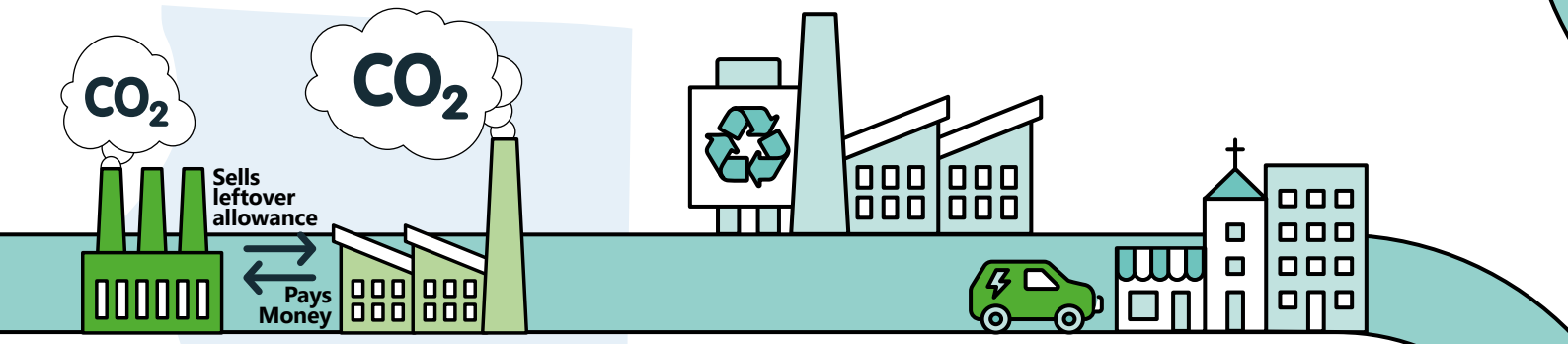
Interaction of Climate Policies in California

Policy Case Studies

Rethinking Decarbonisation Incentives

California's Cap and Trade Scheme (C&T) was developed by the California's Air Resources Board (CARB) to support the achievement of the state's emission reduction goals of approximately 30% reduction compared to business-as-usual by 2020. The C&T scheme complements a range of other sector-specific policies to reduce emissions in transportation and electricity generation.



Policy Type: Emissions Trading System

Key Features

California's Cap and Trade Scheme provides a backstop policy to manage any shortfall in emission reductions from complementary measures. California is also a member of the Western Climate Initiative, which permits trading with the linked systems of Quebec and Ontario in Canada. Sectors not covered by the cap (e.g. agriculture) may be covered by other policies, including offsetting.

Point of Regulation

Mixed Approach. Both upstream on the fuel suppliers and at the point of emissions for electricity generators and large industrial entities.

Sectors Covered

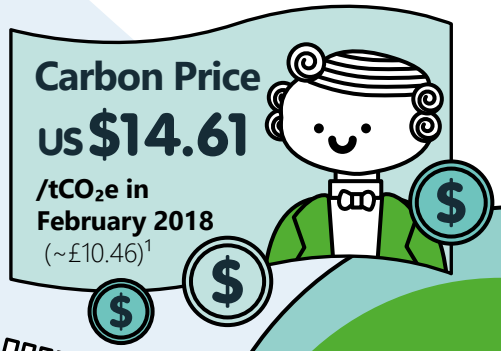
Power, Industry, Transport, Buildings.

Sectors Not Covered

Agriculture, Forestry, Waste.

Emissions Covered

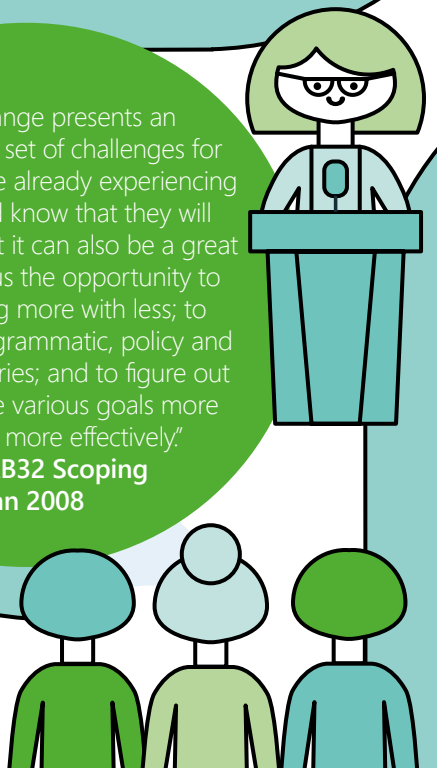
85%



Key Dates

C&T began in January 2013 and in 2017 it was formally extended to 2030.

"Climate change presents an unprecedented set of challenges for California. We are already experiencing its impacts and know that they will only increase. But it can also be a great unifier. It gives us the opportunity to focus on doing more with less; to work across programmatic, policy and political boundaries; and to figure out ways to achieve various goals more quickly and more effectively."
CARB, AB32 Scoping Plan 2008



[1] Exchange rate February 2018: US$1: £0.716.
Source: https://www.ofx.com/, accessed 19/07/2018

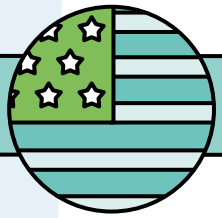
Introduction

California's Global Warming Act of 2006 established ambitious emission reduction goals for the state of approximately 30% reduction in emissions compared to business-as-usual by 2020, and gave CARB responsibility for developing, monitoring and updating plans to achieve these goals.

CARB undertook a cross governmental policy scoping exercise to assess the emission reduction impact of existing policies and identified gaps to meeting the target. This involved engaging with numerous stakeholder groups, including the Climate Action Team of state agencies chaired by California's Environmental Protection Agency, and technical advisory committees.

At the time, a number of existing policies were expected to continue to make a significant contribution to the climate goals. The most significant measures included those in the transportation sector (fuel portfolio and vehicle emissions standards) also implemented by CARB, and the renewable energy trading system and energy efficiency standards, implemented by the California Energy Commission (CEC), which is the state's primary energy policy and planning agency.

CARB designed and implemented the California Cap and Trade (C&T) scheme as a "back-up" plan. C&T complements existing policies to ensure that climate targets are met.



Key Findings

Legislative Framework and Empowered Authorities

- California's approach to climate change mitigation is based on a key piece of legislation (Global Warming Act of 2006 (AB32)), which both established the emission reduction goals and empowered CARB to develop and monitor plans to achieve them.

Development of the Scoping Plan

- The development of the initial plan required an unprecedented level of cross-governmental cooperation.
- The challenge was to develop a coherent policy package that met emission reduction goals while being consistent with other policy priorities, such as minimising costs on households and delivering air quality improvements.

The Role of Cap and Trade in the Scoping Plan

- The plan identified a raft of existing policy measures which were expected to drive around three quarters of the required emissions reductions. These included sectoral focused regulatory standards, and renewable energy and energy efficiency policies.
- The C&T scheme provides a back-stop policy to manage any shortfall in the results of these existing policies, by capping overall emissions and providing a carbon price signal to incentivise meeting the cap.
- Although achieving emission reductions through C&T was more cost effective than some of the other existing measures, it was considered insufficient on its own to meet the targets in capped sectors. This is because the carbon price signal would not address non-price barriers such as incentivising research into innovation or providing funds for capital intensive emission reduction projects.

Definitions

Emissions Trading System
A cap on emissions is set and obligated parties are required to hold a permit for each tonne of emissions they emit. The cap determines the number of allowances available in the system, which can be traded between parties.

Regulatory Standard
A regulatory obligation to achieve a particular outcome (e.g. emissions produced per unit of activity, proportion of low carbon fuel supplied) which is placed on an entity.

Offsetting
A reduction in emissions of greenhouse gases made in order to compensate for or to offset an emission made elsewhere.

Renewable Energy Trading System
A market in which certificates representing renewable energy are traded between parties, whether for compliance or voluntary purposes.

Point of Regulation
The point in a chain of emission producing activities at which a regulator places the obligation to comply with emission reduction policy. The point is defined relative to the point of emission, either up or downstream from this.