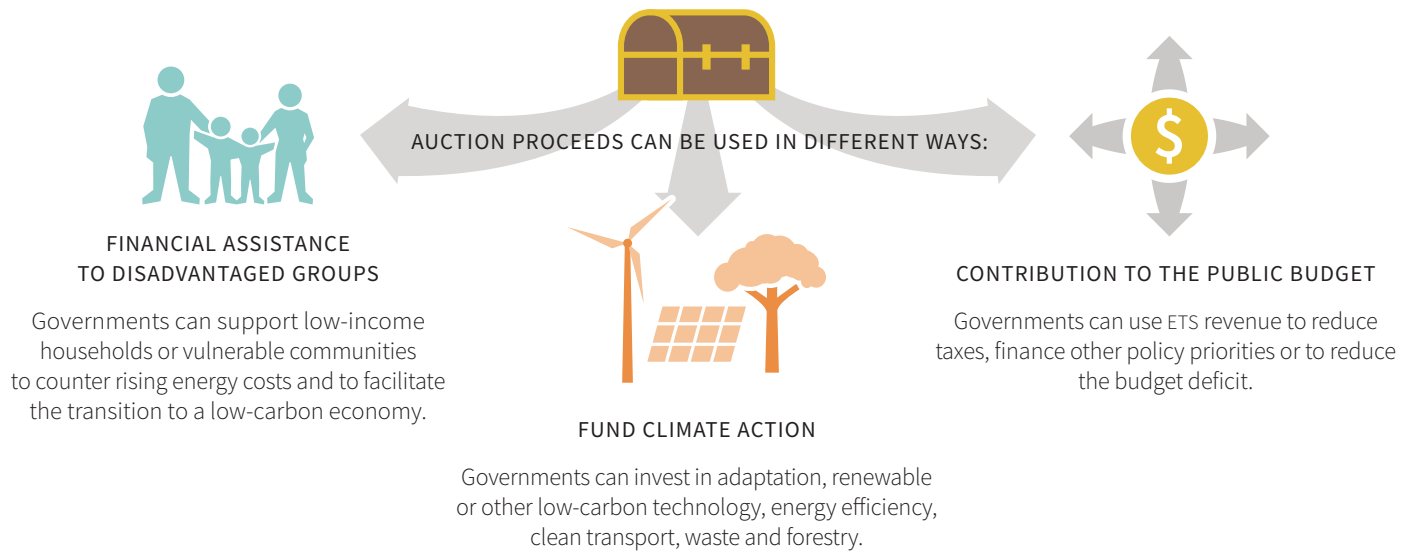


From Carbon Market to Climate Finance: Emissions Trading Revenue

AUCTIONING ALLOWANCES HAS BENEFITS ...

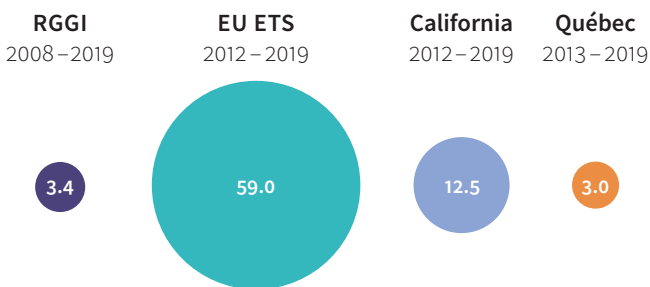
In an emissions trading system (ETS), the government can distribute emissions permits for free, auction them, or combine both approaches. Auctioning is an efficient way to get permits to those who value them most. It generates public revenue and provides an incentive for companies to take early action against climate change, as the more companies reduce their emissions, the fewer permits they need to buy. Auctioning may also be seen as fair because it ensures that regulated companies pay for their emissions.



... AND GENERATES SIGNIFICANT REVENUE

Most ETSs already do, or intend to, auction a share of their permits, and many plan to increase that share over time. The amount of revenue depends on the number of auctioned permits and the carbon price. Towards the end of 2019, ETS jurisdictions had raised more than USD 78 billion through auctioning.

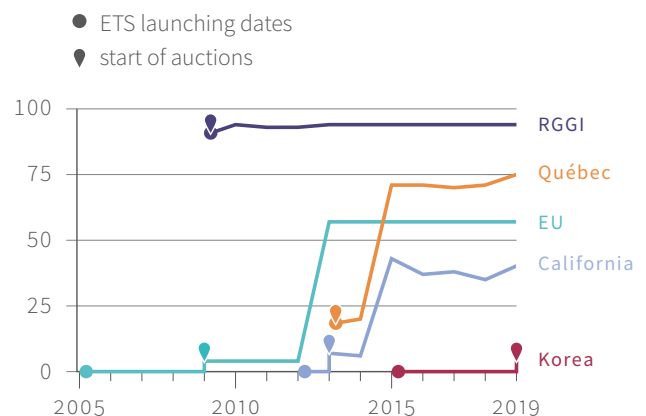
TOTAL AUCTION REVENUES, USD BILLION*



*as of 31 Dec 2019

Korea (2016–2019) raised USD 298 million, Switzerland (2013–2019) USD 36 million, Guangdong (2013–2019) USD 114 million, Shanghai (2013–2019) USD 2.6 million and Shenzhen (2014) USD 0.4 million in auction revenues.

PERCENTAGE OF TOTAL AUCTIONED PERMITS



AUCTIONING IN AN ETS – A SNAPSHOT ACROSS 3 SYSTEMS

REGGI – A PROGRAM THAT AUCTIONS ALMOST 100% OF ITS PERMITS

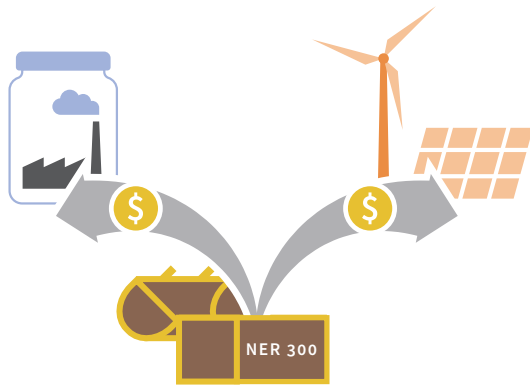
The fact that the Regional Greenhouse Gas Initiative (RGGI) generates revenue, which is reinvested into the community, has helped build support for the program. From 2008 through 2017, RGGI states spent 70% (USD 2.4 billion) of their auction proceeds on energy efficiency, clean and renewable energy, greenhouse gas abatement, and direct bill assistance by returning money to consumers as a rebate on their energy bills. These investments have stimulated the local economy and created jobs through developing low-carbon technology, promoting energy efficiency programs and increasing the use of renewable energy.



44 000

NEW JOB-YEARS*
THROUGH 2017

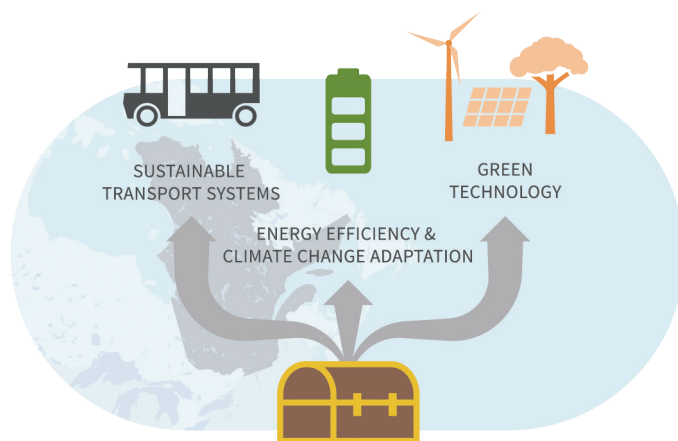
*a job-year is one year of full-time employment; jobs such as efficiency audit performers, energy efficiency measures installers or trainers on energy issues



CALIFORNIA AND QUÉBEC – JOINT AUCTIONS UNDER INDIVIDUAL ADMINISTRATIONS

In 2014, California and Québec linked their systems and began to run joint auctions. The revenue is collected separately:

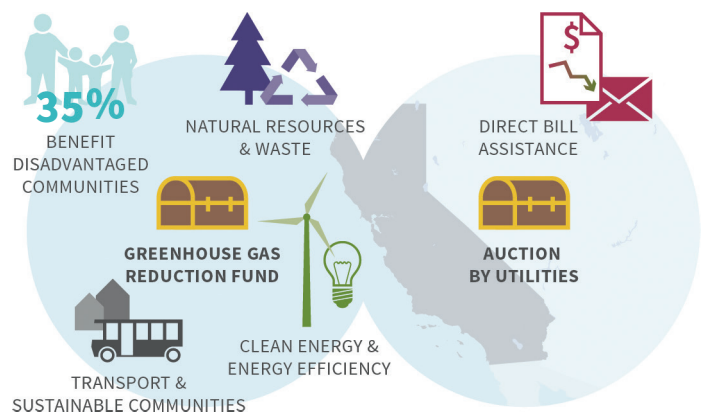
QUÉBEC: Québec's revenue goes to the Green Fund which supports measures such as developing and using green technology, sustainable transport systems, energy efficiency and climate change adaptation.



EU ETS – A FOCUS ON CLIMATE FUNDING

In the European Union (EU), each member state decides how to use their auction revenue, but at least 50% should go towards climate action. The EU also funds one of the world's largest programs for low-carbon innovation: the NER 300 has spent more than 2.3 USD billion since 2012 on cutting-edge renewable energy technologies and carbon capture and storage projects. From 2021 it will be replaced by the Innovation and Modernization Funds which will finance low-carbon technology innovation, modernization of energy systems and energy efficiency in 10 lower-income member states.

CALIFORNIA: Most of California's revenue goes to the Greenhouse Gas Reduction Fund (GGRF), of which at least 35% must benefit low-income households or communities. The fund also invests the proceeds in projects that reduce GHG emissions. Investments through the GGRF are generated through state-owned allowances and referred to as California Climate Investments. Additional revenue from allowances allocated to utilities but auctioned on their behalf must benefit their ratepayers or reduce emissions.



SOURCES AND DISCLAIMERS: Figures from the European Commission, ICAP Status Report, Québec Ministry for the Environment and the Fight against Climate Change, California Air Resources Board, RGGI, EEX, ICE. US dollars were converted at the annual average exchange rates published by the Bank of Canada and <https://www.oanda.com>. For the Québec cap-and-trade system, joint auctions involve currency conversion for part of the proceeds. The rate and transaction fees on the date of conversion can affect the amount deposited to the Green Fund. As a result, the product of the number

of permits sold and the settlement price may slightly differ from the actual amount deposited. For the California cap-and-trade system, the estimated percentage of auctioned permits and total auction revenue account for state-owned permits only. The estimated percentage of auctioned permits for the California and Québec cap-and-trade systems are calculated based on the vintage year, not by the year when permits were or would be actually auctioned.

ABOUT THE INTERNATIONAL CARBON ACTION PARTNERSHIP: ICAP is an international forum for national and subnational governments focusing on best practices in emissions trading. Its work centers on three main pillars: technical dialog, knowledge sharing and capacity building. For more information see the [ICAP website](#) and its [ETS map](#), [Allowance Price Explorer](#), and [ETS Library](#) or follow us on [Twitter](#).