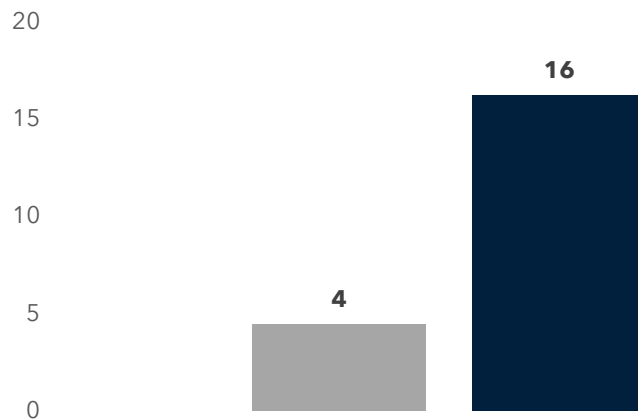
Kgals



Average filling run Size

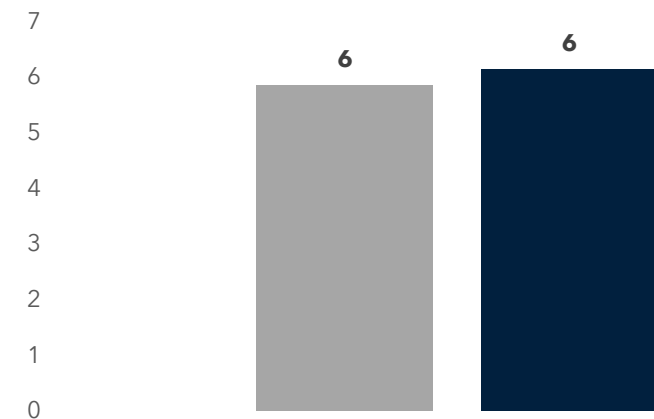
Small packs

Kgals



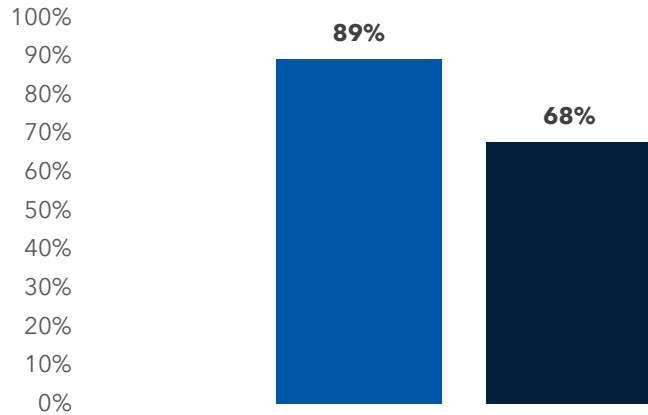
Average dispatched truck size

Kgals

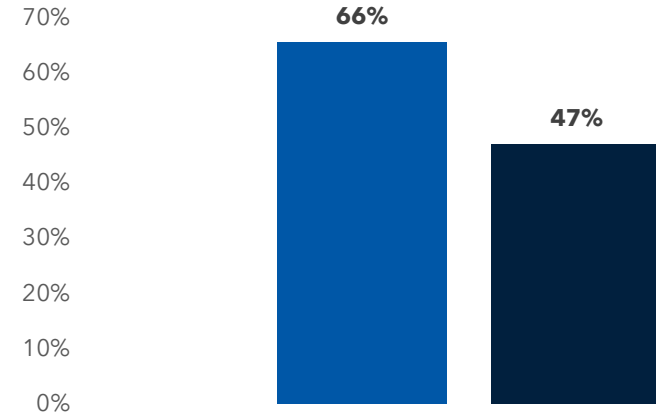


North America champions- utilize advanced automation to a greater extent

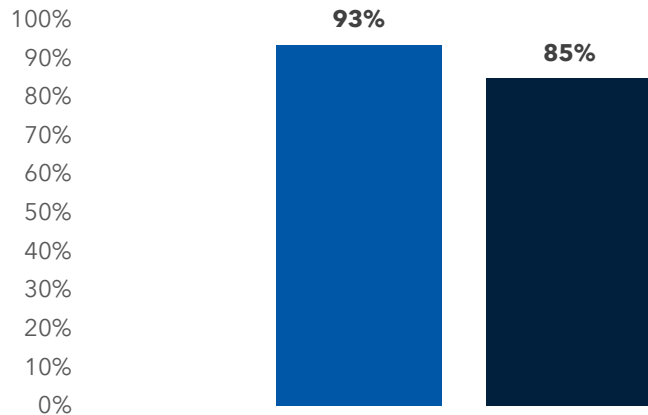
% throughput blended using in-line blending



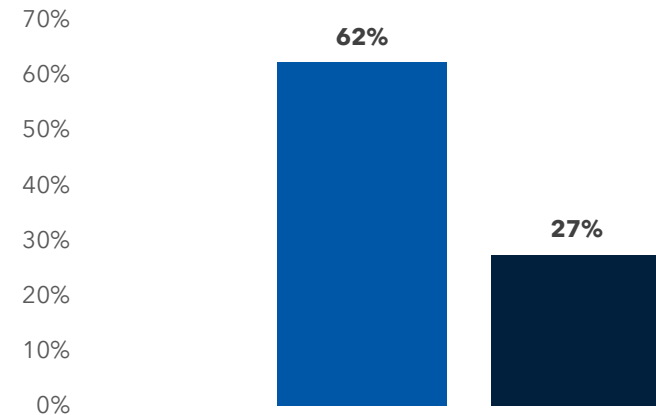
Filling line automation index
Large pack



Filling line automation index
Small pack

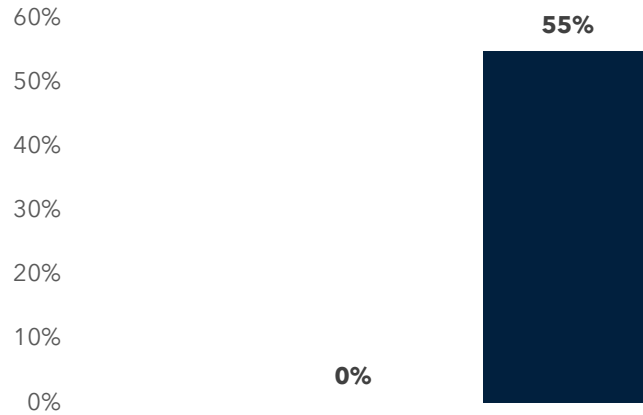


Automation index
On-site warehousing

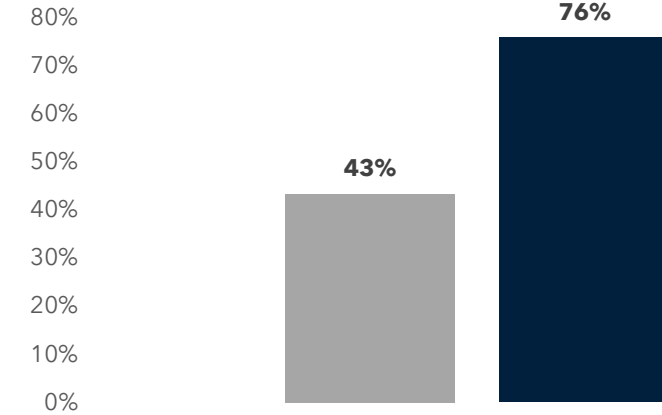


South America champions - winning through Operational Excellence, not automation alone

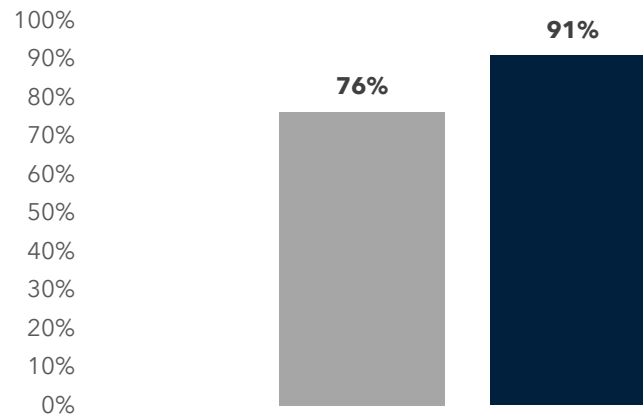
% throughput blended using in-line blending



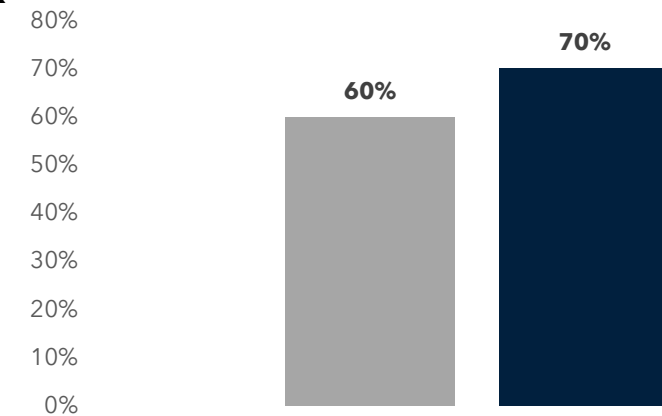
Filling line automation index
Large pack



Filling line automation index
Small pack

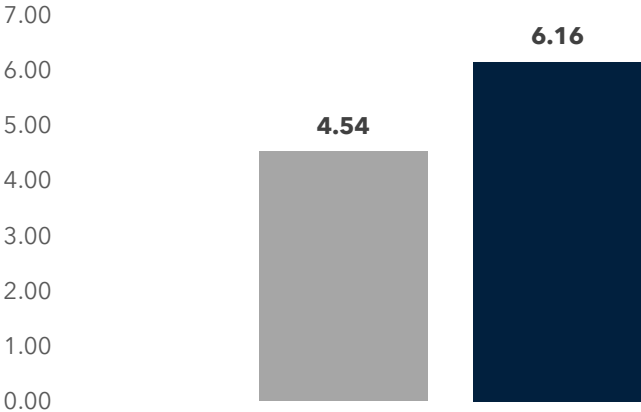


Automation index
On-site warehousing

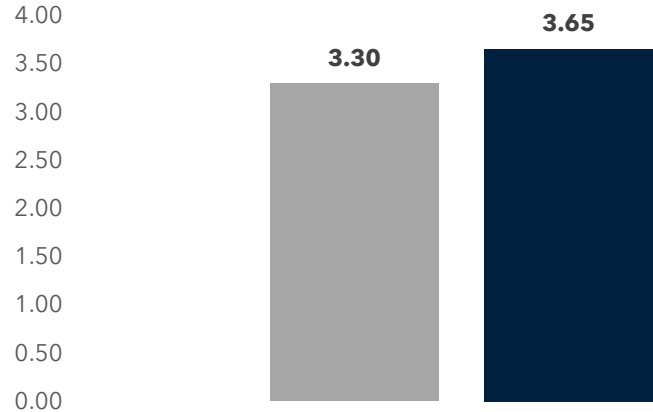


South America champions - Leverage Operational Excellence

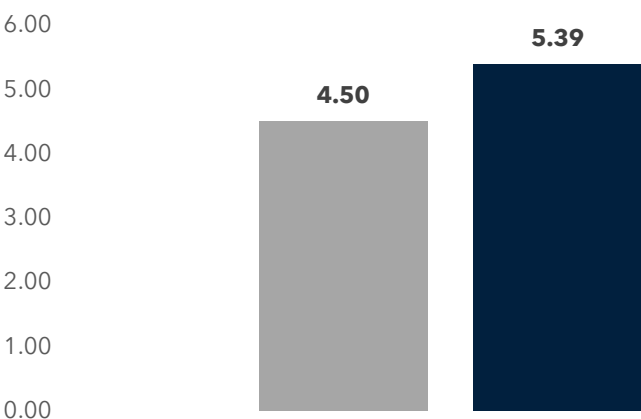
Cycle time (hours) per blended batch
Blending



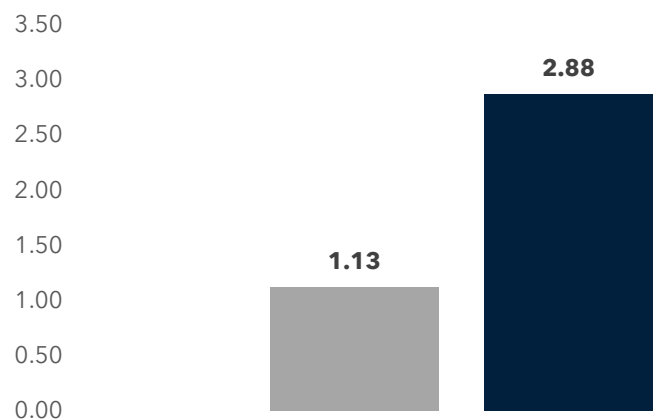
Duration (hours) per filling run
Large packs



Duration (hours) per filling run
Small packs



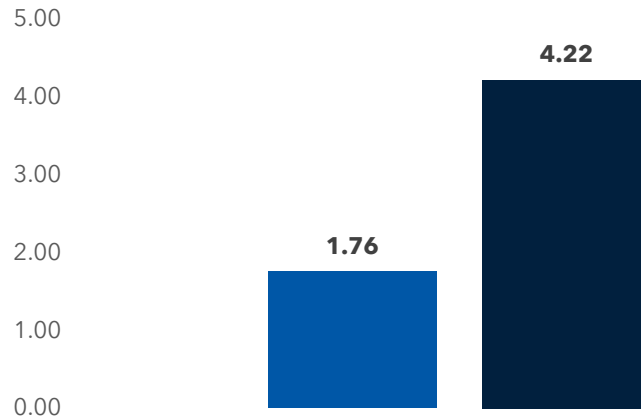
Loading time (hours) per truck
Warehouse



North America champions - manage complexity driven by variety

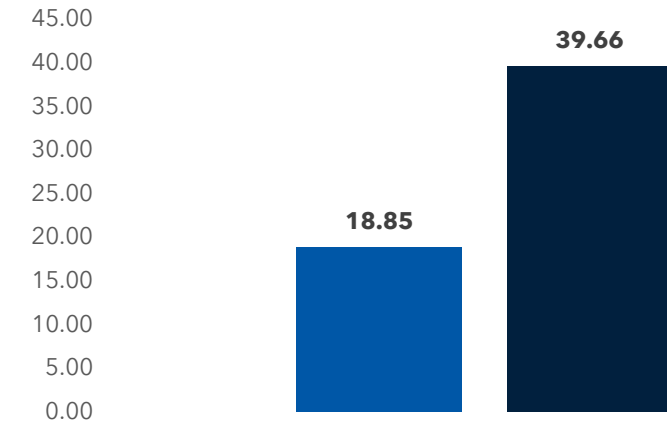
Formulation intensity

No. of formulations per 1,000 Kgals



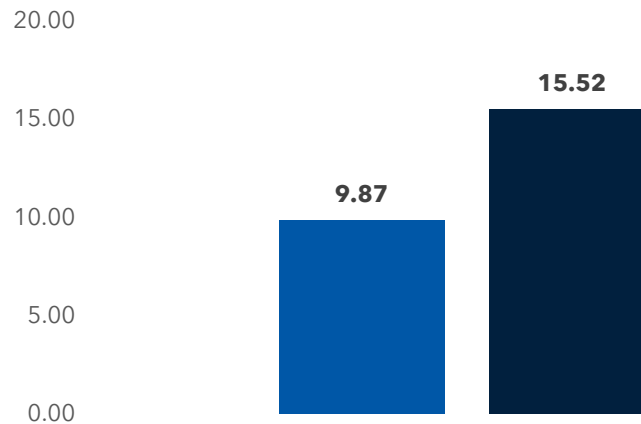
SKU intensity Large packs

No. of SKUs per 1,000 Kgals



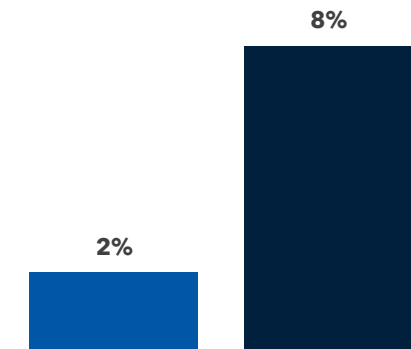
SKU intensity Small packs

No. of SKUs per 1,000 Kgals



% warehouse throughput dispatched in split pallets

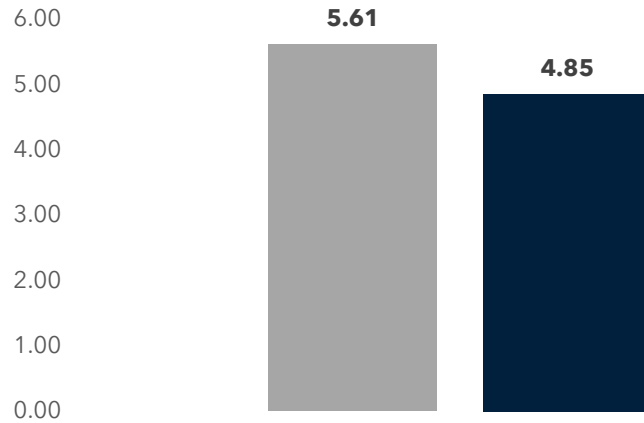
10%
8%
6%
4%
2%
0%



South America champions - handle greater complexity driven by variety

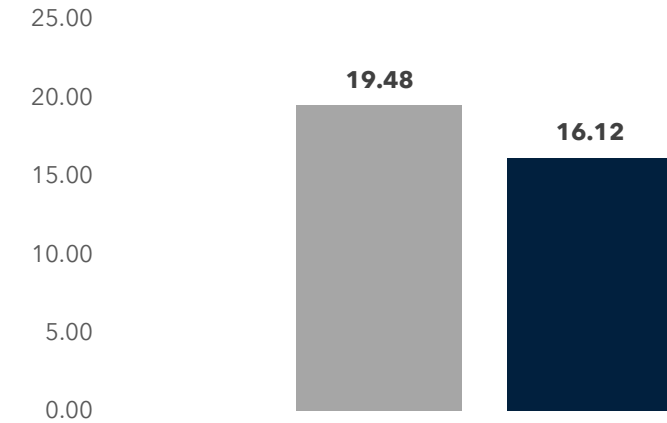
Formulation intensity

No. of formulations per 1,000 Kgals



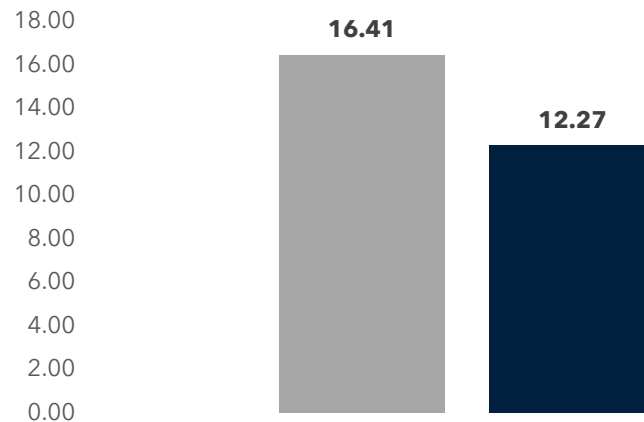
SKU intensity Large packs

No. of SKUs per 1,000 Kgals



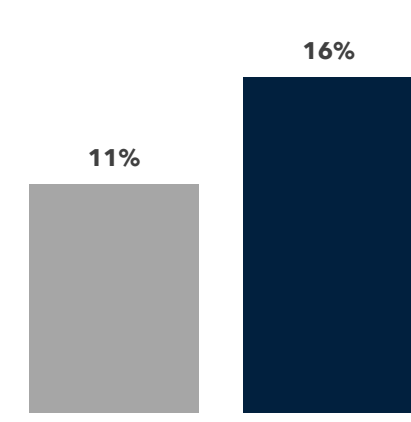
SKU intensity Small packs

No. of SKUs per 1,000 Kgals



% warehouse throughput dispatched in split pallets

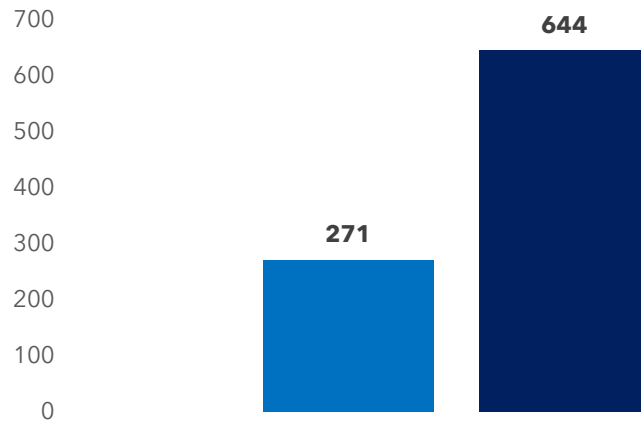
%



North America champions - lead the way in sustainability

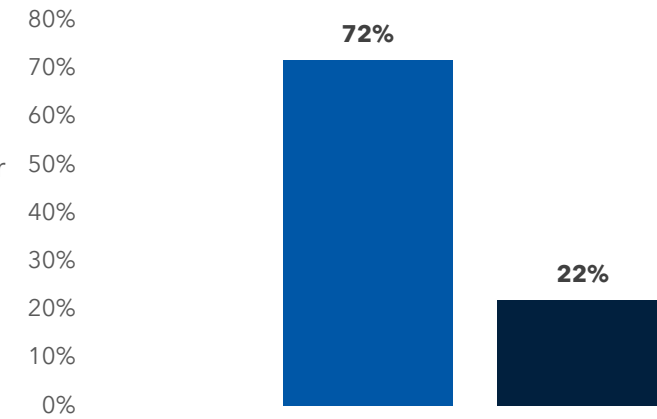
Energy efficiency

kWh consumed
per 1,000 Kgals



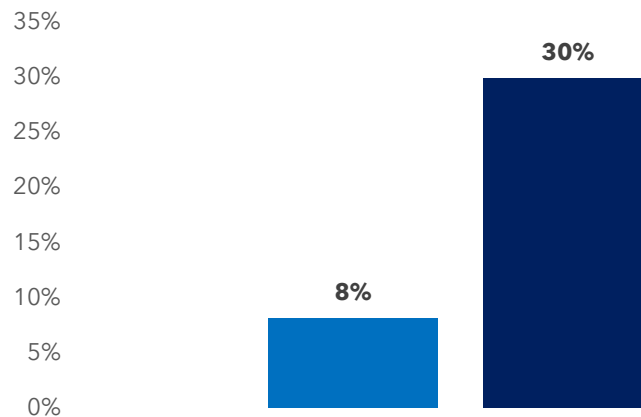
Waste water treatment

% water consumed
undergoing waste-water
treatment



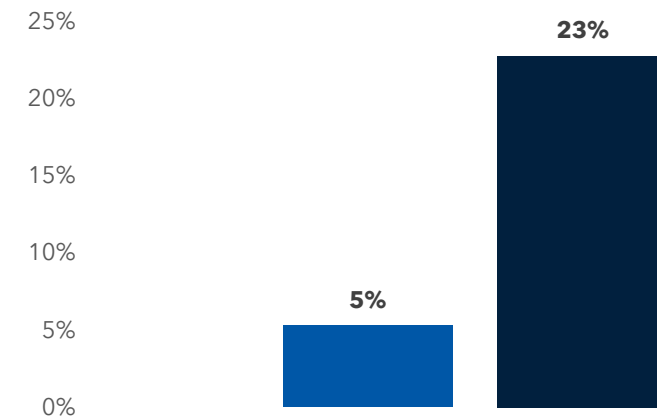
Waste disposed in landfills

% of total waste
generated disposed
of in landfills



Renewable energy

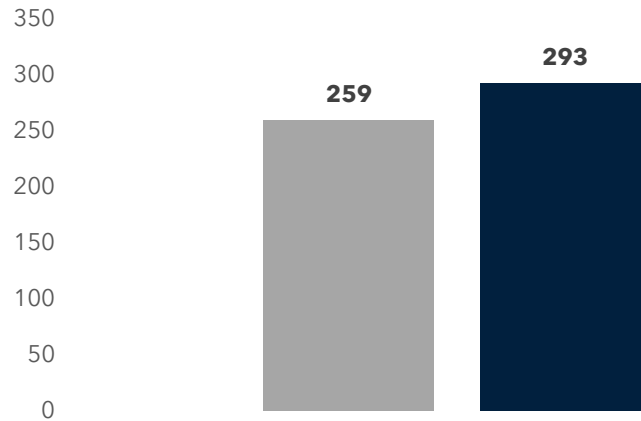
% of total energy
consumed from
renewable sources



South America champions - Improvement opportunities for all players

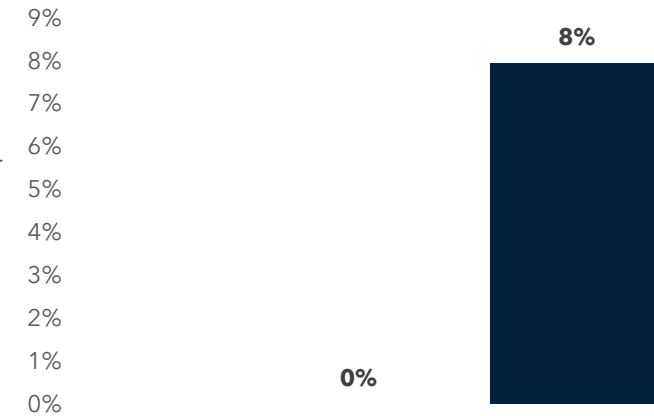
Energy efficiency

kWh consumed
per 1,000 Kgals



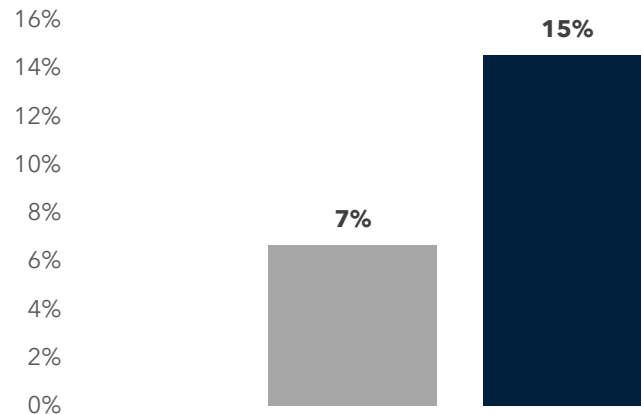
Waste water treatment

% water consumed
undergoing waste-water
treatment



Recycled plastic

% of the total packaging
consumed from recycled
plastic



Renewable energy

% of total energy
consumed from
renewable sources



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