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FSR REGULATORY POLICY WORKSHOP SERIES 2017-2018

THE REFORM OF THE EU ETS AND ITS IMPLICATIONS FOR THE ENERGY MARKETS

Scientific Organisers:

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Teatro

Badia Fiesolana, Via dei Roccettini, 9 - San Domenico di Fiesole

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■ INTRODUCTION

The increasing penetration of renewable-based generation in the electricity sector poses challenges to the operation of energy systems, due to the greater variability of the generation levels of some of these technologies. A larger share of renewable-based generation in the electricity market is also creating concern to the extent that this generation is promoted through support mechanisms which prevent it from being exposed to market/price signals. While improvements in the design of support mechanisms have been introduced to address this concern (e.g. by replacing feed-in tariffs with feed-in premia and allocating the support through auctions), the fact remains that a shrinking share of generation is fully exposed to market signals/prices.

At the same time, the continuous support for renewable-based generation, even for mature technologies, is advocated on the basis that market prices do not currently internalise some of the negative externalities associated with electricity generation using conventional technologies. One of these externalities is clearly the impact on the climate of greenhouse gas (GHG) emissions from fossil fuel-based electricity generation.

The EU Emission Trading Scheme (ETS), introduced in 2005, is supposed to address this market failure, by creating a market for GHG emission allowances (EUAs), thus setting a price for carbon emission reflecting their negative externalities.

However, while the fundamental design of the EU ETS seems appropriate to address the above-mentioned market failure, its implementation has been hindered by the economic crises of the last decade, as well as by overlapping targets for the different EU environmental policy objectives (energy efficiency, renewables penetration and GHG emission reductions). As a result, EUAs have traded between 4€/tCO₂ and 8€/tCO₂ over most of the last five years, reaching as low as 3€/tCO₂ in March 2013. These levels are well below those which are believed to be necessary to promote any

fuel/technology switching.

The European Commission is currently revising the EU ETS system for the period beyond 2020. This new system includes, among other things, a new emissions reduction target of 43% by 2030 (compared to 2005 levels) and a cap which will be reduced by a linear reduction factor of 2.2% from 2021 onwards (compared to the current 1.74%)[1]. The proposal also includes a set of rules to avoid carbon leakage for sectors facing the highest risk of relocating their production outside the EU, with a gradual phase-out of free allocation for the less exposed sectors after 2026. Finally, the Market Stability Reserve (MSR) mechanism will be revised and made more systematic, doubling the percentage of surplus EUAs to be placed in the Market Stability Reserve (MSR) each year from 12% to 24% over the period 2019-2023.

While the cost of the externalities linked to GHG emissions is difficult to estimate with any accuracy [2], to the extent that the revision of the EU ETS will deliver higher EUA prices[3], pressure on maintaining support for renewables-based generation may lessen. This could be particularly the case for mature technologies, whose costs have significantly decreased over the last few years, as demonstrated by the results of the most recent auctions.

Against this background, the Workshop will consider the way in which the EU ETS might be revised to address the shortcomings identified in its implementation so far and to what extent this revision might result in higher EUA prices. A fundamental step in this process relates to the need of calibrating the EU ETS also considering the interaction with other climate and energy policies, in order to promote possible complementarity across different instruments[4]. The Workshop will also aim at assessing what the implications of such higher EUA prices could be for the prices on the electricity market and to what extent at these prices renewables-based generation would be able to participate in the electricity market without the need for further support.

[1] See <https://ec.europa.eu/clima/policies/ets/revision>

[2] For a survey on this topic, see Richard S.J. Tol, 2011, The Social Cost of Carbon. Annual Review of Resource Economics, 3:1, 419-443.

[3] For example, EUAs traded in the range 26-29€/tCO₂ in the period February-April 2006 and in the range 26-30 in May-June 2008. In its Impact Assessment, the European Commission used an expected average EUA price in phase 4 (2021 - 2030) of € 25 (https://ec.europa.eu/clima/sites/clima/files/ets/revision/docs/impact_assessment_en.pdf).

[4] I4CE, Enerdata, IFPEN (2015). Exploring the EU ETS beyond 2020: A first assessment of the EU Commission's proposal for Phase IV of the EU ETS (2021-2030). COPEC Research Program: the Coordination of EU Policies on Energy and CO₂ with the EU ETS by 2030. November 2015. Available at <http://www.i4ce.org/wp-core/wp-content/uploads/2015/11/15-11-30-COPEC-FULL-REPORT.pdf>

■ PROGRAMME

- 08.30 - 08.45 *Welcome Coffee*
- 08.45 - 09.00 Welcome Address
Jean-Michel Glachant | Florence School of Regulation
- 09.00 - 09.15 Introduction to the Workshop
Simone Borghesi | Florence School of Regulation and University of Siena
Alberto Pototschnig | Florence School of Regulation

SESSION I - THE EU ETS BEYOND 2020

Chair: **Simone Borghesi** | Florence School of Regulation and University of Siena

- 09.15 - 09.50 The new EU ETS in the Policy Mix
Francesco Nicolli | Florence School of Regulation
- 09.50 - 10.25 Responsiveness in Cap-and-Trade Systems and the Case of the Market Stability Reserve
Luca Taschini | London School of Economics and University of Verona
- 10.25 - 11.00 EU ETS Reform and its Implementation: ENEL's Perspective
Mariano Morazzo | ENEL
- 11.00 - 11.15 General Discussion
- 11.15 - 11.45 *Coffee Break*

SESSION II - THE IMPLICATIONS OF THE EU ETS REFORM FOR THE WHOLESALE ELECTRICITY MARKET

Chair: **Alberto Pototschnig** | Florence School of Regulation

- 11.45 - 12.10 Session Introduction: Setting the Scene
Virginia Canazza | REF-E
- 12.10 - 12.45 Energy Sector Representatives
Kristian Ruby | Eurelectric
Regina Mandic | EFET
- 12.45 - 13.45 *Lunch*

13.45 - 14.35	<p>Roundtable of FSR Donors</p> <p>Simone Mori ENEL</p> <p>Andrew Nind Baringa</p> <p>Michel Matheu EDF</p> <p>Steffen Löbner EEX on behalf of EPEX Spot</p> <p>Agime Gerbeti GSE</p>
14.35 - 15.20	<p>Roundtable of Regulatory and Market Design Experts</p> <p>Massimo Ricci ARERA</p> <p>Andrew Claxton Ignis Markets</p> <p>Mathieu Fransen ACM</p>
15.20 - 15.40	<p>General Discussion</p>
15.40 - 16.00	<p>Conclusions</p> <p>Simone Borghesi Florence School of Regulation and University of Siena</p> <p>Jean-Michel Glachant Florence School of Regulation</p> <p>Alberto Pototschnig Florence School of Regulation</p>