

European food retail research

drivers, challenges and technologies of European supermarket operators to reduce energy consumption and carbon footprint

EuroShop



Düsseldorf, 18 February, 2014

Nina Masson, Head of Market Research

about the research



- qualitative research with quantitative elements
- period: 10 January to 21 February 2014
- interviews with leading food retailers in Germany, France, Denmark, Norway, the UK + other mainly Western and Northern European countries
- 50 initial responses, 33 used in analysis for EuroShop
- retailers that agreed to be mentioned (others opted to remain anonymous):

METRO GROUP
MADE TO TRADE.

coop
Norge

**Dansk
Supermarked**

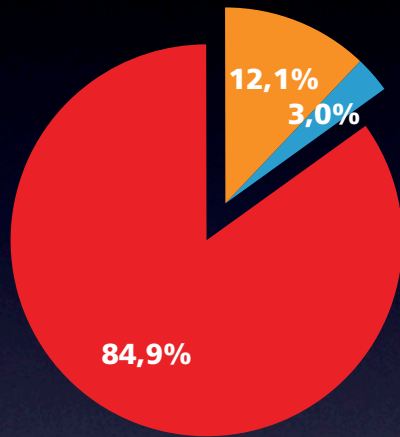


MIGROS

TESCO

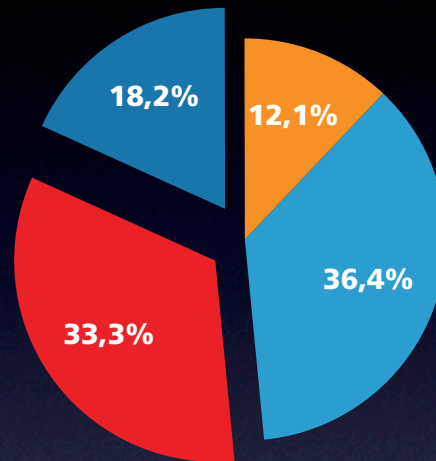


respondents



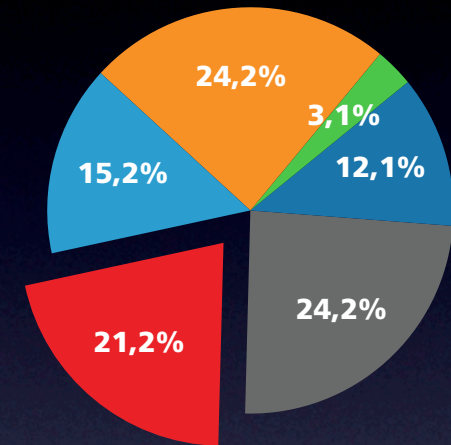
- Small
- Medium
- Large

mostly represented: large food retailers, often part of a bigger enterprise group



- 1-100
- 101-1000
- 1001-5000
- 5000+

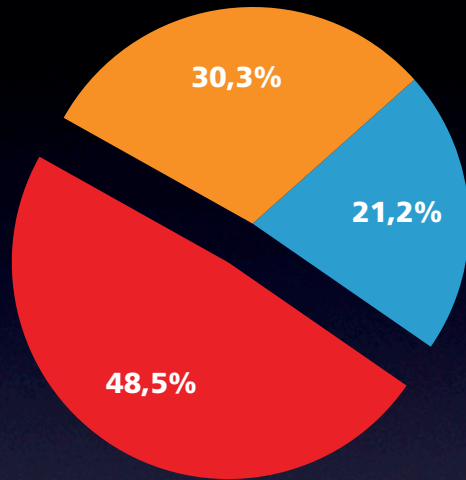
more than half of respondents represent food retailers with 1001 to more than 5000 stores across Europe



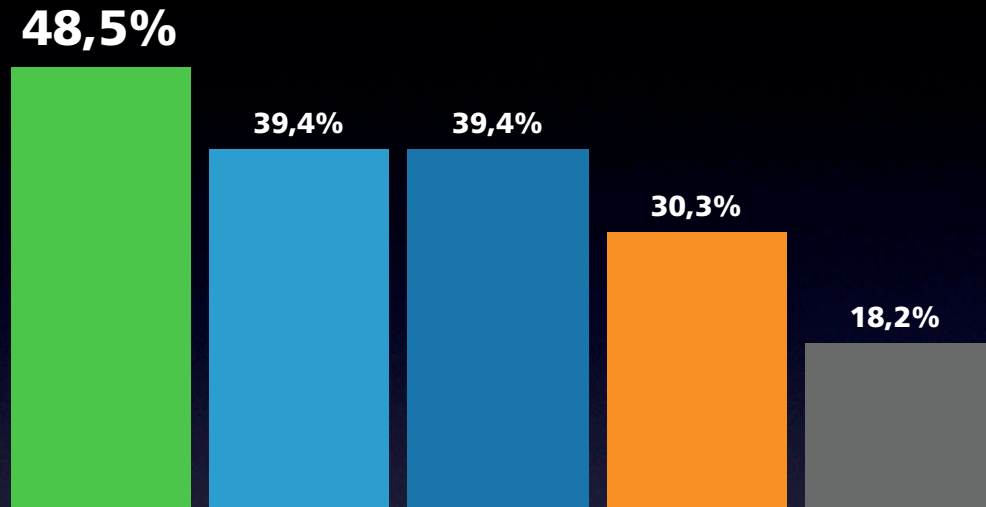
- Germany
- France
- UK
- Denmark
- Norway
- Other

German and French food retailers strongest response group

respondents



- Non-management
- Strategic management
- Operational management



- Sustainability, CSR etc.
- Environment, energy management etc.
- Technical equipment, refrigeration etc.
- Facilities, building management etc.
- Strategic management, business development etc.

two major groups, mostly at the operational management level, participated in the research:

1. sustainability, CSR, environment, energy management
2. refrigeration, technical equipment, facilities, building management

importance of reduced carbon footprint in stores for overall future business success



■ average rank all retailers



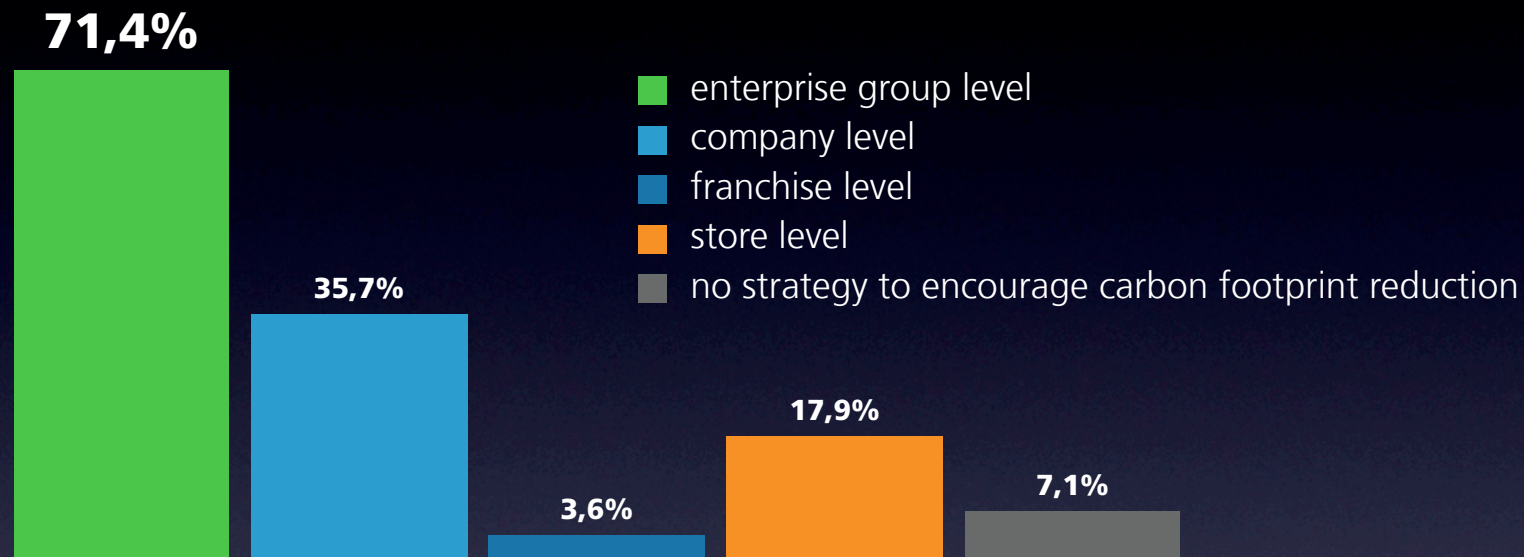
- ⦿ reducing the carbon footprint in their stores is “rather important / important” to Western and Northern European mostly large food retailers
- ⦿ technology choice is embedded in a broader framework of sustainability considerations
- ⦿ carbon footprint reduction in stores and future business success are directly linked

importance of reduced carbon footprint in stores for overall future business success



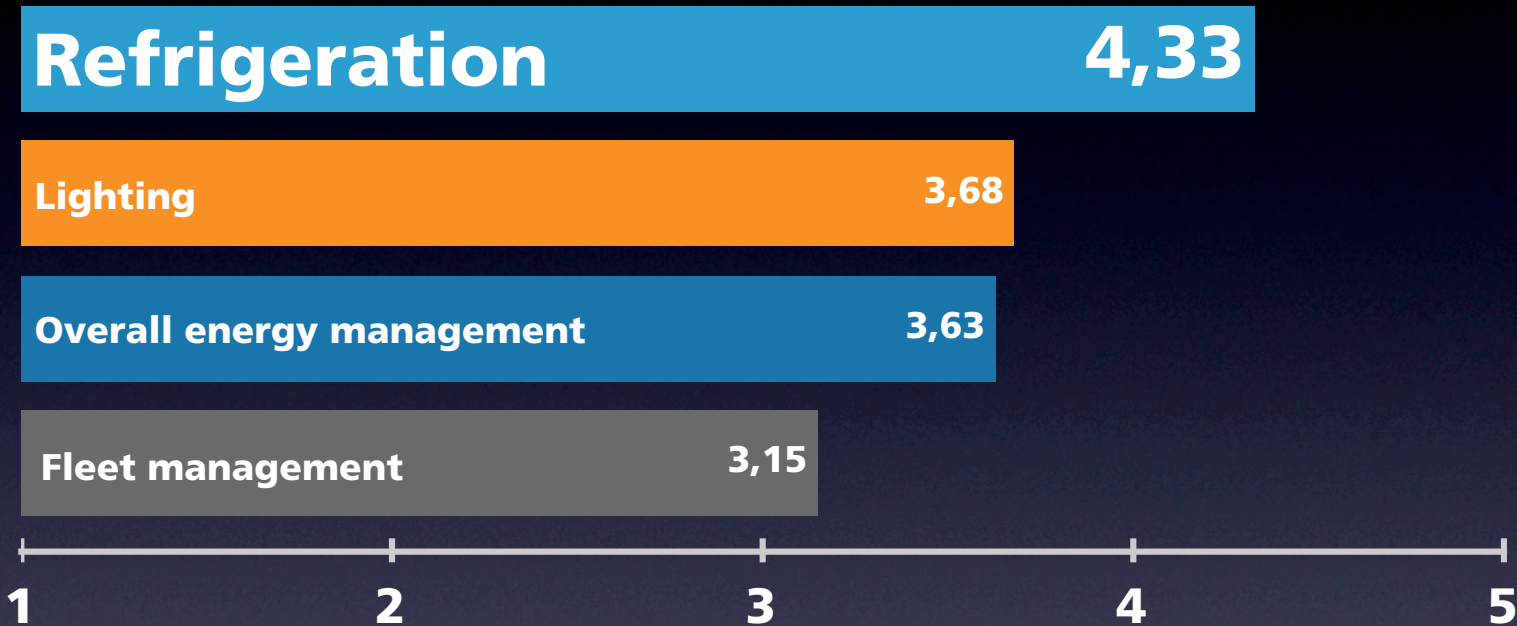
- ⦿ reducing the carbon footprint in their stores is “rather important / important” to Western and Northern European mostly large food retailers
- ⦿ technology choice is embedded in a broader framework of sustainability considerations
- ⦿ carbon footprint reduction in stores and future business success are directly linked
- ⦿ German food retailers attach the greatest value to carbon footprint reduction as a tool to increase or maintain future business success (4.43 average rank)

strategy to encourage carbon footprint reduction in stores



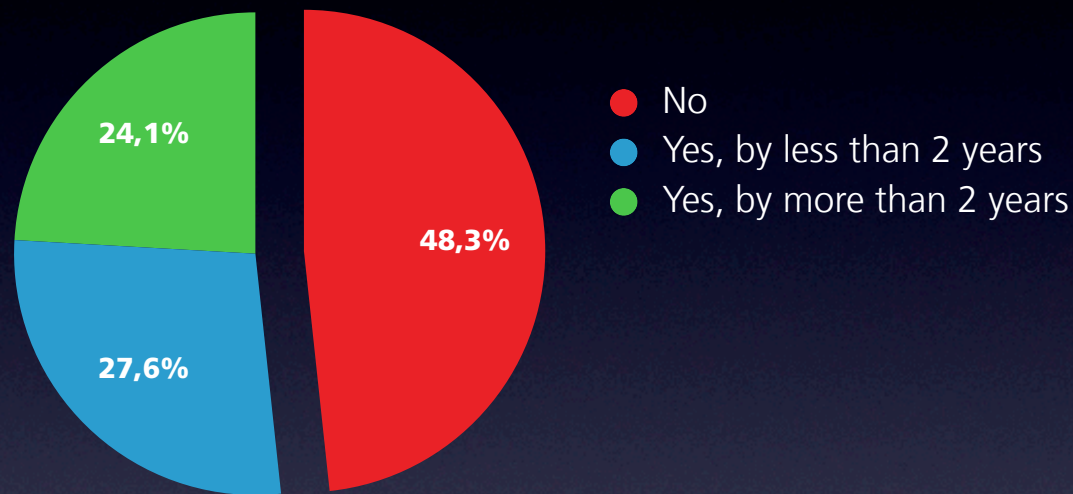
- ⦿ an overwhelming majority follows a strategy at the enterprise level to encourage carbon footprint reduction across all enterprise group members = carbon footprint reduction is driven from the highest-possible level
- ⦿ more than 1/3 follows only or also such a strategy at the company level
- ⦿ only very few state there is no such strategy available at any level

importance of environmental features to increase energy efficiency in stores



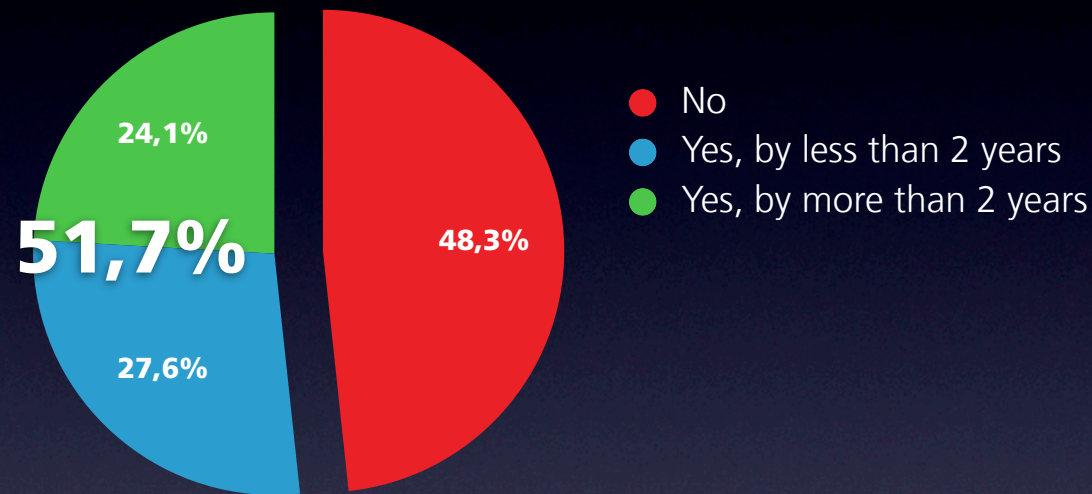
- refrigeration - energy-efficient systems & the use of low-global warming refrigerants - has the highest priority among surveyed European food retailers, translating to “rather important / important” in their strategy to increase their stores’ energy efficiency
- German food retailers attach a more equal value to the different means of increasing a store’s energy efficiency

willingness to reduce investment cycles to promote the uptake of more environmentally-friendly refrigeration



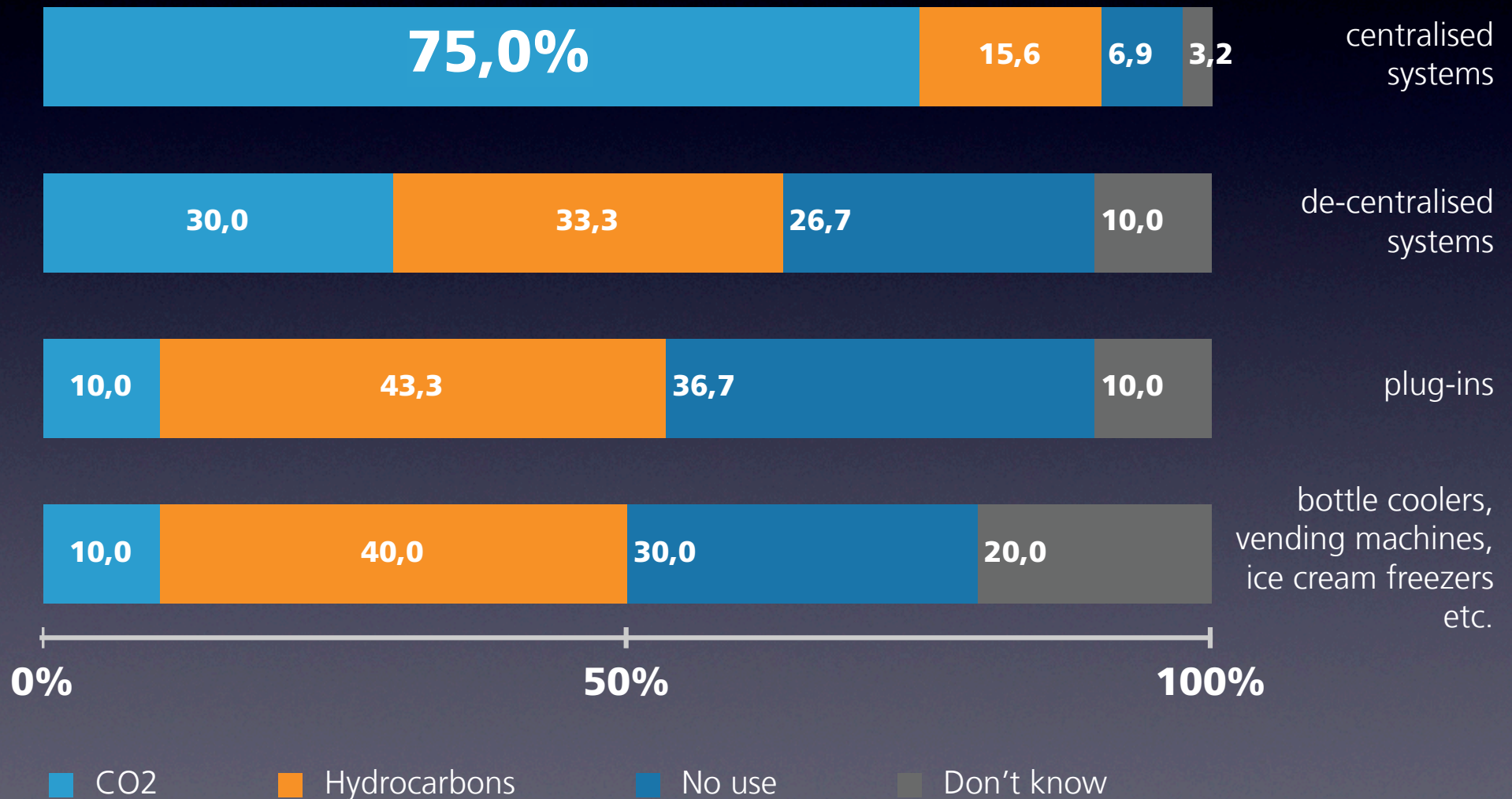
- more than half of all respondents would be willing to reduce their normal investment cycles to promote the uptake of more environmentally-friendly refrigeration technology
- among those, 24.1% would even be willing to reduce investment cycles by more than 2 years
- the average investment cycle for refrigeration systems in surveyed food retailers is mostly between 9-15 years

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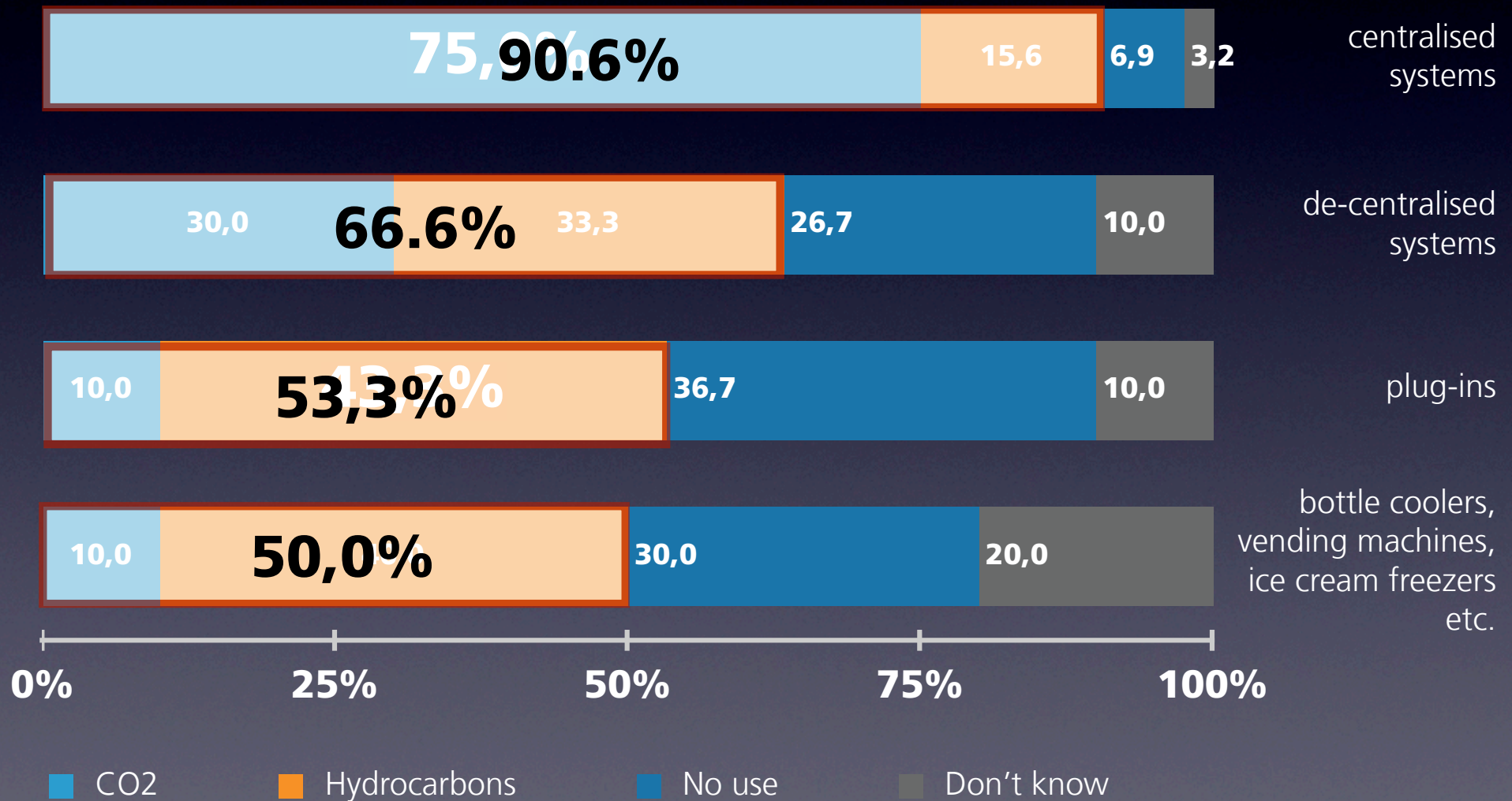


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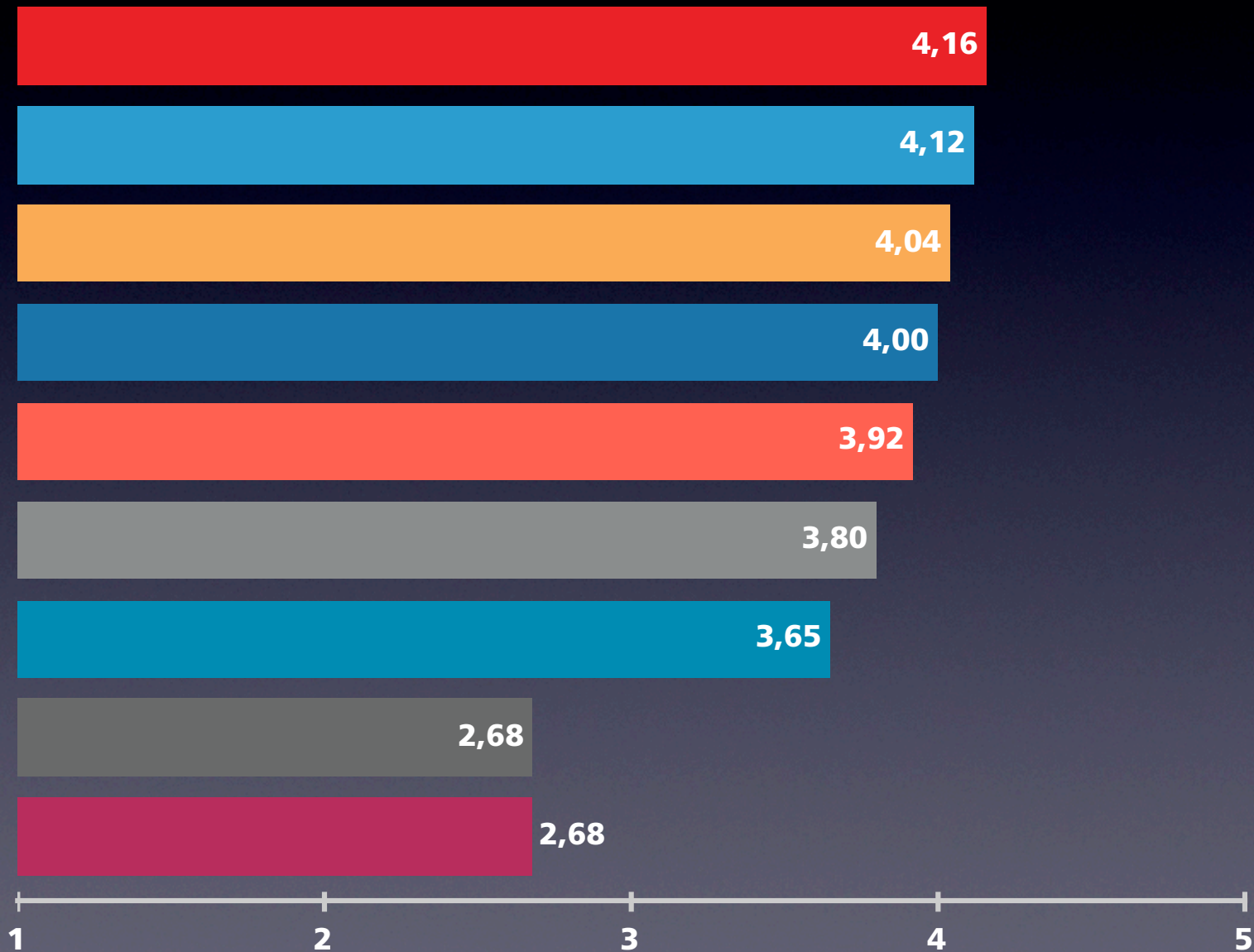
use of natural refrigerants among European food retailers, by application



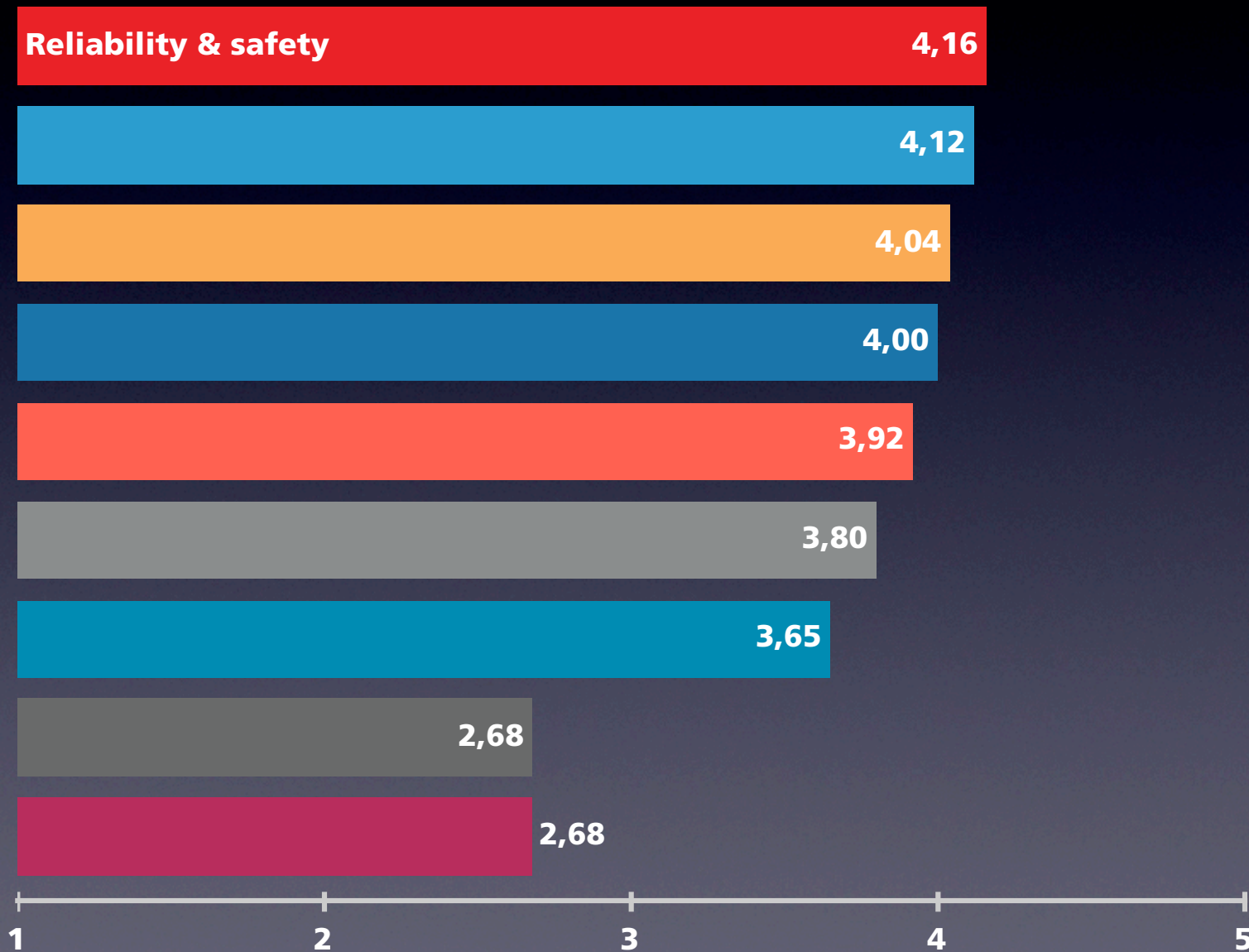
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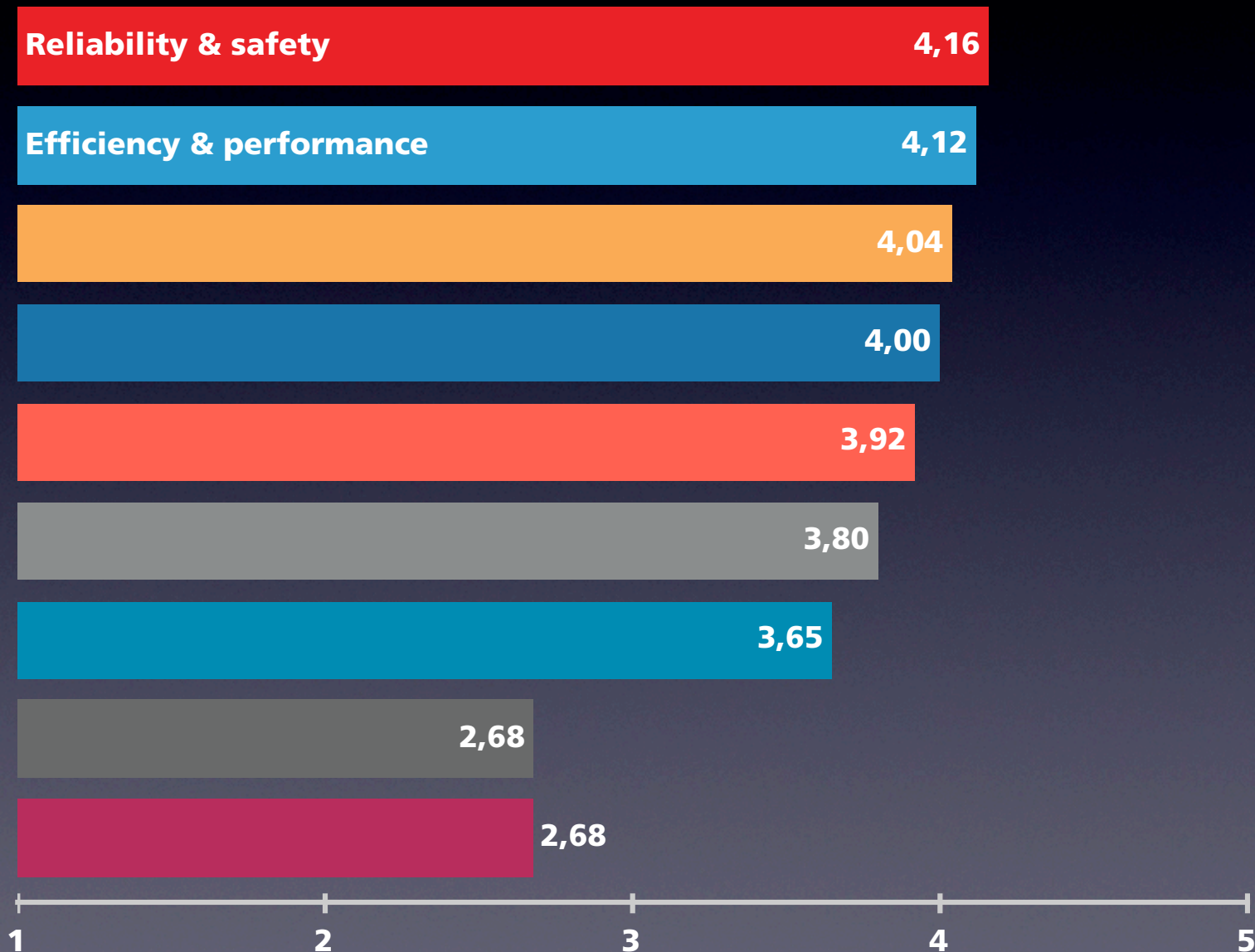
importance of factors for purchasing new refrigeration technology for stores



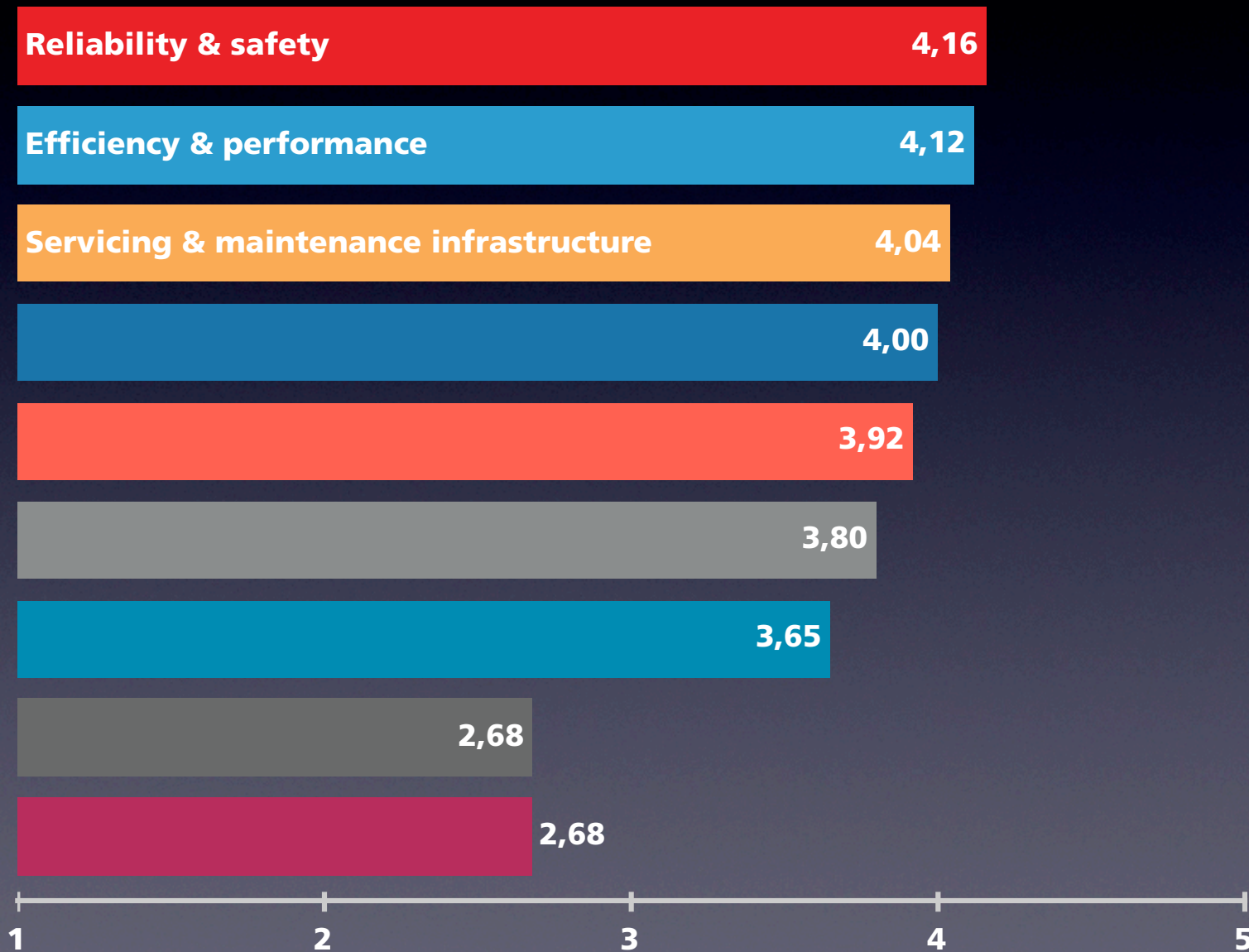
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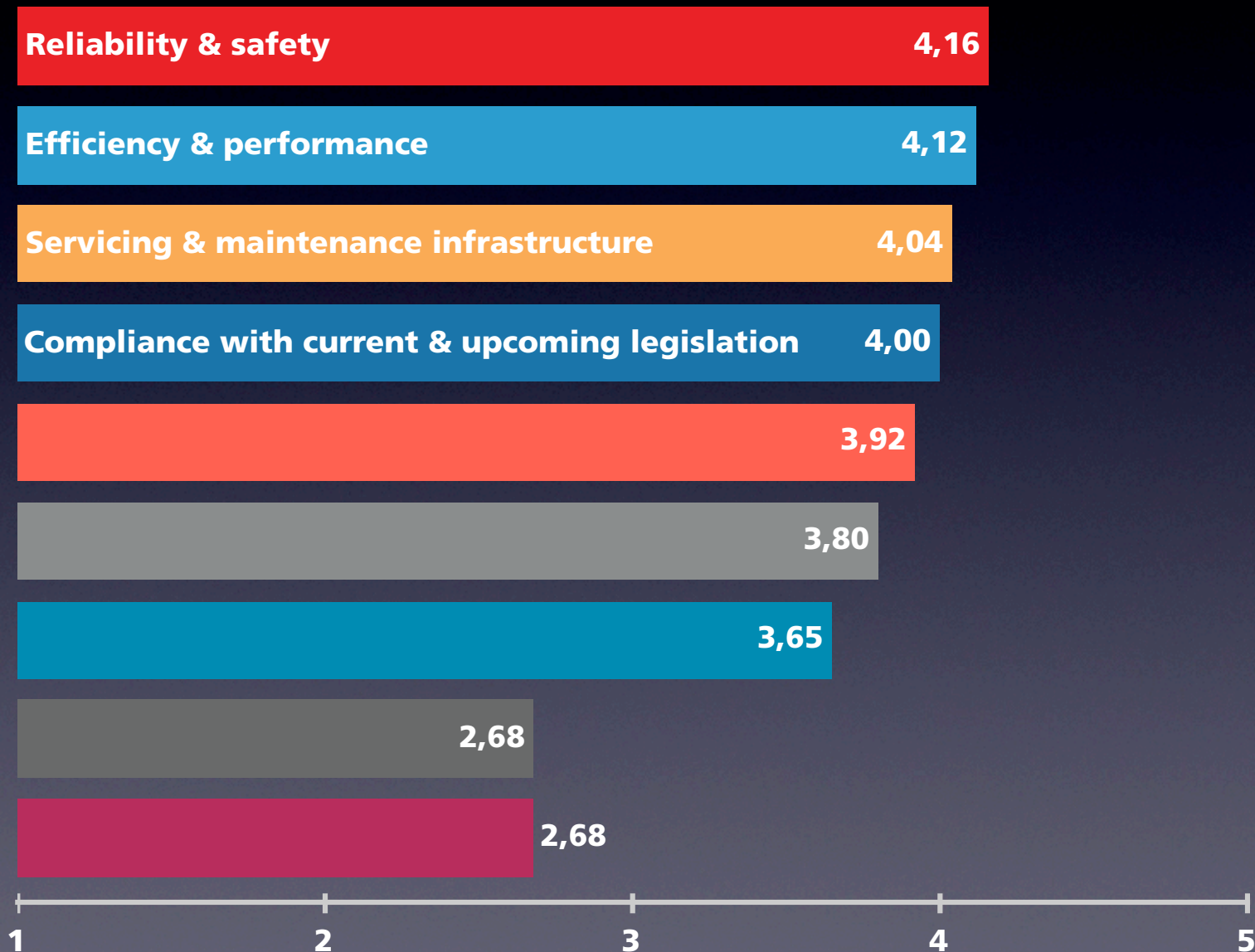
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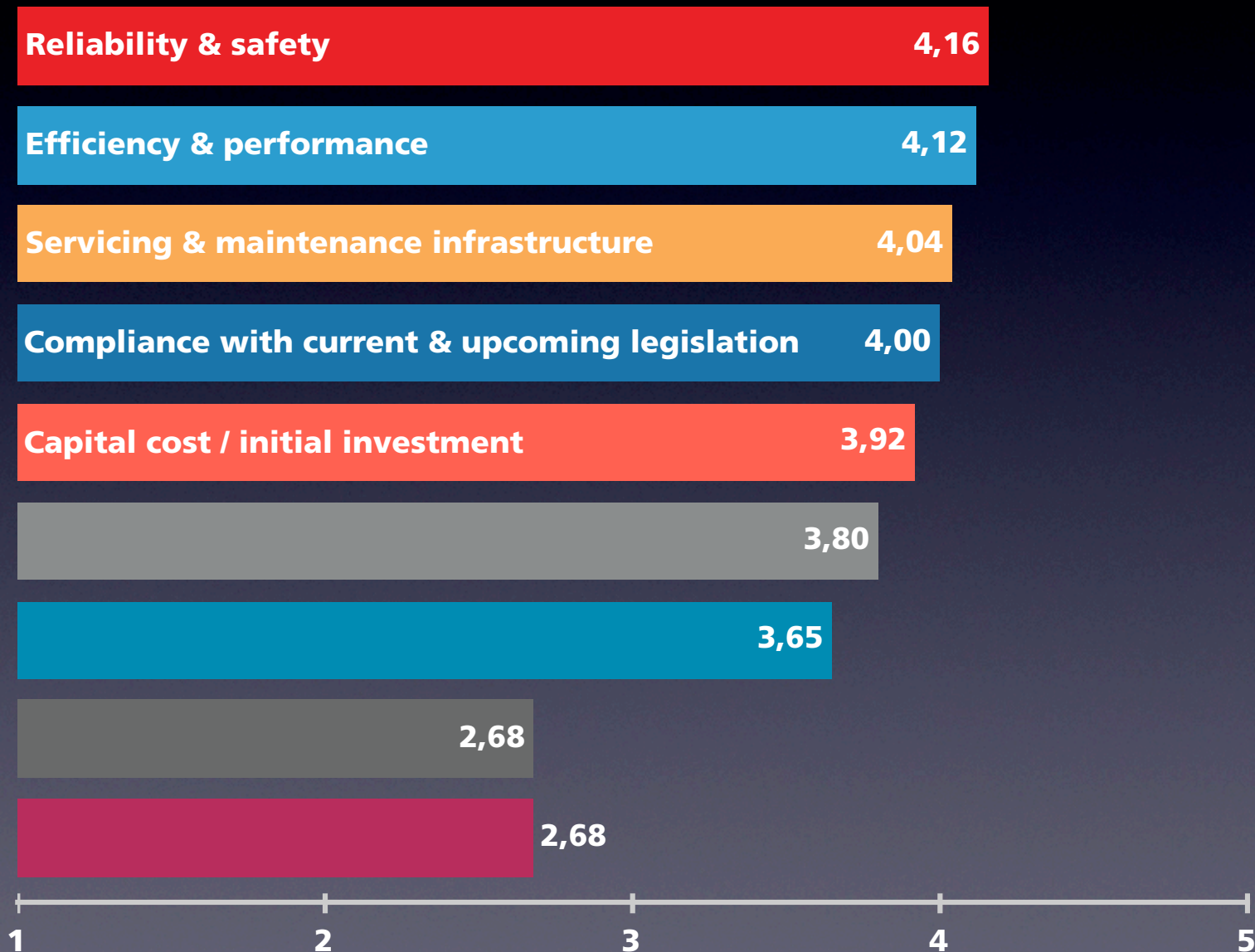
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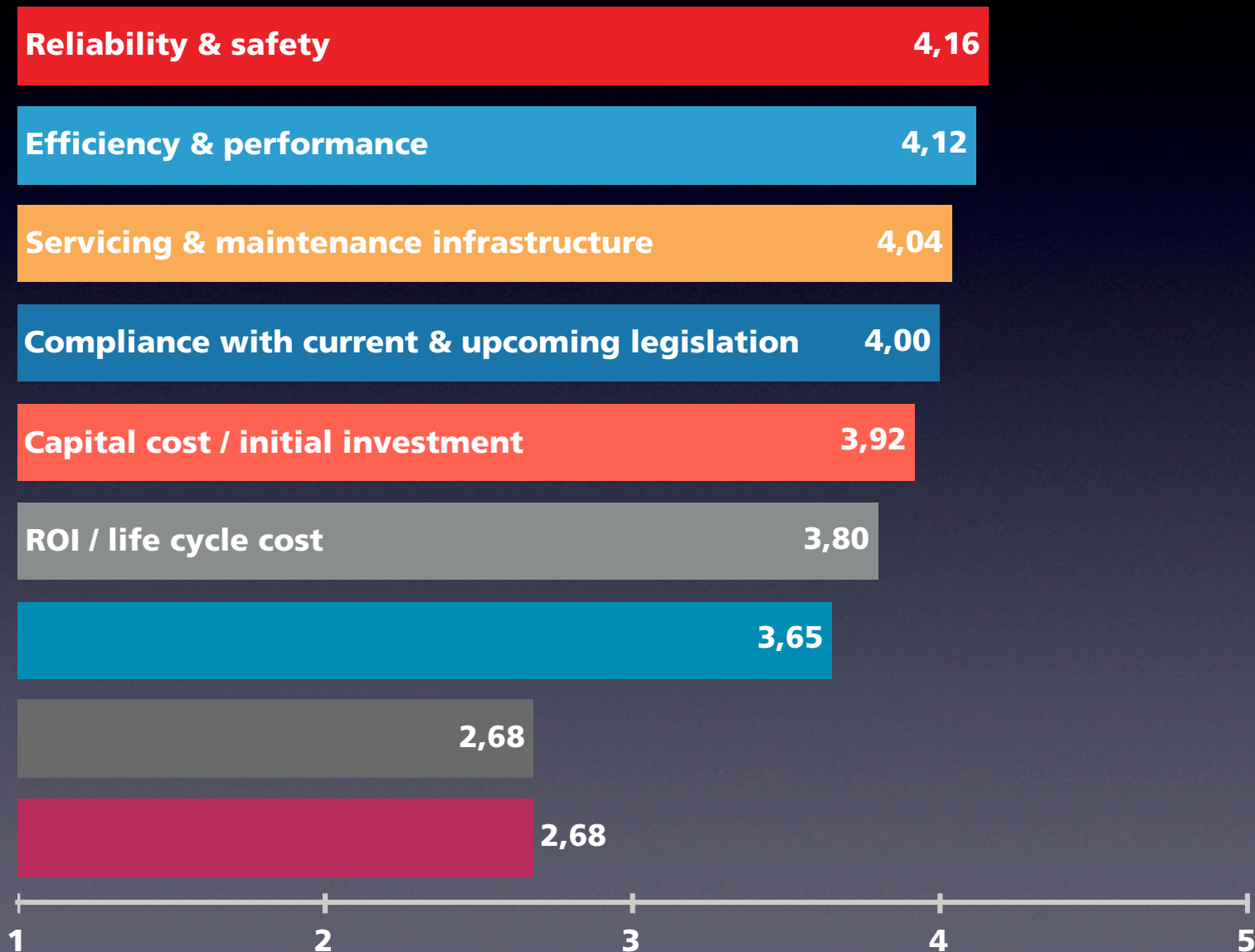
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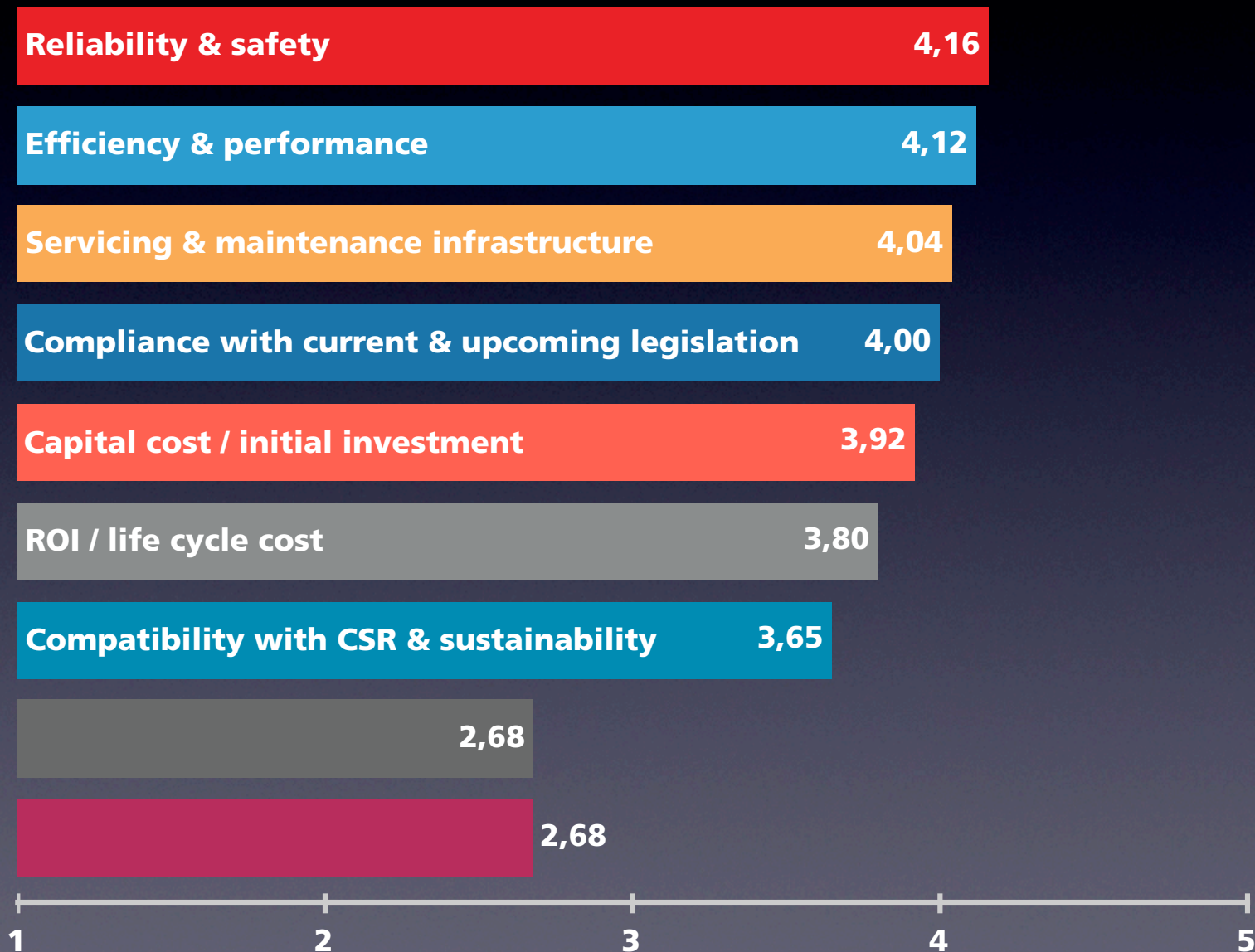
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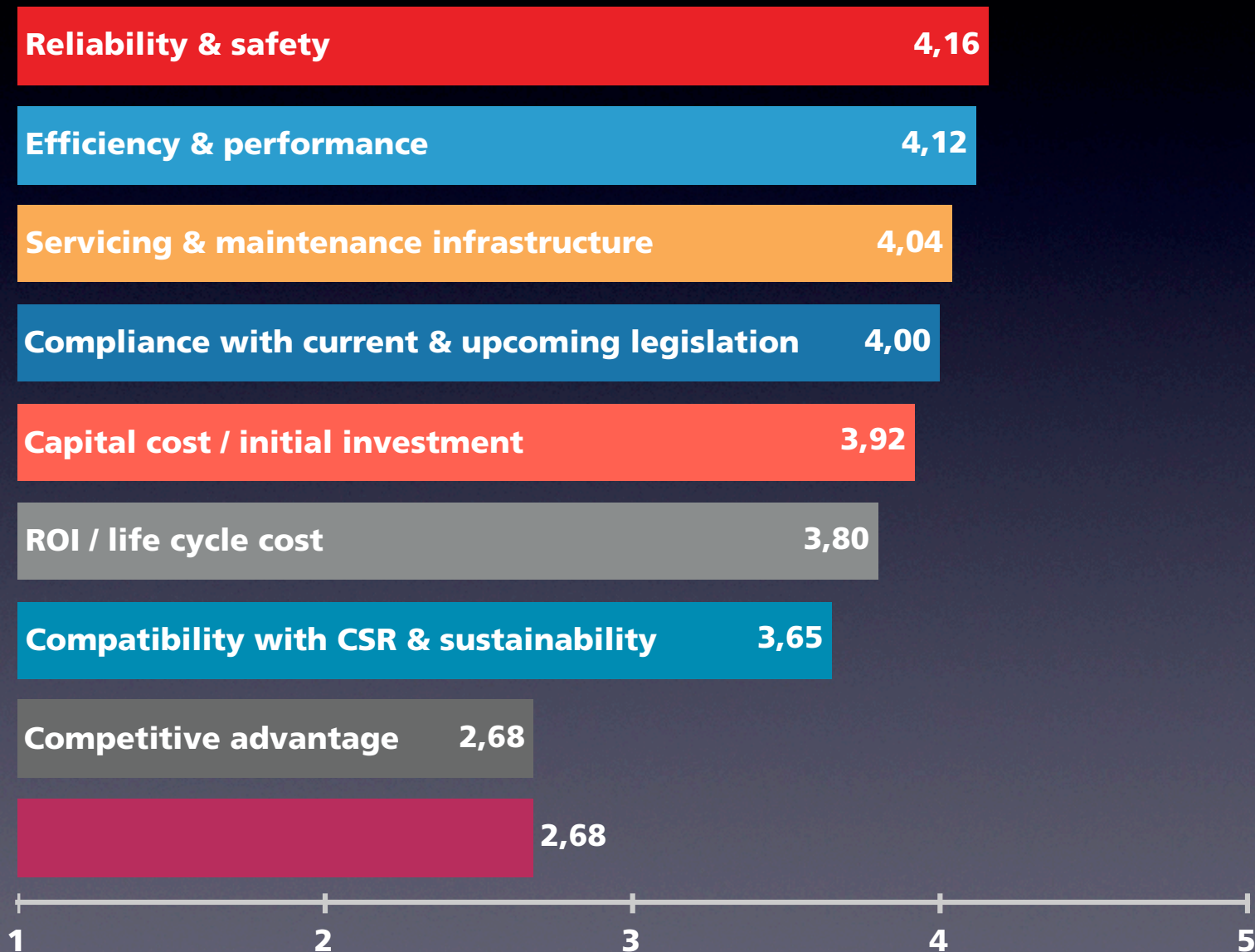
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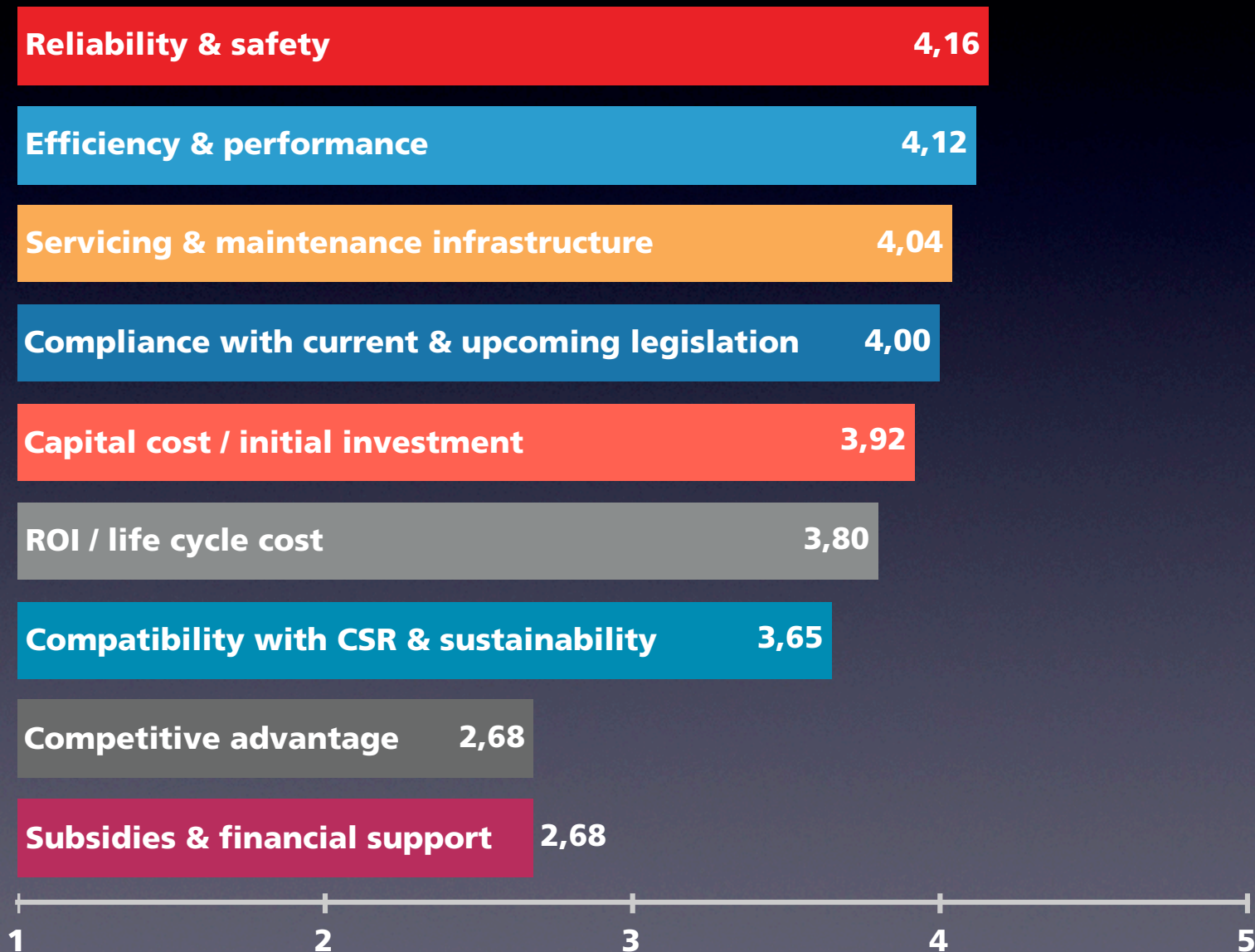
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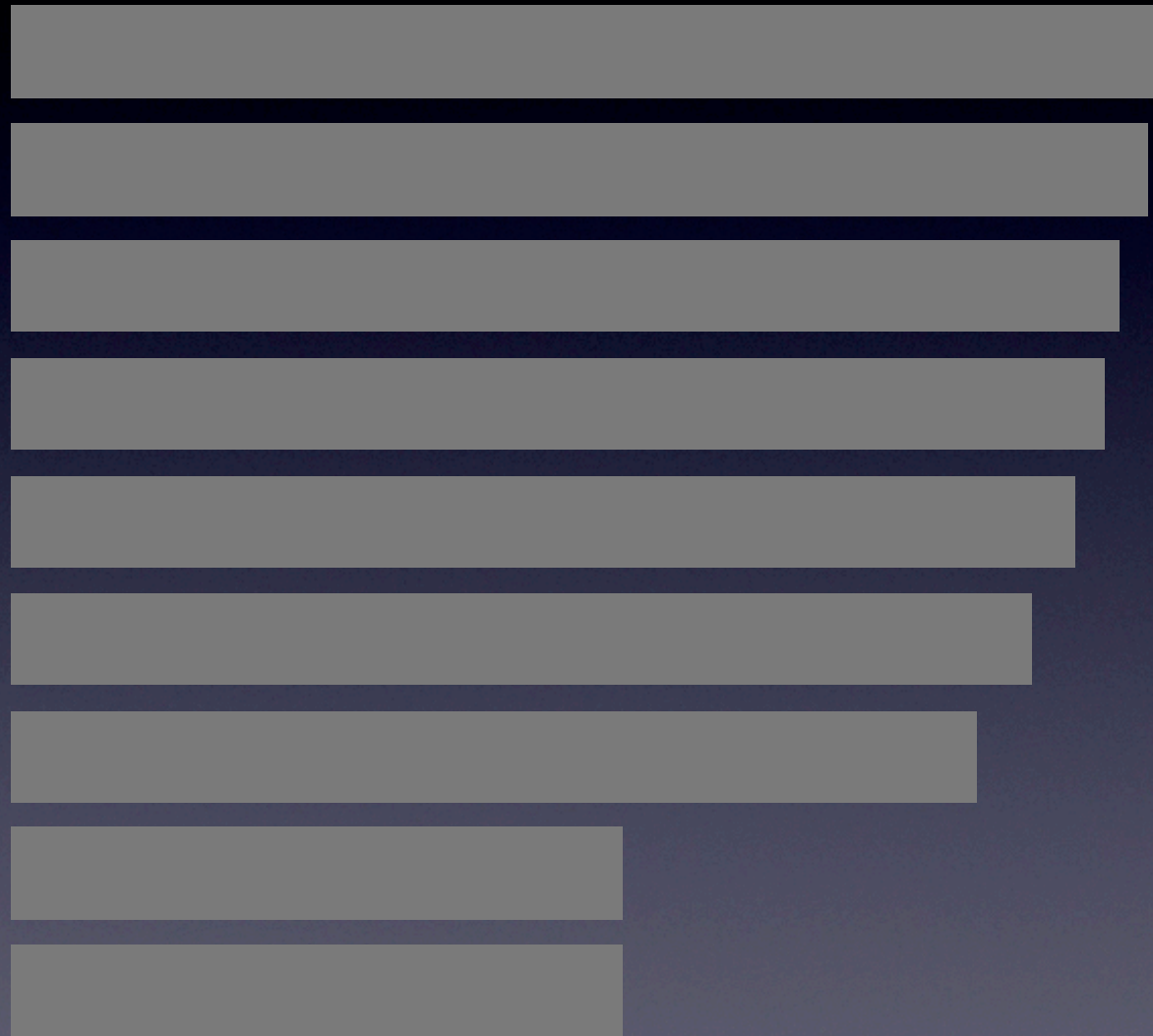
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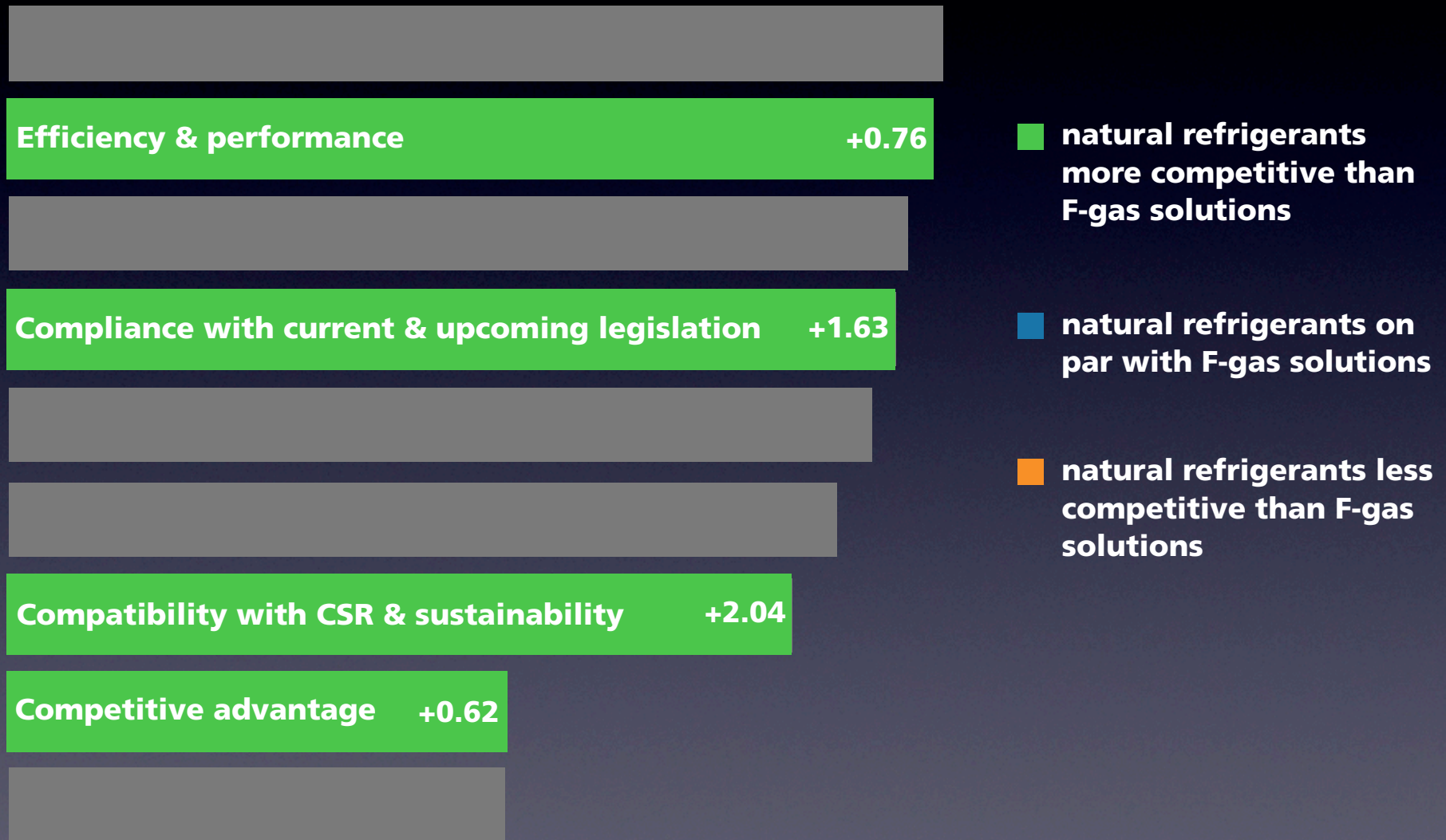


performance of natural refrigerant technology as compared to F-gas solutions

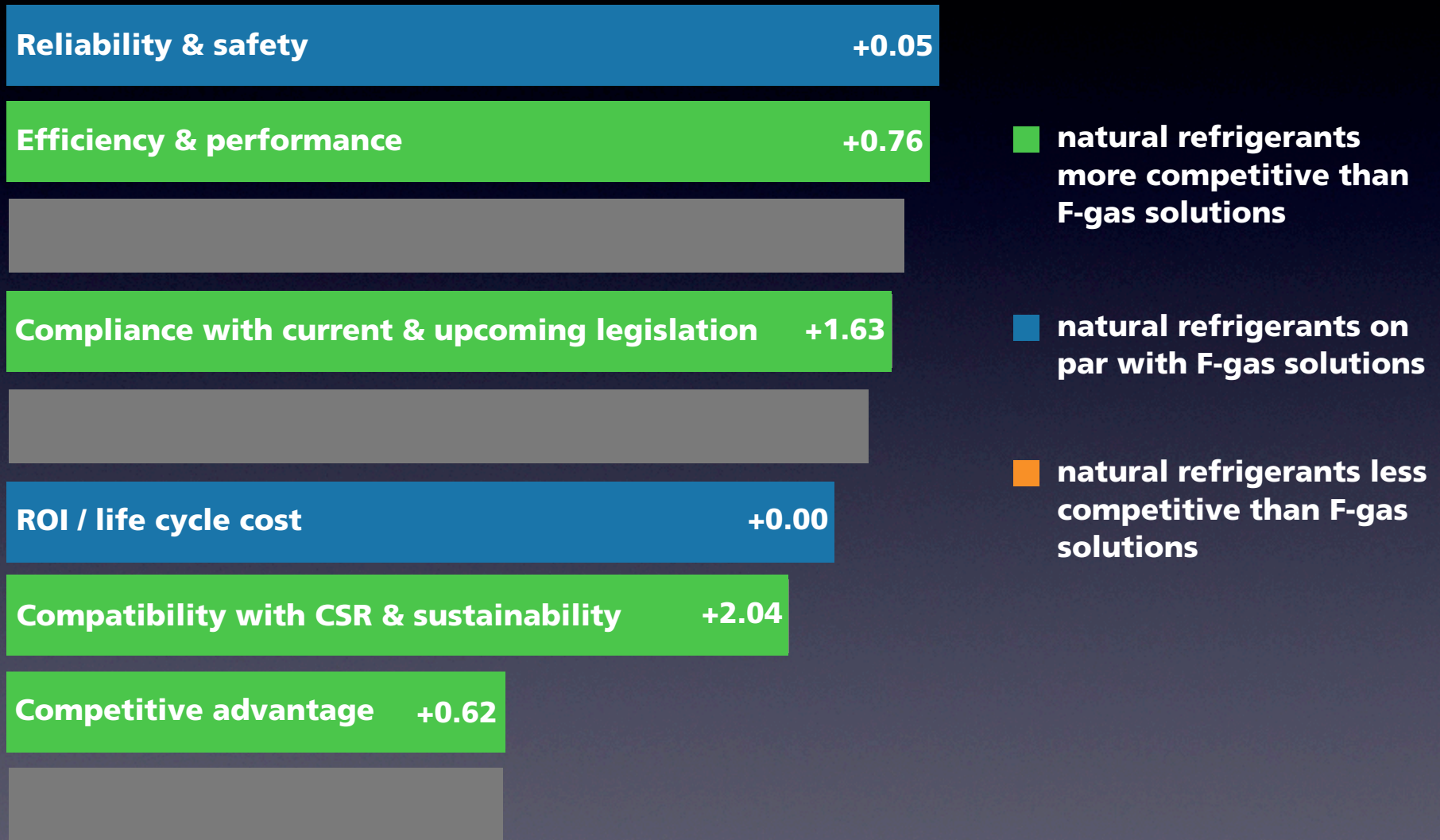


- **natural refrigerants more competitive than F-gas solutions**
- **natural refrigerants on par with F-gas solutions**
- **natural refrigerants less competitive than F-gas solutions**

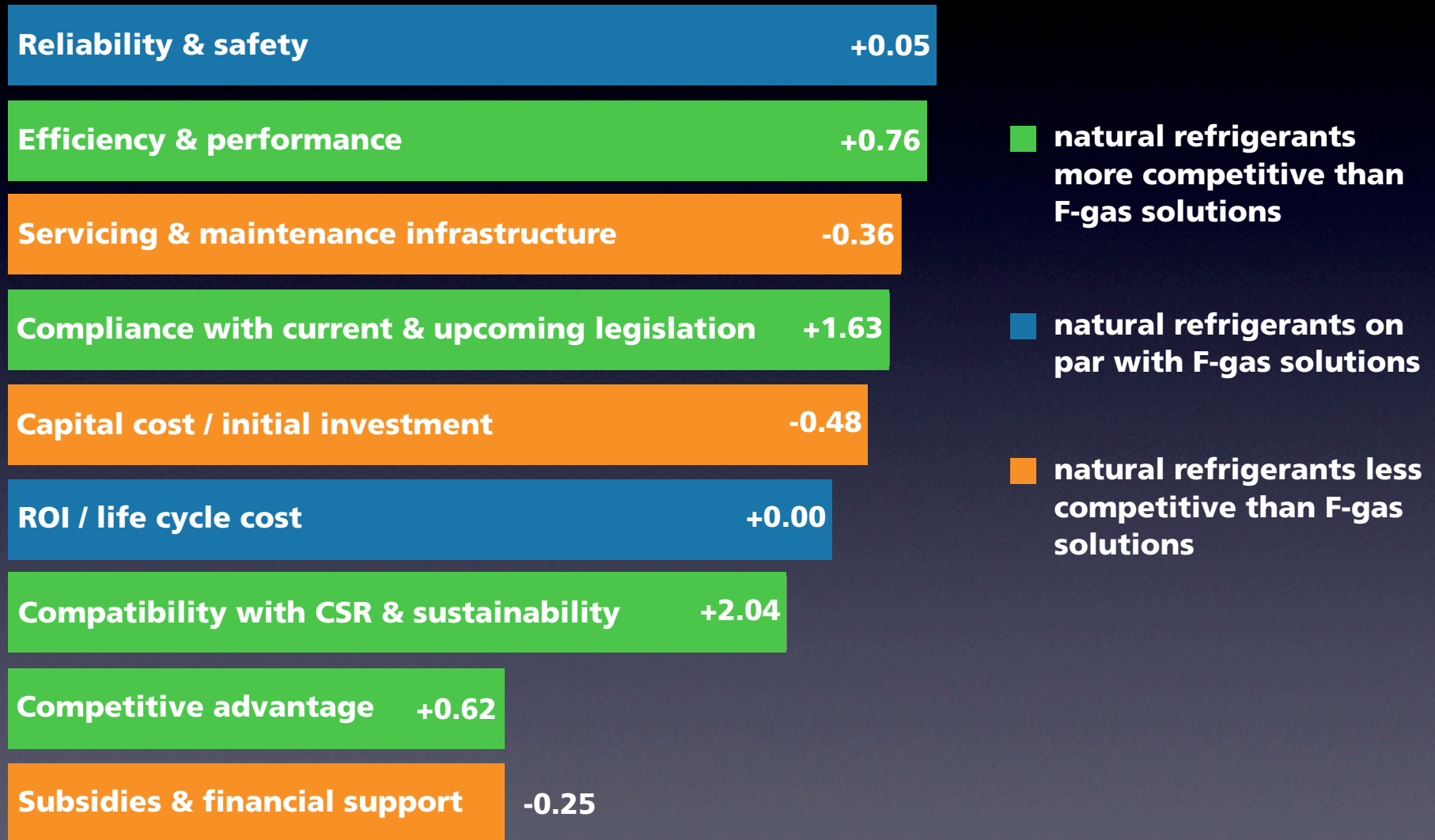
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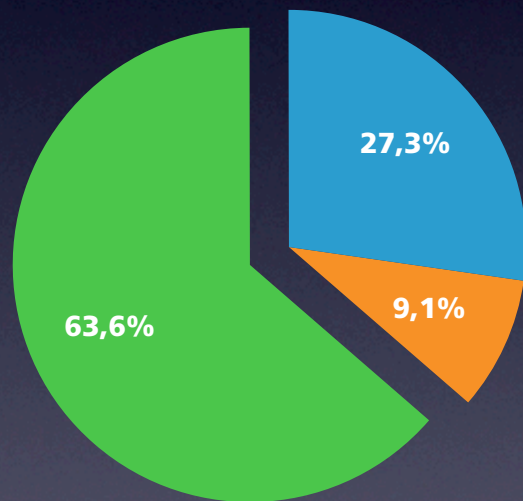
performance of natural refrigerant technology as compared to F-gas solutions



impact of F-gas bans in centralised refrigeration systems as of 2022



- more than 3 out of 5 food retailers anticipated upcoming bans on the use of HFCs to adapt their refrigeration strategy and use non-fluorinated (natural refrigerant) gases
- those are now well-positioned to combine long term legislative compliance with investment security, independent of upcoming F-gas rules

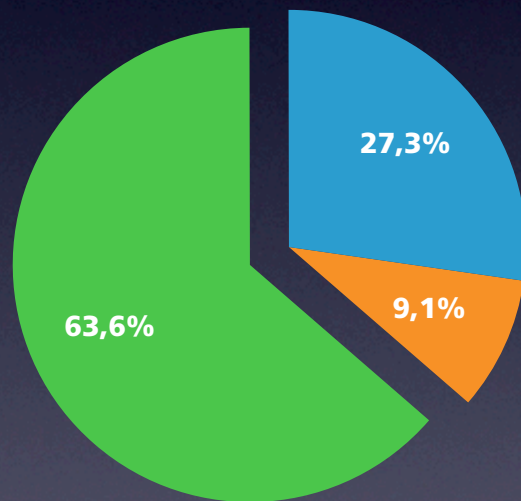


- I need to adapt my refrigeration strategy already today/or as soon as the f-gas agreement becomes official.
- I need to adapt my refrigeration strategy, but closer to the 2022 date.
- The f-gas agreement does not change my strategy as I am already implementing f-gas alternatives in new systems.
- I have not heard about the f-gas rules and/or I have no clear strategy yet regarding the use of f-gases in my store.

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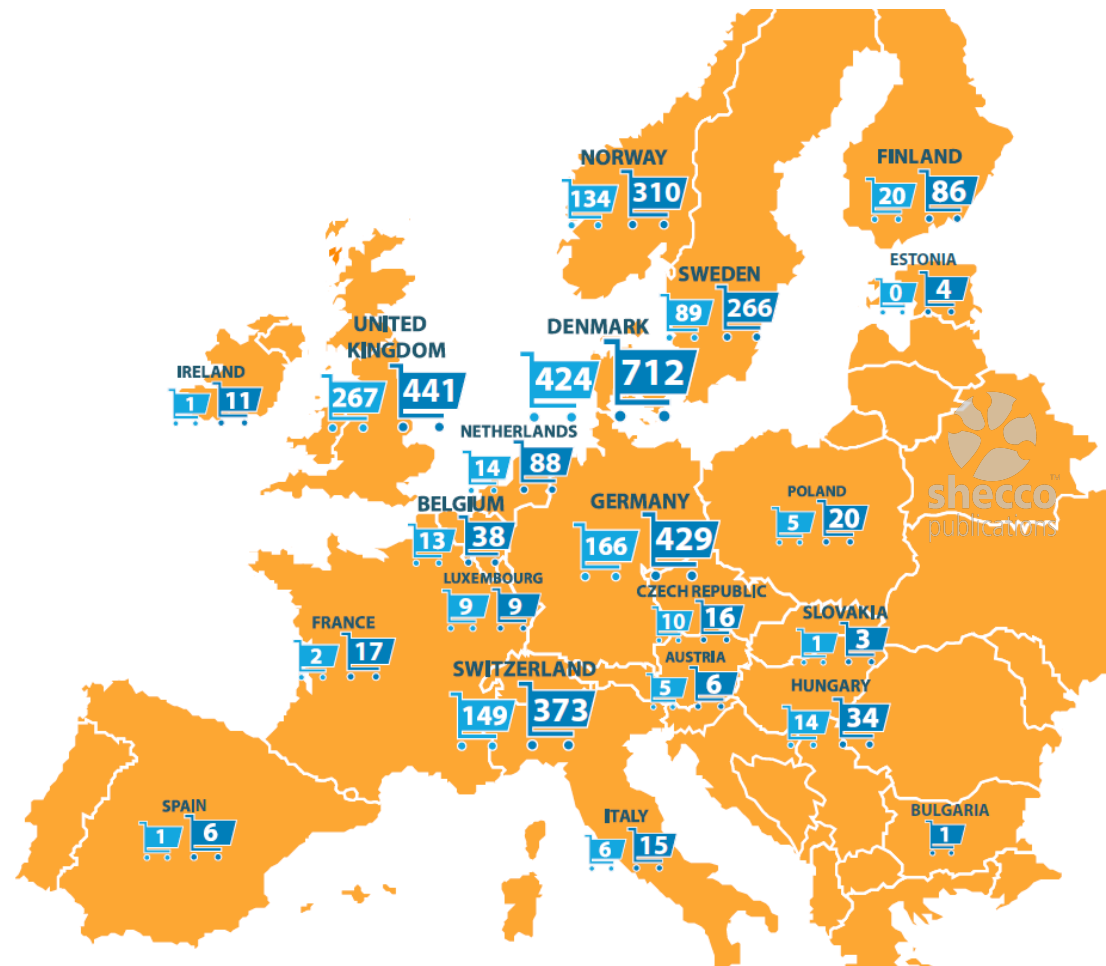
- without exception, all food retailers have already heard about the upcoming HFC bans and have developed an appropriate strategy
- only a minor share has adopted a wait-and-see strategy to adapt their refrigeration strategy closer to the 2022 deadline

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europa: the world leader for CO₂ commercial refrigeration



europa: "CO₂-only" stores

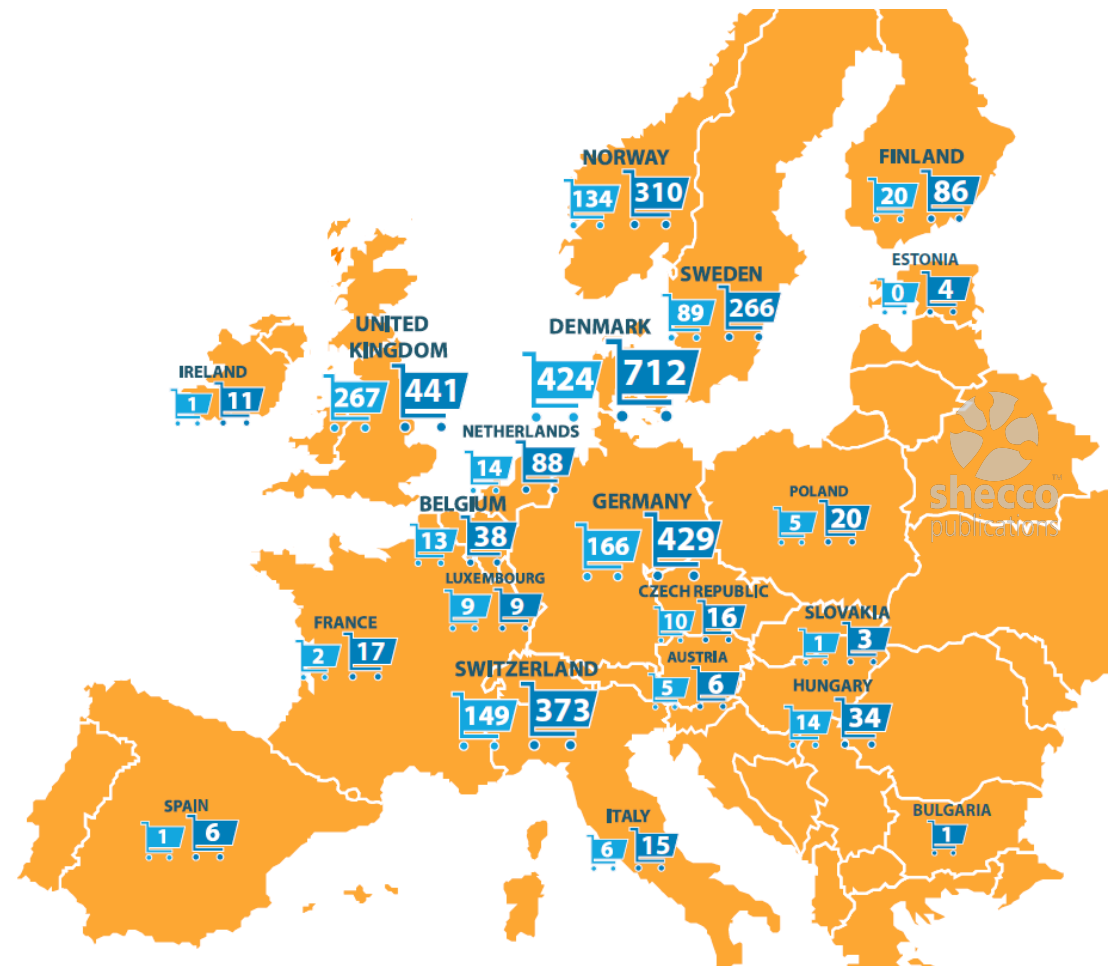


source: shecco, status Nov 2013, "GUIDE Europe 2014: Continued Growth and Innovation for Europe", data from 14 system suppliers / contractors, 11 food retailers

europa: "CO₂-only" stores

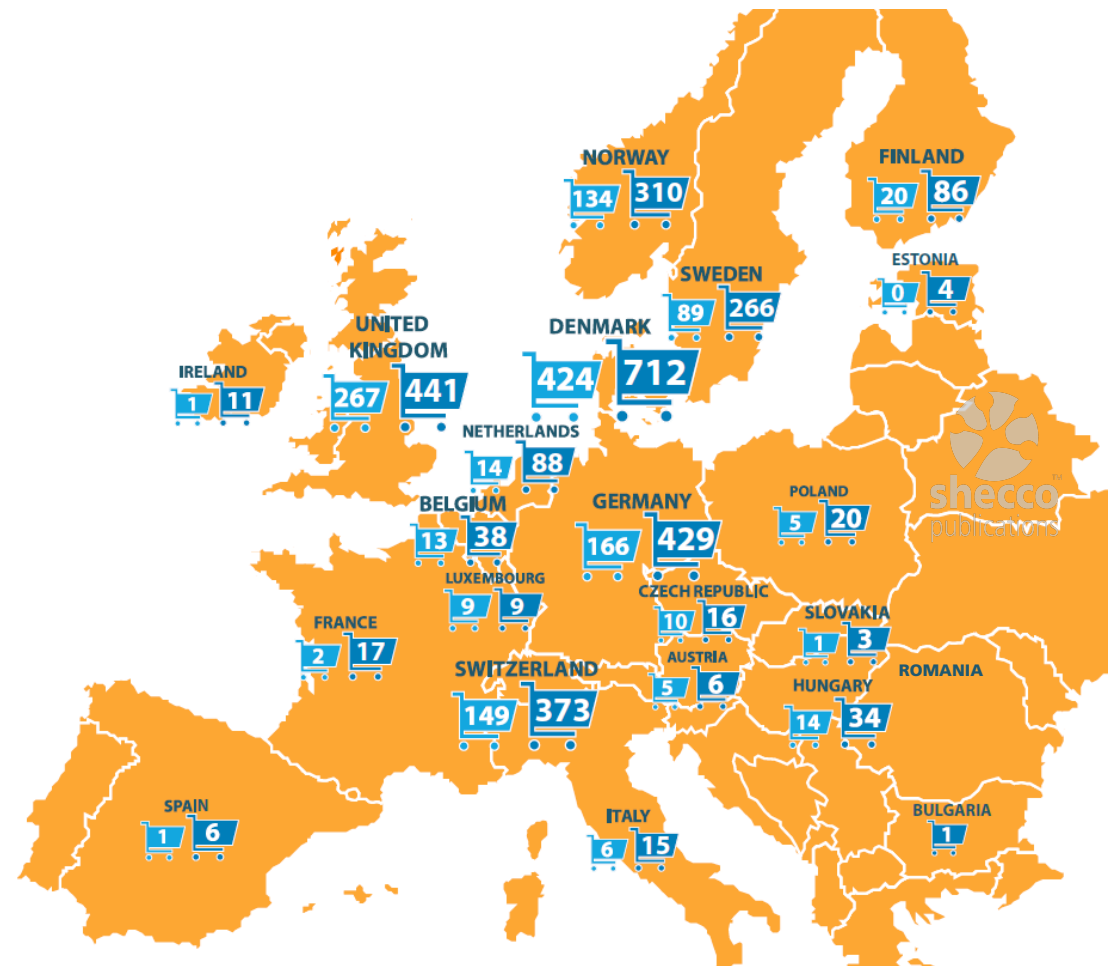


market change can happen very fast



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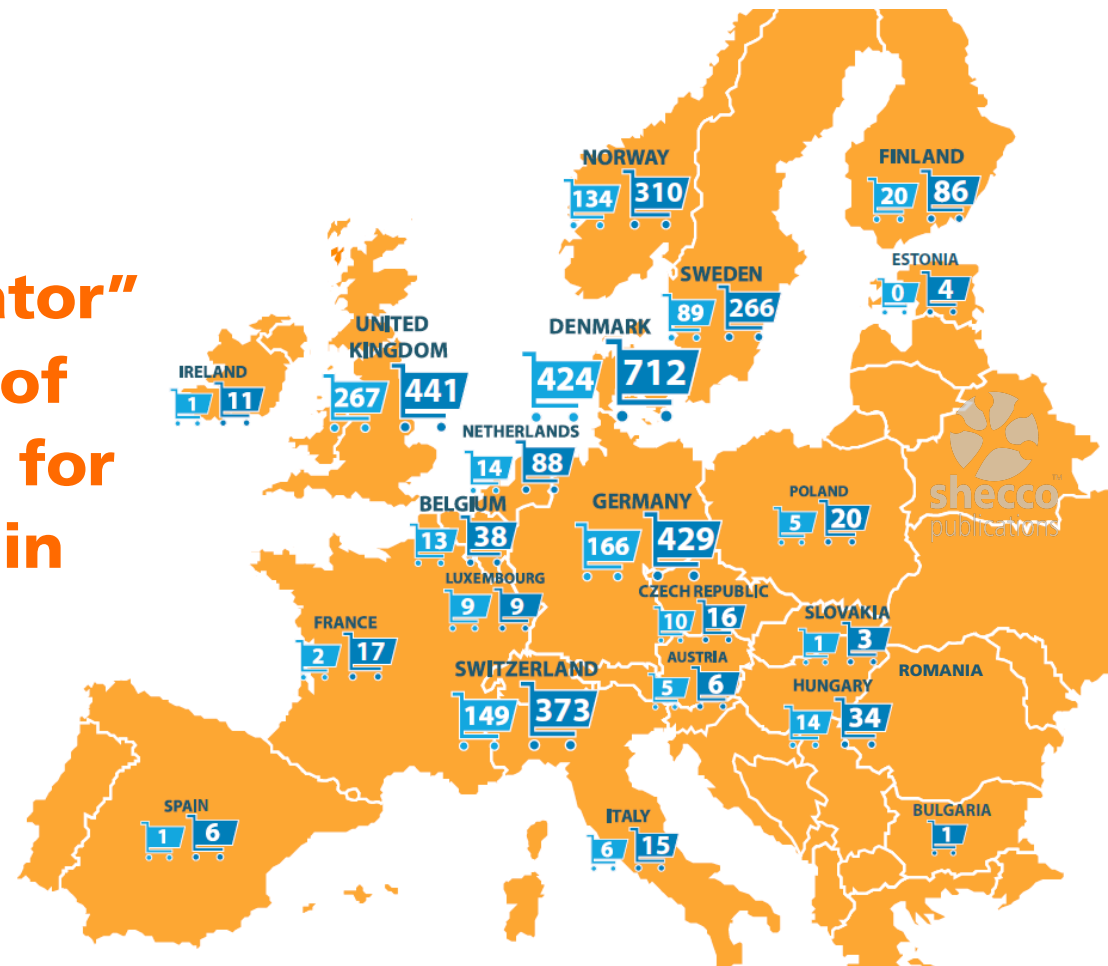
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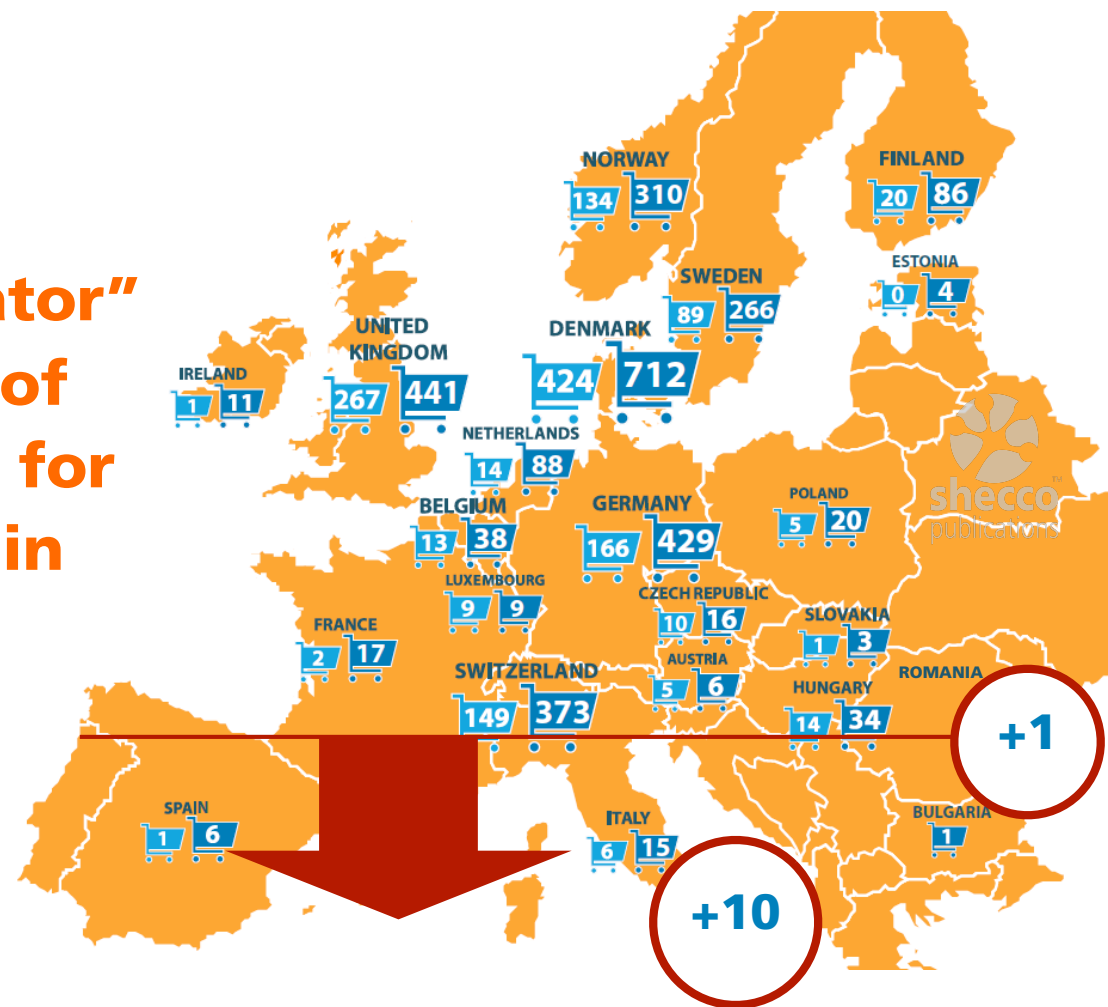
**"CO₂ efficiency equator"
disappears - variety of
solutions developed for
increased efficiency in
warm climates**



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CO₂ TC stores: europe 2011-13 (est.)



	2011	2013	Increase in 2 years
Denmark	424	712	+68%
United Kingdom	267	441	+65%
Germany	166	429	+158%
Norway	134	310	+131%
EU	1331	2885	+117%

natural refrigerant stores: europe brands



source: shecco, status Nov 2013

natural refrigerant stores: europe brands



68 brands



source: shecco, status Nov 2013

shecco - useful links



Industry Platforms:

<http://www.hydrocarbons21.com>

<http://www.R744.com>

<http://www.ammonia21.com>

<http://www.R718.com>

shecco publications

<http://publications.shecco.com>

ATMOsphere events

<http://www.atmo.org>

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