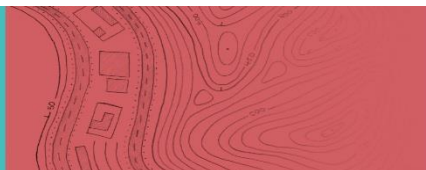


# Overview of the NZ ETS

Catherine Leining



# Overview of the NZ ETS

Operational since 2008

Designed to cover all sectors/gases

- Biological emissions from agriculture have been exempted indefinitely from unit obligations but are still reported

Prices driven by the international market until de-linking in mid-2015

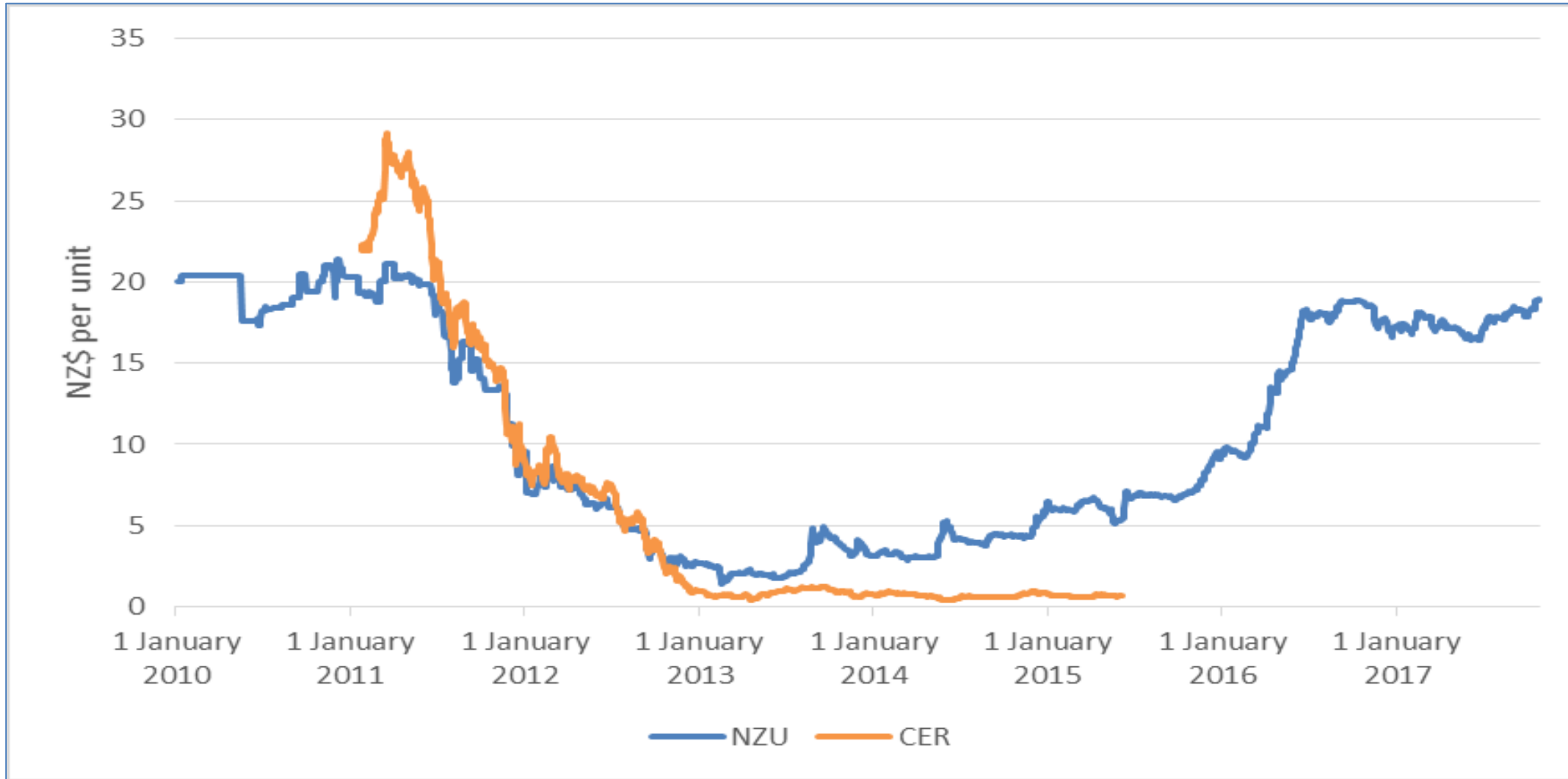
Now operating as a domestic-only system

No significant impact on domestic emissions to date

Uncertainty on unit price has hindered low-emission investment in NZ



# Emission prices in the NZ ETS: 2010-2017



Source: Data from OMF (2017). Image from Leining and Kerr (forthcoming). "A Guide to the NZ ETS."



# Current context

## The previous government signalled (July 2017):

1. Auctioning under an overall limit by 2021
2. Quantity limit on participants' use of international units if the NZ ETS re-opens to international markets
3. Changes to the price ceiling: level and/or mechanism
4. Coordinated decisions on supply 5 years in advance with rolling updates
5. Future decisions on industrial free allocation, forestry rules and other operational issues

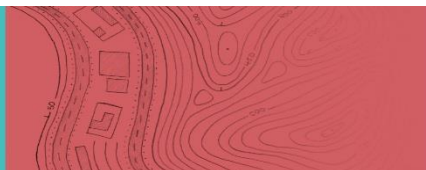
## The new government has signalled:

1. Reconsidering obligations for biological emissions from agriculture at 95% free allocation
2. Goal of net zero emissions by 2050
3. Zero Carbon Act in 2018 establishing a new 2050 target and an independent Climate Change Commission
4. NZ ETS amendments by the end of 2019



# Managing supply and prices

Catherine Leining and Suzi Kerr



# Motu's ETS Dialogue

20+ experts across sectors

Active from March 2016 – March 2017

Focused on issues of unit supply, prices, investment risk and international linking

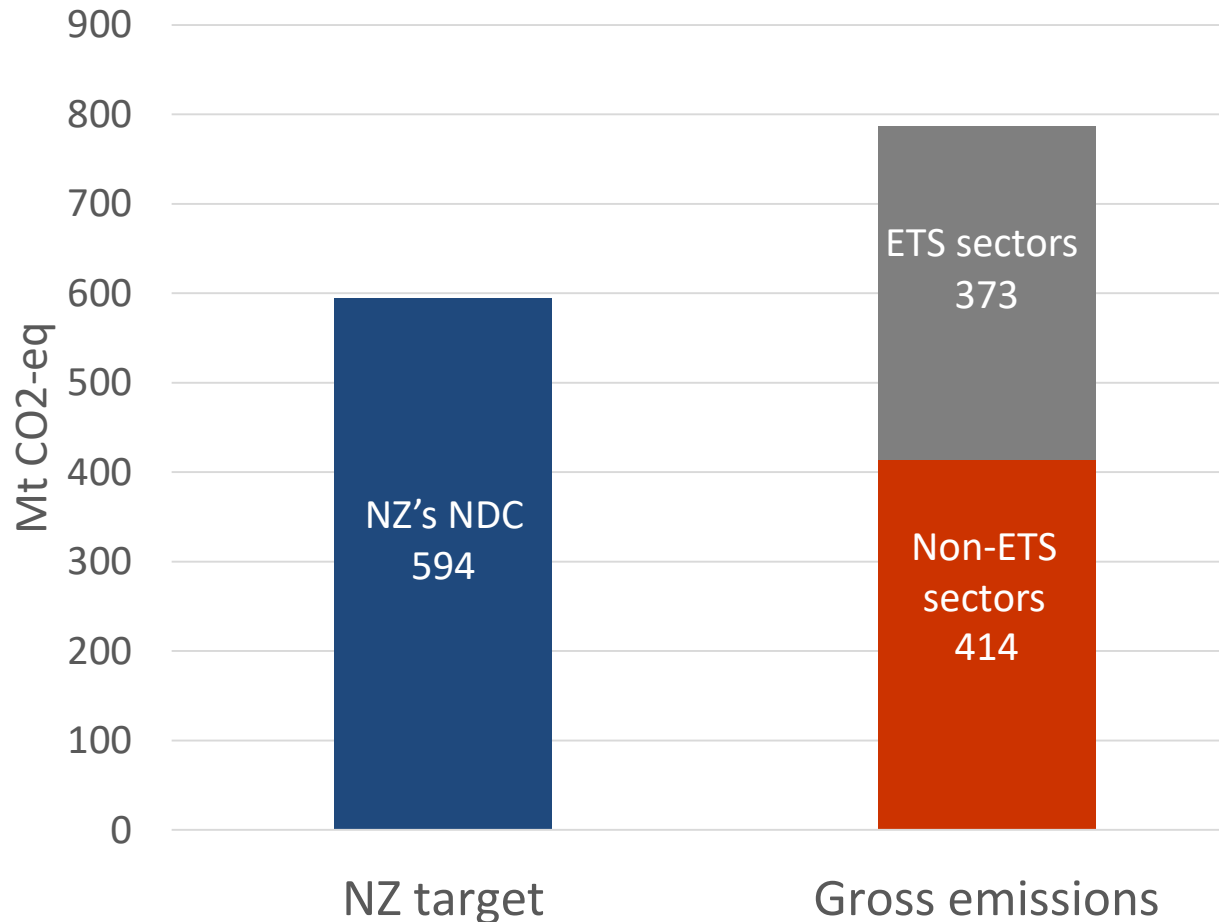
- Did not look at other key issues: forestry rules, free allocation, market oversight, agriculture – or level of ambition

Synthesis paper co-authored by XX participants



# 2030 outlook: Mind the gap

Projections for 2021-2030

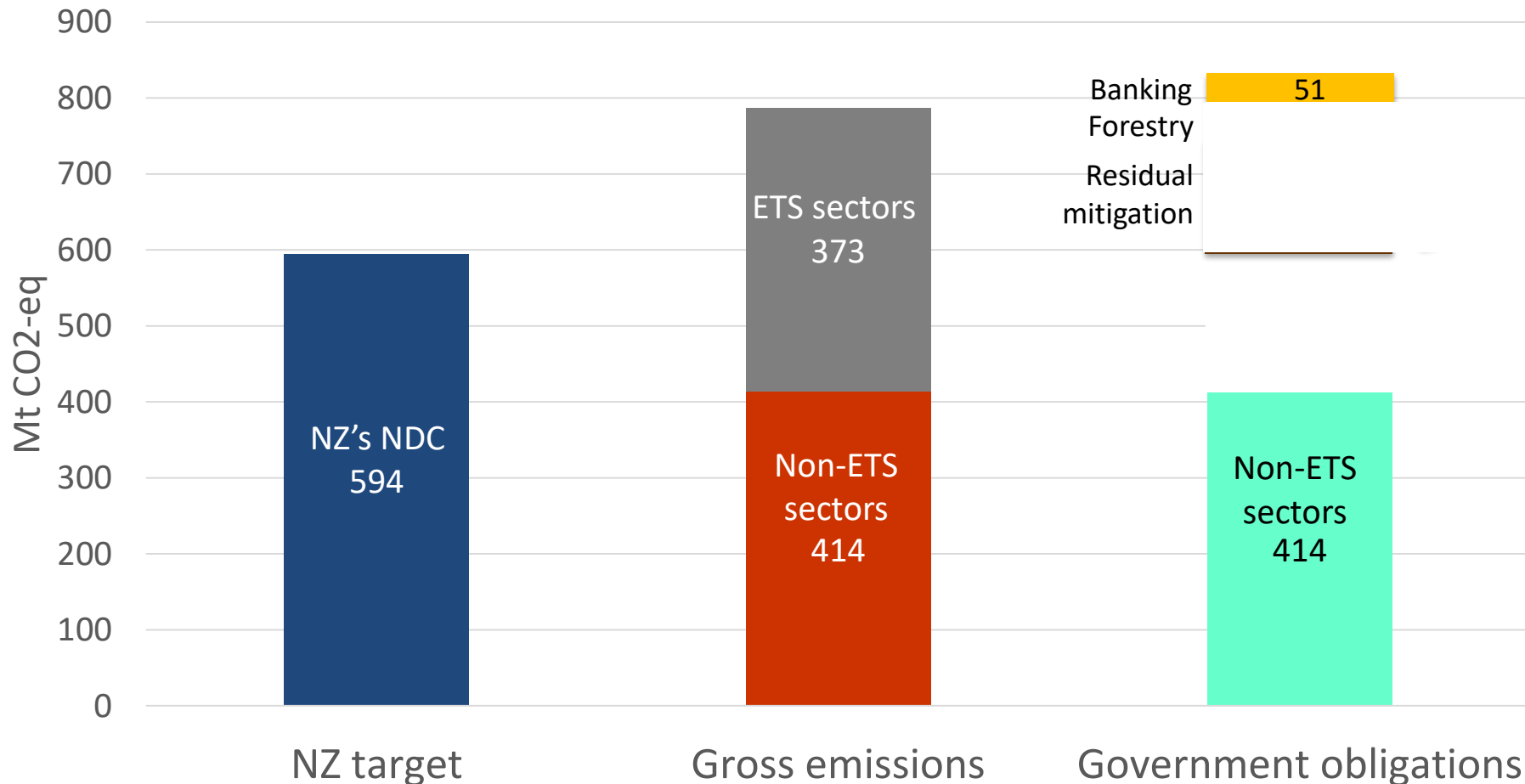


Source: MfE (2018). "New Zealand's provisional carbon budget for 2021-2030"; MfE RIS for NZ ETS Review changes (2016).



# 2030 outlook: Mind the gap

Projections for 2021-2030



Source: MfE (2018). "New Zealand's provisional carbon budget for 2021-2030"; MfE RIS for NZ ETS Review changes (2016).





# Objectives for managing ETS supply

## Environmental effectiveness

Domestic decarbonisation

Global contribution

## Policy and price predictability

Efficient and cost-effective transition

Balance between certainty and flexibility

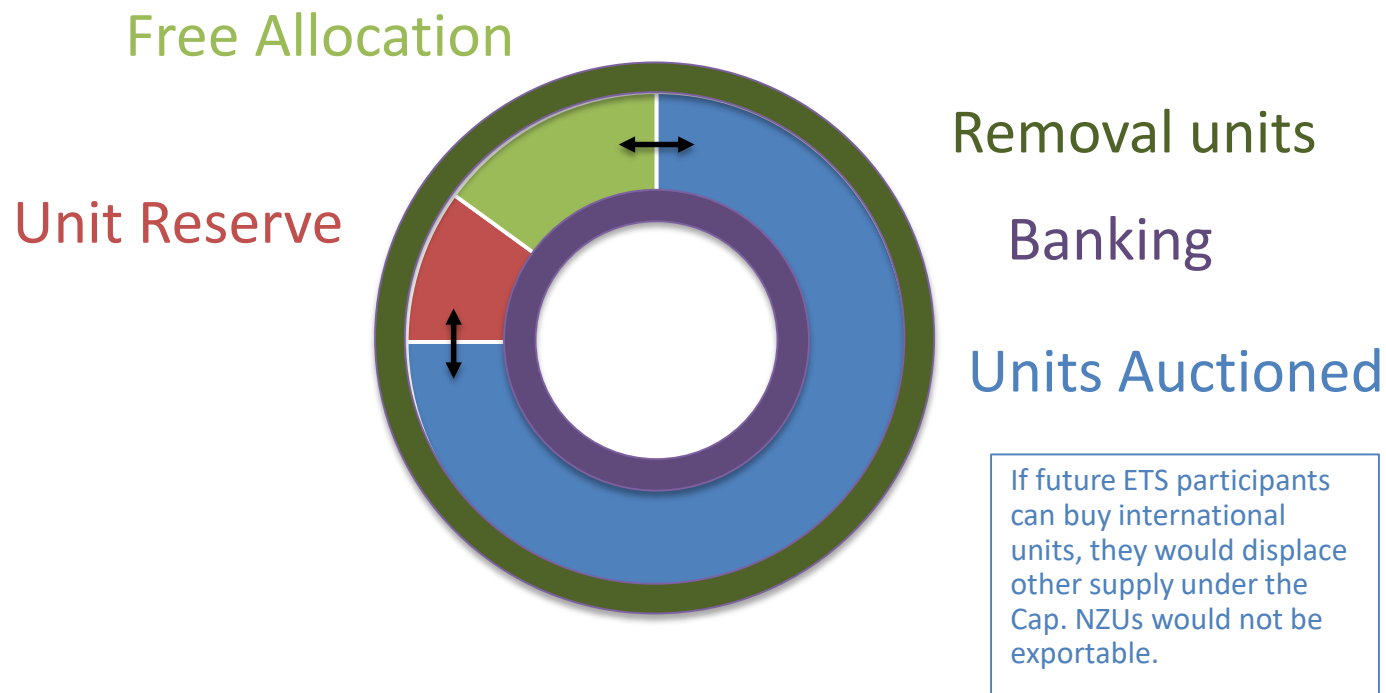


# Core proposal

1. **NZUs** enter the market through auctioning, free allocation, removals, and banking
2. Government manages ETS supply through an annual **Cap** on units auctioned and freely allocated with a **Unit Reserve**
3. The market sets the price with **Price Band** safeguards, managed through the Unit Reserve
4. The Cap and Price Band are set in advance for 5 years, extended by 1 year each year, and guided by 10-year **Cap and Price Band Trajectories**; review is triggered when the Unit Reserve nears depletion or by a *force majeure* event
5. An **Independent Body** provides advice to government on ETS supply and price
6. The supply of **International Units** is managed by government in line with NZ's domestic net zero transition

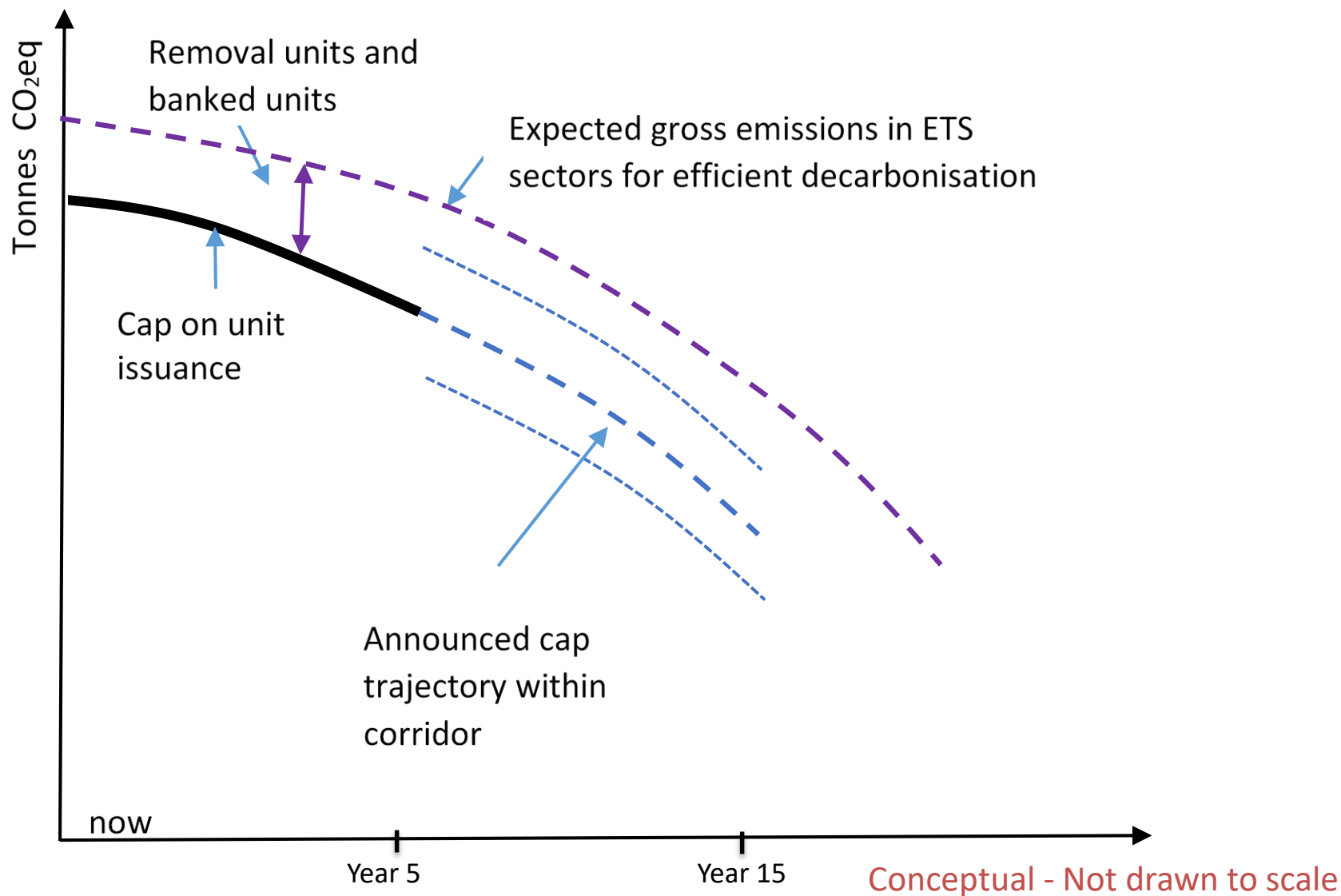


# Introduce a Cap



- Limits sum of auctioning plus free allocation
- Unit Reserve used to adjust auction volume to manage prices
- Additional domestic supply from removals, banking
- Guided by 10-year Cap Trajectory

# Introduce a 10-year Cap Trajectory



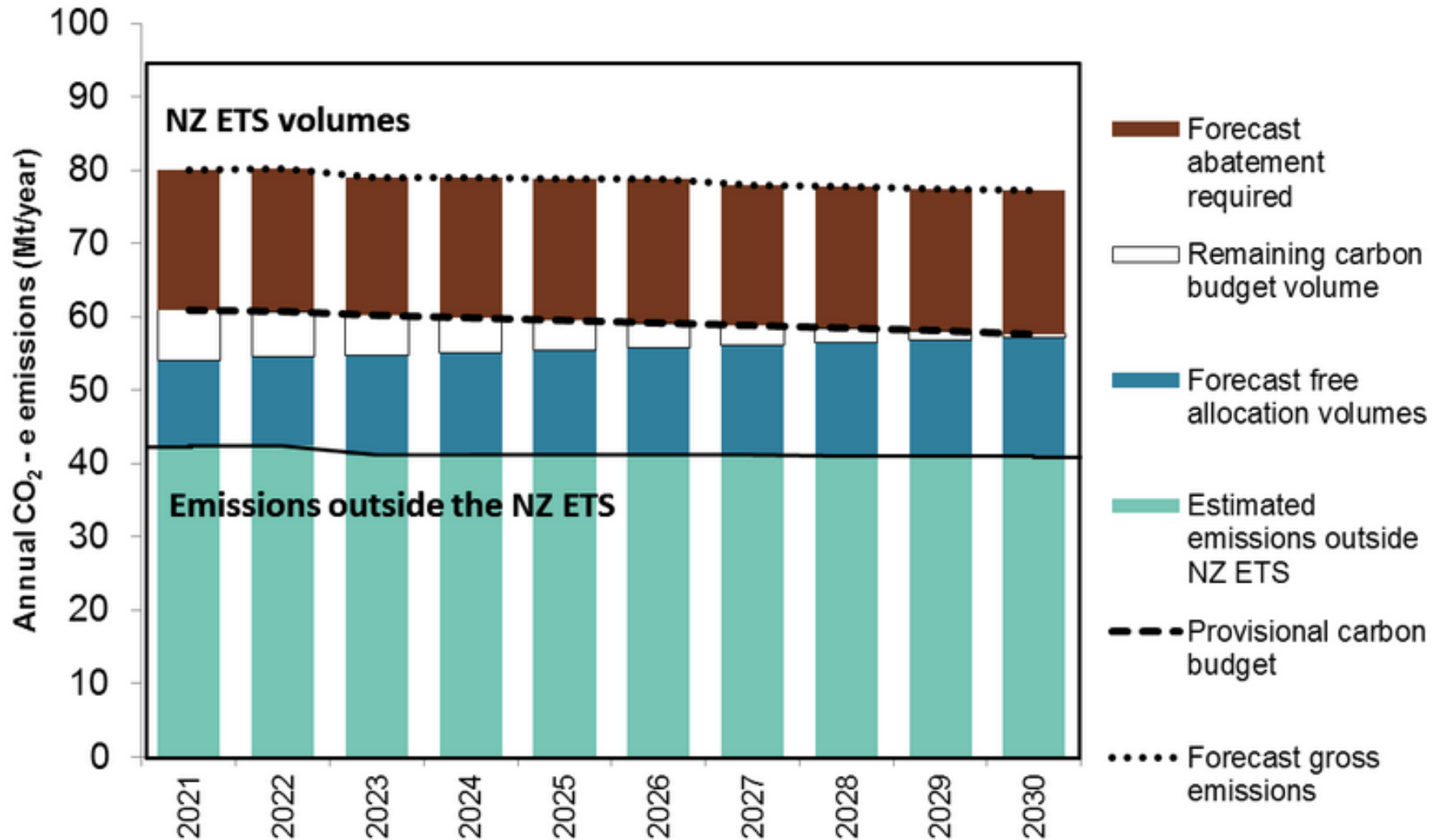
# Align the Cap with targets (1)

The government sets the Cap in line with:

1. NZ's global contribution to mitigation
2. Domestic decarbonisation objectives
3. International mitigation costs
4. Technical and economic mitigation potential in ETS and non-ETS sectors
5. Other policies and measures in ETS and non-ETS sectors



# Carbon budget under current settings (2017)

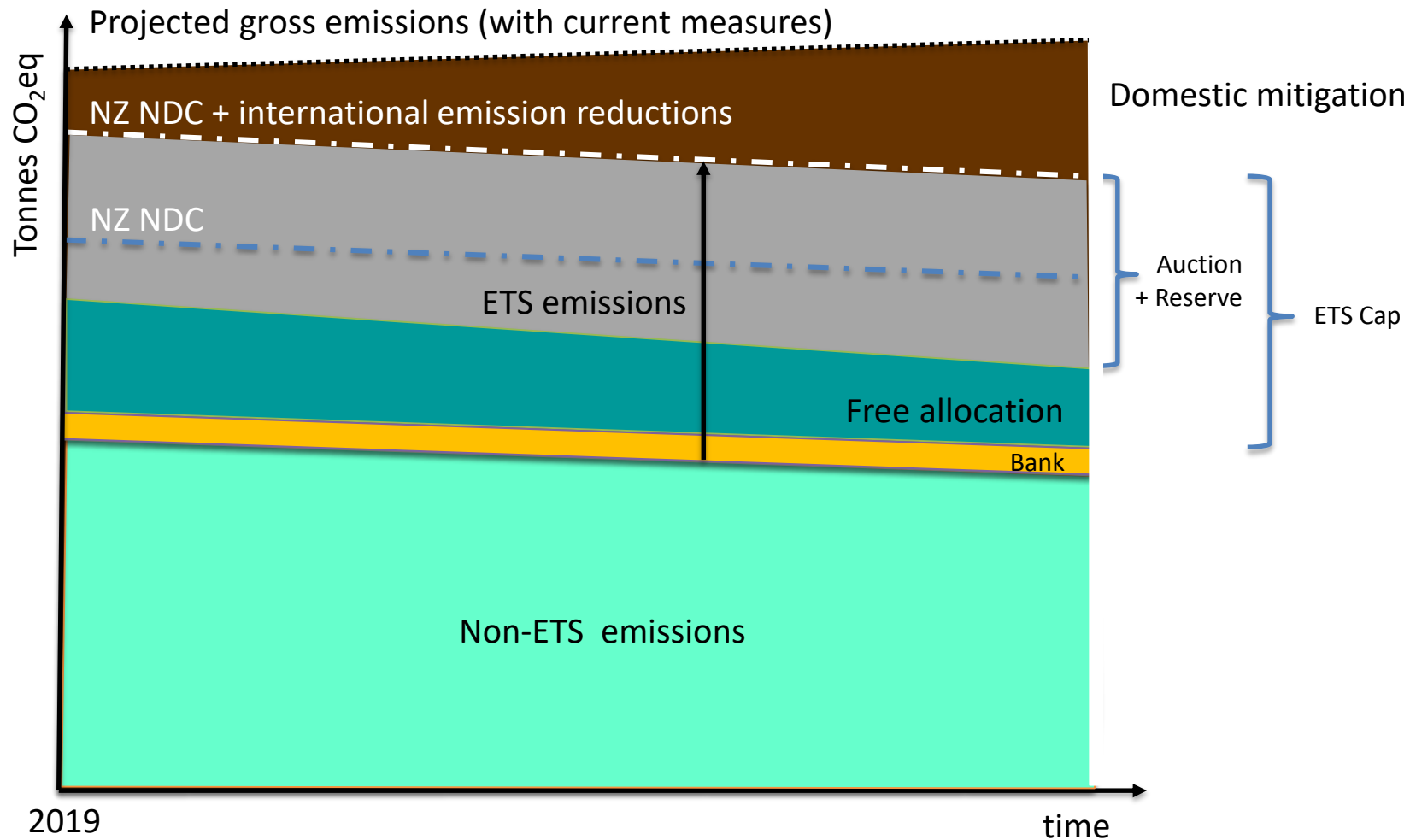


Source: MfE (2017). "New Zealand's provisional carbon budget for 2021-2030."



# Align the Cap with targets (2)

Conceptual - Not drawn to scale



# Effective levers for adaptive price control

1. Cap is one determinant
  - Large bank allows market to smooth prices for economic shocks
2. Good information to market
  - on demand
  - on supply

Political process for signalling decisions that affect prices well in advance and stable, time-consistent governance
3. Price band
  - gives price signal even if price is always at one margin





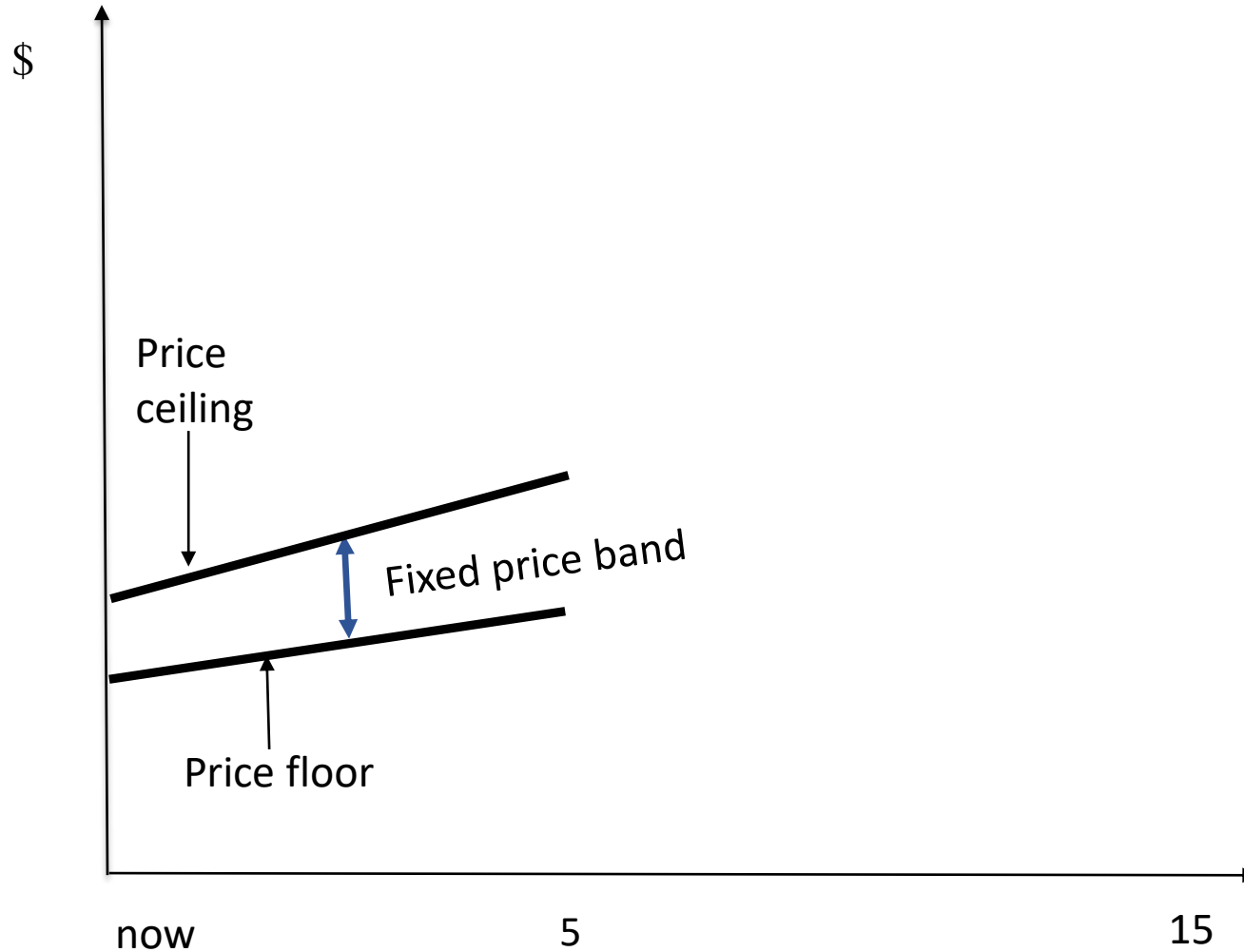
# Introduce a Price Band

**Price Floor:** Reserve price at auction

**Price Ceiling:** Trigger for releasing more auction volume from the Unit Reserve at increasing prices



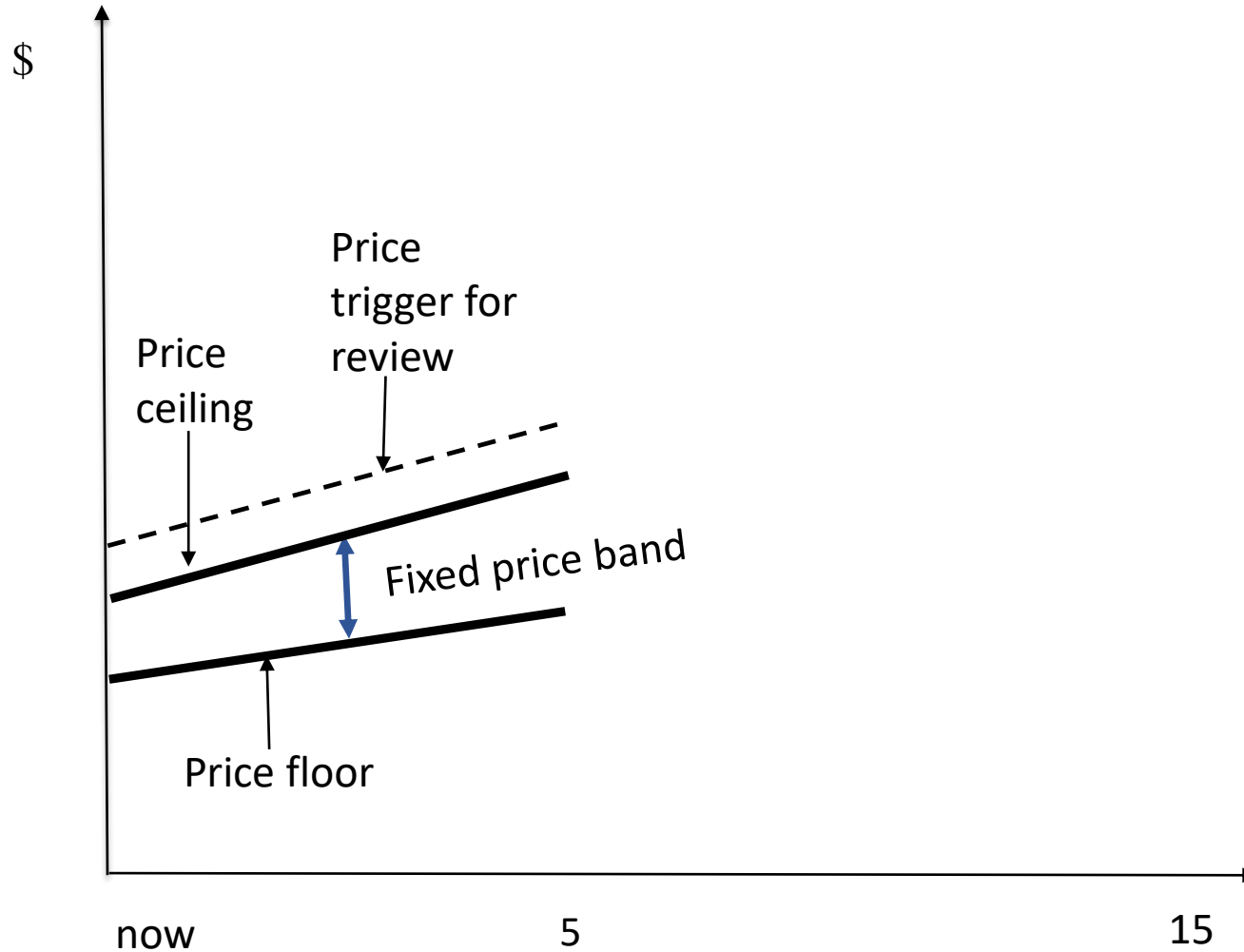
# Price Band and Trajectories



Conceptual - Not drawn to scale



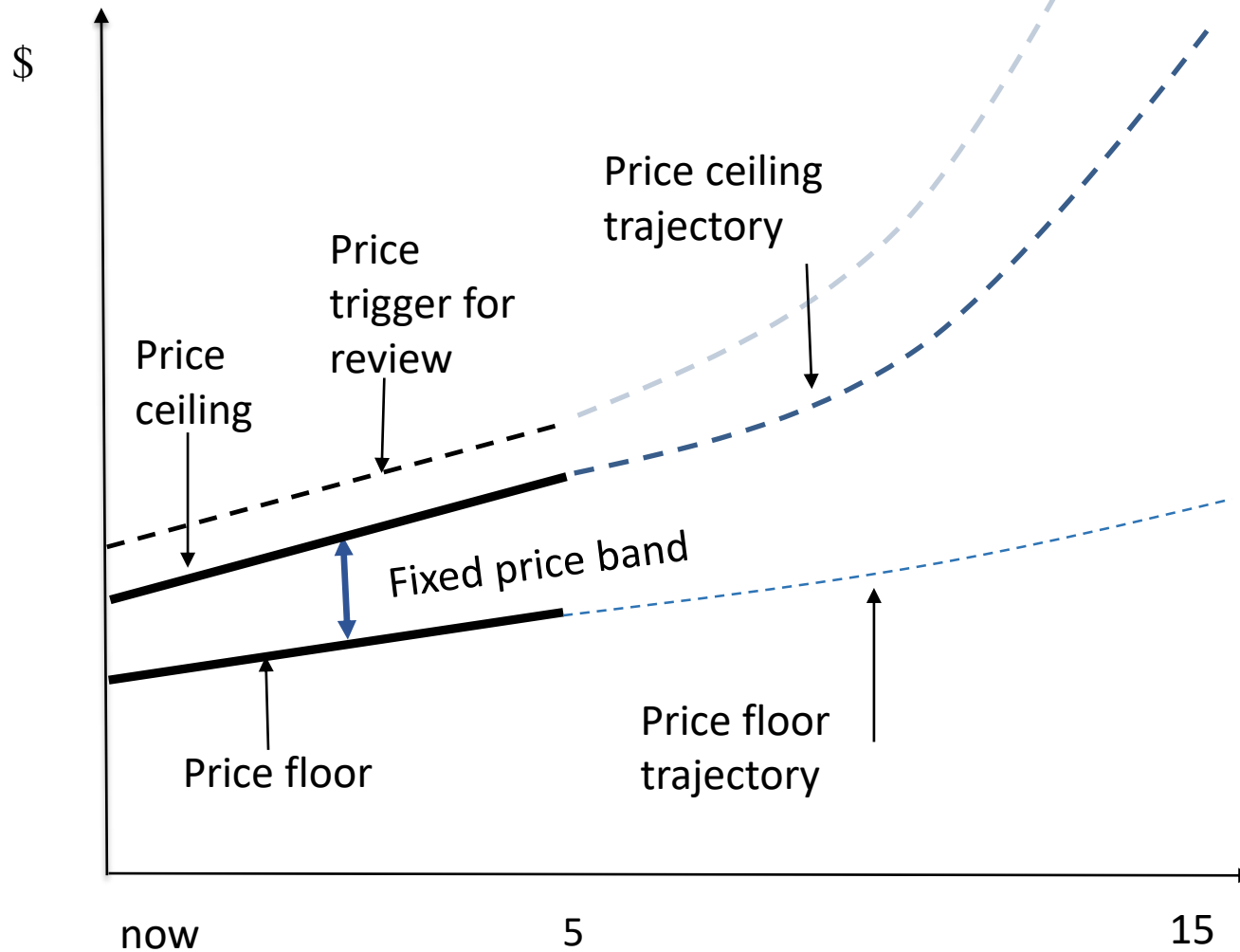
# Price Band and Trajectories



Conceptual - Not drawn to scale



# Price Band and Trajectories



Conceptual - Not drawn to scale



# Metrics and free allocation

For methane, the metric used to translate to CO<sub>2</sub>-e affects the effective price

- There is no ‘correct’ metric. It depends on value judgements about short and long-term climate damage; and political judgements

For emissions-intensive trade-exposed activities that receive output-based allocation the rate of free allocation also affects the effective price

Adaptive pricing must send clear signals also on any changes in metric and free allocation

