

Actividad: diseñando el cap en condiciones de incertidumbre

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Taller de Capacitación en Mecanismos de Emisiones Transables

Santiago, Chile

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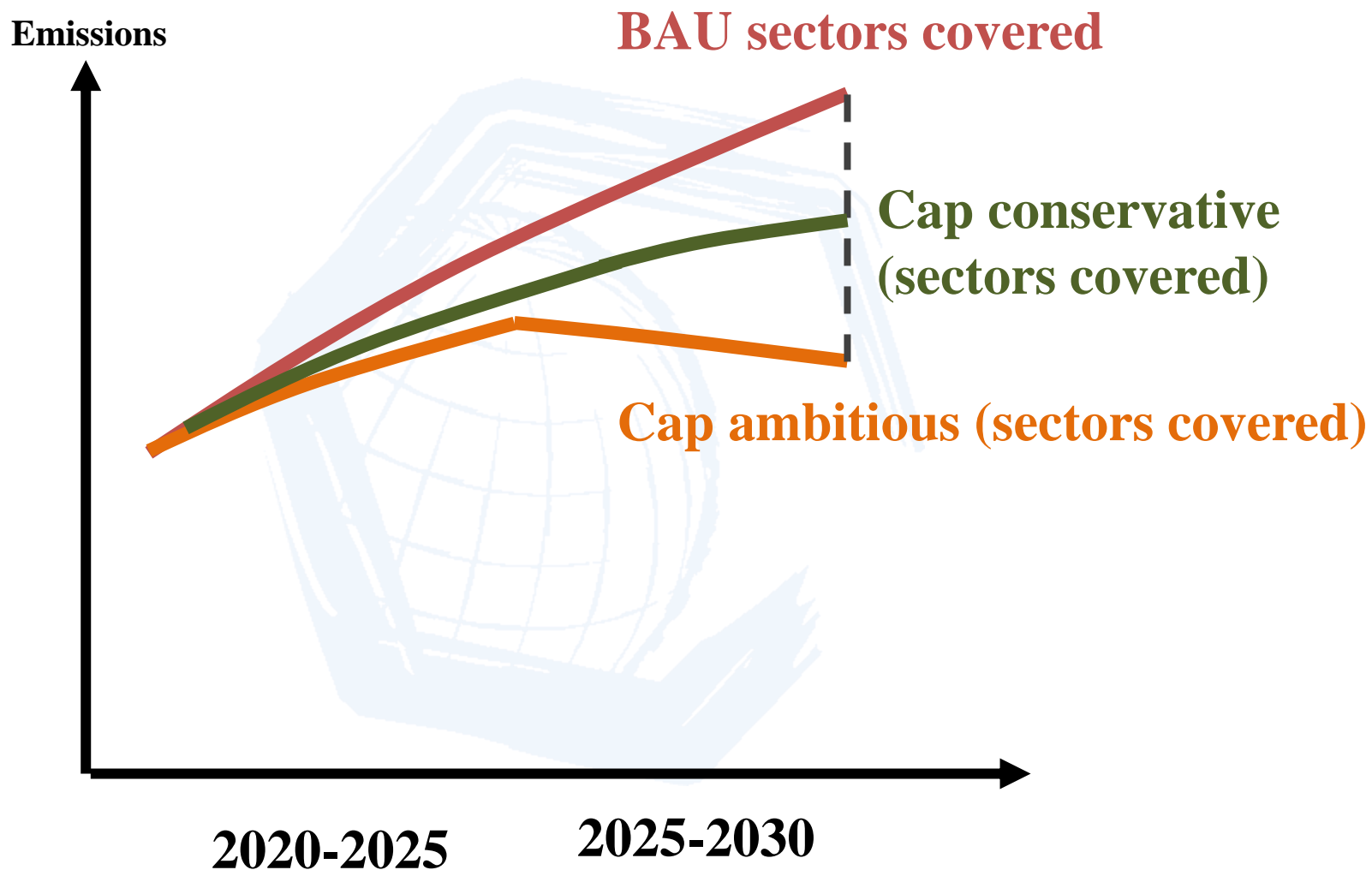
Objective(s) of the game

- **Start thinking on how to “factor in” uncertainty**
- **Discuss options available to address uncertainty**
- **Most importantly, having fun!**

Welcome to Caplandia!

- **The year is 2018** – Caplandia’s Prime Minister has recently committed to a **30% reduction** target against Business as Usual Emissions by 2030 and has announced an ETS for the power and industrial sectors as the key emission reduction mechanism.
- **Your Task** - The Caplandia Prime Minister must define the cap for the period 2020-2030.
- You are in one of two groups and need to convince the PM to follow your choice.
- **Two options:**
 - Conservative cap supporters
 - Ambitious cap supporters

Welcome to Capland!



Information you have

- **Decide now for: 2020-2030**
- **Decide based on past and future information**
 - Average GDP growth in the past ten years 3.9%
 - Prediction MoE next ten years 5.0%
 - Prediction of the Caplandia University: 4%
- **Decision now: implications for ten years.**

Agenda

- 1. Introduction (5 min.)**
- 2. Separate in two “countries” and read your position (5 min.)**
- 3. Discuss in your team and construct your argument (15 min)**
- 4. Prime Minister “hearing”: select 1 or 2 team leaders to present your argument (10 min)**
- 5. Primer Minister makes a decision and we “observe” the results (5 min)**
- 6. Debrief (10 min).**



Economic Crisis Hits Caplandia!

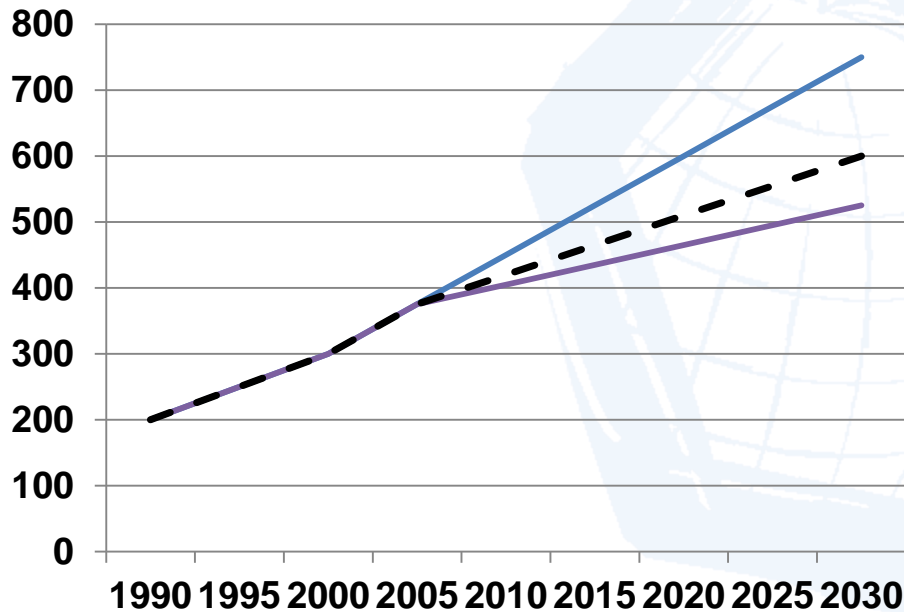


- Actual Emissions 25% below estimated BAU.

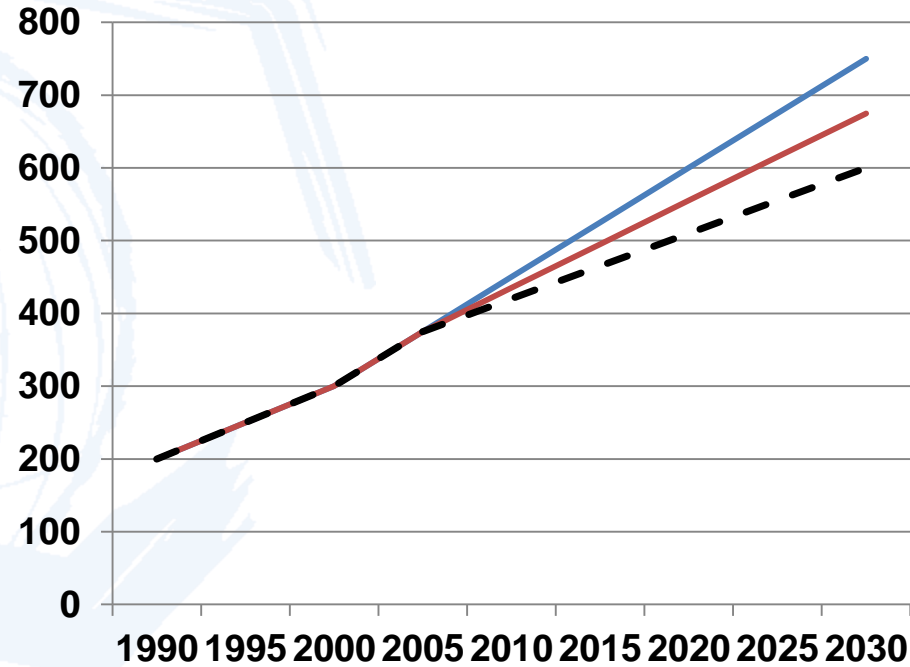
Ambitious cap requires only 12% reduction.

Conservative cap non-binding

Emissions from 1990 to 2030



Emissions from 1990 to 2030



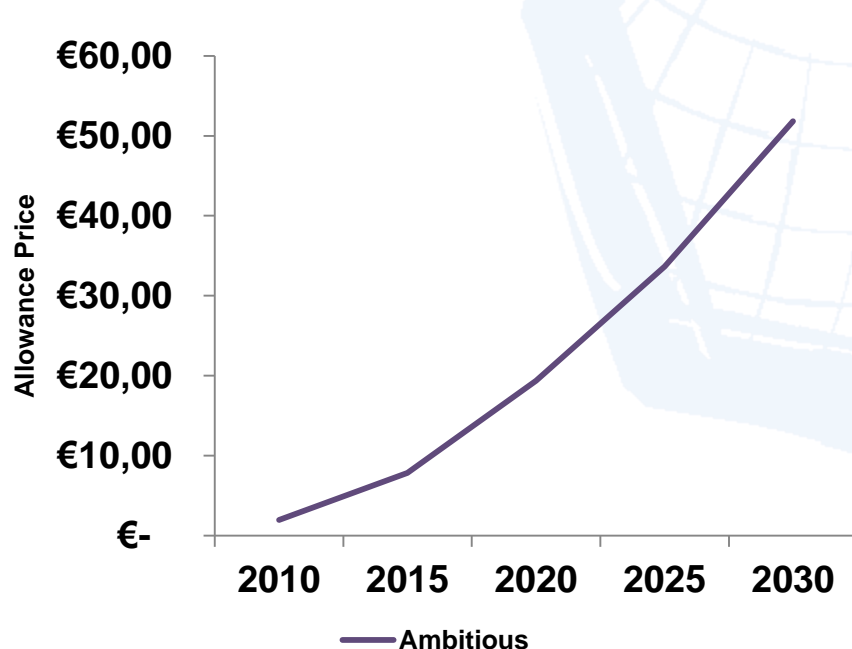
— BAU — Ambitious - - Economic Crisis

— BAU — Conservative
- - Economic Crisis

Prices, investment and abatement

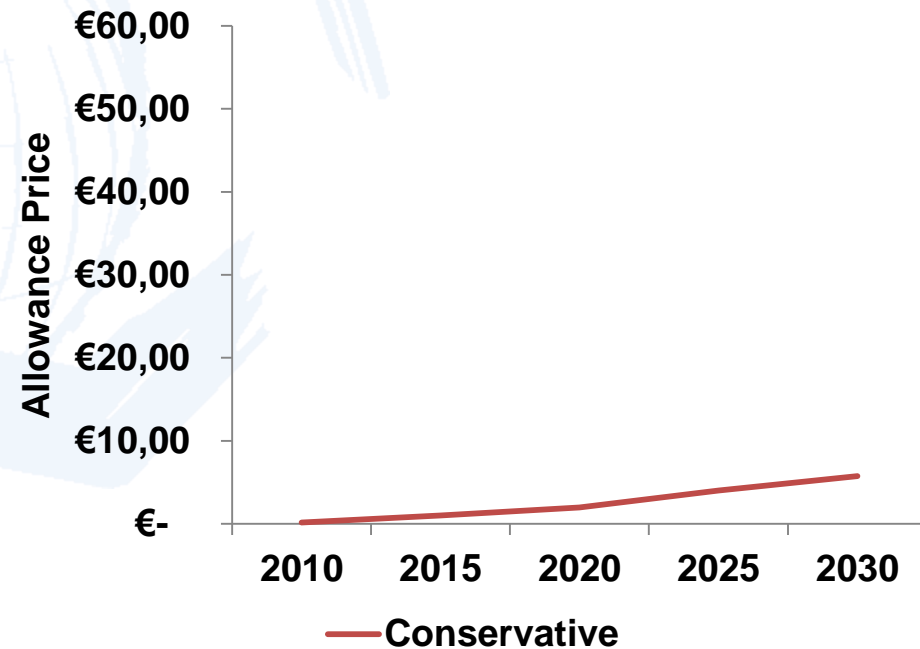
Ambitious cap:

- Cap remains binding, prices rise over time. Target achieved.
- Investment in emission reduction measures and new technologies



Conservative cap

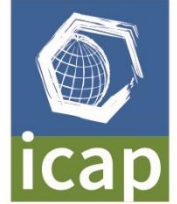
- Prices Crash, ETS accused of failing, environmentalists call for it to be replaced.
- No investment in emission reduction technologies.
- Abatement stalled for ten years!



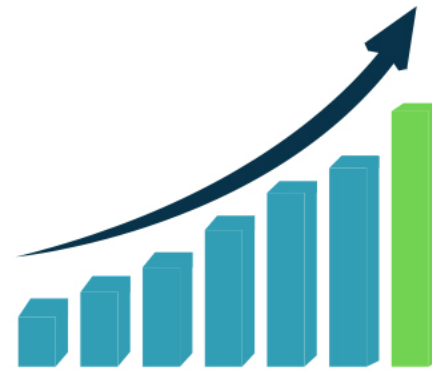
In an alternate world....



Caplandia enjoys unprecedented growth!

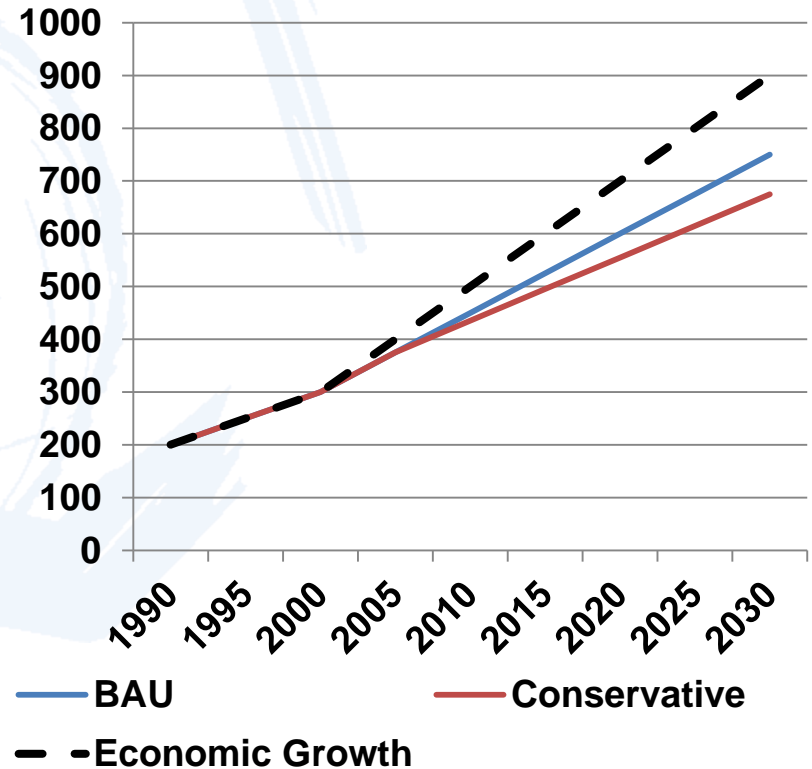
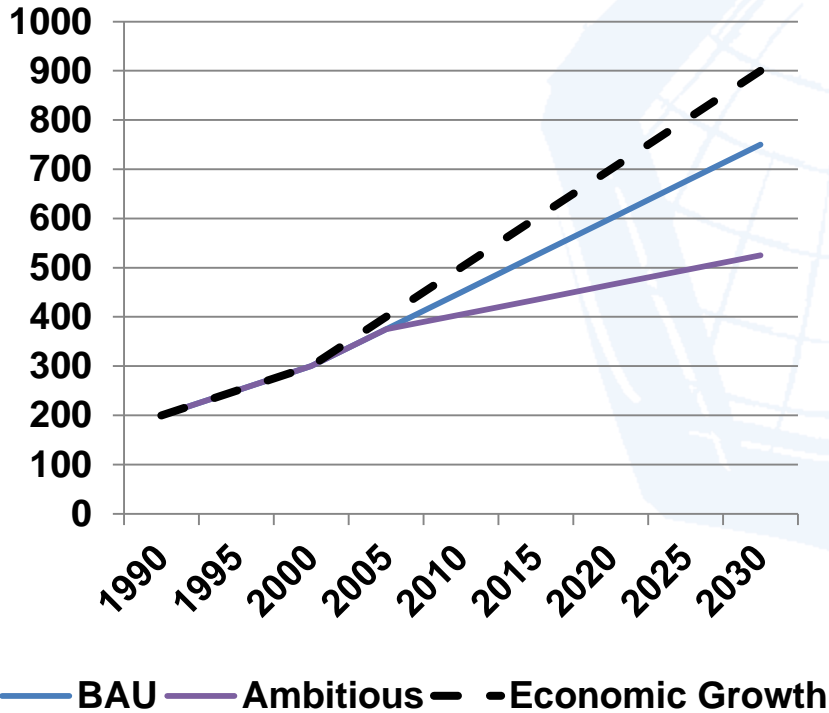


Actual emissions 20% above estimated BAU



Ambitious cap requires 42% reduction.

Conservative cap requires 25% emissions reduction.



Prices, investment and abatement

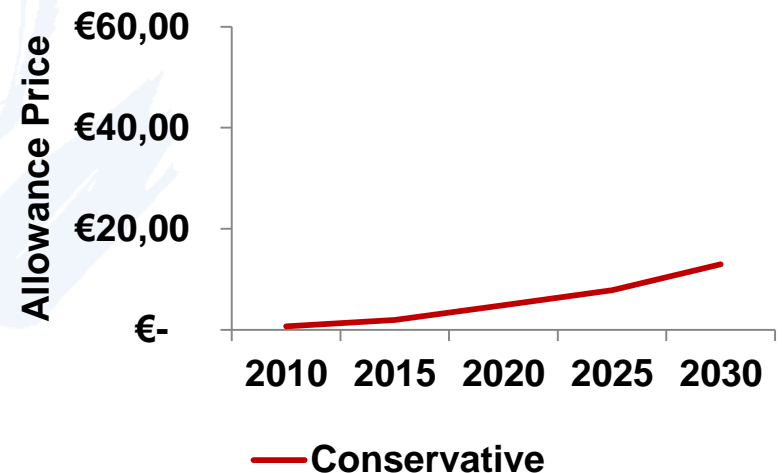
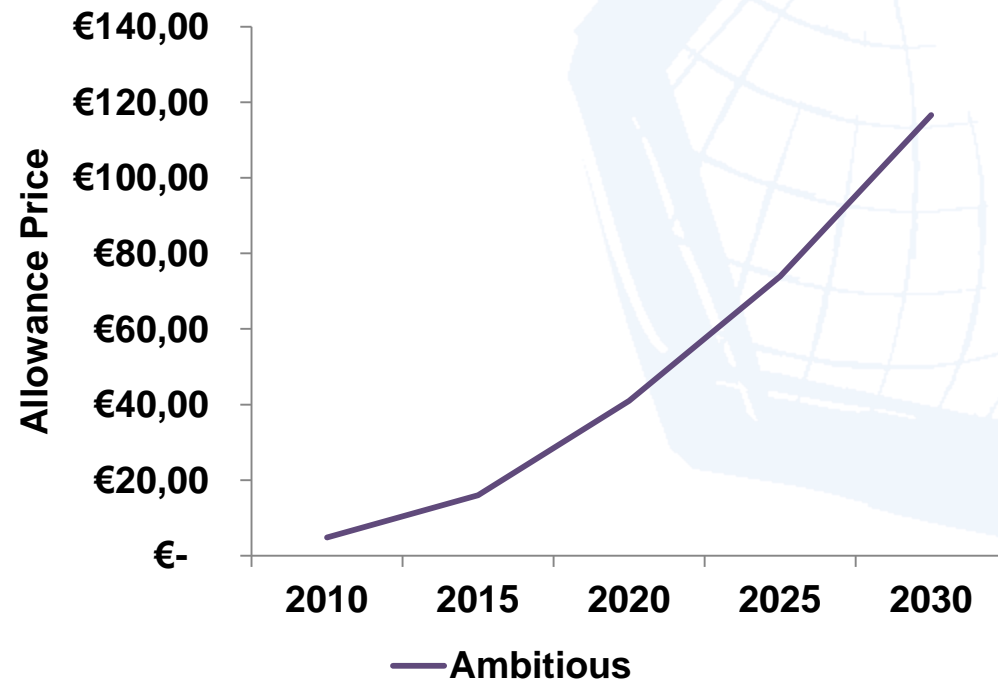
Ambitious:

Prices rise to above 100, not experienced anywhere in the world.

Under huge industry pressure, the ETS targets are revised, creating uncertainty and reducing investment.

Conservative:

- Prices rise moderately towards 2030.
- Some pressure from industry, but still enjoy profits due to the economic upswing.



Debrief

- Which scenario would you rather be in and why?
 - We don't know what is going to happen
- Which situation looks most familiar from the global experience to date?
- Can these situations be avoided? With what kind of tools?

Getting the cap right...

Trade-off 2: certainty and flexibility

Ex-ante

During implementation

Challenge

Information related

Information & system shocks & structural change

Tools

Projecting BAU: stress
test assumptions

Data gathering- MRV

Multiple data sources:
historical

Setting timeframes

Piloting ETS

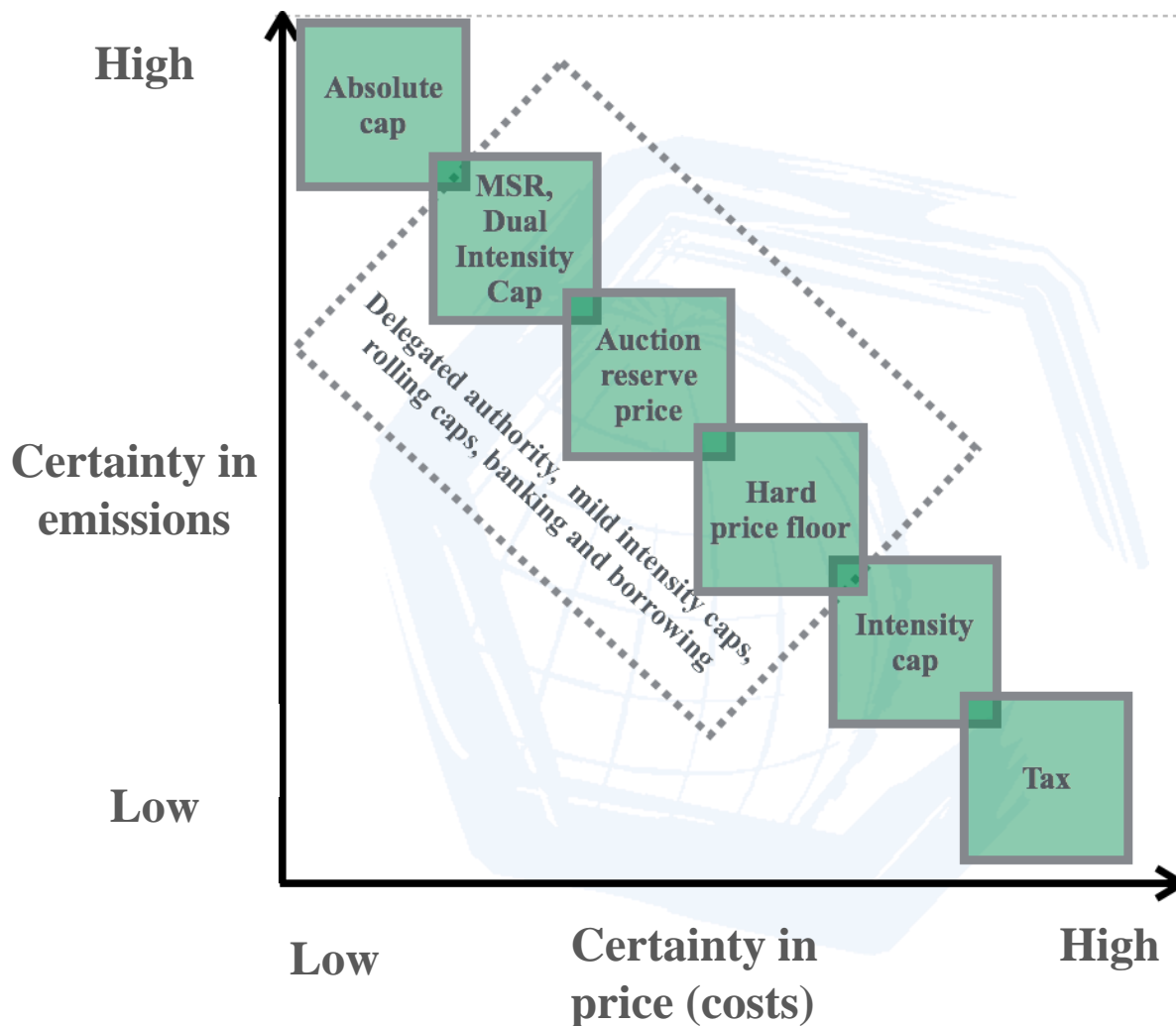
Built in cap periods & program reviews

Cap types/Rolling caps

Temporal flexibility options

Consider adjustment mechanisms

Adjustment mechanism



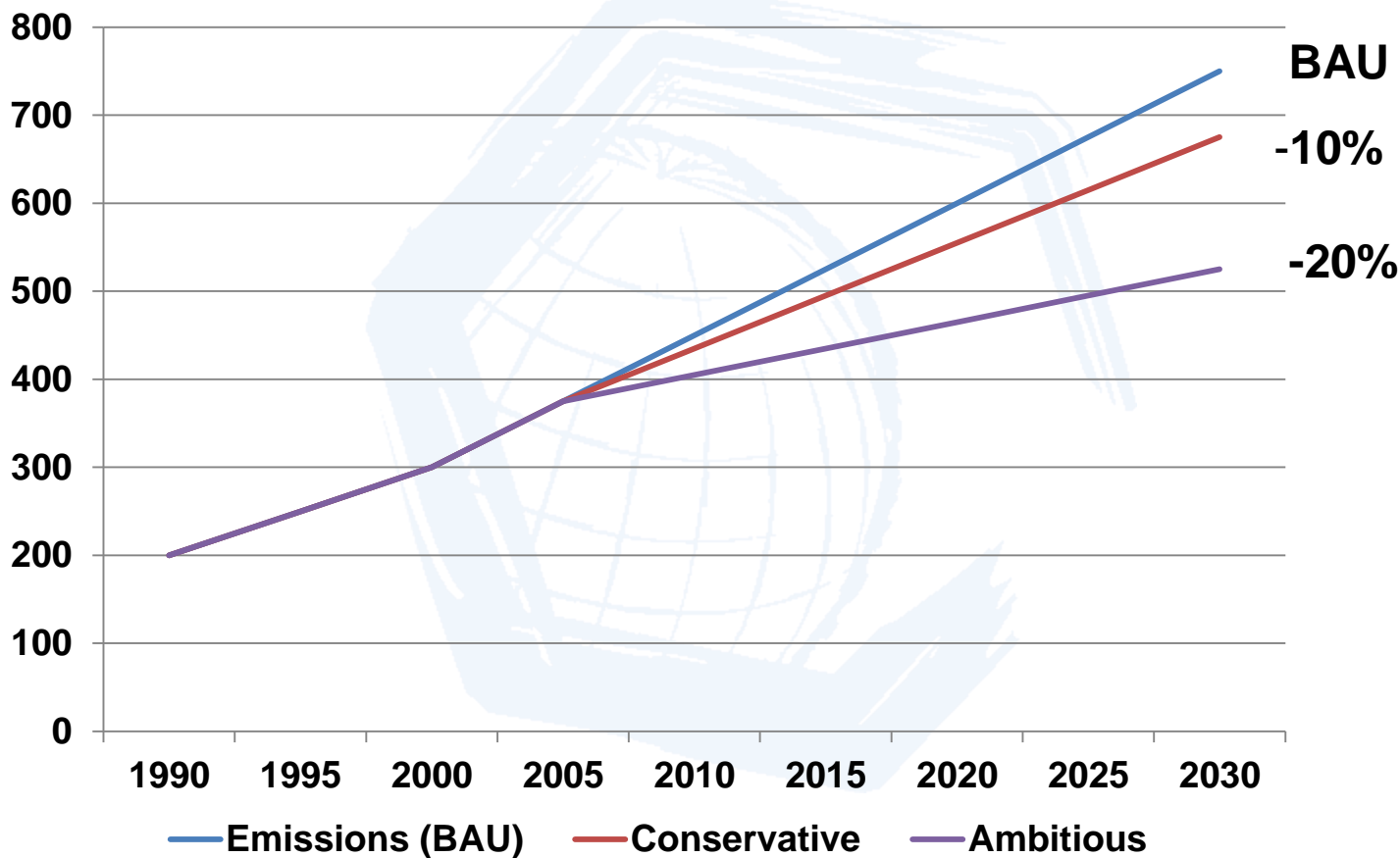
A large, faint, light blue graphic in the background consists of several overlapping, hand-drawn outlines of a globe, creating a sense of depth and movement.

Muchas gracias!

Relative Cap versus Absolute Cap

- **Pros** – mitigate the impact of external shocks and allow more price certainty when emissions are uncertain.
- **Cons** – Can be data intensive, difficult to find an appropriate indicator to base changes to the cap on, give up on certainty of targets.

Targets relative to Business as Usual



Marginal Abatement Costs

