



Reshaping the Economy to Achieve Carbon Transition

**THE SHIFT  
PROJECT**

## EU ETS Structural Reform

### The Option for an Auction Reserve Price

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Based in Paris, The Shift Project (TSP) is a Europe-wide think tank working towards an economy free from the constraints of carbon and fossil fuels. Combining high-level scientific expertise and economic players, The Shift Project is able to position itself as the interface between the academic world, businesses, and civil society and government institutions. In just over three years, it has become a recognized actor in energy transition – and more generally in the “carbon” transition.

Created in 2010 by Jean-Marc Jancovici, The Shift Project is above all a source of proposals in the public interest at a time when viable transition solutions for both the planet’s resources and a sustainable economy are struggling to emerge.

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# Content

<b>CONTENT</b> .....	<b>2</b>
<b>ABSTRACT</b> .....	<b>3</b>
<b>THE OPTION FOR A RULE-BASED AUCTION RESERVE PRICE COMBINED WITH A REINFORCED USE OF CAP NEUTRAL EU-BASED JI (JOINT IMPLEMENTATION) CREDITS</b> .....	<b>4</b>
A RULE-BASED AUCTION RESERVE PRICE.....	4
CAP NEUTRAL EU BASED DOMESTIC PROJECTS ABOVE THE BENCHMARK .....	4
<b>ARGUMENTS IN FAVOR OF THE OPTION</b> .....	<b>5</b>
REDUCE OTHER POLICIES’ ADVERSE IMPACTS ON THE ETS .....	5
INCREASE PREDICTABILITY AND STABILITY .....	5
COMPLEMENT QUANTITY-BASED MANAGEMENT MECHANISM.....	6
FACILITATE LINKING WITH OTHER ETSS WHERE SIMILAR MECHANISMS ARE IN PLACE.....	6
INCREASE THE ETS’ RESILIENCE TO EXTERNAL DEMAND SHOCKS.....	6
IDEAL TIMING AND COORDINATION WITH THE MSR .....	6
IDEAL TIMING DUE TO OIL PRICE COLLAPSE .....	6
IDEAL TIMING SINCE THE PRICE HAS ALREADY BEEN DETERMINED BY THE EC AND ACCEPTED BY MEMBER STATES AND INDUSTRIAL SECTORS.....	7
ACCEPTABLE PRICE TRAJECTORY CAN BE DETERMINED BY THE EC BASED ON 2050 ROADMAP INVESTMENTS REQUIRED .....	7
FROM “QUANTITY ONLY” TO “PRICE ALSO”: INCREASING ETS EFFICIENCY TO REDUCE GHG EMISSIONS.....	7
INCREASE MEMBER STATES REVENUES IN A FAIR MANNER THANKS TO THE REDISTRIBUTIVE MECHANISM IMPLEMENTED UNDER THE 2030 CLIMATE ENERGY FRAMEWORK .....	7
<b>REPLIES TO MAIN OBJECTIONS</b> .....	<b>8</b>
THE EU ETS AS THE CORNERSTONE OF EU CLIMATE CHANGE MITIGATION POLICIES .....	8
A VAST MAJORITY OF STAKEHOLDERS IN 2012 OPPOSED DISCRETIONARY PRICE MANAGEMENT MECHANISMS.....	8
AN AUCTION RESERVE PRICE PRESERVES THE QUANTITATIVE “ESSENCE” OF THE ETS.....	9
AN AUCTION RESERVE PRICE WOULD CREATE SURPLUSES OF ALLOWANCES REMAINING IN MEMBER STATES HANDS .....	9
AN AUCTION RESERVE PRICE STILL LETS MARKET FORCES ESTABLISH SECONDARY MARKET PRICES .....	9
AN AUCTION RESERVE PRICE IS RESTRICTED TO THE PRIMARY MARKET, WHICH HAS ALWAYS BEEN AND WILL ALWAYS BE POLICY-DRIVEN .....	10
AN AUCTION RESERVE PRICE STARTING WITH –AND FLOORED BY- THE REFERENCE PRICE FOR CARBON LEAKAGE, WOULD BE LESS EXPOSED TO LOBBYING PRESSURES .....	10



## Abstract

The EU ETS is stuck in a downward circle where:

- industrials explain that, in order to change their processes and tools using low carbon technologies, they need both a long-term stable regulatory framework and a higher carbon price
- the regulator has to intervene, rebalancing a market ruled under a “quantity-only” principle where price is totally left in market's hands – except for carbon leakage issues where a reference price of 30 euros per ton of CO<sub>2</sub> fully satisfies industrial sectors
- low carbon investors require carbon prices to be more predictable, so that their risk can be managed

Lead by the ambition to effectively tackle climate change and therefore trigger low carbon investments, The Shift Project proposal aims at implementing an auction reserve price complemented with a flexible use of ERUs (emissions reduction units) coming from EU-hosted Joint Implementation Projects in order to avoid potential adverse impacts on competitiveness for those sectors exposed to carbon leakage risk.

An Auction Reserve Price could make the EU ETS CO<sub>2</sub> price more stable and predictable, reducing the need for one-shot regulatory interventions and reinforcing attractiveness to low carbon investors. Nevertheless some industrial sectors might not have the possibility to further decarbonize their processes, and their competitiveness shouldn't be hindered by the auction reserve price. It would not be the case if there was a sufficient carbon price in place worldwide.

We therefore suggest reviving the Joint Implementation flexibility mechanism, provided that it remains limited to projects hosted by EU ETS participating Member States. Note that this mechanism is globally *cap neutral*. In order not to add to current ETS oversupply, reinforcing the use of EU based domestic projects credits would require a rebalancing between ETS and non-ETS sectors which the MSR could contribute to



# The option for a rule-based auction reserve price combined with a reinforced use of *cap neutral* EU-based JI (Joint Implementation) credits

## A rule-based auction reserve price

The Carbon Price Signal in the EU ETS is currently not sufficient to trigger the low carbon investments required to reach our long term climate goals (at least 80% GHG emission reductions by 2050). There has been an approach in Europe, which consists in refusing any price-based management of the EU ETS. Meanwhile, other ETSs in the world have effectively implemented such price management mechanisms, while respecting an absolute GHG emission cap (environmental integrity).

Our proposal means moving from a “quantity only” to a “price also” management of the EU ETS. Implementing an auction reserve price means that auctioned allowances – and only auctioned allowances – would not be allocated unless bidders pay more than this auction reserve price.

As opposed to “discretionary price management mechanisms”, an auction reserve price can be implemented based on a transparent and explicit price trajectory. Subsequent revisions of this price trajectory should be based on pre-defined rules.

Last, we learn from California and Quebec ETS that it is also possible to comply with a cap (ensuring environmental integrity of the ETS) while preventing carbon prices from reaching a level that is too high: the EU Market Stability Reserve paves the way to such a cost containment reserve.

**This auction reserve price should start at the carbon price used for the determination of sectors exposed to a risk of carbon leakage: 30€ / ton of CO<sub>2</sub> as soon as possible.**

An auction reserve price could be supplemented with a price ceiling consistent with the cap (-2.2% linear reduction factor for emissions allowances to 2050). This could be handled through a reserve of allowances, consistent with the cap and to be released when the market price reaches the ceiling price. This ceiling price should be made explicit and fixed in advance. Allowances to be placed into this reserve could come from those allowances that are in the MSR (Market Stability Reserve).

## Cap neutral EU based domestic projects above the benchmark

What are Domestic Projects Credits?

Domestic Projects Credits are EU state-owned allowances converted into Emission Reduction Units against demonstration that a project has achieved GHG emission reductions in an Annex-1 Country (in our proposal, this would be restricted to EU ETS participating Member States). Such projects must have been approved by the host country, comply with a registered methodology and pursue an independent verification.



In the absence of a global and sufficient carbon price worldwide, an auction reserve price may raise competitiveness issues for industrial sectors exposed to the risk of carbon leakages.

We therefore propose that those companies currently receiving free allocations up to the benchmark, would be further entitled to comply using 100% of EU-hosted Joint Implementation credits. This proposal maintains free allocations, and further reduces compliance costs for emissions beyond the benchmark, enabling those installations to surrender EU based domestic projects credits instead of allowances (EU based domestic projects credits have always been and still are much cheaper than allowances).

“EU-hosted” cap neutral EU based domestic projects credits means that eligible EU based domestic projects credits must be issued by those Member States participating in the EU ETS. “Cap neutral” highlights the fact that each EU based domestic projects credits are “allocation units” (state owned allowances) converted into carbon credits, which means that EU based domestic projects credit do **not add to EU absolute cap on GHG emissions**. (This could require rebalancing ETS and non-ETS respective share of this cap).

Exposed businesses would still receive free allowances and even further reduce their compliance costs. The EU would benefit from those businesses stimulated innovation to reduce GHG emission in non-ETS sectors.

Under this proposal, businesses would reduce GHG emission outside their fences, where they can achieve cheaper reductions. The underlying assumption is that GHG abatement costs in non-ETS sectors is much cheaper for businesses as compared to GHG abatement within their own industrial installations and as compared to allowances market prices.

## Arguments in favor of the option

### Reduce other policies’ adverse impacts on the ETS

Other policies reducing GHG emissions on ETS sectors adversely impact the ETS price signal.

An auction reserve would contribute to protect the price signal from the so called “overlapping policies issue”.

### Increase predictability and stability

An explicit auction reserve price, determined several years in advance and increasing over time would significantly increase predictability and stability in the scheme. This price trajectory provides guidance for companies when considering a business plan for investments.

An explicit carbon price creates certainty and confidence for low-carbon investors.

It is expected that an auction reserve price would consequently trigger significant low-carbon investments, in a more effective way than a pure quantity-based ETS (even with the MSR).



## Complement quantity-based management mechanism

The EC is trying to steer the carbon price signal through quantity-only mechanisms: the cap on emissions, and the MSR.

An auction reserve price would add a price-based management mechanism, enabling the EC to let the ETS become significantly more efficient in reducing EU GHG emissions, moving from a “quantity only” management to a “quantity and price” management. Other ETSs in the world have similar price-based mechanisms (see below).

## Facilitate linking with other ETSs where similar mechanisms are in place

The California ETS, the Quebec ETS and some Chinese Pilot ETSs have implemented auction reserve prices. Implementing an auction reserve price on the EU ETS would facilitate future linking with ETSs in the two main GHG emitting countries in the world.

## Increase the ETS’ resilience to external demand shocks

Economic downturns reduce the demand for allowances, diminishes willingness and available finance to tackle climate change. An auction reserve price would maintain the incentive to innovate and reduce GHG emissions beyond those reductions that directly result from economic downturns.

Economic recovery increases the demand for allowances. An auction reserve price can be supplemented with a kind of price ceiling through a cap-neutral “strategic reserve”. Such a reserve would provide the market with allowances available at a ceiling price, avoiding excessive direct and indirect carbon costs.

## Ideal timing and coordination with the MSR

The MSR will most likely be implemented. This creates the ideal situation for introducing an auction reserve price. Indeed, it is probable that the negotiation process would supplement the auction reserve price with a kind of ceiling price. A ceiling price shall be consistent with the cap to respect the environmental integrity of the ETS. Therefore, a “carbon cost containment reserve” is needed: a reserve of allowances that could be sold by Member States at a given ceiling price. The Market Stability Reserve is the ideal source to feed that “carbon cost containment reserve”.

## Ideal timing due to oil price collapse

The recent collapse in oil prices creates an unprecedented opportunity to reinforce the carbon price signal while maintaining energy prices at an acceptable level.



## **Ideal timing since the price has already been determined by the EC and accepted by Member States and industrial sectors**

In order to assess the carbon leakage exposed list of sectors and subsectors, there was a need to use a carbon price. This carbon price at 30 €/ton has been negotiated and accepted<sup>1</sup> by the European Commission and by Industrial Sectors. This price will be revised in the future in order to update the carbon leakage list of sectors and subsectors.

The initial auction reserve price trajectory could start with - and remain floored by - this price.

## **Acceptable price trajectory can be determined by the EC based on 2050 roadmap investments required**

In a second step, the 2050 roadmap to a low-carbon economy could be further assessed, and let Member States and the EC establish the price of allowances required to trigger the planned roadmap.

## **From “quantity only” to “price also”: increasing ETS efficiency to reduce GHG emissions**

Managing the ETS is very complex currently, especially since the cap is expected to play too many roles:

1. The cap is an environmental safeguard limiting EU industrial installations absolute GHG emissions
2. The same cap is expected to also play the role of a “quantity-based” constraint
3. The same cap is also expected to ensure that allowances price is sufficient to trigger those low-carbon investments that are required to reach our long term climate ambitions

The MSR will complement the cap and play the role (2) above.

An auction reserve price would complement the cap and the MSR, playing the role (3) above.

## **Increase Member States revenues in a fair manner thanks to the redistributive mechanism implemented under the 2030 climate energy framework**

The 2030 climate and energy framework establishes that 10% plus 2% of allowances to be auctioned are redistributed to some Member States. We fully support this redistributive mechanism. Consequently, an auction reserve price would increase Member States revenues from auctions in a fair manner.

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<sup>1</sup> See 2014/746/UE, (10) (link : <http://eur-lex.europa.eu/legal-content/FR/TXT/HTML/?uri=CELEX:32014D0746&from=EN>)



## Replies to main objections

### The EU ETS as the cornerstone of EU climate change mitigation policies

EU Policymakers want the EU ETS to be the cornerstone of EU climate change mitigation policies, aiming at being exemplary worldwide.

Implementing an auction reserve price actually supports the ETS as it is relevant to:

- prevent carbon price collapse
- make the investment in the EU ETS worthwhile
- make the carbon price a determining contributor to the transition to a low carbon Europe.

### A vast majority of stakeholders in 2012 opposed discretionary price management mechanisms

Combining the word “discretionary” and price management mechanism has biased this question of the public consultation (discretionary intervention is something that a vast majority of stakeholders do not want, while price management mechanisms can be designed for improving ETS efficiency).

The auction reserve price that we propose is absolutely **rule based, explicit and predictable**. It has therefore nothing in common with option f) as per EC 2012 consultation simply because it is not discretionary.

Browsing replies to the former EC Consultation on EU ETS Structural reform, it appears that some opponents to any kind of regulatory intervention on prices object that one should “cure the roots, not the consequences”. Carefully looking at “the roots” leading to a low carbon price, it appears that these roots contribute to climate change mitigation. Indeed, the key drivers to low carbon prices are emission reductions resulting from many factors among which an improved energy efficiency and an increase in the use of renewable energy.

Policymakers are committed to mainstream climate change in all policies. As a consequence, we expect non-ETS policies to reduce the demand for allowances, which is agreeable. If we want the ETS to nevertheless create a certain price signal, we need the price signal and the demand for quantities to be somehow decoupled.

That is exactly what an auction reserve price will do, while letting market forces fully determine secondary market prices.

This preserves the advantage of the EU ETS which is that the market (i.e. supply-demand balance) will create the price above the auction reserve price, as opposed to a tax or a direct political intervention.



## **An auction reserve price preserves the quantitative “essence” of the ETS**

The “quantity essence” of the ETS can be outlined as following:

- Quantifying verified emissions and subsequent amounts to be surrendered
- Quantifying amounts to be allocated / auctioned
- Price on the secondary market emerges from the quantity of demand and the quantity of supply

All these aspects will remain unchanged if an auction reserve price is implemented.

Currently, the primary market allowance price is a result from bids, under the constraint of selling all the allowances or none of the allowances.

Implementing without change in these rules would require bids to be placed above a certain price. Market participants might temporarily opt for lower cost allowances available on the secondary market and coming from the surpluses of the industrial sectors, thus creating a temporary surplus in Member States hands (not on the market). As per existing regulation, the volume of allowances of those auctions that did not take place will be distributed evenly over the following auctions scheduled.

## **An auction reserve price would create surpluses of allowances remaining in Member States hands**

Indeed, as long as market participants can find cheaper allowances on the secondary market, there could be insufficient bids for auctions.

First: it would contribute to rapidly absorb the surplus (allowances in circulation); consistently with the goals aimed at by the MSR and further demonstrating that an auction reserve price is a smart complement to the MSR. Once the surplus is absorbed, both by the MSR and by installations “short” of allowances, auctions will take place.

Also: Businesses that need allowances could be prevented from obtaining them if surplus holders were unwilling to sell. In that case, demand and therefore price would increase until auctions occur.

Lastly, considering that the auction price trajectory is increasing over time, the later auctions will effectively take place, the higher will be the auction reserve price, increasing Member States revenues.

## **An auction reserve price still lets market forces establish secondary market prices**

Price on the secondary market would be determined by the sole market forces. Those businesses who need cash for industrial purpose, could sell allowances at market prices established below the auction reserve price. Indeed the auction reserve price only applies on allowances to be auctioned.



## **An auction reserve price is restricted to the primary market, which has always been and will always be policy-driven**

The primary market (auctions) is driven by public policies. It cannot be stated otherwise, since allowances are issued by public authorities.

Implementing an auction reserve price is a complement to existing policies already determining the primary market in full.

## **An auction reserve price starting with –and floored by- the reference price for carbon leakage, would be less exposed to lobbying pressures**

The fear that lobbies would influence policy makers to reduce the auction reserve price could be mitigated if this auction reserve price starts with –and is floored by- the value determined for assessing carbon leakage exposed sectors and subsectors. As a consequence, reducing the auction reserve price would reduce the price of carbon used for assessing the carbon leakage list.

### Contact:

Frédéric DINGUIRARD, Project Manager

+336 19 34 57 67 – [frederic.dinguirard@theshiftproject.org](mailto:frederic.dinguirard@theshiftproject.org)

The Shift Project is a think-tank centred on the transition to a fossil-free economy. It seeks to guide the decision-making processes of companies and public institutions by bringing forward innovative proposals built on scientific facts ([www.theshiftproject.org](http://www.theshiftproject.org)).