

Sustainable Fabs Start Here: Interact, Commit, Innovate

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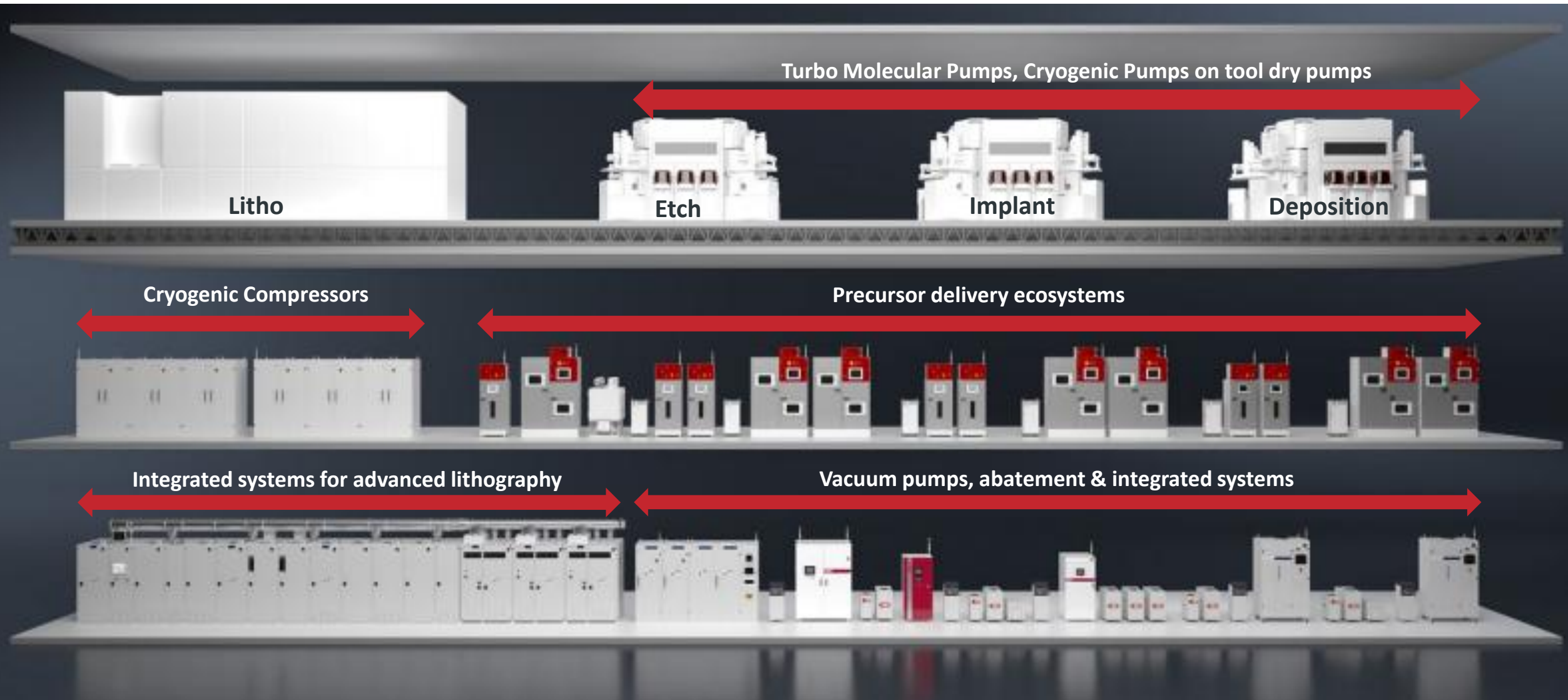


1. Why are we here talking about Sustainable Fabs?
2. Interaction
3. Commitment
4. Innovation
5. What's next?

Why are we here talking about Sustainable Fabs?

- Because we are the stewards of our industry
- Because our target is sustainable profitable growth

Typical fab layout





Edwards solutions



Precursor delivery systems



Vacuum technology



Integrated solutions



Abatement technology

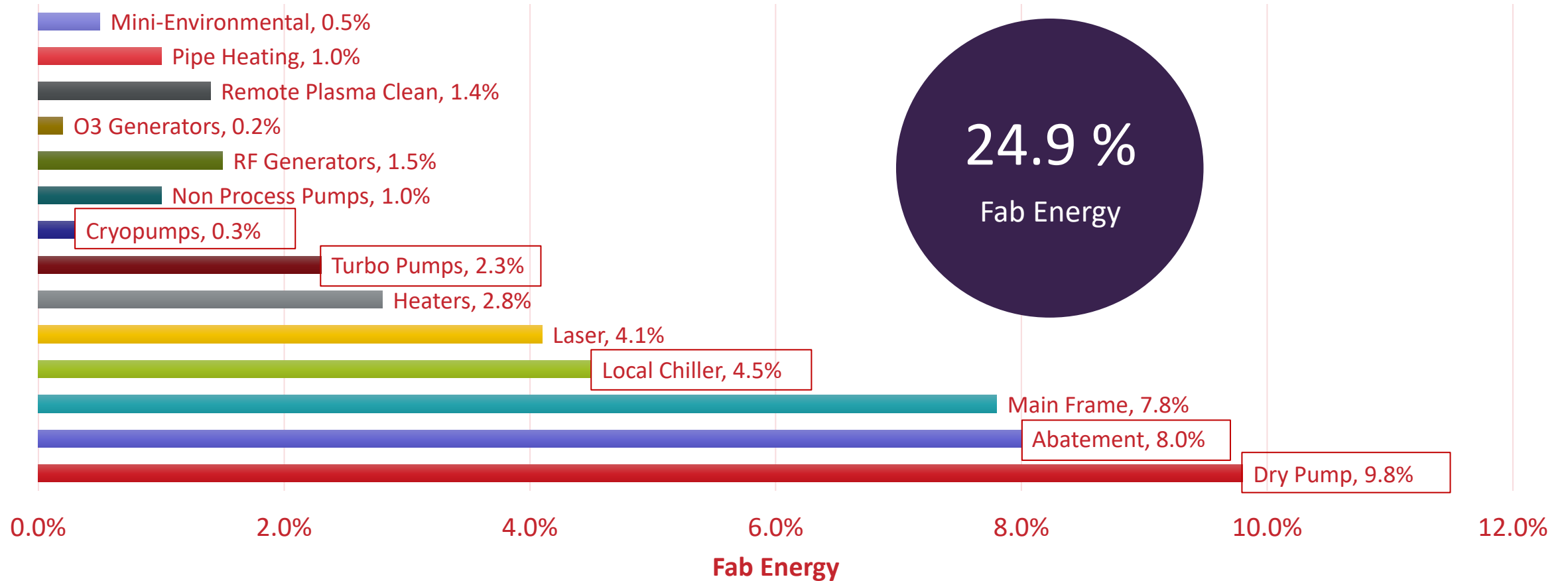


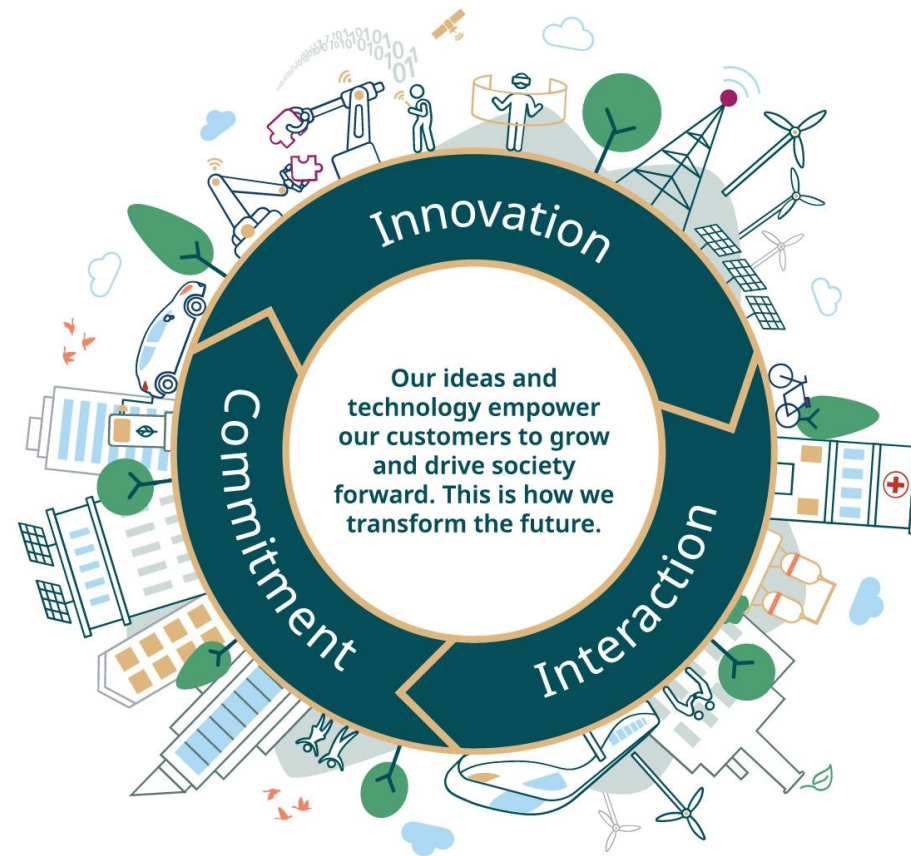
Chamber solutions



OEM equipment energy consumption overview

Our technologies influence around a quarter of fab energy use





Interaction



Interaction: Building our roadmap towards sustainability leadership



Carbon Disclosure Project
2024 score: Climate B / Water C



Silver Sustainability rating for 2024



Signatory of the UN Global Compact since 2008
Committed to the UN Guiding Principles for
Business and Human Rights.



Official sponsor



Member for > 10 years
RBA tools to assess and share our sustainability

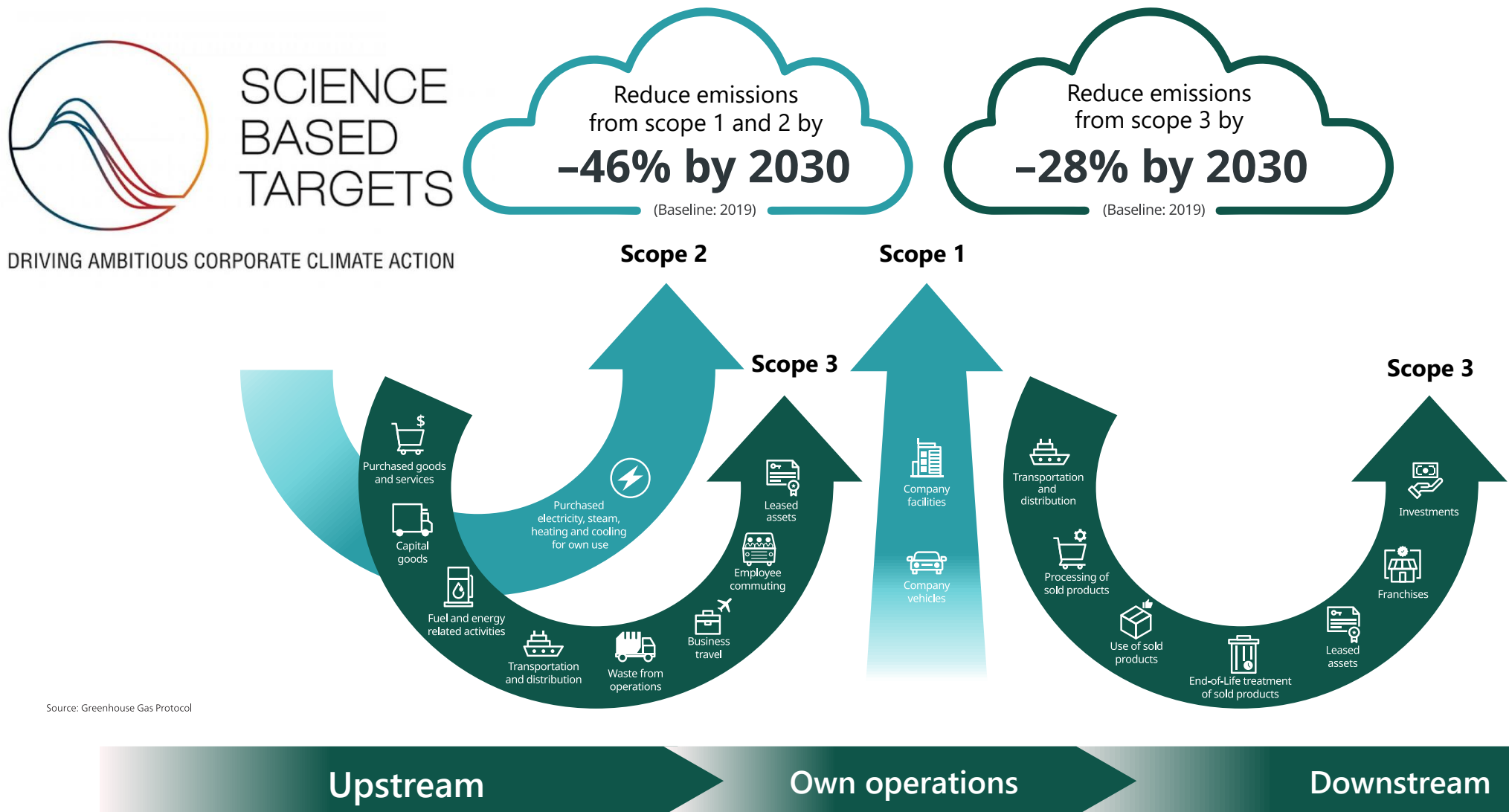
Founding partner



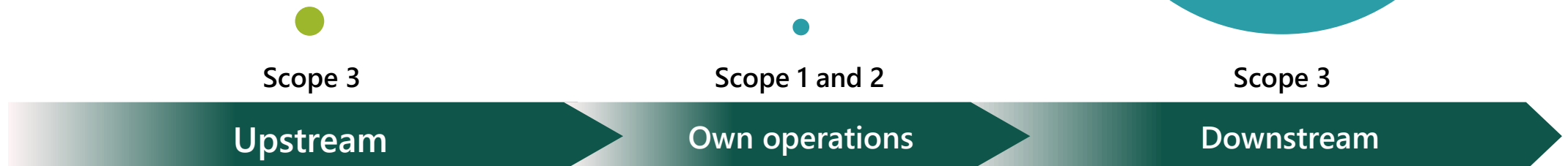
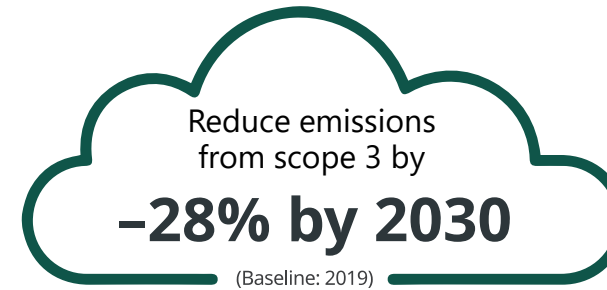
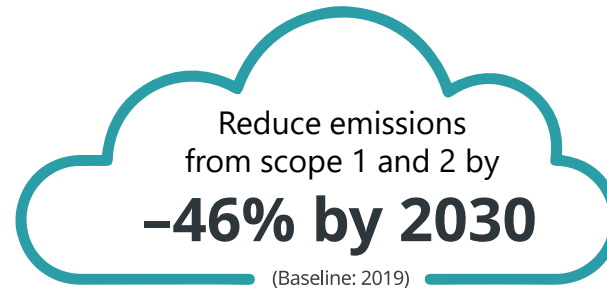
Commitment



We have committed to reduce our climate impact



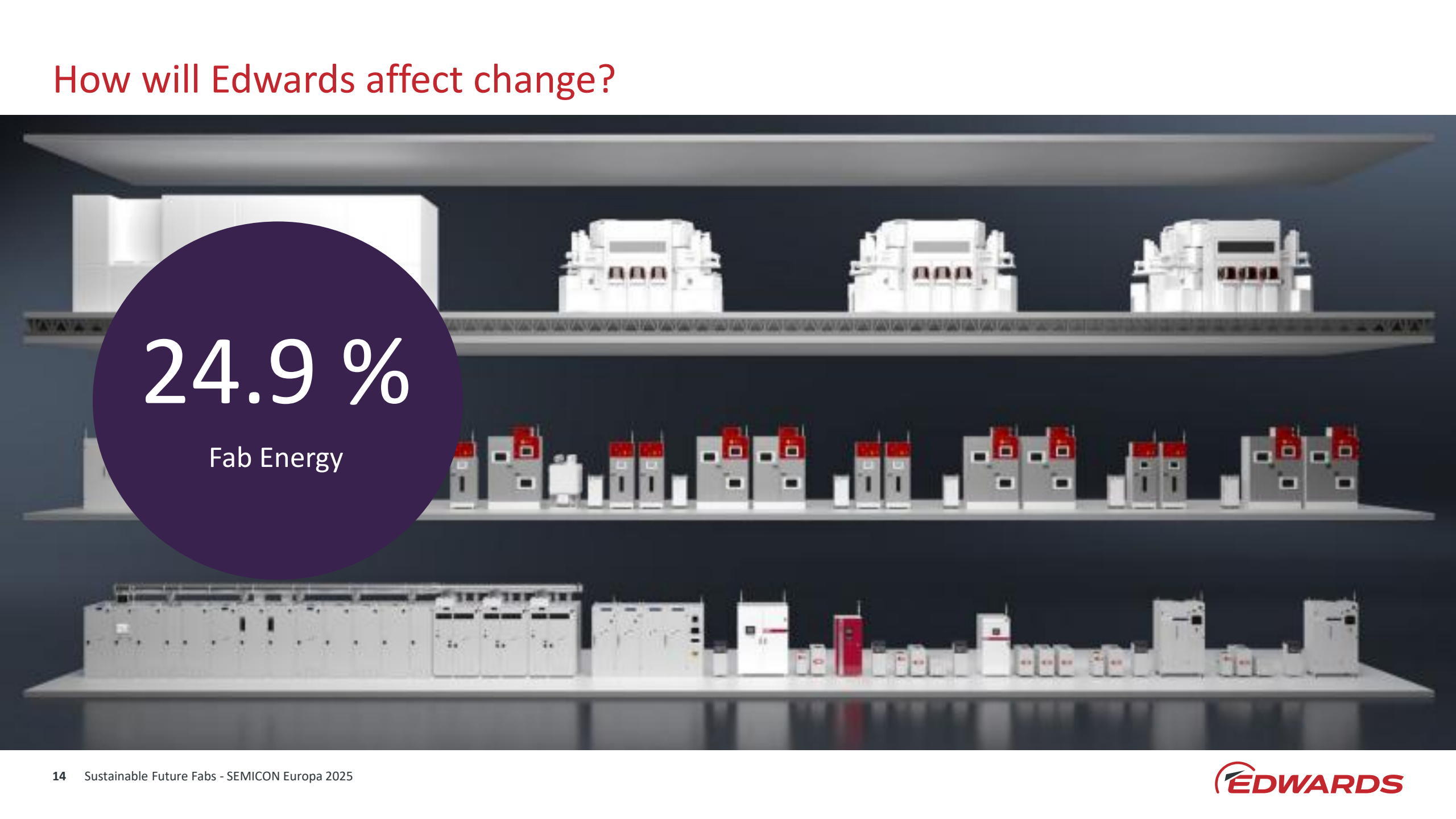
We have committed to reduce our climate impact



Innovation



How will Edwards affect change?



24.9 %

Fab Energy

Innovation – reducing dry pump power consumption

Dry pumps

~10%

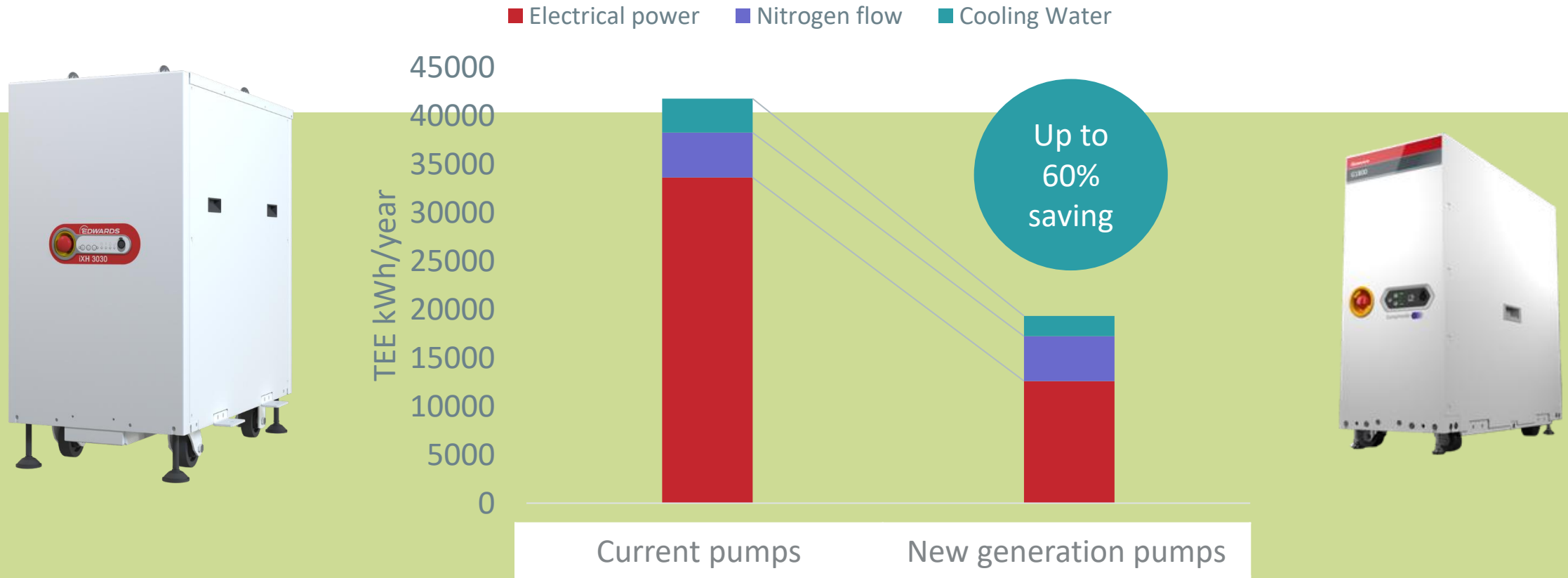
Fab Energy

Vacuum, abatement & integrated systems



Innovation – reducing dry pump energy consumption

Industry standard (S-23) total equivalent energy improvement



Innovation – upgrade options that reduce abatement energy consumption

Abatement

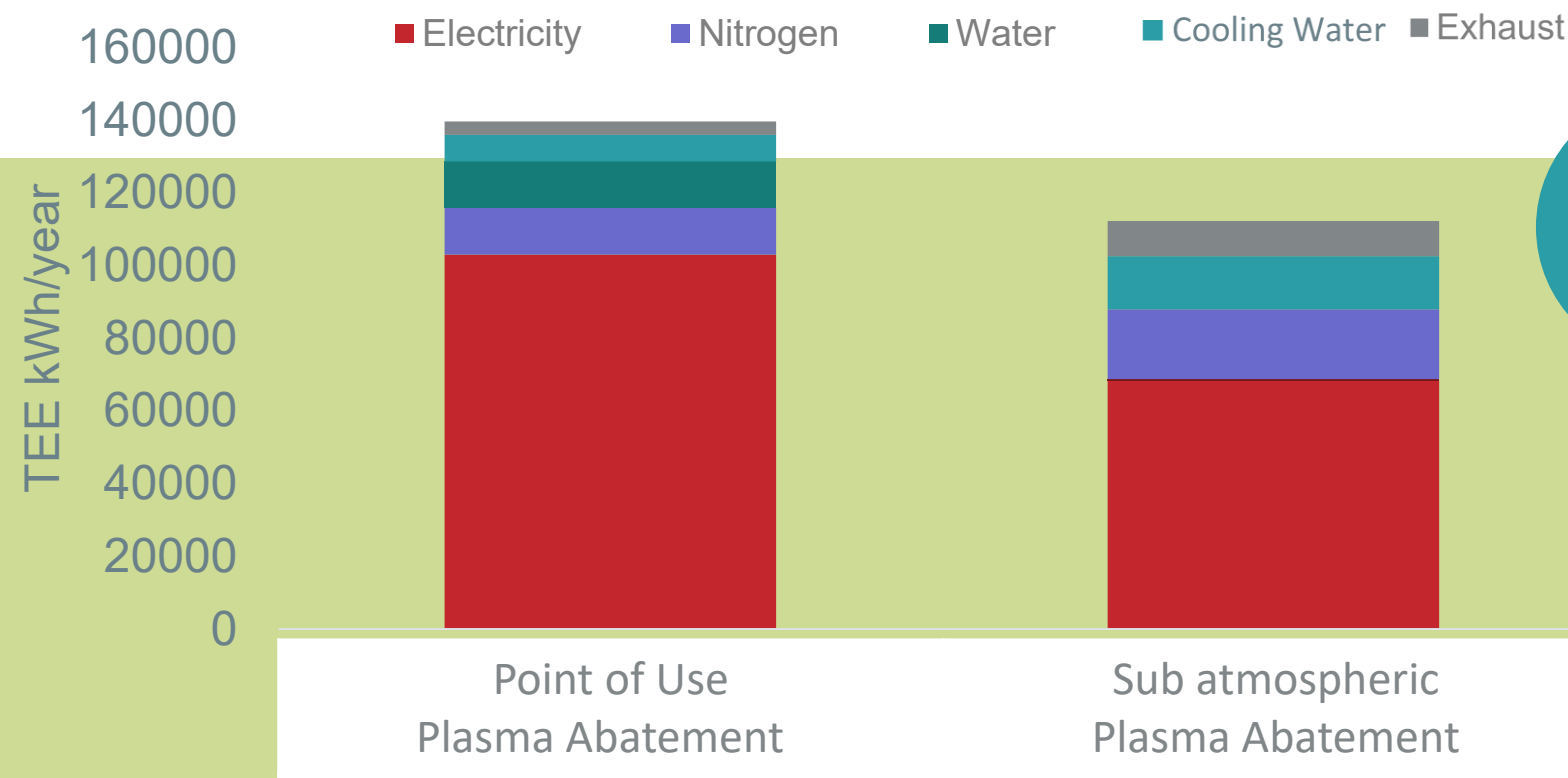
~8%

Fab Energy

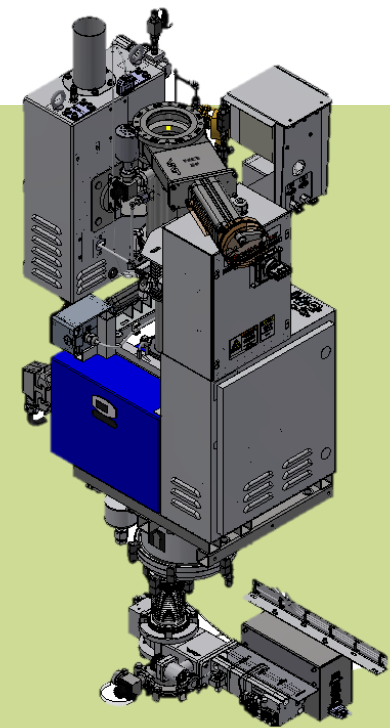
Vacuum, abatement & integrated systems

Innovation – developing upgrade options that reduce abatement energy

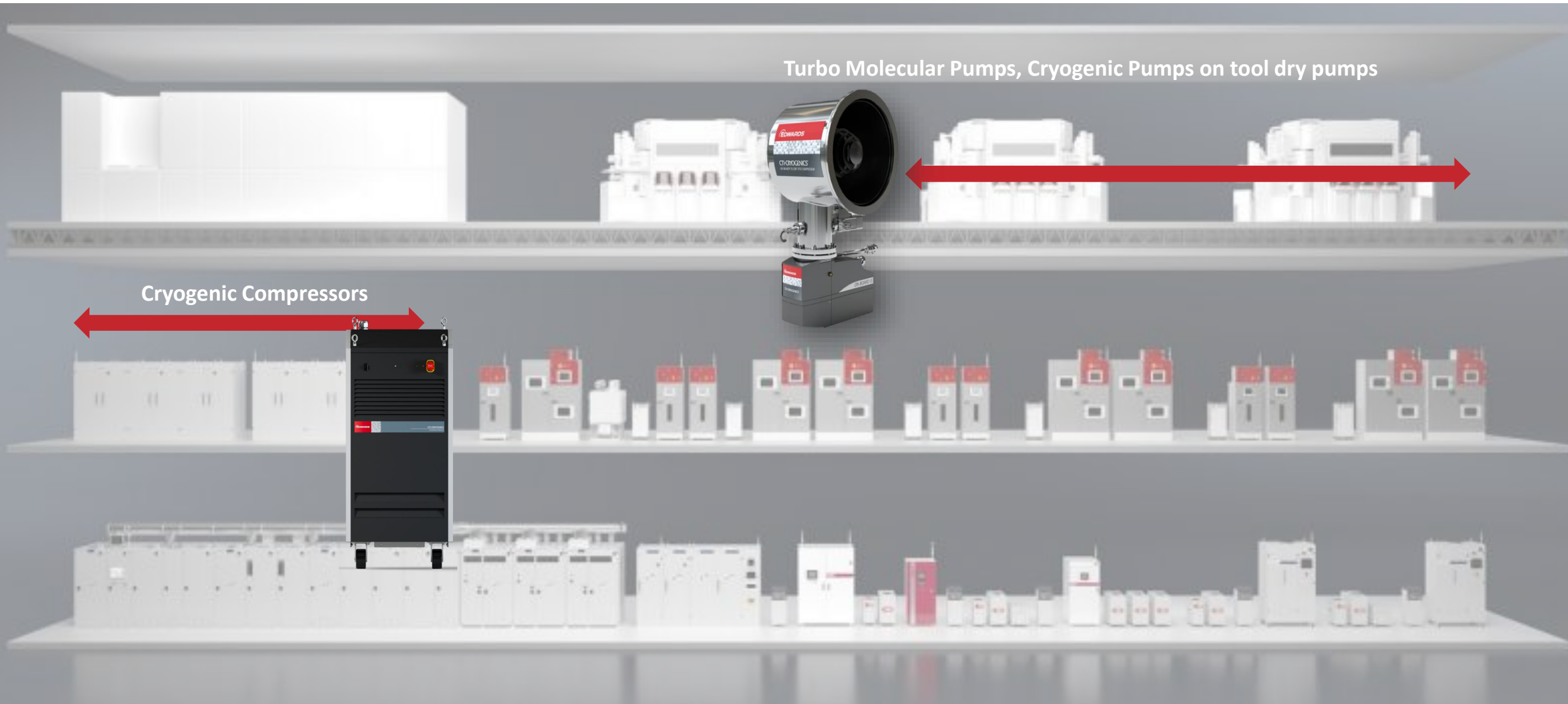
Industry standard (S-23) total equivalent energy improvement



Up to 25% saving



Innovation – reducing Compressor power consumption



Innovation – more cryo pumps per compressor

~40%
Energy saving

-60%
↓

-29%
↓

**Variable speed compressor
with higher capacity Vs.
application with two
standard compressors**

Water Savings
Vs. application with 2xIS1000 compressors

Total emissions
Reduced CO₂e

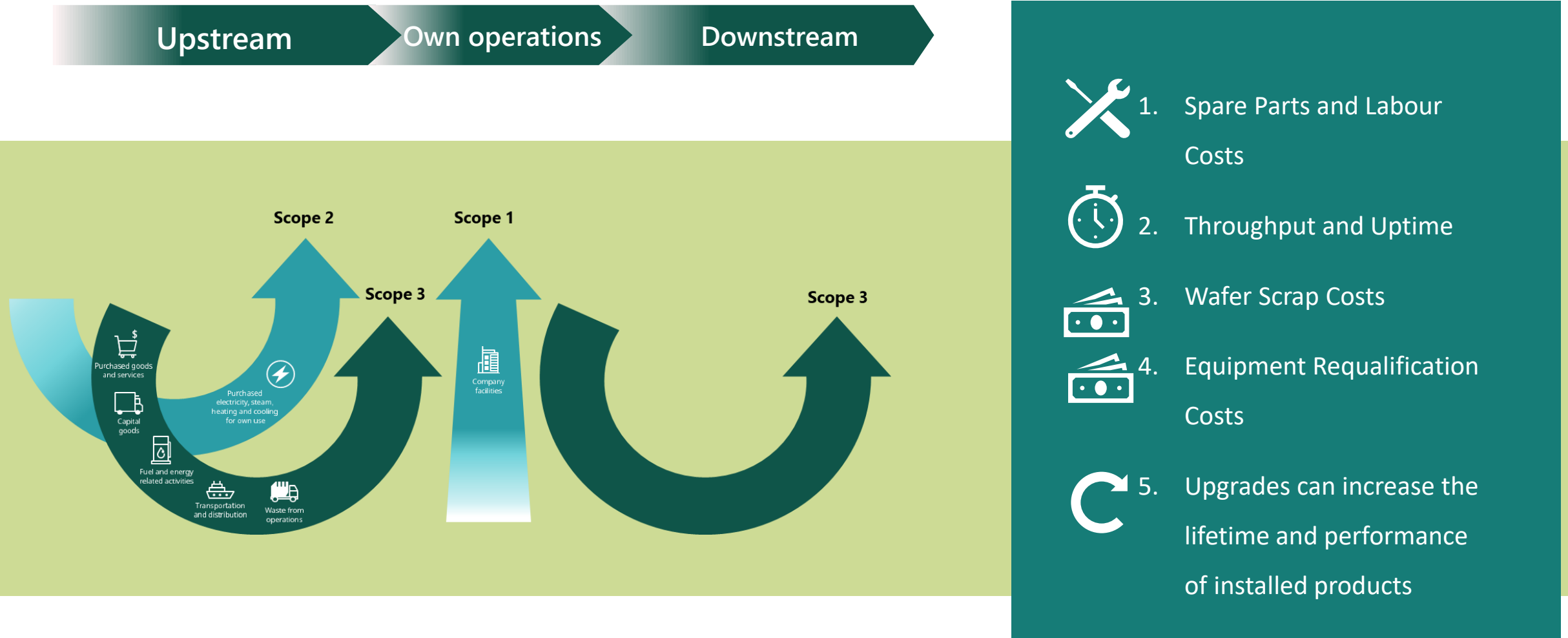


Innovation – data driven predictive maintenance



Innovation – data-driven predictive maintenance

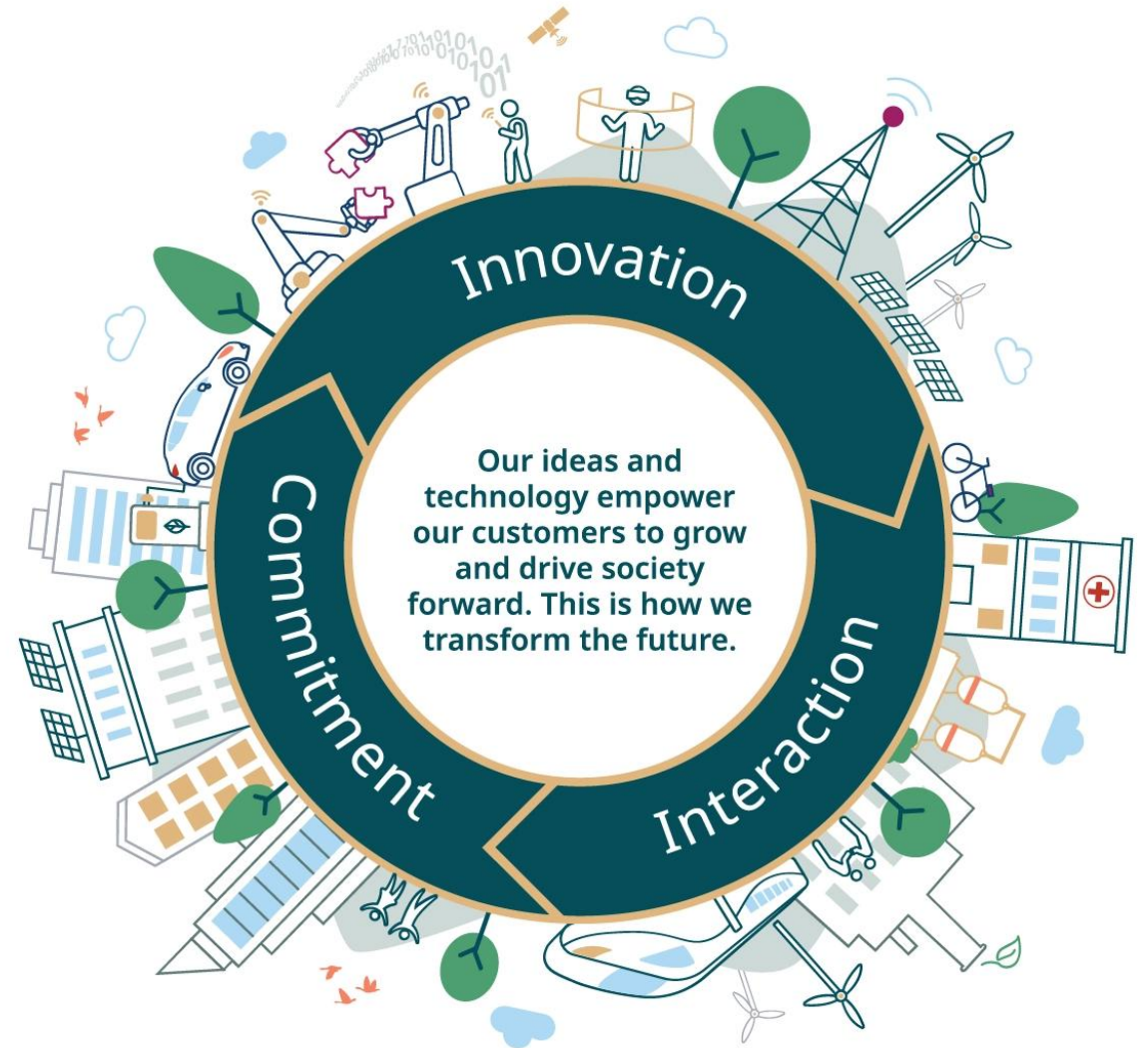
These innovations + improvements depend on keeping systems efficient and reliable — energy efficiency as a continuous responsibility.



Interaction, Interaction and Commitment

We can't do it alone - you can't do it alone.

- **Innovative systems** will play their part
 - **Ongoing interaction** is needed
- Change will be driven by **long term commitment**



We must not lose sight of why we're talking about this:

- Because we promised.
- Because we have no choice.

If not now, then when? If not us, then who?



[enabling environments where innovation thrives]

■ Part of Atlas Copco Group



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