EUROPEAN PARLIAMENT

DIRECTORATE GENERAL FOR INTERNAL POLICIES
POLICY DEPARTMENT A: ECONOMIC AND SCIENTIFIC POLICY

WORKSHOP

ETS Market Stability Reserve

Brussels, 05 November 2014

MEETING DOCUMENT

CONTENTS

Organised by the Policy Department A: Economy and Scientific Policy
Committee on the Environment, Public Health and Food Safety (ENVI)

Workshop on the ETS Market Stability Reserve

Wednesday, 5 November 2014 - 16.30 - 18.30
European Parliament (Brussels), József Antall (4Q2)

The event is open to the public and will be web-streamed:
http://www.europarl.europa.eu/ep-live/en/schedule

AGENDA

Setting the scene

Chaired by Ivo Belet, MEP, Rapporteur

16.30-16.35 **Introduction**
Ivo Belet, MEP

16.35-16.42 **Setting the context for the discussion**
Hauke Hermann, Senior Researcher at Öko-Institut

Part 1 Impacts of the MSR on the functioning of the ETS?

Chaired by Matthias Groote, MEP, S&D Shadow

16.43-16.48 **Introduction**
Matthias Groote, MEP

16.48-16.55 **Impact of the MSR on the carbon price and the surplus**
Marcus Ferdinand, EU Carbon Analysis at Thomson Reuters

16.56-17.03 **Impact of the MSR on the behaviour of market participants**
Luca Taschini, Grantham Research Institute, London School of Economics

17.04-17.11 **Key insights from the MSR modelling**
Andrei Marcu, Head CEPS Carbon Market Forum

17.12-17.27 **Question & Answers**

Part 2 Stakeholder discussion on the MSR

Chaired by Ian Duncan, MEP, ECR Shadow

17.27-17.32 **Introduction**
Ian Duncan, MEP

17.32-18.02 **Stakeholder Discussion**
Jason Anderson, Head of EU Climate & Energy Policy at WWF
Jesse Scott, Head of Unit Environment & Sustainable Development, Eurelectric
Peter Botschek, Director Energy, Health, Safety & Environment CEFIC
Dirk Forrister, President & CEO IETA

18.02-18.17 **Question & Answers**

Closing remarks

Chaired by Ivo Belet, MEP, Rapporteur

18.18-18.25 *Jos Delbeke, Director General DG Climate Action*

18.25-18.30 *Ivo Belet, MEP, Rapporteur*

SHORT BIOGRAPHIES OF EXPERTS

Hauke Hermann

Hauke Hermann is a Senior Researcher at Öko-Institute and leads different projects in the field of emissions trading, electricity market design and progress towards emission reduction targets. His key competence is quantitative analysis. During his work he has gained an in-depth knowledge of the power sector and the energy-intensive industry. He joined Öko-Institut in 2009. Prior to this he was working for Ecologic Institute, Berlin. At the latter, he was involved in research projects on the improvement and review of the European Union Emissions Trading Scheme (EU ETS) for the European Commission and the German Environmental Ministry. Hauke Hermann holds a Master degree in Environmental and Resource Management from the Technical University in Cottbus, Germany. He also studied at the Bosporus University in Istanbul.

Marcus Ferdinand

Marcus Ferdinand heads the 'Carbon Market Trader EU' team at Thomson Reuters Point Carbon an independent provider of analysis and forecasting for the energy and environmental markets. He has followed European and global carbon politics closely since 2009, providing regular policy and market analysis to governments and participants in regional and global carbon markets. He is a much used speaker at market events and he has also given presentations to advice the European Commission as well as other EU institutions and governments. Previously he worked with E.ON's headquarter as well as E.ON's Energy Trading business. Marcus studied Energy and Environmental Management in Flensburg (Germany) and Lima (Perú) and holds a Diploma as industrial engineer.

Luca Taschini

Luca is an economist, working at the intersection of environmental economics, energy markets, and industrial organisation. His current research investigates how market-based environmental regulations –and emissions trading schemes in particular – are working in theory and in practice. More specifically, he is studying the functioning of price containment mechanisms, participation restrictions, the linkage of markets and the investigation of policy controls able to promote technology adoption. Luca is Chair of the Dahrendorf Economic Working Group, looking at economics and climate change and he is leading the FP7 Entracte project on the EU ETS reform. He is also a visiting scholar at the Joint Program on the Science and Policy of Global Change (MIT) and at the Research Center for Sustainability Science (Ritsumeikan University – Japan).

Andrei Marcu

Andrei Marcu is currently Senior Advisor and Head of the CEPS Carbon Market Forum at the Centre for European Policy Studies. Mr. Marcu has been one of the corporate sector pioneers in the area of climate change, greenhouse gas (GHG) markets and related areas on sustainable development. Since 1993, Mr. Marcu has been actively involved in many areas of climate change related initiatives, including as Chief Executive Officer of BlueNext, the environmental exchange, based in Paris. Mr. Marcu joined Mercuria Energy in September 2009 in the role as Head of Regulatory Affairs, Environment and Climate Change. Mr. Marcu was the Founder and President and CEO of International Emissions Trading Association (IETA, a world-class business association with offices in Geneva, Brussels, Washington and Ottawa. IETA is dedicated to the creation of an efficient and environmentally robust market for greenhouse gases to address the issue of global warming and climate change. He is currently a Board Member of IETA.

Jason Anderson

Jason Anderson is Head of EU Climate Change and Energy Policy at the WWF European Policy Office, managing a team in Brussels and leading European policy among a network of 15 offices. Previously he was a policy officer at Climate Action Network Europe in Brussels, and then the head of the climate programme at the Institute for European Environmental Policy. He was a lead author of the IPCC special reports on ozone and climate, and on CCS. He is a contributing author to the reference text Environmental Policy in the EU, and has contributed to five editions of the Manual of European Environmental Policy.

Peter Botschek

Peter Botschek has served since 2006 as director of energy & health, safety and environment with Cefic – the European Chemical Industry Council. Before joining Brussels-based Cefic in 2001, Botschek was seconded from HYDRO Agri, today known as YARA, to the European Fertilizer Manufacturers Association (EFMA) in Brussels, as an issue manager for agriculture and environment. Before then, he was part of the application consultancy department Thomasdünger GmbH in Germany after managing fertilizer application experiments at the company's research & development station. Botschek is a member of EU and international bodies such as Business Europe, the European Alliance of Energy-Intensive Industries, the European Commission Stakeholder Meetings on Climate Policy, the IEA energy and greenhouse gas efficiency initiative, Observer Focal Point with UN Climate Change Convention (UNFCCC). He received his doctorate in agriculture in Bonn, Germany, specialising in plant nutrition and environment issues.

Dirk Forrister

Dirk Forrister is President and CEO of the International Emissions Trading Association (IETA). Previously, he was Managing Director at Natsource LLC, the manager of one of the world's largest carbon funds. Earlier in his career, Mr. Forrister served as Chairman of the White House Climate Change Task Force in the Clinton Administration and Assistant U.S. Secretary of Energy for Congressional, Public and Intergovernmental Affairs. Previously, he was legislative counsel to Congressman Jim Cooper of Tennessee. He was also Energy Program Manager at Environmental Defense Fund.

Jesse Scott

Jesse Scott is Head of Environment at EURELECTRIC since January 2012. Previously Jesse Scott has held positions at Demos Europe as the Director for Energy (between May and December 2011), E3G as the Head of the EU Office (between 2008 and 2011) and at White and Case LLP as an Associate (between 2007 and 2008). Jesse Scott has also attained a BA Hons and MPhil from Cambridge University.

SPEAKERS' PRESENTATIONS
Presentation by Hauke Hermann

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Institut für angewandte Ökologie
Institute for Applied Ecology

Workshop on the ETS Market Stability Reserve: Setting the scene for the discussion

Hauke Hermann (Öko-Institut)

European Parliament
Brussels, 05/11/2014

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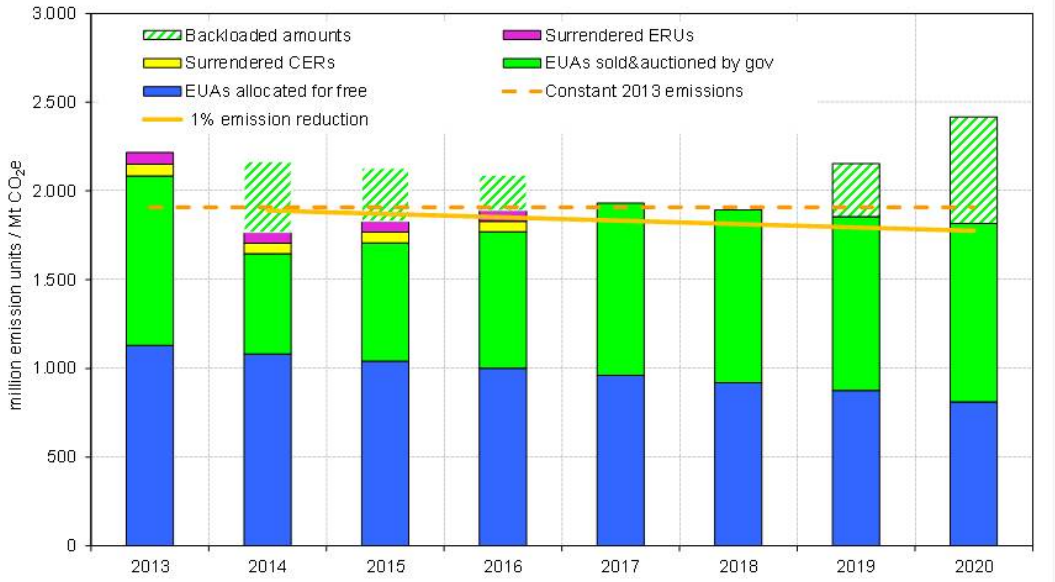
Perspective of the surplus until 2020



Sources: EUTL; EEA data viewer; EEA (2014) Trends and Projections in Europe; Öko-Institut calculations

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European Council Conclusions on 2030 Climate and Energy Policy Framework

The conclusions of the European Council provide strong backing for the introduction of the MSR:

*2.3 a well functioning, reformed Emissions Trading System (ETS) **with an instrument to stabilise the market in line with the Commission proposal** will be the main European instrument to achieve this target; the annual factor to reduce the cap on the maximum permitted emissions will be changed from 1.74% to 2.2% from 2021 onwards*

What parameters make the MSR well functioning?

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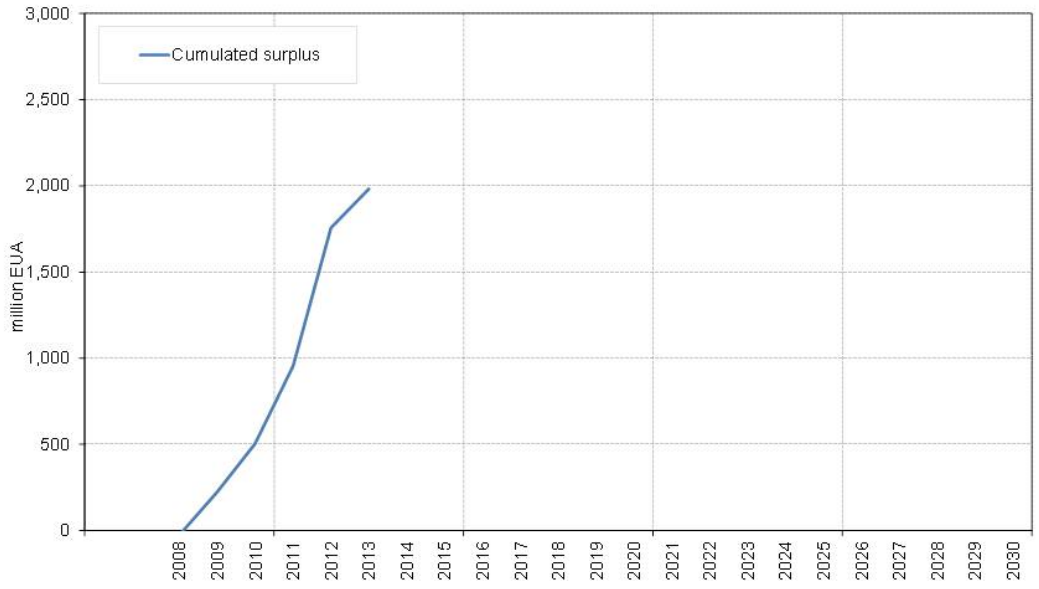
Functioning of the MSR (1): The surplus is an important issue



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Sources: COM (2014) 20/2; EUTL; EEA data viewer; EEA (2014) Trends and Projections in Europe; Öko-Institut calculations 4

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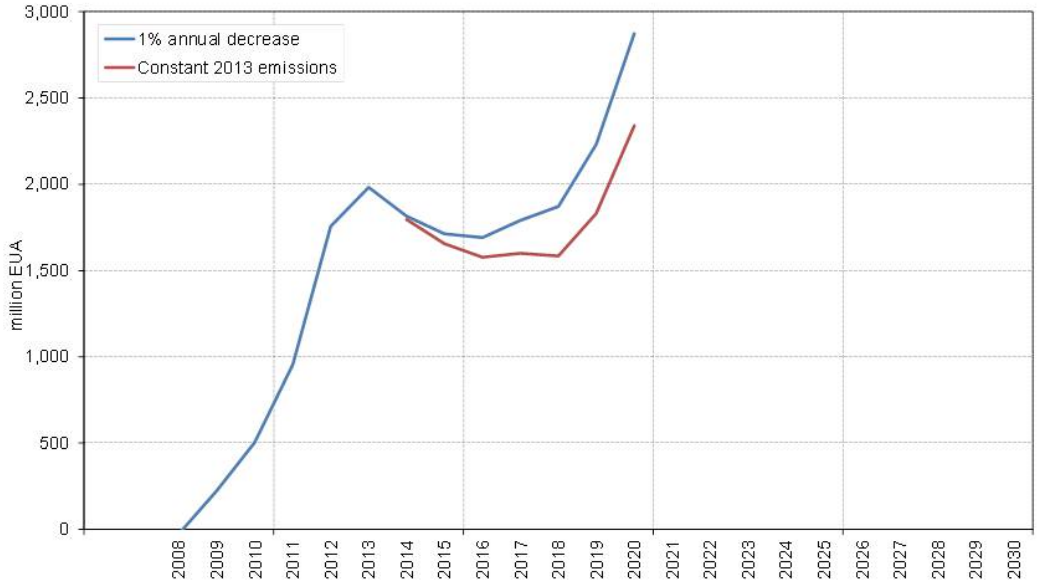
Functioning of the MSR (2): Evolution of the surplus until 2020



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Sources: COM (2014) 20/2; EUTL; EEA data viewer; EEA (2014) Trends and Projections in Europe; Öko-Institut calculations

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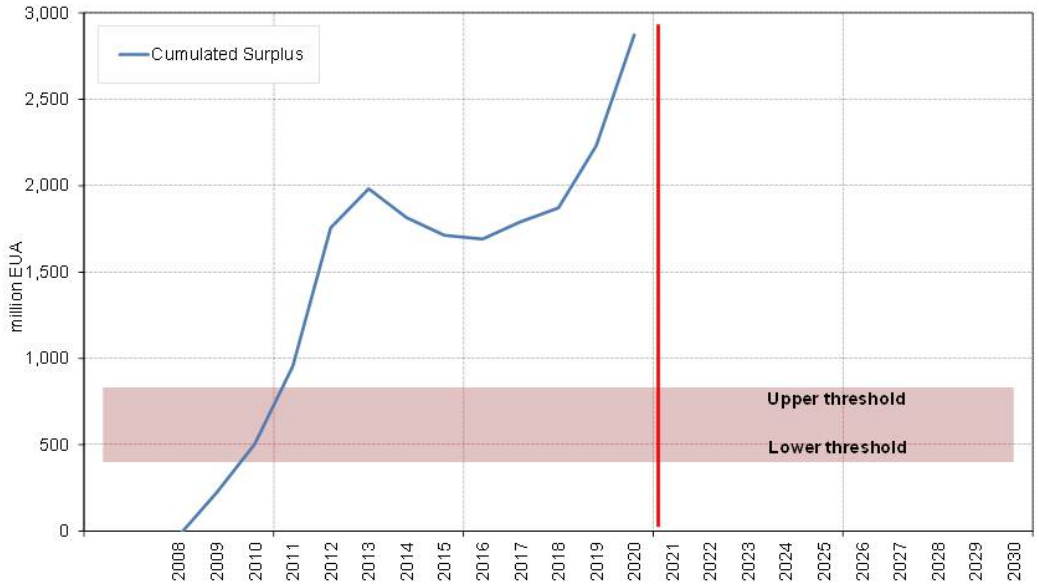
Functioning of the MSR (3): The hedging corridor



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Sources: COM (2014) 20/2; EUTL; EEA data viewer; EEA (2014) Trends and Projections in Europe; Öko-Institut calculations

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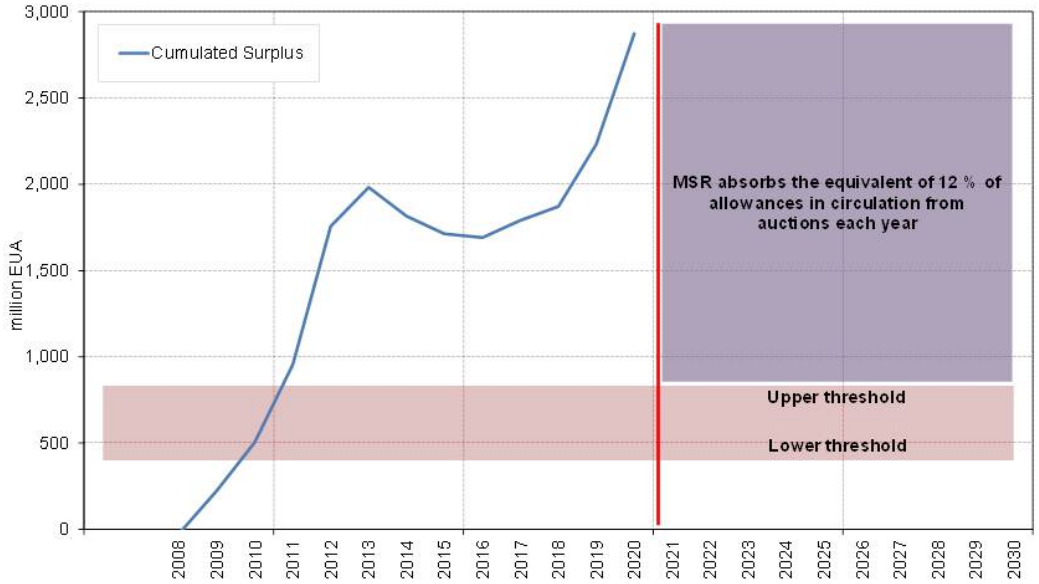
Functioning of the MSR (4)



Sources: COM (2014) 20/2; EUTL; EEA data viewer; EEA (2014) Trends and Projections in Europe; Öko-Institut calculations

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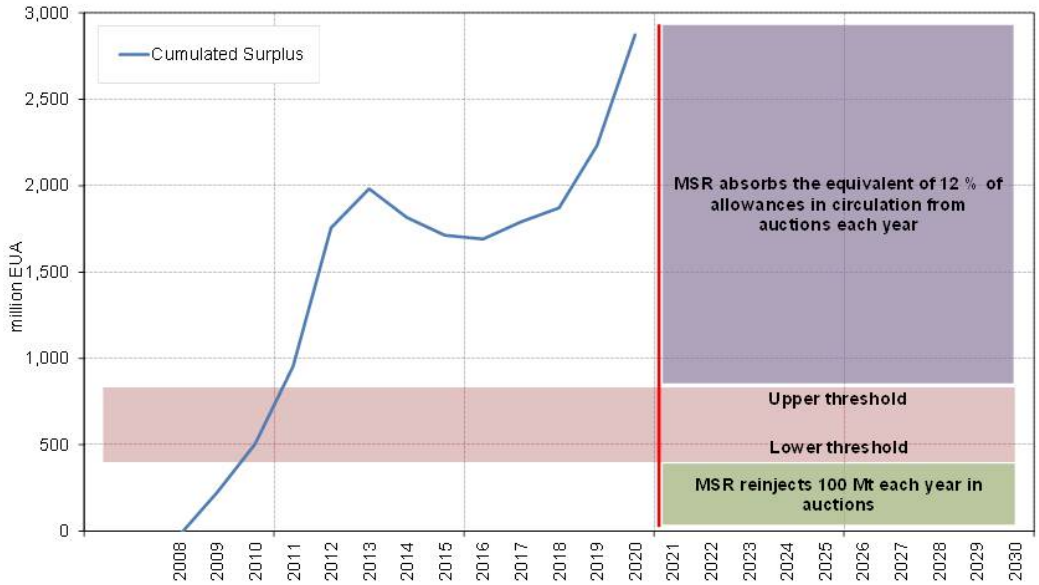
Functioning of the MSR (5)



Sources: COM (2014) 20/2; EUTL; EEA data viewer; EEA (2014) Trends and Projections in Europe; Öko-Institut calculations

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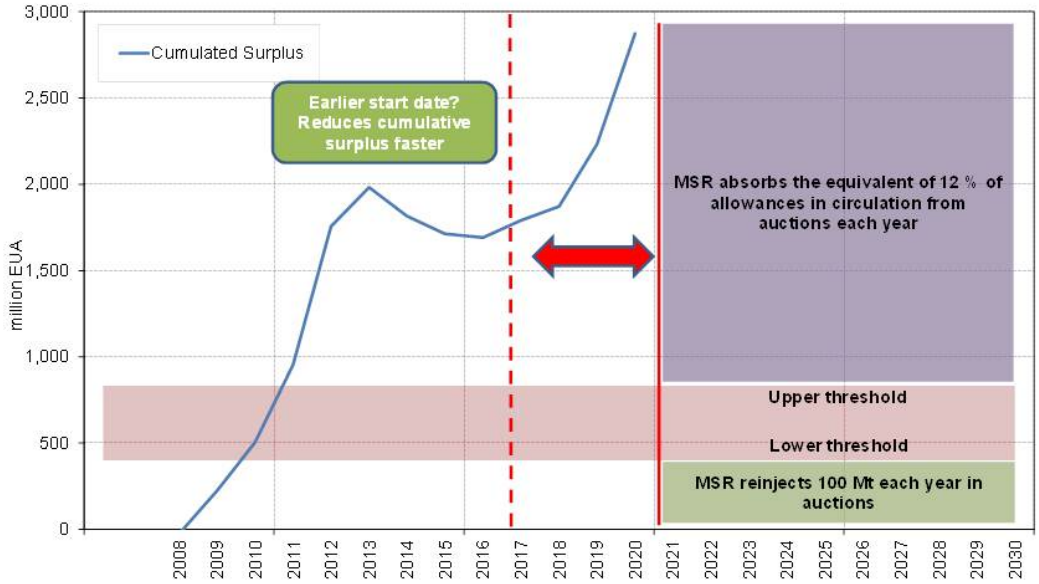
MSR Proposals: Earlier Start Date?



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Sources: COM (2014) 20/2; EUTL; EEA data viewer; EEA (2014) Trends and Projections in Europe; Öko-Institut calculations

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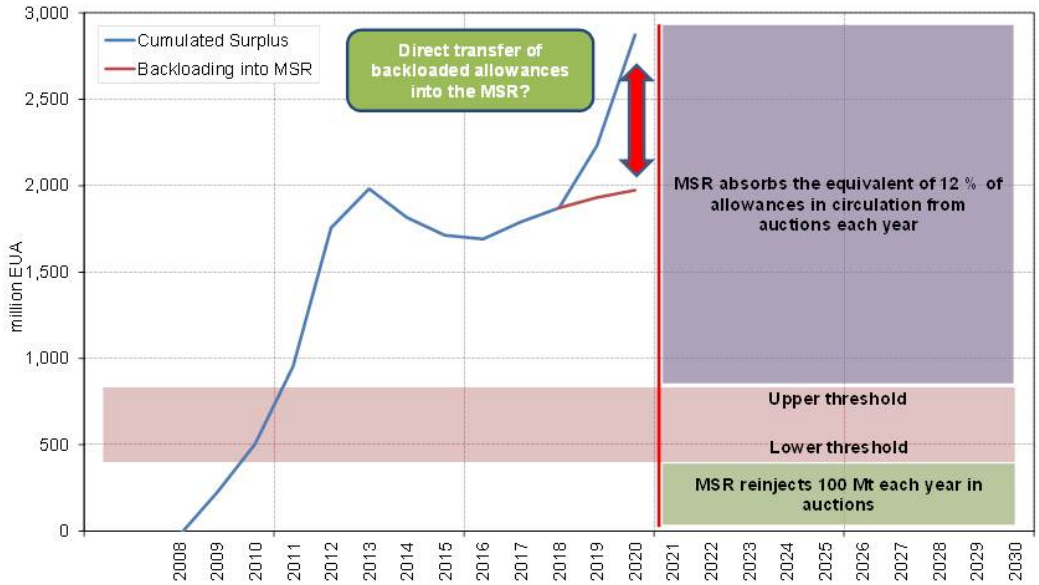
MSR Proposals: Re-introduction of backloaded allowances?



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Sources: COM (2014) 20/2; EUTL; EEA data viewer; EEA (2014) Trends and Projections in Europe; Öko-Institut calculations

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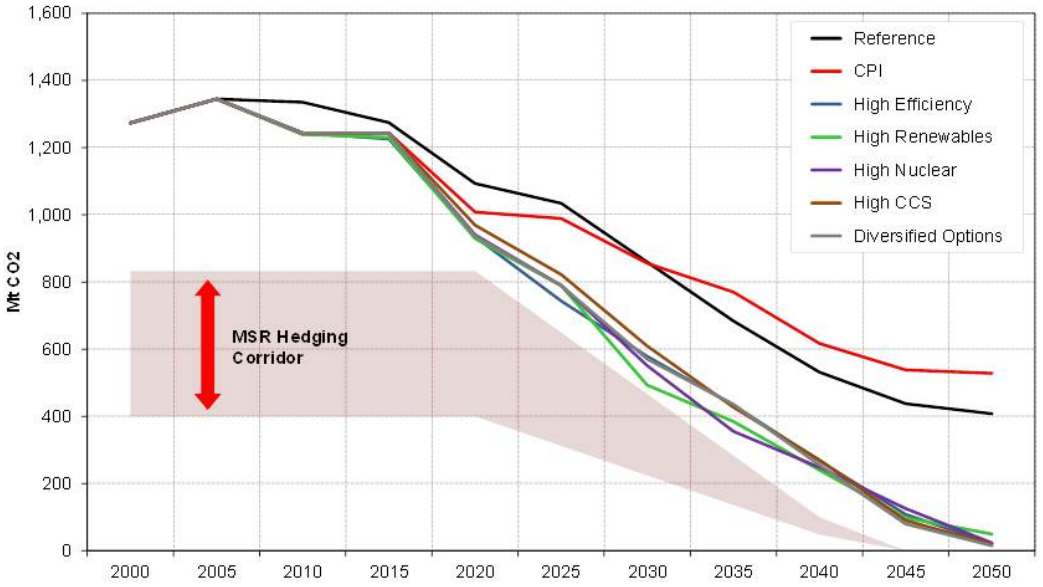
MSR Proposals: Decreasing hedging corridor?
Upper band of HC shrinks at 2 x LRF (2,2%) p.a



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Sources: COM (2014) 20/2; EUTL; EEA data viewer; EEA (2014) Trends and Projections in Europe; Öko-Institut calculations

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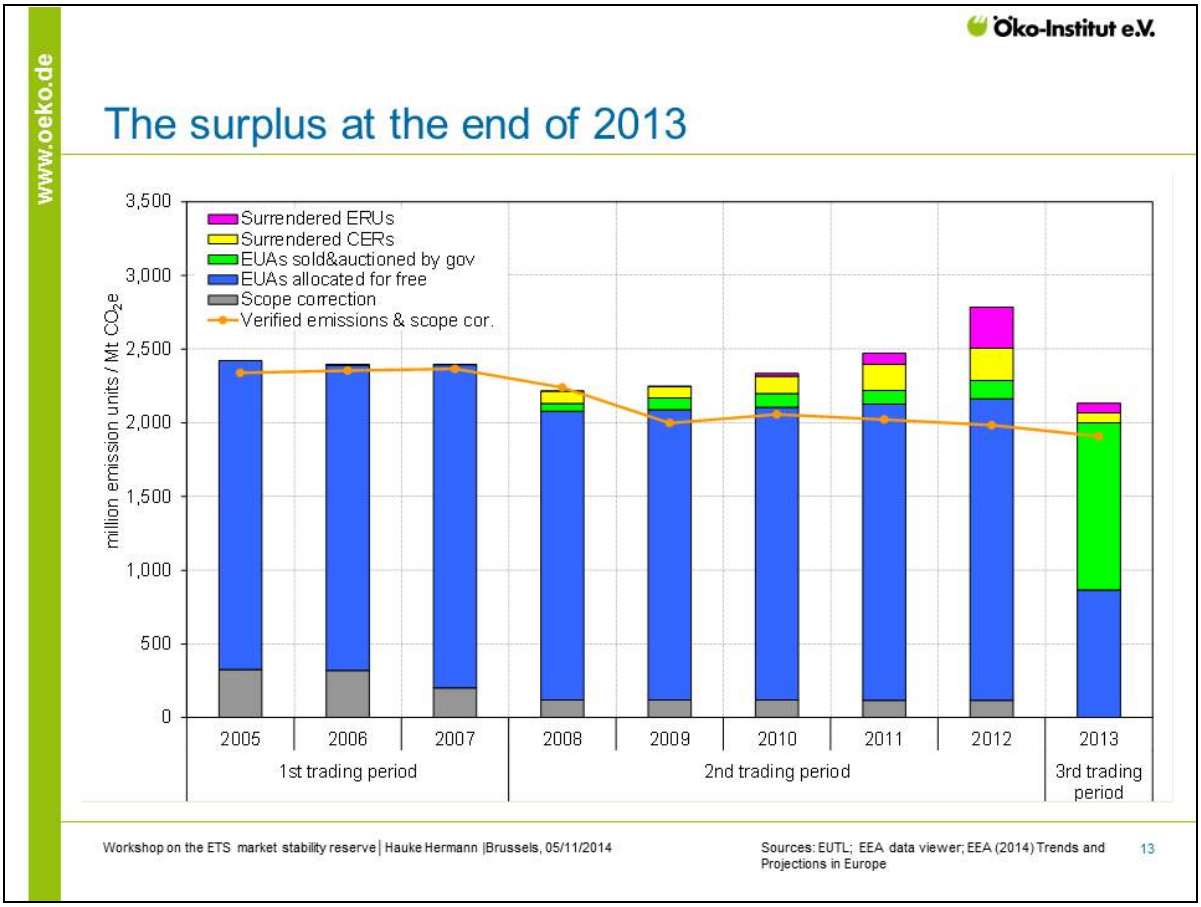
Thank you for your attention!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The surplus at the end of 2013
million emission units / Mt CO2e
3,500
3,000
2,500
2,000
1,500
1,000
500
0
Surrendered ERUs
Surrendered CERs
EUAs sold&auctioned by gov
EUAs allocated for free
Scope correction
Verified emissions & scope cor.
2005
2006
2007
2008
2009
2010
2011
2012
2013
1st trading period
2nd trading period
3rd trading period
Workshop on the ETS market stability reserve | Hauke Hermann |Brussels, 05/11/2014
Sources: EUTL; EEA data viewer; EEA (2014) Trends and Projections in Europe
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Presentation by Marcus Ferdinand

The Market Stability Reserve

Impact on EU ETS market balance and prices

Marcus Ferdinand
Head of EU carbon analysis

POINT CARBON

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Conclusions

- Speed of oversupply reduction mainly dependent on
  - Handling of backloaded volume
  - Start date
- Resilience against future shocks: MSR will partially mitigate effects of lower economic growth
- The MSR will incentivise more abatement via the EU ETS
- Without MSR, oversupply remains high towards 2030

POINT CARBON

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Thank you very much for your attention!

Marcus Ferdinand
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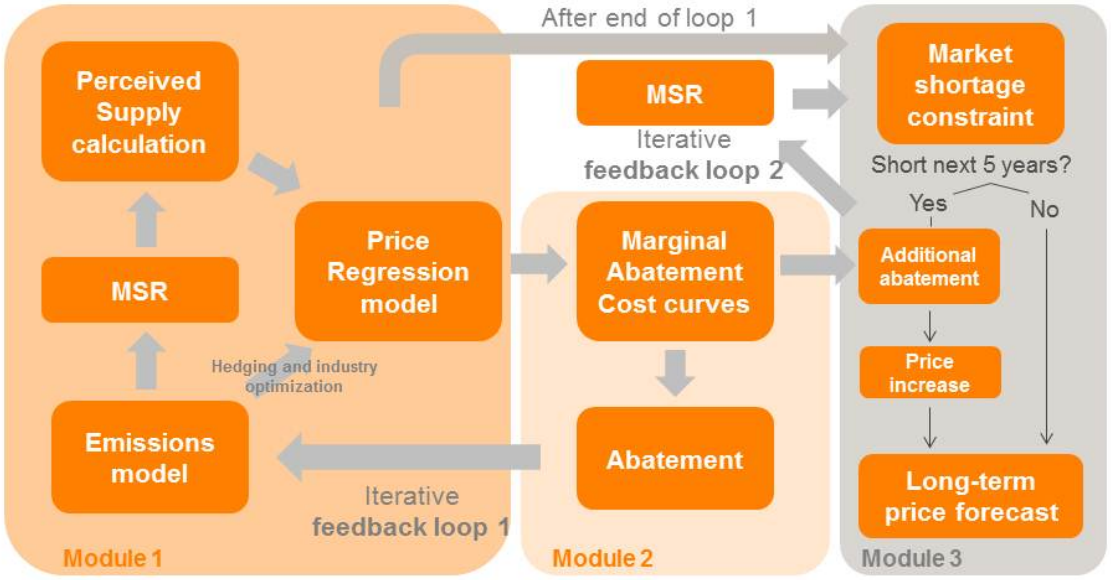
Price forecast model



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Interaction between prices and abatement

- Models annual abatement resulting from annual average carbon price
- Power sector:
  - Abatement represented by fuel switching
- Industry sector and aviation:
  - Abatement sector specific
  - Abatement technologies are irreversible
  - Delayed investments
- A numerical optimization algorithm used to model the interaction between price and abatement

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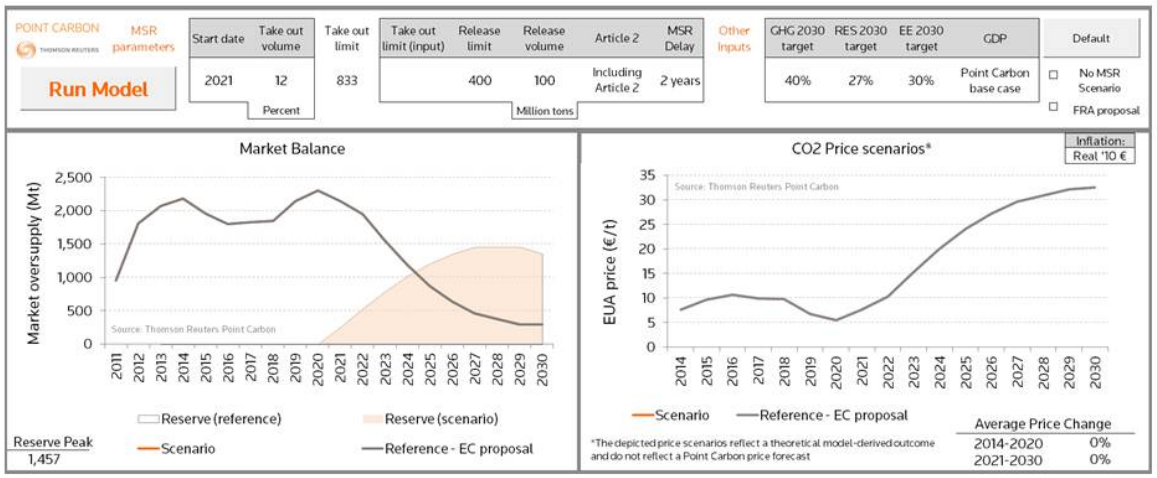
EC proposal



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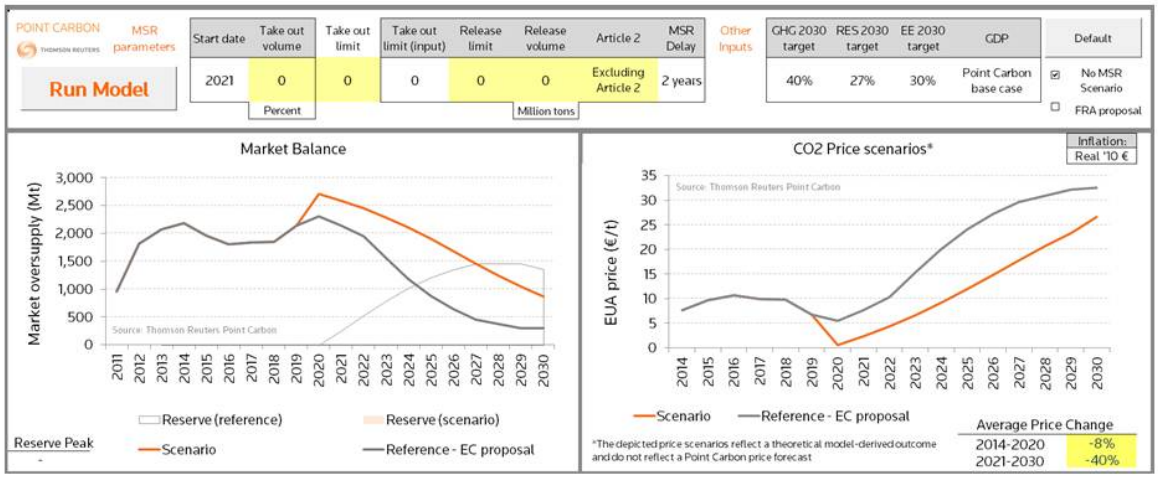
No MSR



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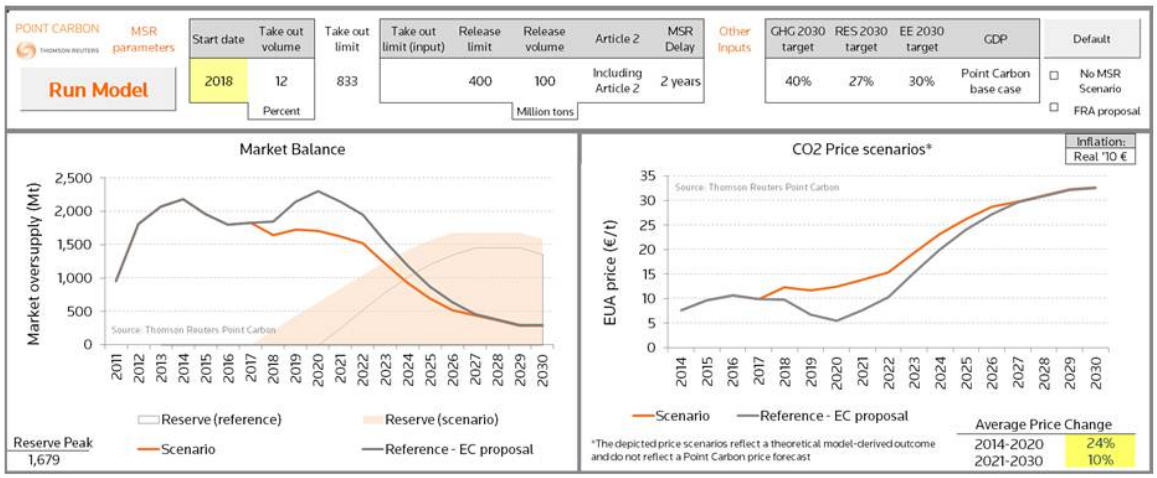
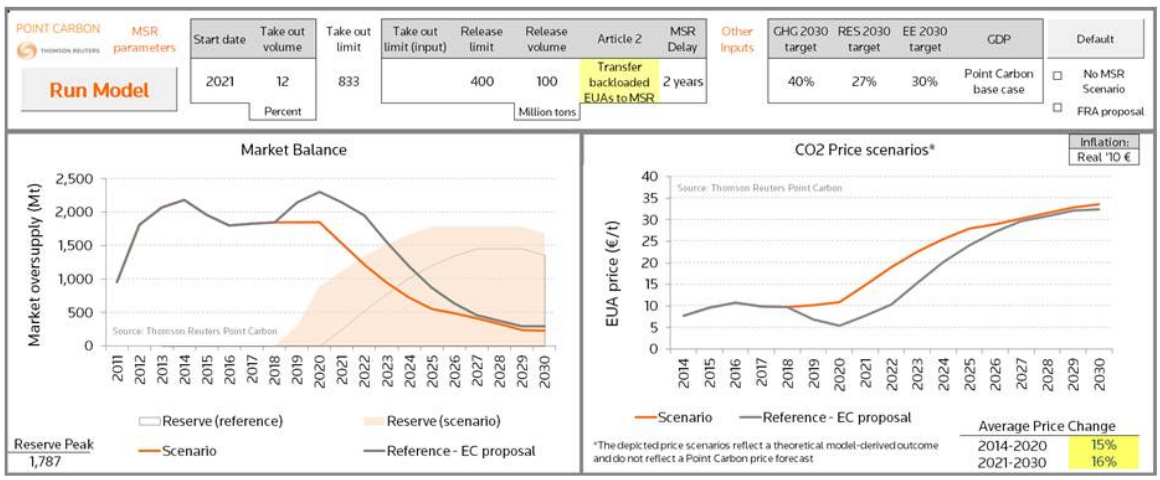
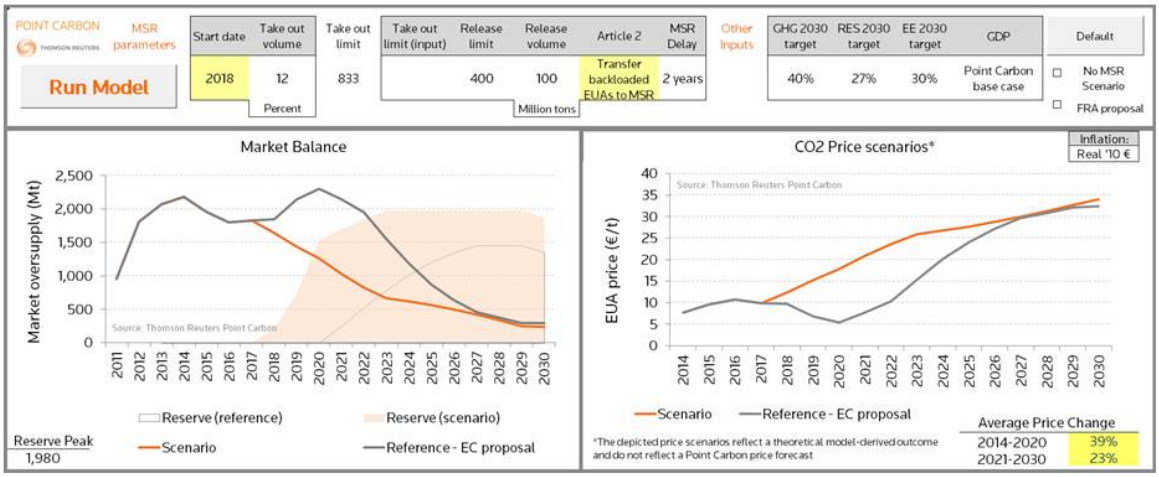
Early implementation (2018)



Transfer of backloaded allowances to reserve



Transfer allowances + 2018 start



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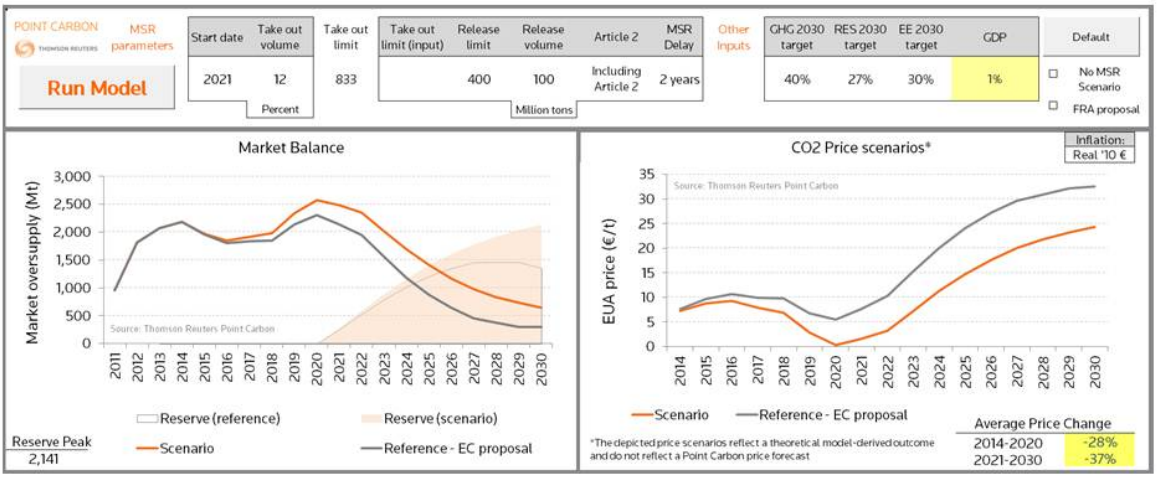
Low GDP growth scenario (1% p.a. 2014-2030)



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MSR Scenarios	Year when surplus falls within chosen surplus band	Average 2014-2020 price (€/t)*	Average 2021-2030 price (€/t)*	Abatement triggered by EU ETS (2014-2020) (Mt)	Abatement triggered by EU ETS (2021-2030) (Mt)	Allowances in reserve in 2030 (Mt)
Commission proposal	**2026**	**~9**	**~23**	**116**	**1,564**	**1,357**
Early Start (2018)	one year earlier	+2	+2	+41	+170	+222
Transfer of 900 Mt backloaded allowances to the MSR	two years earlier	+1	+4	+22	+235	+330
German proposal	four years earlier	+3	+5	+70	+399	+523
French proposal	two years earlier	No change	No change	No change	-44	-359
Alternative thresholds (1,000 Mt - 600 Mt)	one year earlier	No change	-1	No change	-61	-204
Alternative thresholds (600 Mt - 200 Mt)	one year later	No change	No change	No change	+36	+177
Alternative size of MSR adjustments (20% take out)	two years earlier	No change	+3	No change	+214	+170

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Presentation by Luca Taschini

The EU ETS Market Stability Reserve: A Responsiveness Mechanism

Luca Taschini

London School of Economics
Grantham Research Institute

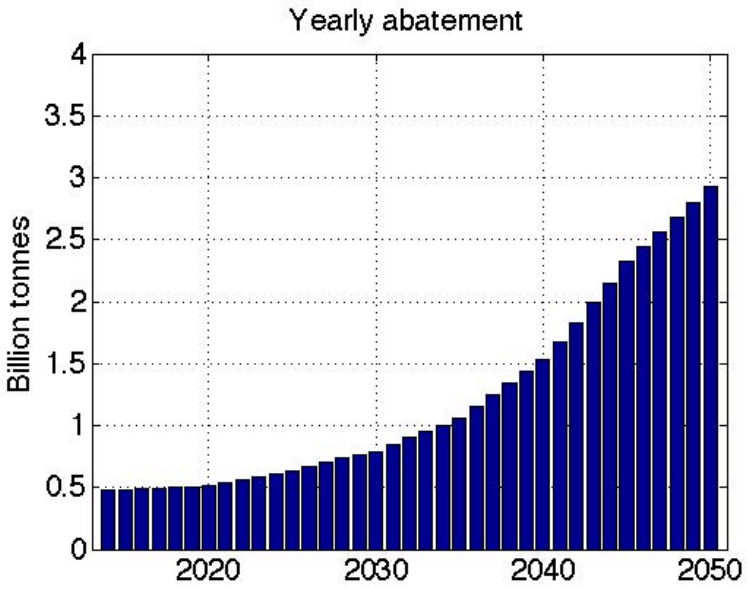
Workshop on the EU ETS Market Stability Reserve
European Parliament - Brussels, November 5, 2014

The problem: policy design under uncertainty

- By choosing a specific instrument for implementing an intended policy (carbon tax or emission permits), planners are at least temporarily locking themselves into certain consequences.
- The current inflexible supply of permits is not responding to fundamental changes in the permits demand due to economic shocks and technology advancements.
- In particular, the economic recession (a large-scale unforeseen event) reduced the permits demand depressing prices.

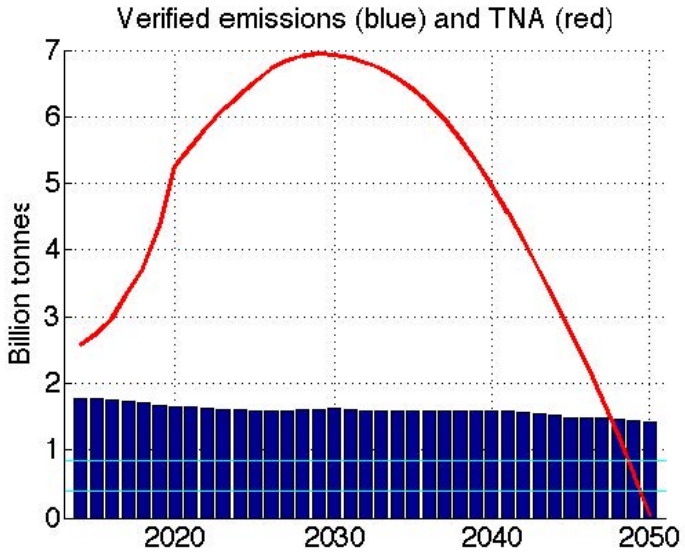
What is the optimal outcome?

- Under no uncertainty and complete information, firms solve their abatement problem obtaining an optimal outcome.



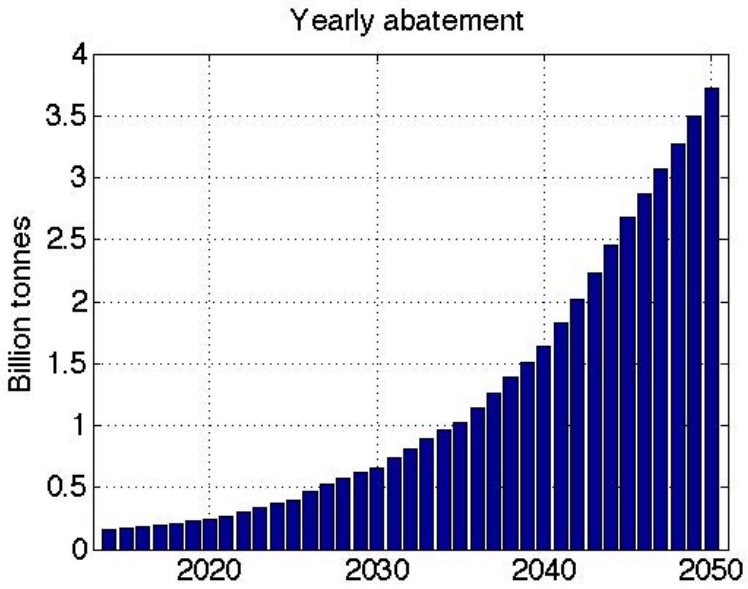
What is the optimal outcome?

- A large *surplus* in the system could be the result of early abatement in light of scarcity expected in the future.
- The cap is fixed - what matters is how emissions are distributed.



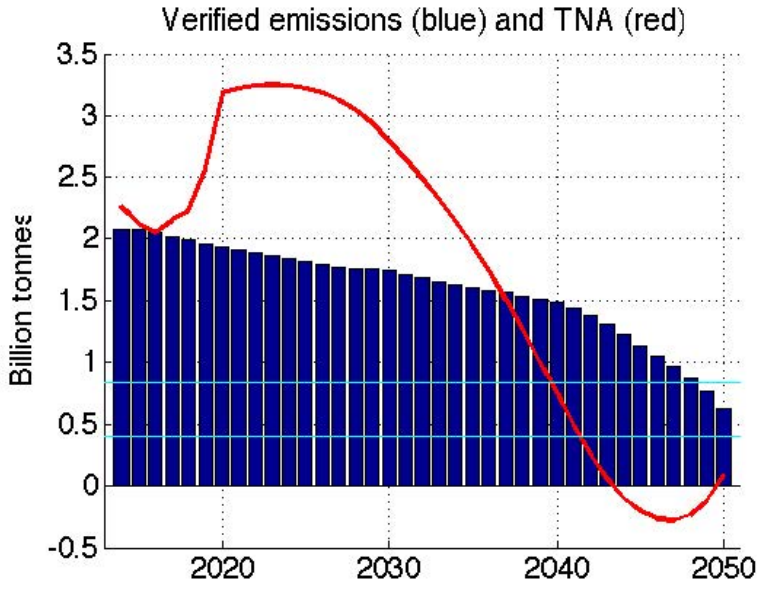
Uncertainty and incomplete information

- In reality businesses operate under uncertainty about the economy and the future policies.



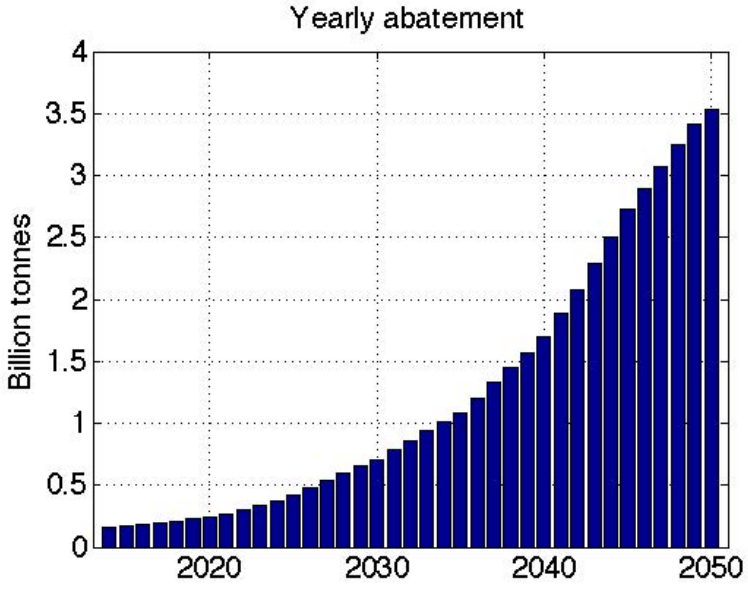
Uncertainty and incomplete information

- Uncertainty and large-scale unforeseen events lead to sub-optimal outcomes.



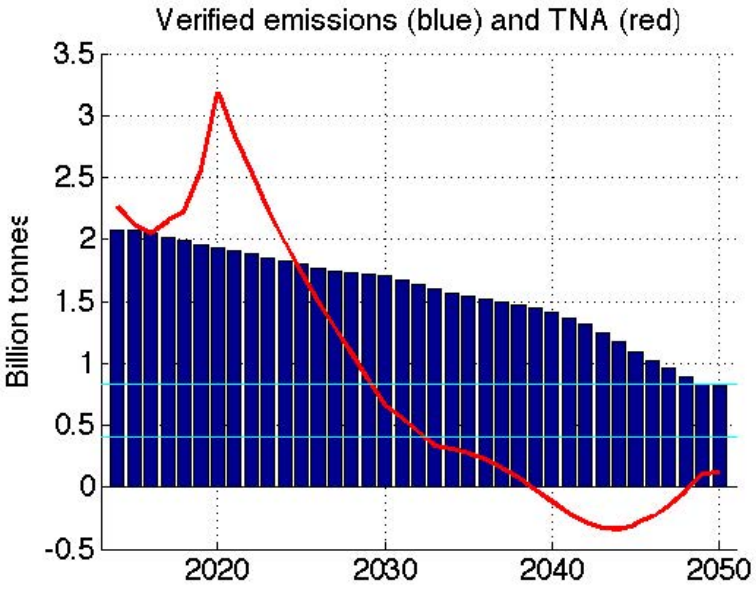
What is the role of the MSR?

- The allowance demand-supply imbalance – as measured by excessive *surplus* – may be the result of large-scale unforeseen events and higher perceived uncertainty.



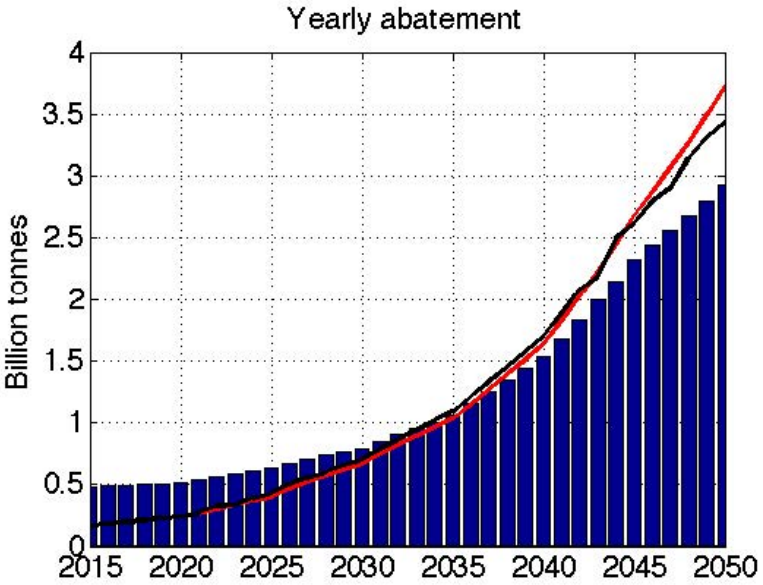
What is the role of the MSR?

- The MSR aims at making the EU ETS responsive to shocks in the future and thereby minimise the possible deviations from the optimal pathway.



The role of the MSR

- The MSR reduces sub-optimality inducing earlier emission reductions - red without MSR and black with MSR.



Conclusions and policy considerations

- Uncertainty and incomplete information lead to sub-optimal outcomes and call for policy adjustments.
- The MSR mitigates the impact of unanticipated shocks.
- The MSR reduces sub-optimality inducing earlier emission reductions.
- However, MSR parameters matter:
  - a large surplus in the system could be the result of early abatement;
  - withholding and injection thresholds should be set properly (adjustable).

Thank you very much for your attention.

Luca Taschini
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London School of Economics
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Figures based on the paper Kollenberg and Taschini (2014)

Presentation by Andrei Marcu

Market Stability Reserve

Environment Committee Workshop

November 5, 2014, Brussels

Andrei Marcu

Head, CEPS Carbon Market Forum

What problem are we solving?

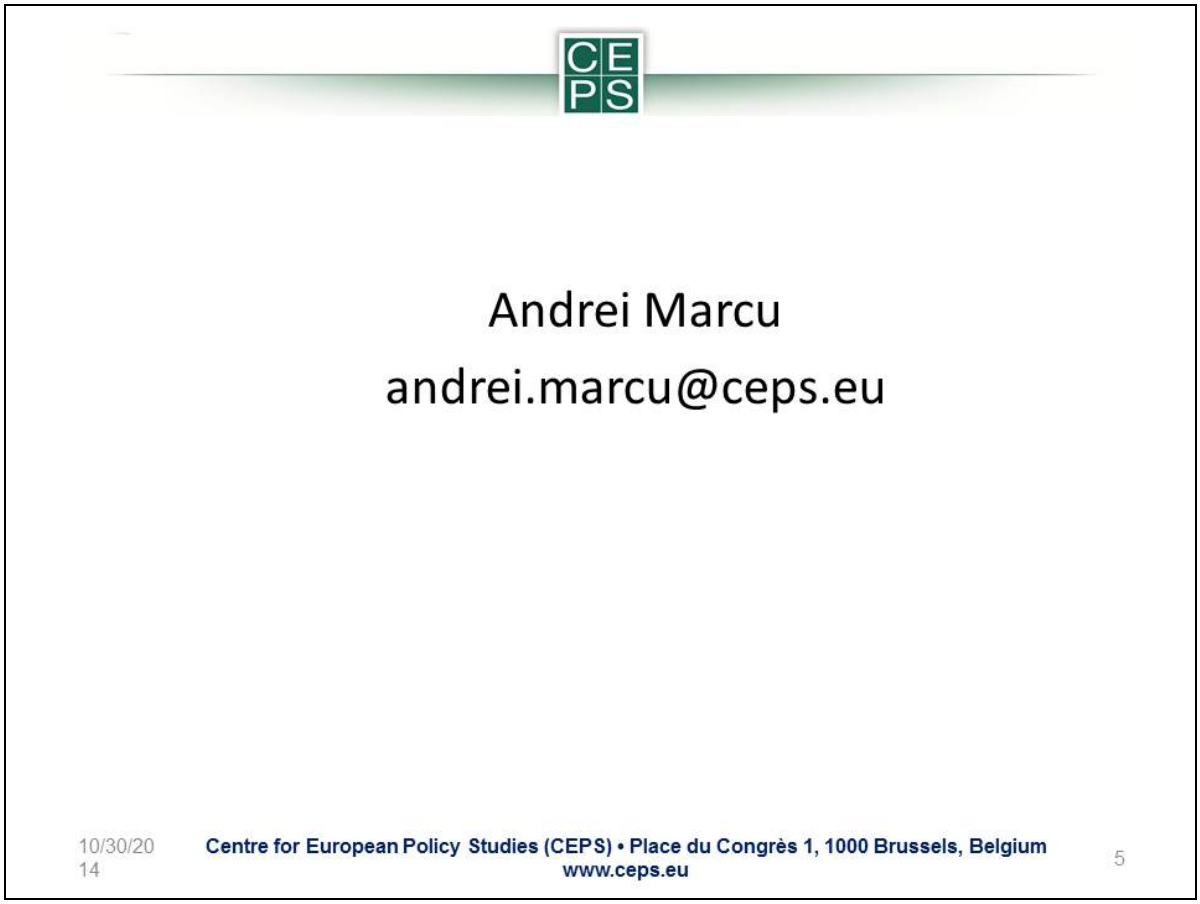
- EU ETS objective: promote reductions of GHG in a cost effective and economically efficient manner
- Design flaw: lack of supply side flexibility in the EU ETS
- Symptom: prices that are unlikely to represent 2050 GHG limits and affecting LT effectiveness of the EU ETS
- Loss of effectiveness of the EU ETS is a concern as it provides the case for ET
- Price not reflecting LT scarcity due to
  - Market design
  - Nature of market – young
  - A ST view of a LT problem

MSR as solution

- MSR solves the AUCTIONING part of the problem
- Current EC proposal has an impact in the long-term, but no significant immediate impact
- Parameters that influence the MSR impact
  - Start date
  - Treatment of back loaded amount
  - Bandwidth (thresholds)
  - Removal (and injection) rates
- Separately Early Start and No Back loaded reinjection don't have a quantum impact, more marginal
- Treatment of back loaded amount seems to have more impact
- The joint approach would represent a visible change
- A number of questions that may benefit fro further reflection here or outside this workshop

Question for reflection from presentations

- What is the purpose of the MSR, what does it try to solve?
- Can the MSR solve the whole problem, what is missing?
- What is the rationale for waiting, if the MSR addresses a flaw?
- What adjustments are needed and how is that adjustment addressed?
- Impact of Council conclusions on the debate?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