



California's carbon set-aside proposals

Legislative lessons for Europe

Introduction

Roughly half of the EU's greenhouse gas emissions are covered by a regulatory cap under the EU Emissions Trading System (ETS). In May 2010, a communiqué from the European Commission introduced the idea of a set-aside of 1.4 billion allowances from the 3rd Phase of the ETS to prepare compliant companies for the prospect of a shift to a 30% 2020 target. Since then the quantities and rationale for a set aside have become more elastic, but the concept has persisted as a potential tool for European policymakers to make temporary changes to the supply of permits while deferring more fundamental decisions about changes to the cap (see Table 1 below).

About Sandbag

Sandbag is a UK based not-for-profit organisation campaigning for environmentally effective carbon markets and focusing on the EU Emissions Trading System.

Our campaigns are supported by in-house research monitoring the environmental robustness of the caps, the distribution of allowances, and how key sectors, installations and companies in the scheme are affected by it.

For more information visit our website at www.sandbag.org.uk or email us at info@sandbag.org.uk

Table 1: Shifting rationales and quantities for a Phase 3 set-aside

Document	Proposed set-aside	Purpose of set-aside
20% Communiquéⁱ	1.4Gt	To prepare the ETS for a 30% economy-wide target in 2020 (i.e. 25% domestic, 5% offset).
2050 Roadmap (leaked draft)	0.5-0.8Gt	To account for excess allowances banked forward from Phase 2.
2050 Roadmapⁱⁱ (published)	No figure provided	To align the EU ETS with any new measures in the implementation of the Energy Efficiency Target

This briefing explores how set aside legislation is being introduced from the outset into California's ARB legislation, and summarises the design and purpose of the legislation in each instance.

The scope of California's ETS

California's Air Resources Board (ARB) is due to introduce a cap-and-trade system to the state from January 2013. Initially the system will cover approximately 36% of the state's emissions arising from stationary installations in the electricity and heavy industry sectors. From 2015 the scheme will expand to cover 85% of emissions by incorporating fuels used for heat, transport and other smaller scale industrial and commercial purposes.ⁱⁱⁱ

Set Aside 1: The Allowance Price Containment Reserve (APCR).

The APCR is a reserve of permits principally in place to protect against abrupt rises in the market price. The reserve sets aside 1% of the cap over the first trading period (2013-2014) growing to 7% of the cap in the

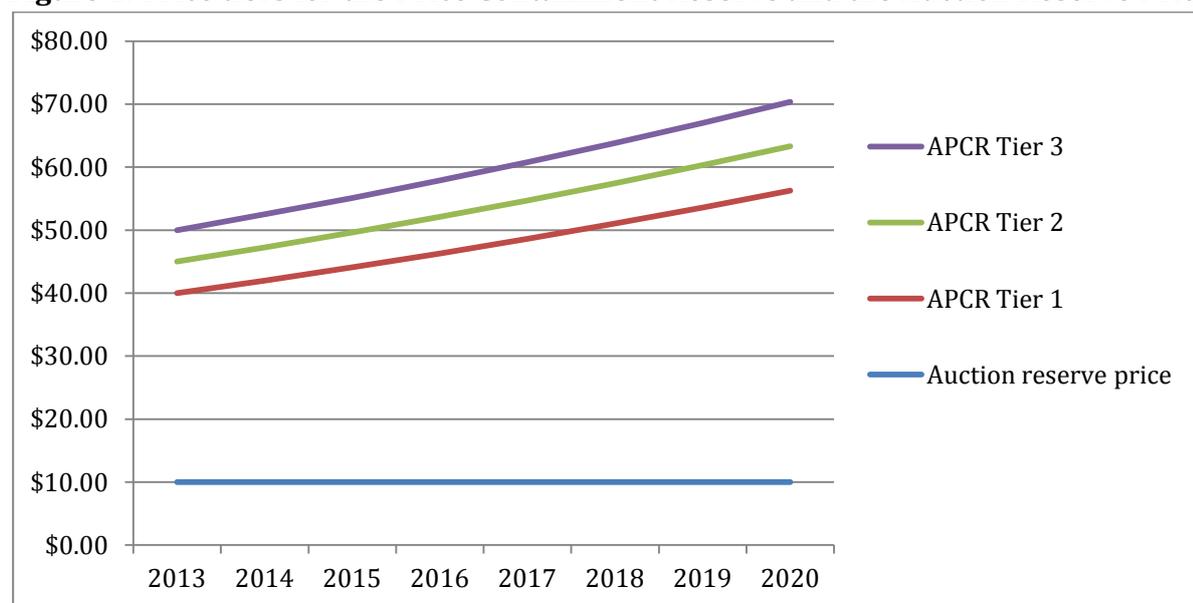
third trading period (2018-2020). If the EU were to set aside 7% of Phase 3 allowances it would equate to roughly 1 billion tonnes.^{iv}

Permits in this set aside are given a **fixed annual price** that escalates predictably over the course of the scheme. The price is set above the anticipated market price for the remaining permits, but reserve permits can be purchased on a first come first serve basis by market participants who wish to hedge against the prospect of price spikes. Any permits not sold from the reserve each year are banked into the reserve for future use.

The reserve is divided equally into three different price tiers. In 2013 these prices will be \$40, \$45 and \$50 and will rise a further 5% (plus inflation) each year reaching \$56, \$63 and \$70 in 2020.^v

The Allowance Price Containment Reserve guarantees a predictable price for a predetermined portion of permits under the cap, thereby providing some protection against price spikes. It also serves to protect against price crashes through decreasing the supply of permits entering the general market through auction. But the Californian scheme also offers an additional guarantee against price crashes in the form of a minimum reserve price for permits which are not in the reserve. When there are no bids above \$10 for permits sold at auction, the permits are withdrawn and added to the Allowance Price Containment Reserve.^{vi} Note that the APCR does not affect the *fundamentals* of the total quantity of permits available within the scheme, but merely regulates their *availability*.

Figure 1: Price tiers for the Price Containment Reserve and the Auction Reserve Price

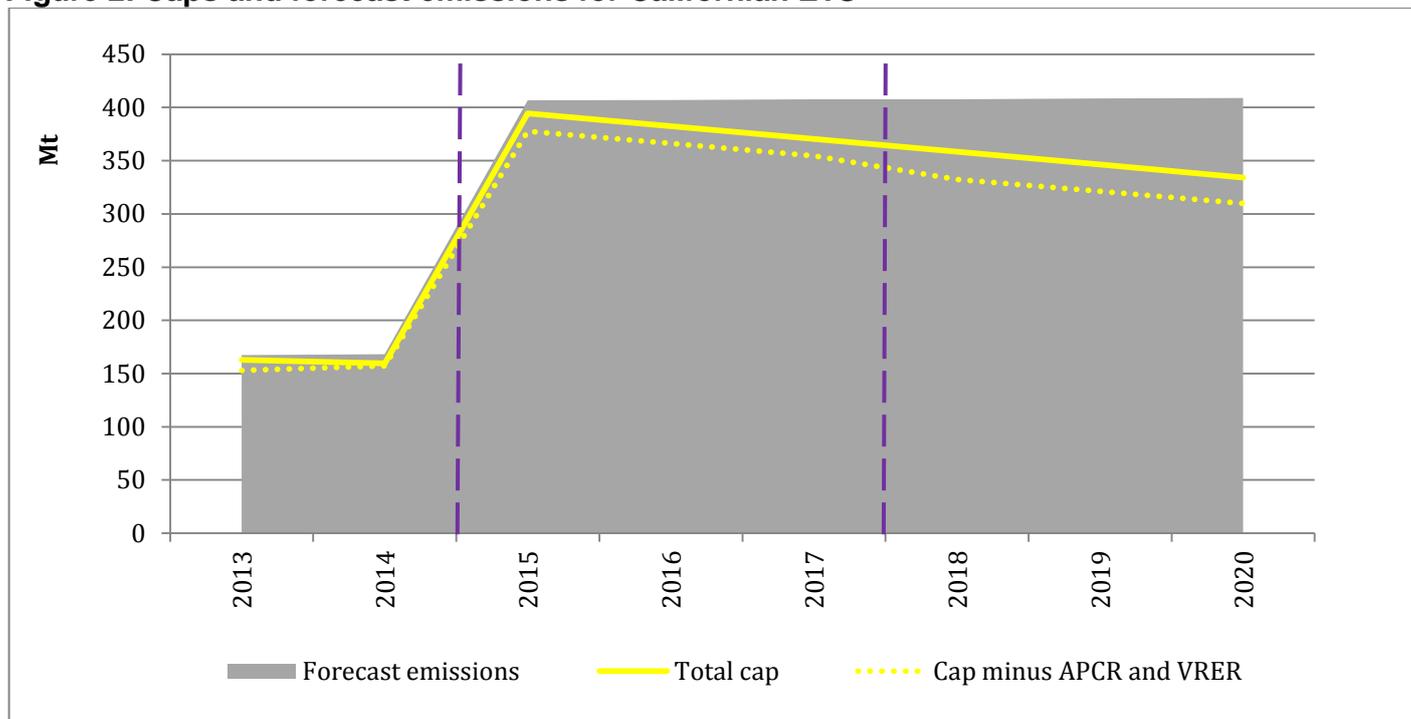


Set Aside 2: the Voluntary Renewable Energy Reserve (VRER)

The ARB cap-and-trade legislation also contains a placeholder to potentially adjust the supply of permits on a more permanent basis. To capture the environmental additionality of voluntary renewable energy purchases, the ARB has prepared a second reserve to adjust the absolute supply of permits downward to reflect these.^{vii} The VRE reserve is fairly limited in size, however, and places clear limit on the number of permits consumers and businesses can cancel from the scheme through take-up of green energy (amounting to 7.1 Gt or 0.28% of the 8 year budget).

This VRER set aside reflects similar provisions within the RGGI Model Rule (namely XX-5.3), which allow participating states the option of cancelling permits to reflect voluntary purchases of renewable electricity.^{viii} Australia's Clean Energy Future plan makes a more explicit commitment that voluntary action will be treated as additional when accounting for Australia's pollution reduction targets after 2012" in point 3.31 of its draft legislation.^{ix}

Figure 2: Caps and forecast emissions for Californian ETS



Period/year	Allocation Price Containment Reserve (Mt)	Voluntary Renewable Energy Reserve (Mt)	Total cap (Mt)	BAU emissions in covered sectors (Mt)	Abatement (Mt)
Period 1 (2013-2014)	3.2 (1%)	1.6 (0.5%)	322.5	335.4	12.9
2012			NA	NA	NA
2013			162.8	167.3	4.5
2014			159.7	168.1	8.4
Period 2 (2015-2017)	45.9 (4%)	2.9 (0.25%)	1,147.3	1,221.2	73.9
2015			394.5	406.7	12.2
2016			382.4	406.9	24.5
2017			370.4	407.6	37.2
Period 3 (2018-2020)	72.7 (7%)	2.6 (0.25%)	1,038.8	1,224.8	186
2018			358.3	407.6	49.3
2019			346.3	408.4	62.1
2020			334.2	408.8	74.6
Total	121.8 (4.8%)	7.1 (0.28%)	2508.6	2,781.4	272.8

<http://www.arb.ca.gov/regact/2010/capandtrade10/capv4appi.pdf> p.14

<http://www.arb.ca.gov/regact/2010/capandtrade10/candtmodreg.pdf> p.74, 103

Conclusion

While there is currently no explicit provision in the ETS Directive for introducing a set-aside, neither is there anything in the current legislation to prevent the Commission from altering the timing of supply in a given budget period, a point the Commission has repeatedly stressed.

However, the Californian legislators have demonstrated greater foresight by establishing a set aside from the outside and laying out the exact price conditions under which this reserve will re-enter the market and the price conditions under which they will be withheld from auction. The Commission would be wise to enshrine similarly predictable and transparent supply control mechanisms in the Directive when it is next re-opened. These could be structured as a strategic reserve following the California model.

Endnotes

ⁱ European Commission, *Analysis of options to move beyond 20%*.

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0265:FIN:EN:PDF>

ⁱⁱ European Commission, *2050 Roadmap*, p. 11

http://ec.europa.eu/clima/documentation/roadmap/docs/com_2011_112_en.pdf

ⁱⁱⁱ <http://www.businessgreen.com/bg/feature/2027193/ultimate-guide-californias-cap-trade-scheme>

^{iv} Phase 3 budget is 15,265Mt, an APCR would set aside 7% or 1,069Mt (a VER would set aside a further 0.25% or 38Mt)

^v <http://www.arb.ca.gov/regact/2010/capandtrade10/candtmmodreg.pdf> p.143 (2020 figures aren't adjusted for inflation)

^{vi} <http://www.arb.ca.gov/cc/capandtrade/meetings/121409/pdr.pdf> p.72

^{vii} <http://www.arb.ca.gov/regact/2010/capandtrade10/capisor.pdf> Part I, Vol. I, p. II-28

^{viii} See <http://www.rggi.org/docs/Model%20Rule%20Revised%2012.31.08.pdf> XX-5.3 p.41

^{ix} <http://www.cleanenergyfuture.gov.au/wp-content/uploads/2011/07/Consolidated-Final.pdf> p.30