The MSR: Impact on balance and prices

CEPS Task Force: EU ETS Market Stability Reserve, 10 April 2014, Brussels

Marcus Ferdinand, Head of EU Carbon Analysis
Scenario visualisation tool

• Shows the impact on market balance and prices

• Multiple parameters can be changed
  – Trigger levels
  – Starting point
  – Return of backloaded allowances
  – EU GHG target and RES targets
  – GDP scenarios
The market stability reserve

• Market stability reserve implemented from 2021

• 12% of oversupply will be taken out
  – For example: 2 billion surplus x 12% = 240 Mt to MSR
  – Upper trigger = 833 Mt
    • 833 Mt x 12% = 99.9 Mt, the minimum transfer to MSR is 100 Mt
  – Lower trigger = 400 Mt
    • 100 Mt will be released if oversupply falls below 400 Mt

• Backloading of backloading
  – Auctioning volume in 2020 reduced by 421 Mt which is moved to 2021/22
Price forecast: key assumptions

• 40% GHG reductions $\rightarrow$ 2.2% cap reduction factor from 2021

• 27% share of renewables in final energy consumption

• Market stability reserve implemented from 2021
  – Base case in line with EC proposal

• No additional credits after 2020, no linking

• GDP growth of 1.7% per year from 2015-2020 and 1.9% per year from 2021-2030
Selected scenarios

The following slides provide a number of selected scenarios to show the impact of single changes to the set of parameters.

- Impact of the market stability reserve
- Change of outtake level to 20%
- Change of release volume to 200 million p/a
- Increased upper trigger limit (1000 Mt)
- Early start date (2018)
- Transfer of 900 million allowances to MSR
- Combined early start date (2018) and transfer to MSR
- Effect of Article 2 of MSR proposal

Please note: The prices attached to the scenarios reflect a theoretical model-derived outcome and do not reflect a Point Carbon price forecast. The price changes provide an indication of the importance of the changed MSR parameter and have to be considered as indicative.
Impact of the market stability reserve

• Scenario with and without the market stability reserve in place
Market stability reserve – impact on balance

Market Balance

Reserve (reference)  Reserve (scenario)  Scenario - Surplus  Reference - Surplus with MSR

Reserve Peak

Scenario - Surplus

POINT CARBON
Market stability reserve – impact on price

CO2 Price scenarios*

I. Inflation
Real ’10 €
-8%
-35%

2021-2030

**CO2 Price scenarios**

Average Price Change
2014-2020 -8%
2021-2030 -35%

*The depicted price scenarios reflect a theoretical model-derived outcome and do not reflect a Point Carbon price forecast.
Changed outtake level (20%)

• Instead of taking out 12% as proposed, 20% of the oversupply is transferred to the stability reserve. In order to keep the 100 million minimum transfer volume, the take out limit is lowered to 500 million tons, from 833 million previously.
Change of outtake level to 20% - balance

Market Balance

Reserve Peak 1,545

Market oversupply (million tons)

Scenario - Surplus

Reference - Surplus with MSR
Change of outtake level to 20% - price

CO2 Price scenarios*

Average Price Change
2014-2020  0%
2021-2030  16%

*The depicted price scenarios reflect a theoretical model-derived outcome and do not reflect a Point Carbon price forecast.
Changed release volume (200 million)

• Instead of releasing 100 million allowances per year back into the market when the oversupply falls below 400 million tons, the stability reserve releases 200 million allowances per year.
Change of release volume (200 Mt) - balance

Market Balance

Market oversupply (million tons)

Reserve Peak

1,100


Reserve (reference)

Reserve (scenario)

Scenario - Surplus

Reference - Surplus with MSR

POINT CARBON
Change of release volume (200 Mt) - price

CO2 Price scenarios*

Average Price Change
2014-2020 0%
2021-2030 -6%

*The depicted price scenarios reflect a theoretical model-derived outcome and do not reflect a Point Carbon price forecast.
Increased upper limit (1000 Mt)

• Instead of stopping the transfer to the stability reserve when the oversupply has reached 833 Mt, the transfer stops already when the oversupply reaches 1000 Mt, keeping the 12% take-out volume unchanged.
Increased upper limit (1000 Mt) - balance

Market Balance

Market oversupply (million tons)

Reserve Peak
1,100

Scenario - Surplus

Reference - Surplus with MSR
Increased upper limit (1000 Mt) - price

CO2 Price scenarios*

Average Price Change
2014-2020  0%
2021-2030  -2%

*The depicted price scenarios reflect a theoretical model-derived outcome and do not reflect a Point Carbon price forecast
Earlier start date

- Market stability reserve implemented already in 2018 instead of 2021
Early start date 2018 - balance

Market Balance

Market oversupply (million tons)

Reserve Peak 1,382

Scenarios:
- Surplus
- Reference
- Surplus with MSR

Reserve (reference)
Reserve (scenario)
Reference - Surplus with MSR

POINT CARBON
Early start date 2018 - price

CO2 Price scenarios*

Average Price Change
2014-2020 23%
2021-2030 12%

Inflation
Real '10 €

*The depicted price scenarios reflect a theoretical model-derived outcome and do not reflect a
Point Carbon price forecast
Transfer of backloaded allowances to MSR

• Backloaded allowances (900 million) are transferred to the stability reserve instead of being released to the market in 2019 and 2020
Transfer backloaded allowances - price

CO2 Price scenarios*

Average Price Change
2014-2020 16%
2021-2030 19%

*The depicted price scenarios reflect a theoretical model-derived outcome and do not reflect a Point Carbon price forecast.
Combined early start date and transfer of backloaded volume to MSR

- Backloaded allowances (900 million) are transferred to the stability reserve instead of being released to the market in 2019 and 2020 and the market stability reserve starts to operate in 2018.
Early start date (2018) and transfer - balance

Market Balance

Market oversupply (million tons)

Reserve Peak
1,742

Scenario - Surplus
Reference - Surplus with MSR

Reserve (reference)
Reserve (scenario)
Early start date (2018) and transfer - price

CO2 Price scenarios*

Average Price Change
2014-2020 38%
2021-2030 27%

*The depicted price scenarios reflect a theoretical model-derived outcome and do not reflect a Point Carbon price forecast.
Effect of Article 2
• Scenario with and without the inclusion of Article 2
Effect of Article 2 of MSR proposal - balance

Market Balance

Reserve Peak
1,161

Market oversupply (million tons)

Reserve (reference) Reserve (scenario)
Scenario - Surplus Reference - Surplus with MSR


Reserve (reference)
Reserve (scenario)
Scenario - Surplus
Reference - Surplus with MSR

POINT CARBON
Effect of Article 2 of MSR proposal - prices

Inflation
Real '10 €
-8%
-1%

2021-2030

CO2 Price scenarios*

Average Price Change
2014-2020 -8%
2021-2030 -1%

*The depicted price scenarios reflect a theoretical model-derived outcome and do not reflect a Point Carbon price forecast
Thank you very much for your attention!

Marcus Ferdinand  
Head of EU Carbon Analysis

Thomson Reuters Point Carbon 
Phone: +47 2331 6511  
Mobile: +47 9081 2506  
marcus.ferdinand@thomsonreuters.com

pointcarbon.com  
thomsonreuters.com
DISCLAIMER

The data provided in this report were prepared by Thomson Reuters Point Carbon’s Trading Analytics and Research division. Publications of Thomson Reuters Point Carbon’s Trading Analytics and Research division are provided for information purposes only. Prices are indicative and Thomson Reuters Point Carbon does not offer to buy or sell or solicit offers to buy or sell any financial instrument or offer recommendations to purchase, hold or sell any commodity or make any other investment decision. Other than disclosures relating to Thomson Reuters Point Carbon, the information contained in this publication has been obtained from sources that Thomson Reuters Point Carbon believes to be reliable, but no representation or warranty, express or implied, is made as to the accuracy or completeness of this information. The opinions and views expressed in this publication are those of Thomson Reuters Point Carbon and are subject to change without notice, and Thomson Reuters Point Carbon has no obligation to update either the opinions or the information contained in this publication.

Thomson Reuters Point Carbon’s Research and Forecasts division receives compensation for its reports. Thomson Reuters Point Carbon’s Research and Forecasts division reports are published on a subscription basis and are not issued at the request of any client of Thomson Reuters Point Carbon.

Copyright © 2014 by Thomson Reuters Point Carbon. All rights reserved.