

Chlor-Alkali: Achieving Climate Neutrality...

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12th International
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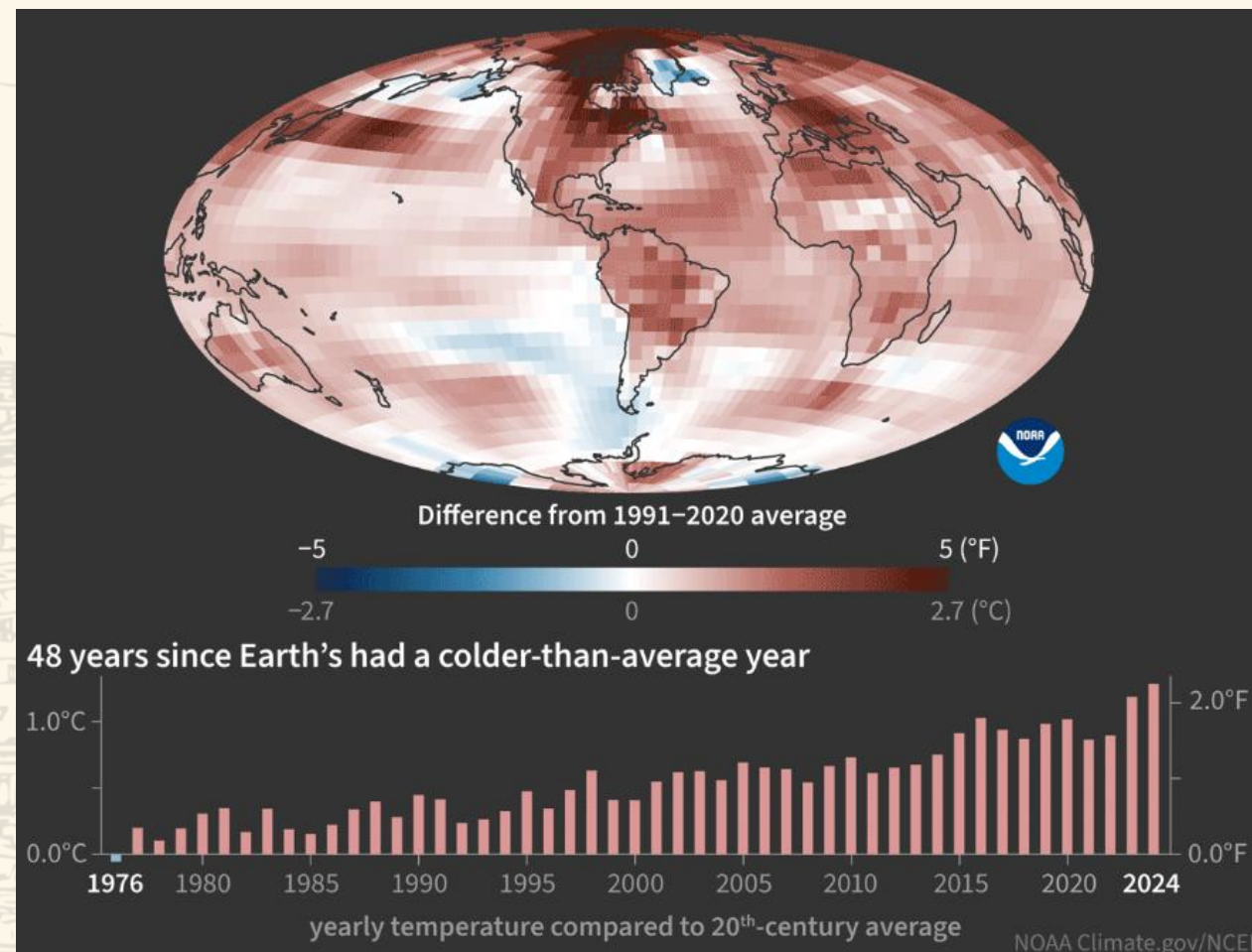
13-15 May 2025
Barcelona - Spain

...or, how Europe's climate policy is like building the Sagrada Familia



Public Concern: the warmest years on record

- 10 warmest years since 1850 have all been in the last decade
- Led to calls for more ambitious climate action
- 2024 UN study suggests 80% of global population want strong government action on climate



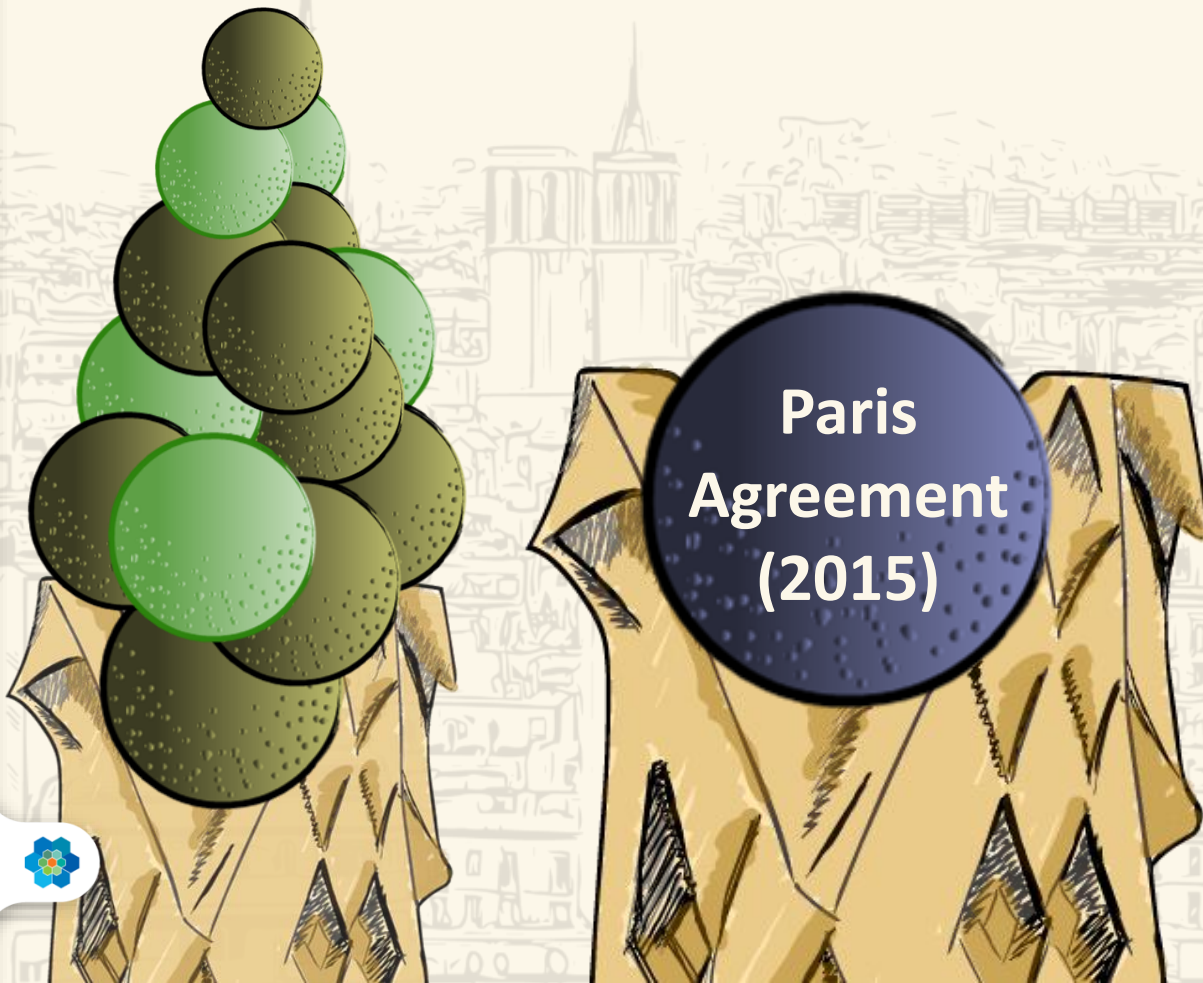
What's the link to Barcelona's iconic cathedral?



- Key decorative part on the Sagrada Familia are colourful spires
- These spires hold 'grapes' that represent those used in various rites
- Their stacking is like the building up of European climate policy over time
- This policy will impact our sector



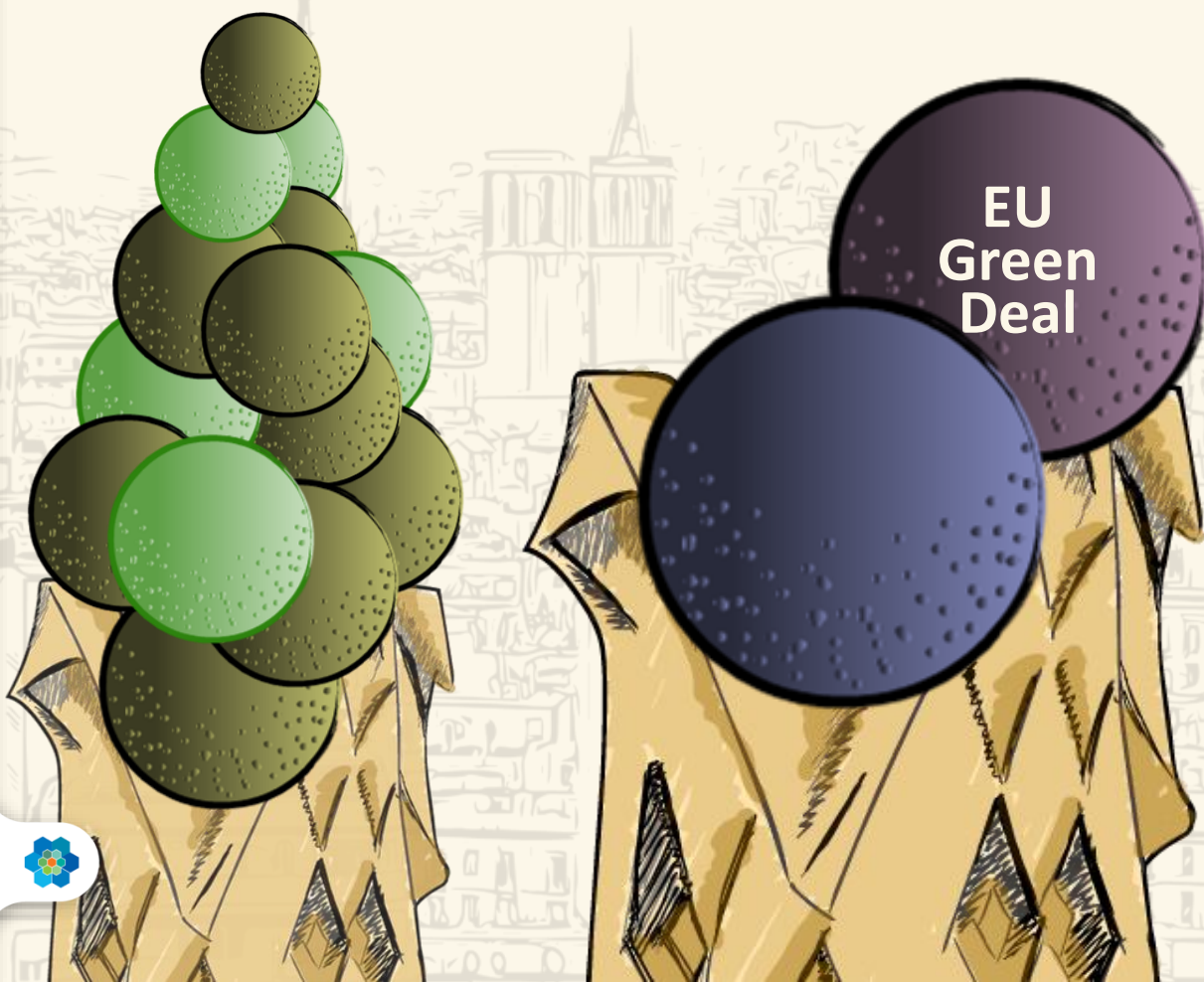
Start = An agreement in Paris...



- Legally binding international treaty on climate change
- All parties to reduce greenhouse gas emissions
- Aim = keep global average temperature increase to below 2°C above pre-industrial levels (aim = <1.5°C)
- Five-year cycles of increasingly ambitious climate action



EU commits to action...

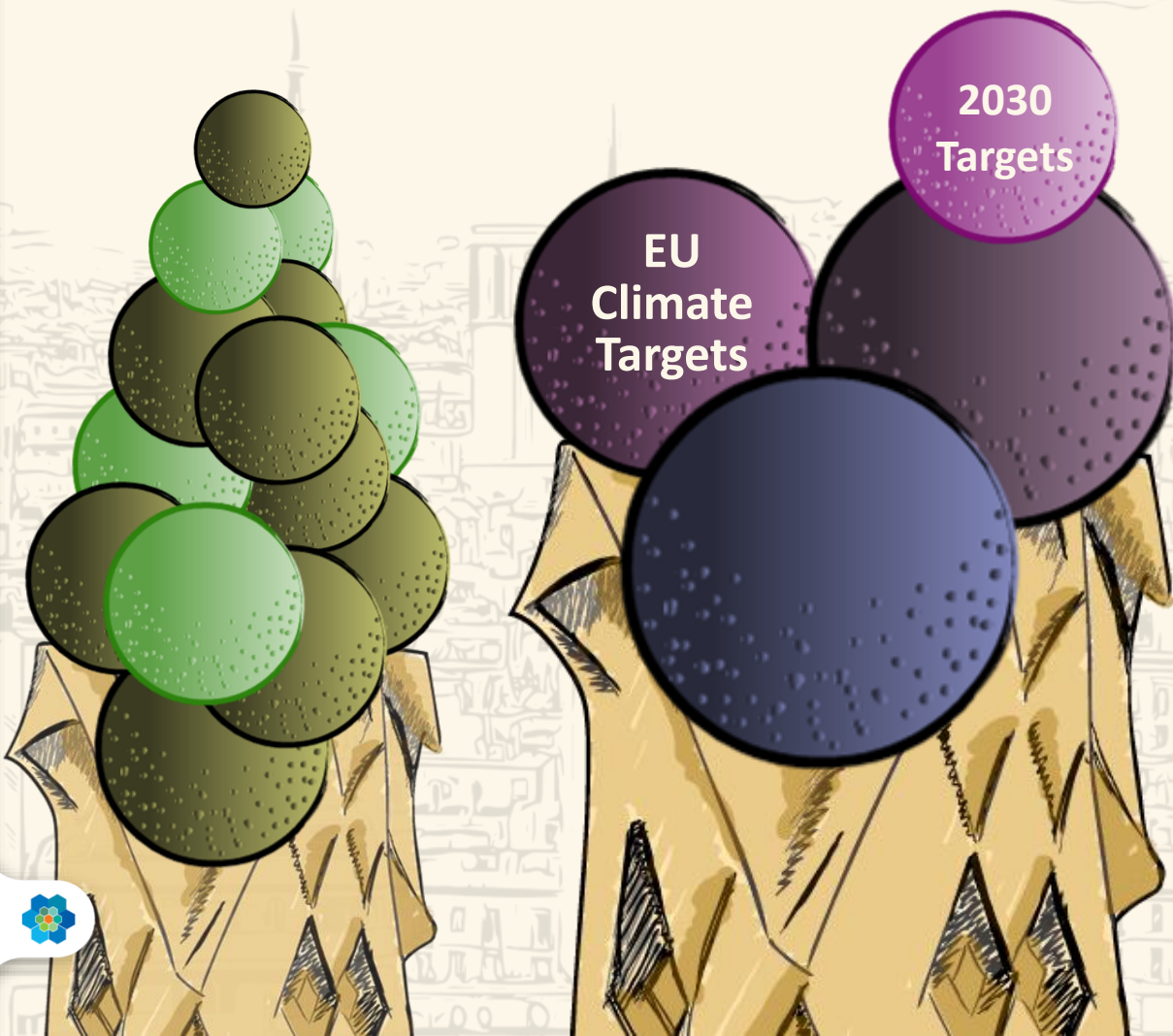


- Aim = EU → first climate-neutral continent **by 2050** by cutting emissions and investing in green technologies
- Boost efficient use of resources by moving to a clean, circular economy
- Covers all sectors of the economy
- Hints at ambitious intermediate EU Climate Targets

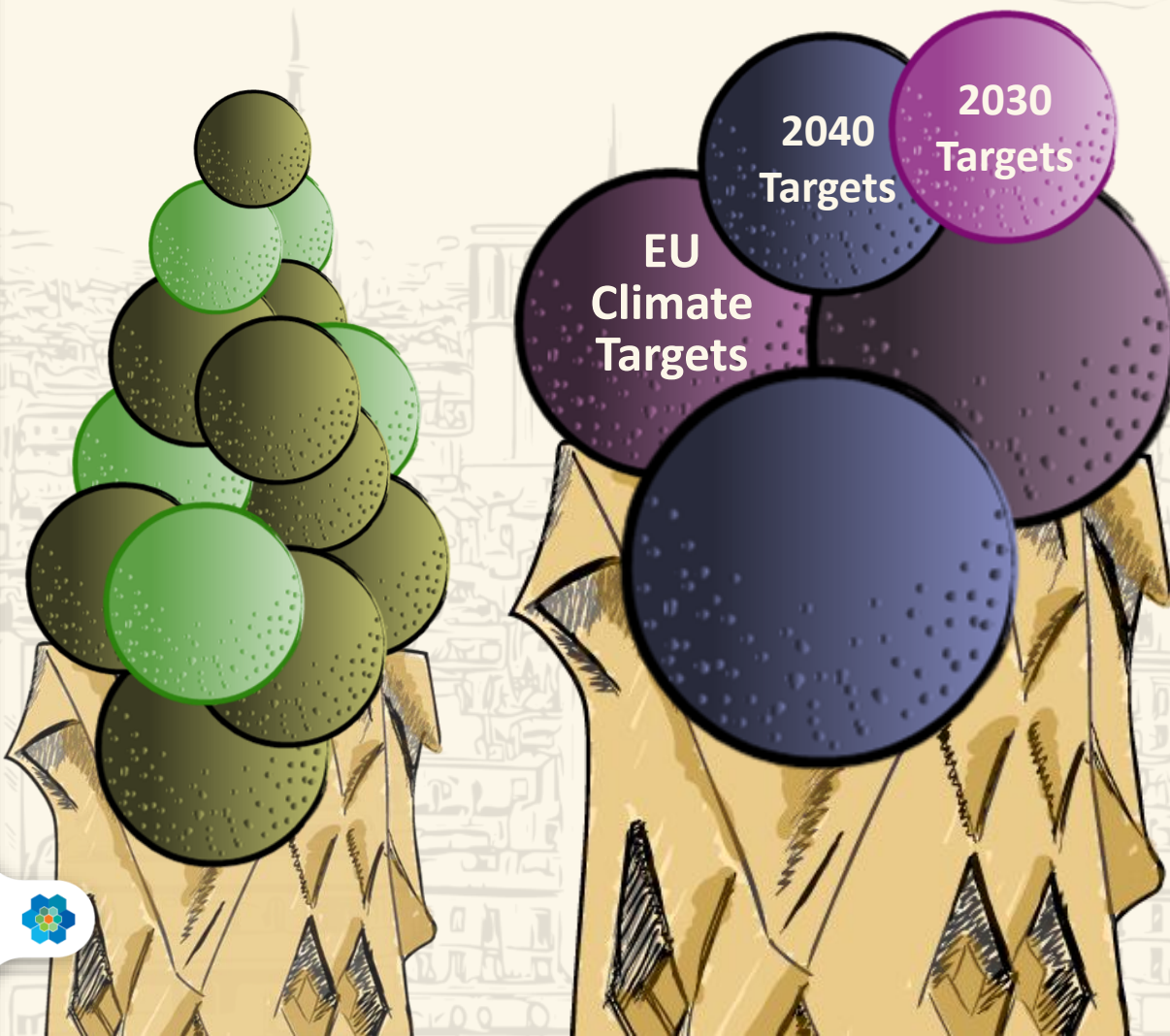


Intermediate climate targets?...

- Reduce net greenhouse gas emissions by at least 55% by 2030, compared to 1990 levels



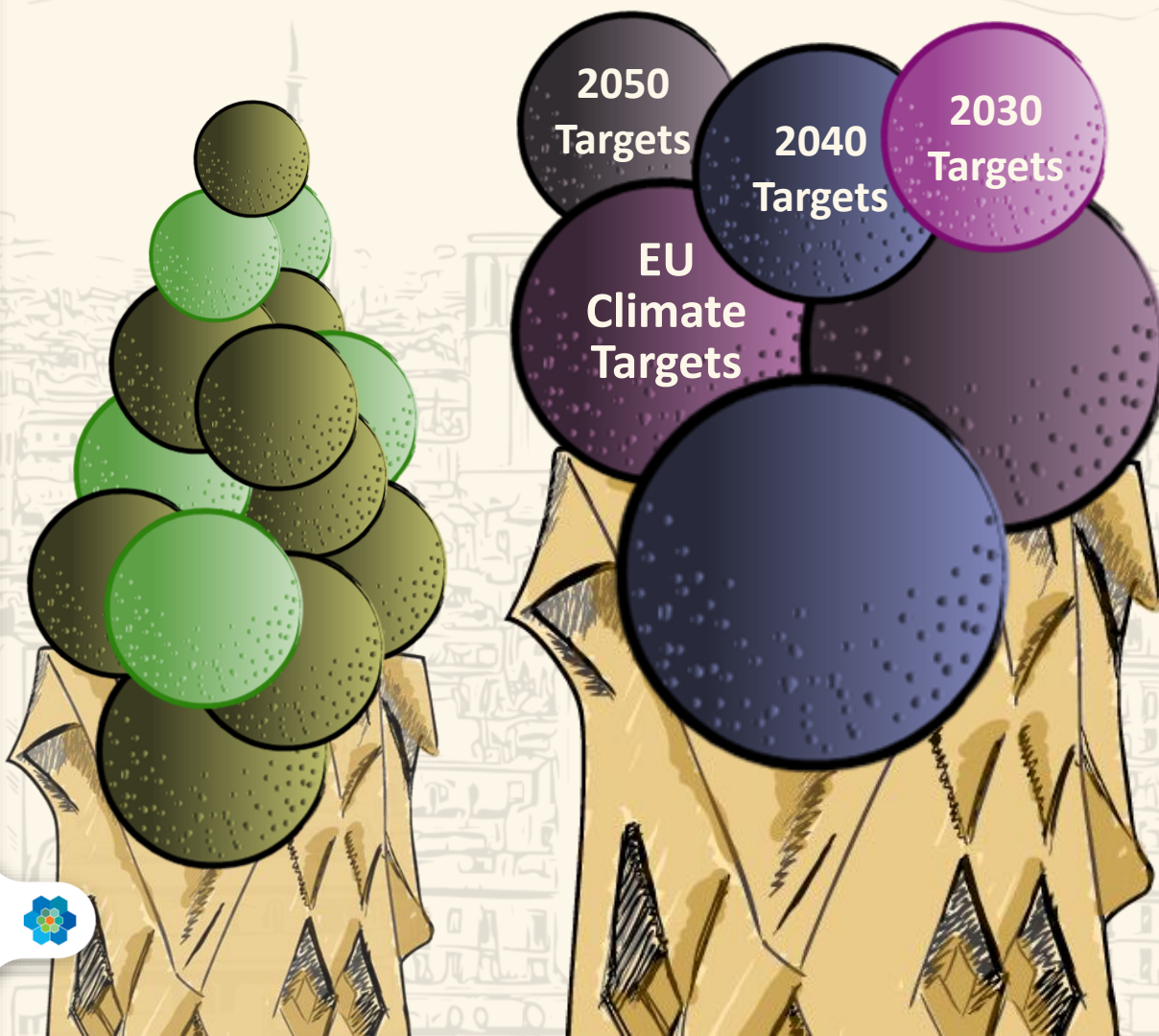
Intermediate climate targets?...



- Reduce net greenhouse gas emissions by at least 55% by 2030, compared to 1990 levels.
- 90% reduction compared to 1990 = 2040 target
- Decreasing energy consumption upto 2040
- Move chemical industry towards carbon capture by 2040



Intermediate climate targets?...



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- 90% reduction compared to 1990 = 2040 target
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- Move chemical industry towards carbon capture by 2040
- Climate neutrality by 2050 (legally binding)
- EU chemical industry ideally becomes climate neutral by this stage

How can industry achieve climate neutrality...



Net Zero
Industry
Act

- Aim = strengthen manufacturing capacity for net-zero technologies
- Into force June 2024
- CO₂ storage targets for 2030, 2040 and 2050
- Simplify regulations/ administration whilst accelerating permitting processes for net-zero projects



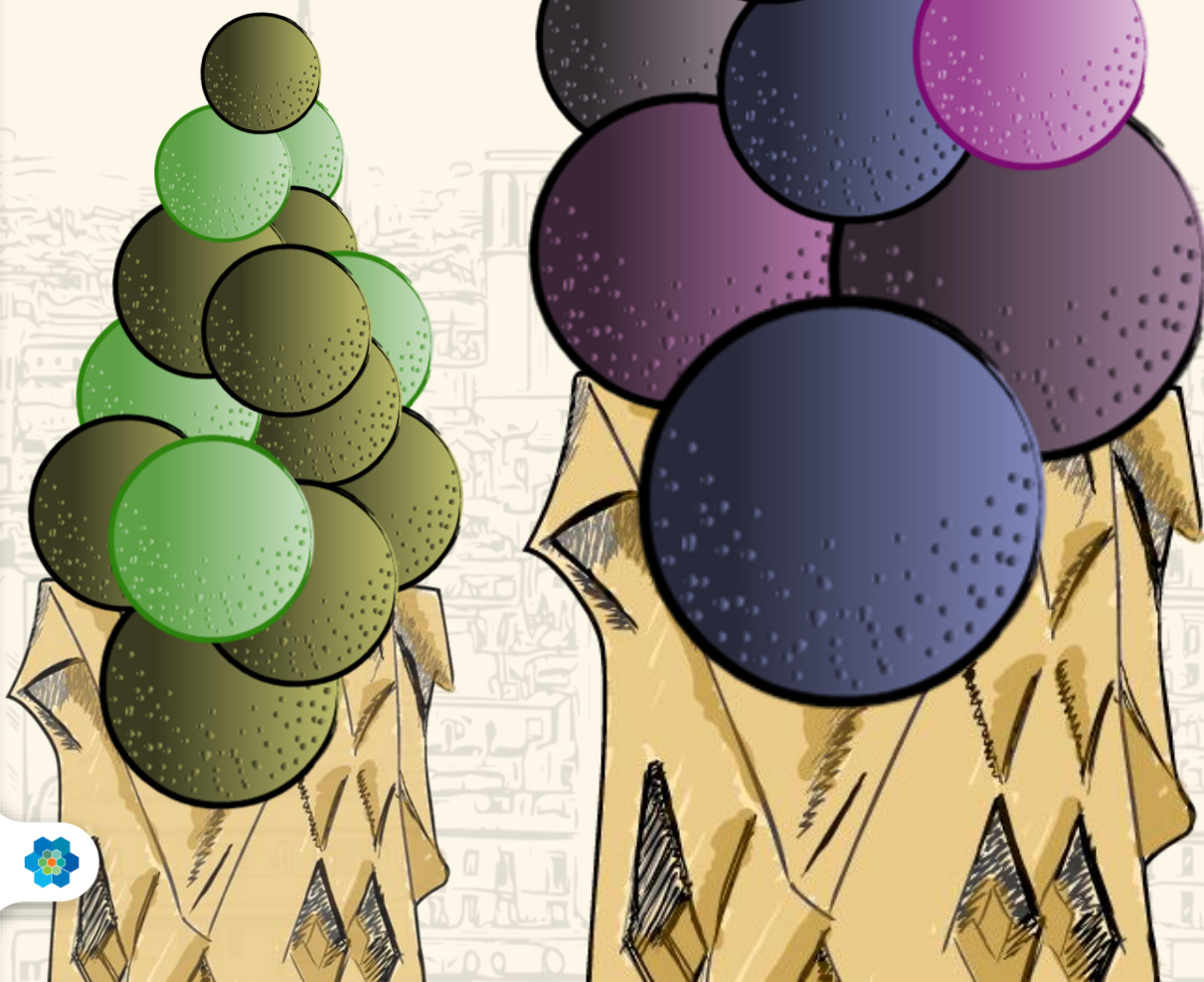
The most recent developments...



- Competitiveness Compass
- Aim = reignite Europe's economic dynamism
- Includes roadmaps for decarbonisation and competitiveness
 - A Clean Industrial Deal (in Q1 2025)
 - A Chemical Industry Package (by end of 2025)
- Also identifies other needs
 - Address unfair competition and global overcapacities
 - Ensure EU regulation is fit for competitiveness
 - Simplify and reduce administrative burden for industry



The game changer?



- Clean Industry Deal: 26 February 2025
- Climate action and competitiveness in the same strategy
 - Stay the course on climate targets
 - Support energy intensive industry to decarbonise
 - Address energy costs, unfair competition & complex regulations
- Includes (of relevance to us)
 - Rapid adoption of the low-carbon hydrogen delegated act to clarify rules
 - Support for carbon emission reduction projects
 - Affordable Energy Action Plan (Q1 2025) to lower energy costs



Antwerp Declaration 2.0 (26 February 2025)

- Words on a page are nice, but 400 business leaders called for EU Heads of State to take immediate action to address competitiveness challenges whilst making the Green Deal a reality



The link to us...



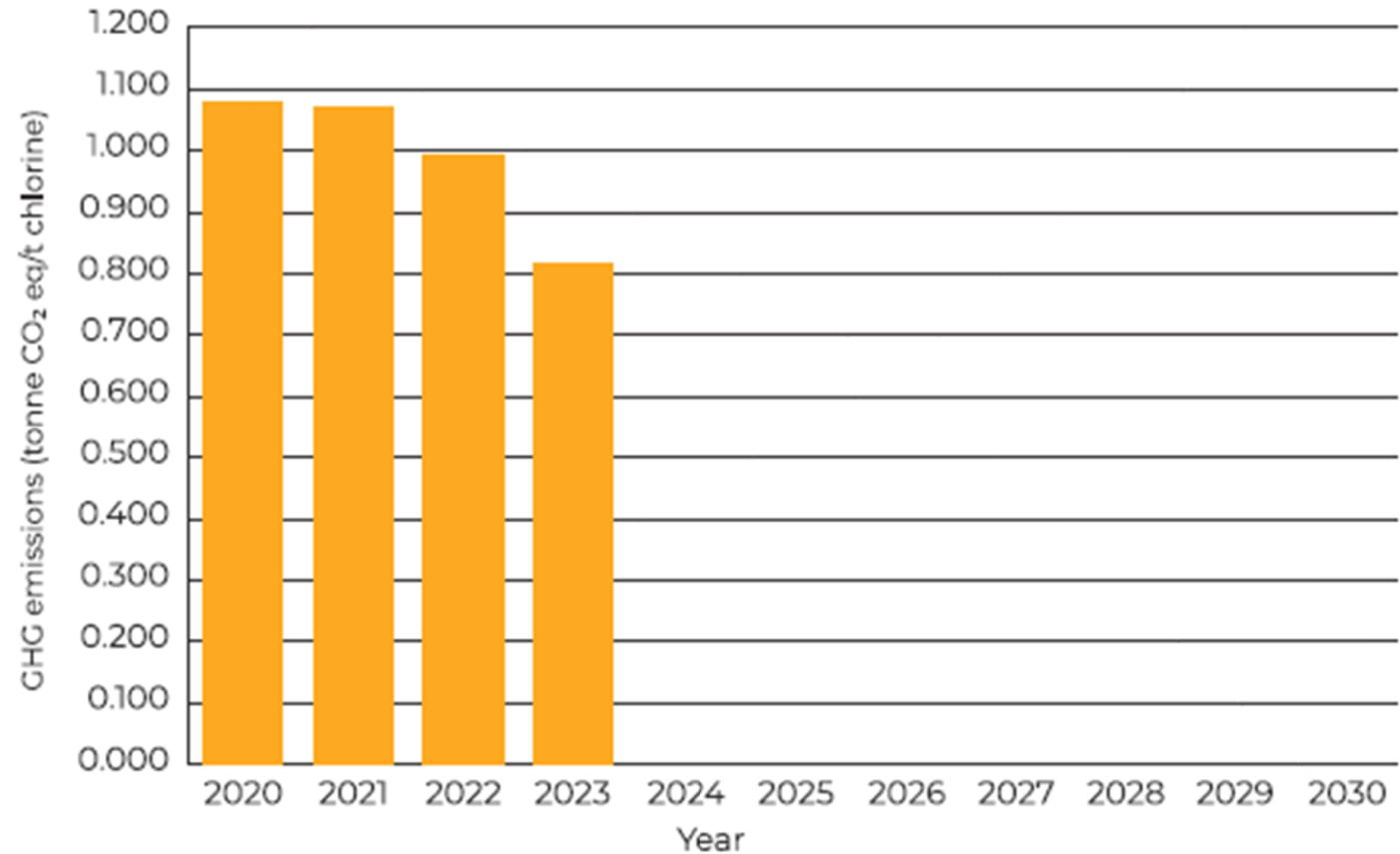
- All together, this creates a regulatory demand for climate neutrality action supported by the general public
- EU action on competitiveness now does not exclude EU action on climate
- Chlor-alkali producers will also have responsibilities here... but what is achievable?

Where are we today?

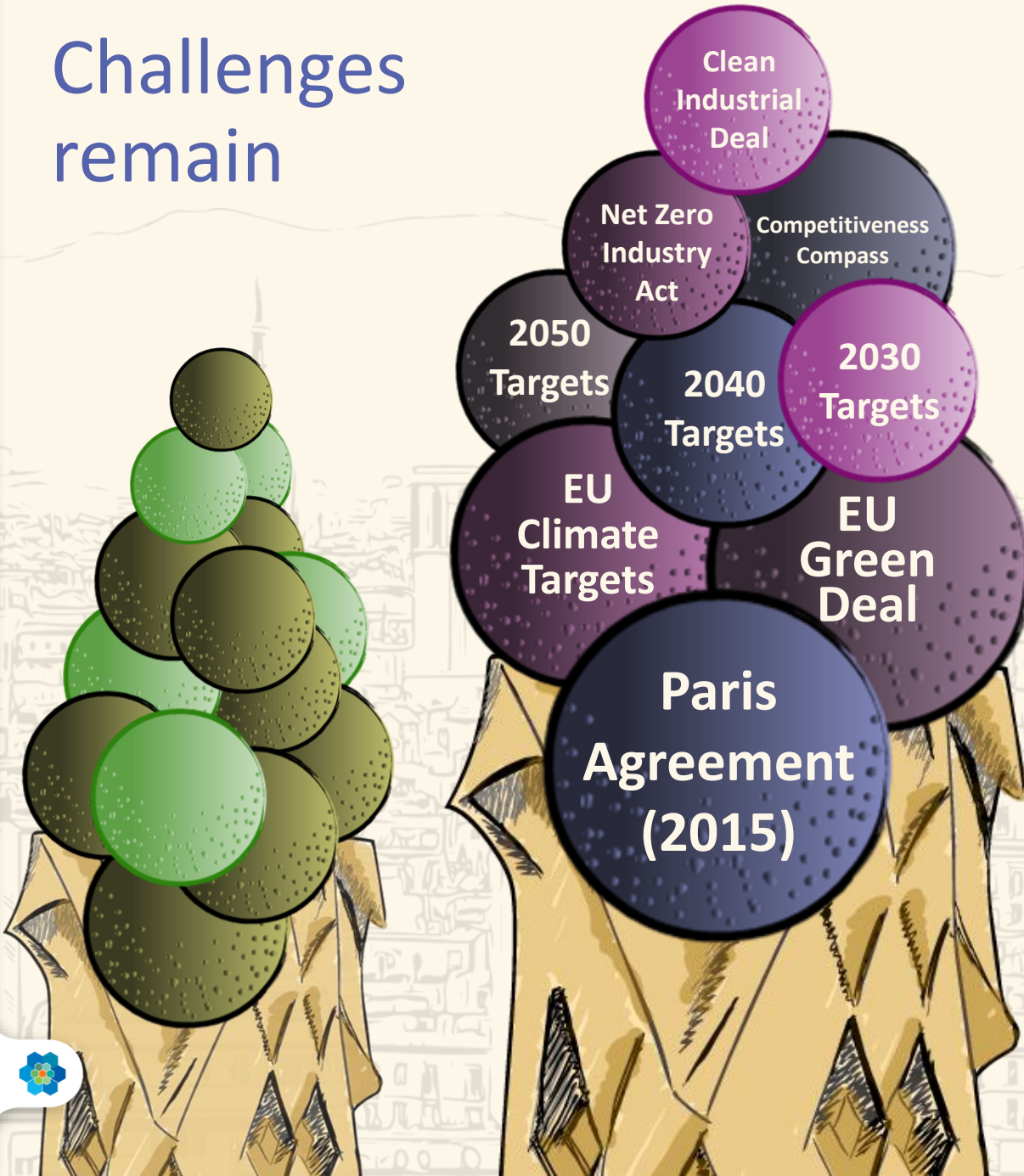
Carbon footprint reduction

- Carbon footprint decreased by 17.6% in 2023, compared to 2022 - why?
- Decrease due to a mix of factors
 - Integration of more low carbon electricity into the overall EU-wide grid
 - Some switching from fossil-based to carbon-neutral electricity
 - Lower utilisation rate

Carbon footprint of Euro Chlor members' production



Challenges remain



- Do we have a favourable investment climate to pay for climate action?
 - Thermodynamic limits of what is possible to 'split salt/ water into chlor-alkali'?
 - Offtake for our hydrogen?
 - Safety must be respected!
 - Role of nuclear/ renewable 'availabilities'?
- ...and more!



Achieving Climate neutrality, Solutions needed!



The 'architects' of these solutions could be in this room, today!



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THANK YOU

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