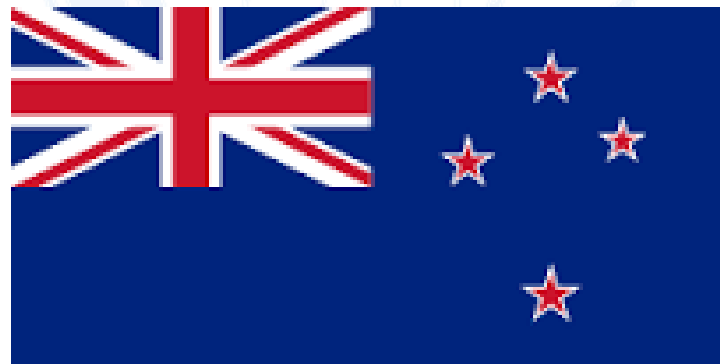
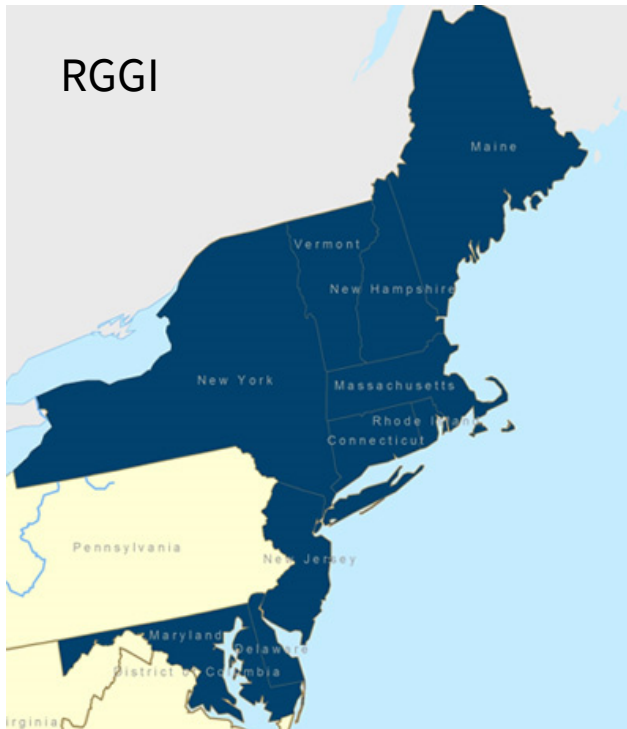


Review & Reform

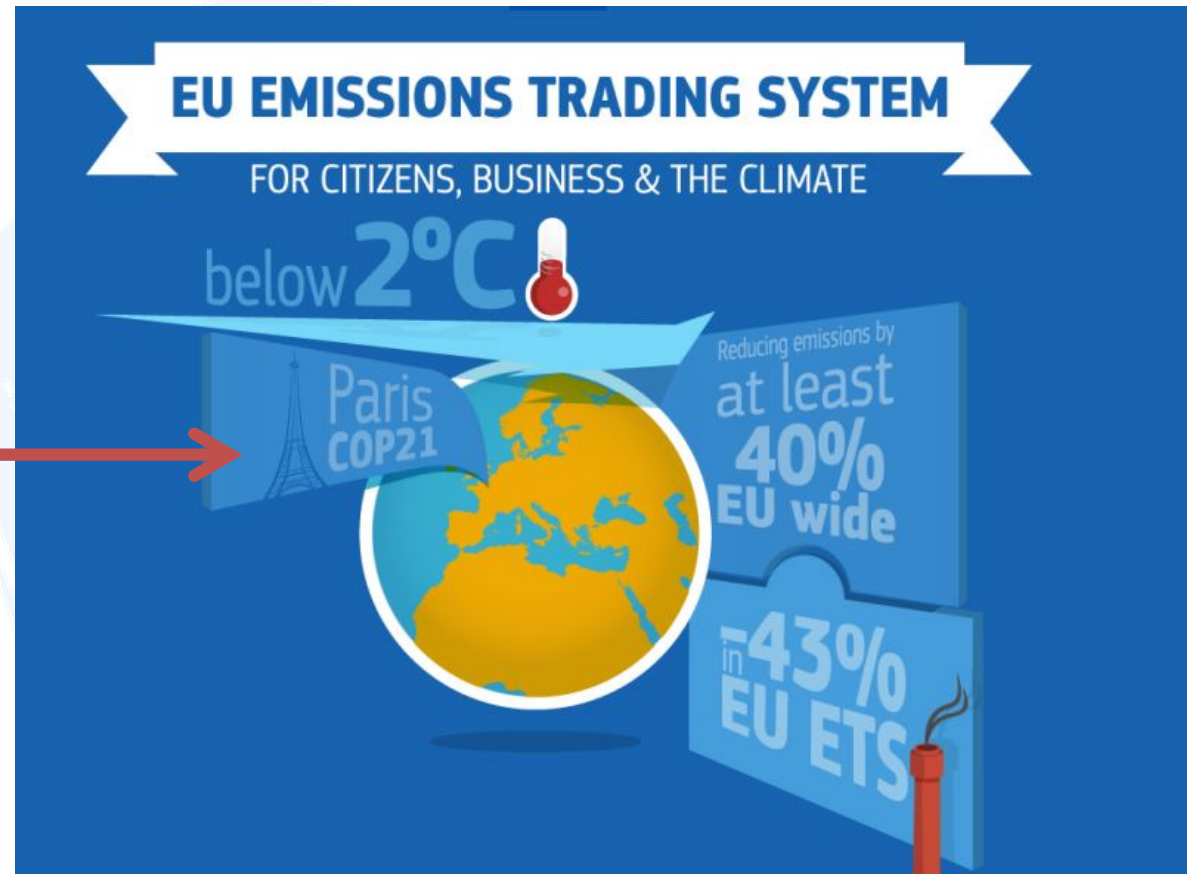


New Zealand

EU ETS: Post-2020 Structural Reform

- Operating over a decade, covering close to half of the EU's GHG emissions (11,000+ installations)

EU ratified Paris Agreement, 2016



- Aim for agreement by end of 2017

EU ETS Reform: Four Major Elements



Cap

- Decline by **2.2%** from 2021 (currently 1.74%)

Market stability reserve

- Operating from **2019**
- Address existing allowance surplus and improve system resilience to future shocks
- 900m backloaded allowances will be added to the reserve rather than auctioned
- 800m allowances permanently cancelled in 2021
- Double rate at which MSR can withdraw allowances from the market (12% to 24%) during 2019-2022

EU ETS Reform: Four Major Elements



Allocation

- Auction share remain at **57%**
- Free allocation to continue
 - Better targeted free allocation (benchmarks and production data more frequently updated)
 - Partially tiered free allocation to carbon leakage threatened industry

Funds

- Modernisation fund
- Innovation fund

EU ETS: Aviation & Maritime Sectors



- Plan to account for GHG emissions from within, arriving or departing from from **2023** onwards if no system in operation comparak by 2021
- Proposal to extend **exclusion of international flights** beyond 2016
 - Flights within EEA fall under EU ETS



RGGI Program Review



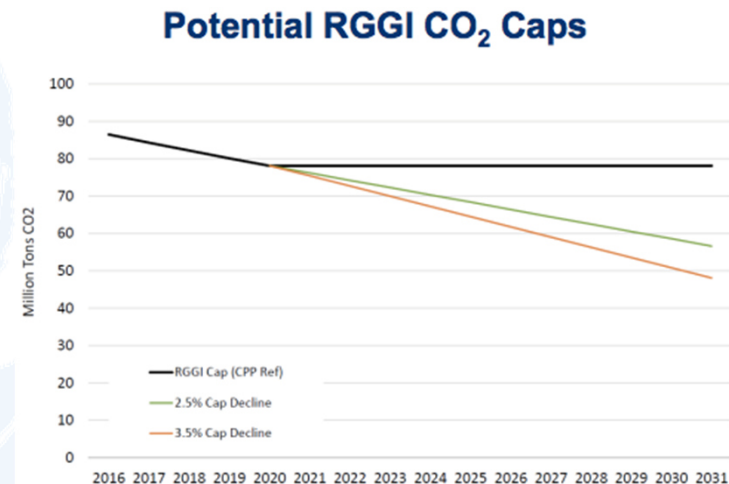
- Collaboration of 9 states to reduce emissions in **power sector**
- **100% auctioning**
 - More than USD 1.37 bn invested in EE, RE, direct bill assistance and GHG abatement programs
- In operation since **2009**
- 2016: Emissions dropped in RGGI jurisdictions for 6th straight year, falling by 4.8% (almost 4m short tons)
 - Emissions dropped nearly 32% since start of RGGI or almost 37m tons

RGGI Program Review

- **First review:** 45% reduction in RGGI cap, interim cap adjustments (account banked allowances) and creation of cost containment reserve

Second review:

- Cap stringency
- Flexibility mechanisms
- Emissions containment reserve
- Reserve Price
- Banking



RGGI Program Review



Cap stringency

- Emissions goals post-2020?
- Modeling on several different options

Flexibility mechanisms

- How has the **CCR** worked to date, increase to price trigger (USD 10) or size of reserve
- **Offsets**: Potential improvements, continuation of program, additional categories, offsets outside RGGI states?

RGGI Program Review



Emissions Containment Reserve

- Supply control mechanism: increase cap stringency if costs lower than expected
- Portion annual cap held in reserve if prices fall below certain trigger point
- Can also reduce cap if market is oversupplied (reduce need for bank adjustments under RGGI that currently takes several years)
- Trigger and reserve size need to be set

RGGI Program Review



Reserve Price

- Considering a potential change to Auction Reserve Price

Banking

- Potential adjustment to RGGI cap to account for some/all banked allowances accrued from 2014-2020

New Zealand



- Operating since **2008**
- Covers **all sectors of the economy**, including forestry (source of emissions and offset units) and agriculture (reporting without surrender obligations)

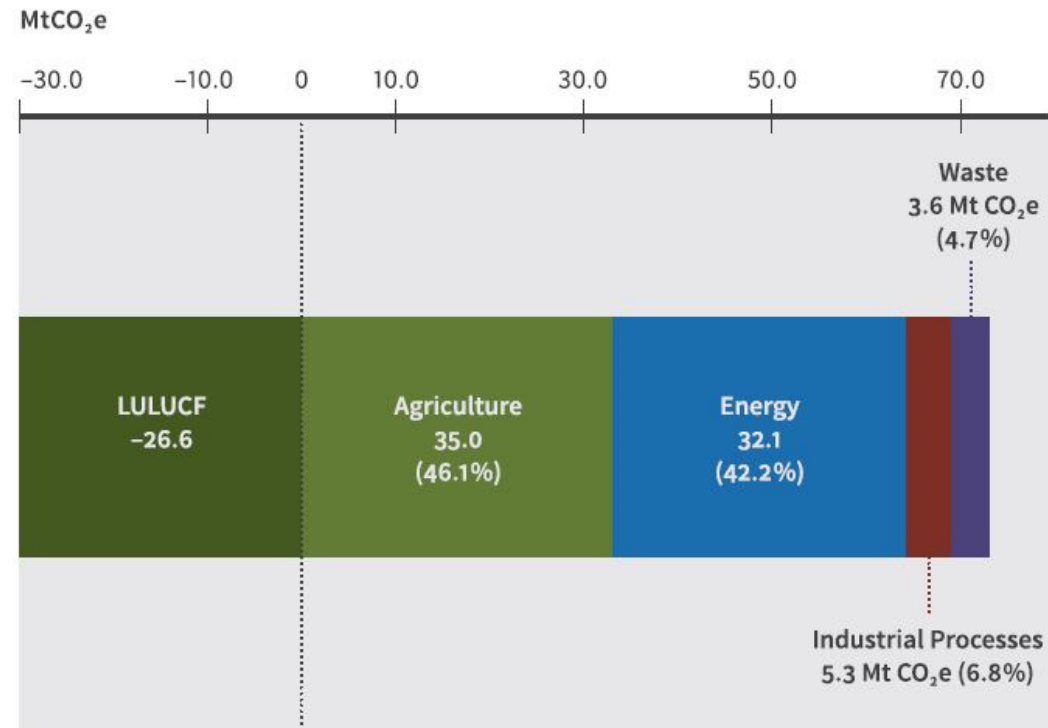


Figure 1 New Zealand's 2012 Emissions Profile

New Zealand Program Review



June 2015: Use of **international offsets** restricted

November 2015: Began 2nd system review

- Ensure ETS helps NZ meet international obligations cost effectively
- Ensure economy prepared for strengthening international response to climate change and potentially higher carbon prices
- Allow ETS to evolve with changing circumstances, especially with respect to Paris Agreement

NZ ETS Review: First Phase



- Phase out one-for-two transition measure over next three years
 - Currently allows entities in energy, industrial and waste sectors to surrender one unit for every two tons of emissions
 - 2017: 67% of compliance cost
 - 2018: 83% of compliance cost
 - 2019: participants face full cost
- Reduces amount of banked allowances and brings obligations in line with New Zealand's 2030 target

NZ ETS: Second Phase

- Broad public consultation (2016)
- Decisions expected mid-2017
- Legislative changes likely made in 2018
- Focus
 - How allowance volumes align with **2030 target**
 - **Auctioning**
 - Necessity of **price stability mechanisms**
 - Use of **international units**: when and how?
 - Reduce rates of **free allocation** post-2020?