

The art of the possible: Policy solutions

FINDING THE BALANCE

CHILE BRINGS INDUSTRY AND PEOPLE TOGETHER TO ACCELERATE COAL EXIT

Chile has put in place an ambitious coal power phase-out strategy. It is on track to be coal-free sooner than the country ever imagined possible.

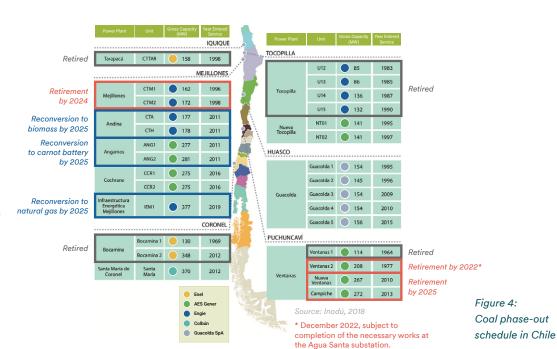
Nearly 40% of Chile's electricity comes from coal. Phasing this capacity out is a core measure that will account for 13% of planned greenhouse gas abatements by 2050 and trigger transformational changes in other energy-related sectors. Achieving a faster coal phase-out enables more renewables on the system and promotes electrification in key sectors such as mining, industry and transport. It also supports the development of a green hydrogen industry.

To eliminate coal from the energy matrix, in 2018 Chile's Energy Ministry assembled stakeholders and set up a round table including trade unions, non-governmental organisations (NGOs), and public and private entities. The aim was to collectively identify the key issues to be considered for a just, responsible and planned transition.

Since mid-2019, as a result of this process, Chile has had a public-private agreement in place under which energy utilities have committed to decommissioning or reconverting their coal power plants before 2040. They have also pledged to stop investing in new coal-fired plants without carbon capture and storage.

While the agreement is voluntary in nature, it has been fully implemented and its original schedule has been accelerated. The initial target of retiring eight out of 28 coal power plant units by 2025 has been brought forward by three years. In 2022, eight power plant units have now been retired and one more could be added to the phase-out scheme (Ventanas 2), with several others pushing their withdrawal dates forward (Figure 4).

- From June 2019 to October 2022,
 8 power plant units have been retired.
- By 2025, 13 power plant units will be retired and 5 more will be reconverted, representing 65% of Chile's coal-fired power plants.
- Plants with no retirement date: to be phased out no later than 2040.



It is very likely that the Chilean power system will be coal-free sooner than 2040, with renewable energy replacing capacity and paving the way to the country achieving netzero by 2050.

These transformational changes do not come without challenges, including maintaining system reliability, upgrading transmission lines, and ensuring a just transition in its broadest sense. A national just transition strategy aims to deliver reduced impacts on communities, the relocation of workers to new facilities, and adequate retirement plans.

A decarbonisation plan encompassing an accelerated closure or reconversion of coal-fired power plants is also being drawn up. It includes:

- thermal power plant reconversion options
- smart grids to deal with more renewables
- energy storage
- upgraded transmission and distribution infrastructure.

Decarbonisation is achieved not only by phasing out coal and other fossil fuels. It requires an energy system that is resilient to the impacts of climate change. Recent prolonged droughts have added to the other challenges, making fossil-fuel power generation look like the most feasible option in the short term. But Chile does not want to follow that path. A sustainable energy future is a must, and mitigation and adaptation to climate change must be included in every action taken under the country's plan for carbon neutrality.



Solar panels in the Atacama desert in Chile | Source: Shutterstock