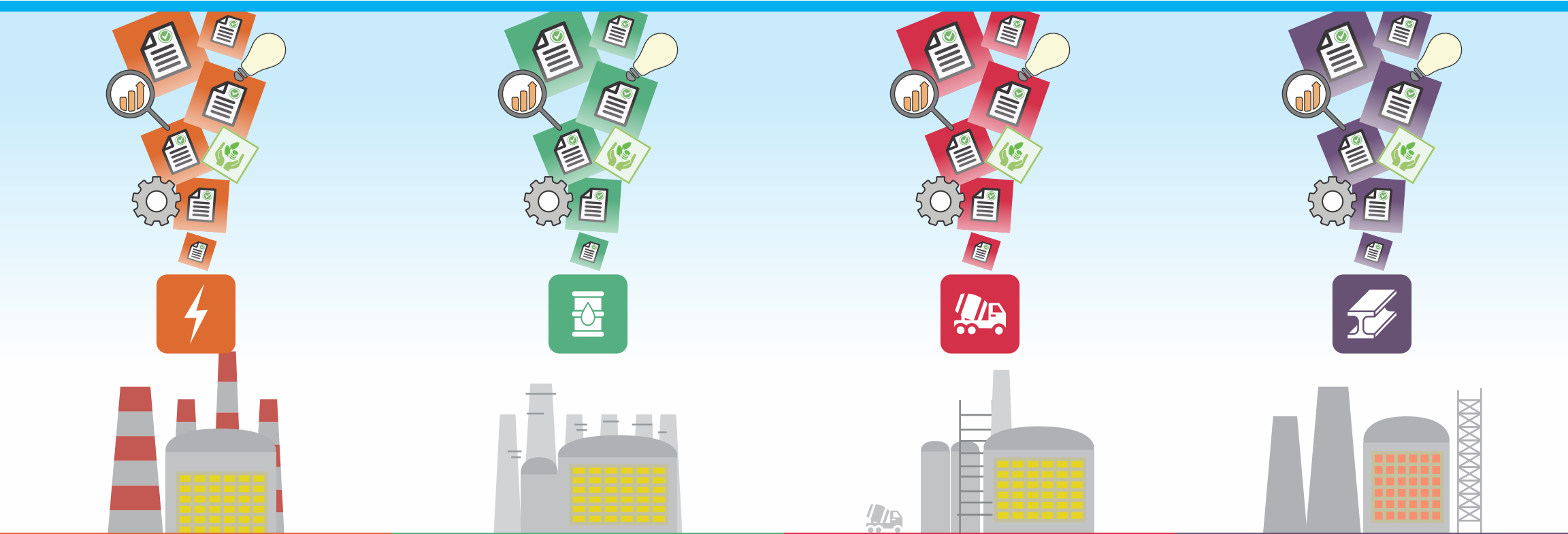


# A BOARD GAME ON THE EMISSIONS TRADING SYSTEM



## WHY A BOARD GAME?

Emissions Trading Systems (ETS) are one of the most cost-effective climate policies to internalize the negative externalities of greenhouse gases (GHG). At the international level, market mechanisms, such as ETS or carbon taxes, regulate more than **15% of global emissions**. The objective of the board game is to have an educational tool that covers the essential aspects of the ETS in an entertaining, attractive and simple way. **This game deals with issues such as emission allowances, allocation, compliance periods, offsets and sanctions, creating interest in the ETS functioning and the status of different ETS in the world.**



## THE GAME

In the design of an ETS, the government establishes a national emissions cap for a set of previously selected actors. Several economic sectors, each including various companies, may be included within this scope. In the game, each player plays the role of one of four industries (thermoelectric, refinery, cement and iron and steel). The objective of the game is to obtain Victory Points through implementing mitigation actions, obtaining money and complying with the ETS.



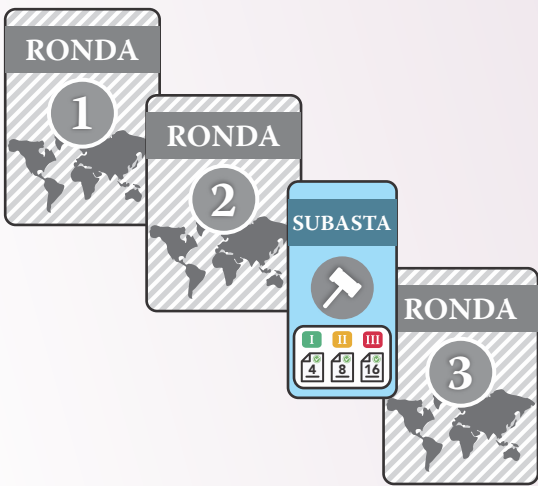
Topics: scope / coverage, cap design.

## EMISSION ALLOWANCES

In the implementation of an ETS, the government must create an amount of emission allowances equivalent to the national cap. Subsequently, it distributes these emission allowances among the different participants. An emission allowance is equivalent to a certain amount of GHG emitted. To avoid being in default and getting a penalty, a company must verify that its emission allowances and its annual accumulated emissions match. Throughout the game, players accumulate GHGs generated by their companies, and in parallel acquire emission rights. At the end of each period you must have the same amount of both. If you don't, you lose victory points!



Topics: assignment, compliance, report, surveillance, sanctions.



## PERIODS

To comply with the ETS, a company can mitigate its emissions, buy emission allowances from other regulated actors or buy offsets. The game is comprised of three periods, which are composed of two rounds, an auction and a final round. In each round players can use resources, implement mitigation actions, buy emission rights and get offsets.



Topics: offsets, temporal flexibility, prices and stakeholder participation.

## WORLD EVENTS

An ETS, being a market-based instrument, can be impacted by various events. This occurs especially if there is a link between two or more markets. In each round, a world event, such as economic changes or natural disasters, can alter the ETS. This makes every round more unpredictable and exciting. There are 20 different world events!



Topics: linking with other markets.



## RESOURCES

ETS are economically efficient mechanisms, since they allow agents to make decisions, based on a utility and cost calculation between mitigating GHG or purchasing emission allowances. In each round, you will have a number of resources related to research, development and innovation that will allow you to earn money, Victory Points or to apply mitigation actions. Each game is different, so test your skills and design a different strategy to win!



Topics: cost-effectiveness, competitiveness.

