

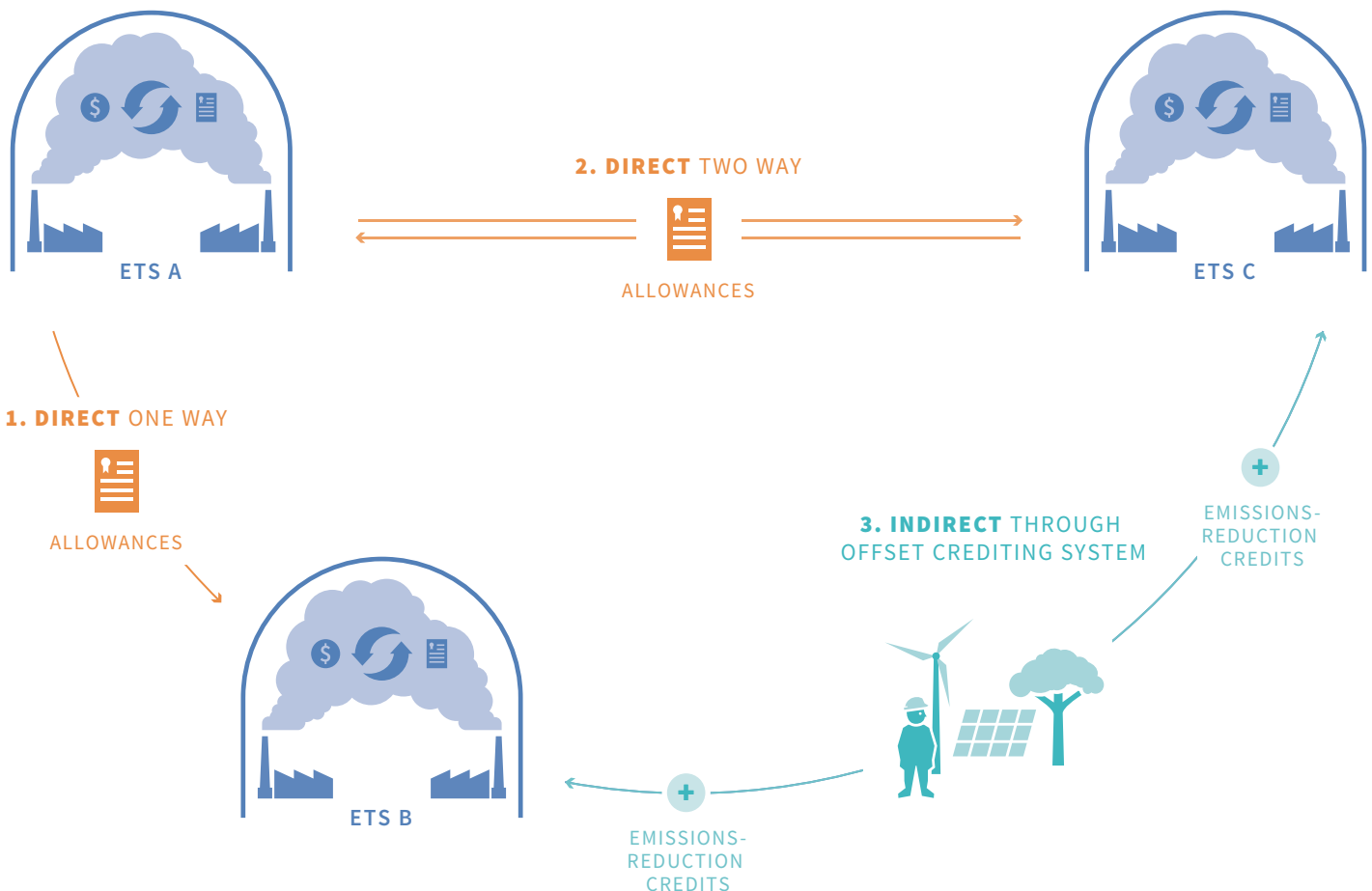
# On the Way to a Global Carbon Market: Linking Emissions Trading Systems

An emissions trading system (ETS) is a market-based instrument that can be used to reduce greenhouse gas (GHG) emissions. It works on the principle of 'cap and trade'. The government imposes a limit (cap) on total emissions in one or more sectors of the economy. Companies in these sectors need to hold one permit for every ton of emissions they release. They may either receive or buy permits, and can trade them with other companies. This is the 'trade' part of 'cap and trade'.



A key advantage of emissions trading systems (ETSs) is that they can be linked, creating larger, more liquid carbon markets. Linking enables regulated companies in an ETS to use permits from another system for compliance. Once linked, prices in the different systems will converge, creating one common permit price.

Linking can take different forms. One-way linking allows companies in system A to buy permits generated in system B. With a two-way link, permits can flow in both directions across the linked market. Links can also happen indirectly via other market mechanisms, for example, if both ETSs are linked to the same offset crediting systems such as the Clean Development Mechanism (CDM).



## WHY LINK?

One of ICAP's core objectives is to help systems link with one another, with the aim to create a well-functioning, global carbon market in the long term.

Linking has a number of benefits:

- 1 Linking opens up access to more and potentially cheaper emissions reduction options. This decreases overall mitigation costs and may allow governments to adopt more ambitious climate targets.
- 2 Linking reduces competitiveness concerns. It levels the playing field for companies across the linked market, which now face the same carbon price.
- 3 Linking increases the number of market participants. With more actors buying and selling permits, trading is more efficient. A bigger carbon market is also better at absorbing shocks, such as sudden changes in commodity prices or exchange rates.
- 4 Linking can demonstrate climate change leadership and encourages international cooperation.

However, linking is not without challenges. Governments may need to adjust their ETS design in order to link and need to be ready to give up some sovereignty in managing the joint market. Furthermore, there may be concerns that companies, by buying permits from the other system, are effectively financing mitigation activities abroad, rather than taking climate action at home.



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## LINKING AROUND THE WORLD

In 2014, California and Québec linked their ETSs. Ontario intends to join them once its own ETS is operational. In Japan, Tokyo and the province of Saitama have also been operating a joint carbon market since 2011. The European carbon market is also expanding: Norway, Iceland and Liechtenstein acceded to the European Union in 2007, and linking negotiations between Switzerland and the European Union were concluded in January 2016.

NORWAY, ICELAND,  
LIECHTENSTEIN & EU



TOKYO & SAITAMA



QUÉBEC & CALIFORNIA  
(& ONTARIO)



SWITZERLAND & EU



**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 visit the [ICAP website](#), check out the [ICAP map](#) or follow us on [Twitter](#).