



# Final Highlights

## 3<sup>rd</sup> CA-RES3 Plenary Meeting

25<sup>th</sup> - 26<sup>th</sup> April 2018, Warsaw



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# Core Theme 1: RES Electricity

## Headline 1: Challenges of Technology-Neutral Auctions. Design Options and Experiences

The first session of CT1 discussed the challenges of technology-neutral auctions. The State Aid Guidelines for environmental protection and energy 2014-2020 have introduced the principle of technology-neutral auctions. Since then, many Member States have either already implemented or are planning to implement technology-neutral auctions in the near future. However, implementation of such auctions proves to be challenging for many Member States, among others, due to grid/system/market integration, geographical distribution, and uncertainty regarding the long-term potential of technologies. During the session, CT1 participants discussed recent experiences, while exploring the various auction design options Member States have chosen for technology-neutral tenders. Participants discussed whether specific auction designs can address concerns related to technology diversification, grid stability and system integration. The participants concluded that integrating objectives other than cost-efficiency in the auction design of technology-neutral auctions is challenging. Finally, CT1 participants found that comparing results of technology-neutral auctions across Member States remains complex, since each Member States uses different types of auction designs.

## Headline 2: National Planning for the 2020 RES Targets in the Electricity Sector. Lessons Learned for the Next Decade

Under the current RES Directive, National Renewable Energy Action Plans (NREAPs) have been a critical tool for integrated planning of renewables deployment towards the 2020 RES targets in each Member State. With the proposal for a new regulation on the Governance of the Energy Union, the central element of National Energy and Climate Plans (NECP) has been introduced. In the second CT1 parallel session, participants discussed the experiences made and lessons learned with national planning for the 2020 RES targets in the electricity sector with the NREAPs with the hope of identifying good practices for the future. No formal regional consultation of NREAPs took place in the 2020 context, but a multitude of well-functioning regional cooperation formats are available and can be used for NECP consultations. During the discussions, CT1 participants discussed the importance of regional consultation for better coordination of national energy policies and identification of cooperation opportunities.

Additionally, the CT1 Taskforce on factors that influence renewable energy initiatives presented its first results to the CT1 participants. Renewable energy cooperation and cross-country electricity trade is expected to play an increasing important role in the future EU energy market. The CT1 Taskforce has the aim of understanding those factors that have affected renewable energy cooperation in Europe.



## Core Theme 1 & 2: RES Electricity & RES Heat

### Headline for the Joint Session: Self-Consumption Combined with Heat Pumps and Storage. Options for Flexibility and System Integration of Renewables

This joint session was led by Core Themes 1 and 2, bringing together their separate initial explorations of the topic of self-consumption during the 2<sup>nd</sup> Plenary Meeting in Zagreb. The CT2 Taskforce on the topic of self-consumption of renewable heat was extended to include aspects (and members) from CT1 in order to include the overall perspective for the electricity system, in particular effects on the grid and the flexibility potential of self-consumption combined with heat pumps and storage.

The joint session explored different aspects how power-to-heat both at the centralized level and at the prosumer level can contribute to the energy system. To achieve a contribution to decarbonisation through power-to-heat, high efficiency technologies (e.g. heat pumps) and a relatively high share of RES in electricity are necessary. The participants of the joint session found that the aspect of flexibility provision through power-to-heat is of mixed importance for participating Member States, depending on their share of variable RES and on their local distribution. Although flexible power to heat options at a large scale level are considered a relevant option in some MS for balancing purposes, currently numerous barriers to using power-to-heat exist, including high regulatory price components for electricity, relatively stable prices (ie low differential between peak and off peak prices), which do not make flexibility provision economically viable and need to be addressed.

At a household level a further barrier is the missing rollout of smart meters in some MS. The participants concluded that the potential of using power-to-heat to increase self-consumption strongly depends on the region and does not necessarily provide benefits for the overall system. Furthermore, for it to be successful in the future – MS raised the point that it would require greater public awareness for householders to “buy-in” to the concept. The use of power-to-heat technologies varies strongly between member states, where use on the prosumer level to increase residual self-consumption is not very relevant at the time being, but might become more relevant in the future.



## Core Theme 2: RES Heat

### Headline 1: Renewable Cooling - Challenges and Solutions for Recognising the Contribution of Cooling towards Achieving the RES Directive Targets

Core Theme 2 on RES Heat held a total of three parallel sessions on the topic of renewable cooling, a topic that was determined to be of interest during the 2<sup>nd</sup> Plenary Meeting in Zagreb.

During the 1<sup>st</sup> parallel session, participants were provided with an overview of the broader policy context of the topic through two presentations, one by a representative from Eurostat and the second by a representative of the Joint Research Centre (JRC). These helped to understand current energy statistics concepts and methodology and the role renewable cooling plays towards the achievements of the 2020 RES targets. The discussion showed that there is currently no agreed upon EU-wide definition of renewable cooling. As a result, limited data on the cooling demand and renewable cooling share is collected across Europe. Cooling makes a substantial share of final energy demand, but the contribution that could come from renewables would be highly dependent on how the concept is defined. Furthermore, Spain presented current local renewable cooling projects and technologies that are in place.

The 2<sup>nd</sup> parallel session of CT2 focussed on the status of renewable cooling within the participating Member States. The CT2 Leader presented the results of their scoping exercise of current renewable cooling practices within Europe. The Netherlands and Portugal provided information on their efforts to increase the share of renewables in cooling.

During the 3<sup>rd</sup> parallel session, participants were treated to a presentation by a representative of the Oeko Institut, who presented the initial results from a study looking to collect background information on current and future cooling demand in the EU. The study also looked at available renewable cooling technologies and explored possible methodological approaches for calculating renewable cooling. Another presentation was given by the European Geothermal Energy Council highlighting developments in renewable cooling technologies.

The discussions that took place during the three parallel sessions of CT2 showed that it was difficult finding agreement on a calculation methodology and definition of renewable cooling among the participating Member States. The participants pointed out that the definition can have a significant impact on how renewable cooling is incentivised. They, however, largely agreed that minimum efficiency standards should be set for cooling technologies as with heat pumps used for heating.



## Core Theme 3: Guarantees of Origin & Disclosure

### Headline 1: Usage of GOs across Sectors. The Case of the Transport Sector

The discussions in the first parallel session of CT3 complemented previous discussions related to energy conversion and energy usage across sectors (“Sektorkopplung”) and the consequences these issues could have for GOs. Participants discussed the use of Guarantees of Origin (GOs) in the transport sector and specifically how the connection between these two areas is growing, for example due to the usage of biomethane or renewable energy electricity at charging stations. Participants discussed how GOs are currently being used in RES in transport, while discussing options to continue doing so in a transparent way in order to avoid double-counting. Participants concluded that it is imperative to look into the consistency of rules coming from different policies and regulations in this regard.

### Headline 2: Large versus Small Consumers

An external speaker was invited in order to bring insights to the discussion from the consumer perspective, in particular from the side of large corporations. Participating countries came to the conclusion that a significant share of the market demand is now coming from corporate buyers or through public procurement. Large consumers tend to make three types of claims, namely renewable energy use, carbon footprint and additionality. Most large corporations tend to choose unbundled electricity products, having one contract with an electricity supplier and a separate contract with a GO supplier. In case of unbundled purchase of GOs, there is a need for regulation and 3<sup>rd</sup> party auditing. As such, GOs are a crucial element to bring such information from the producers to the consumers.

### Headline 3: Environmental Information Contained in GOs

During the 3<sup>rd</sup> CT3 parallel session, participants explored the information items provided in GOs and whether or not some of this information is used by the market or regulatory (governmental) bodies. The discussions showed that some Member States are using the various information contained in GOs, for example, to identify which electricity will be auctioned. In some participating countries, the information in the GOs can provide crucial information like the country or region of production or the exact source of electricity production.



## Core Theme 4: Biomass Mobilisation and Sustainability

### Headline 1: Biomass Trade inside the EU. The Role of Biomass Exchange Platforms

CT4 participants explored the concept of biomass exchange platforms and whether their development could lead to more efficient local biomass markets and biomass trade inside EU and thus consequently could help Member States to reach their renewable energy targets. Lithuania recently introduced a regulation on biomass exchange in order to improve their local markets for bioenergy. A representative from BALTPOOL, the company in charge of the exchange platform (<https://www.baltpool.eu/en/>), presented the system and explained how the platform improves local bioenergy markets by reducing bioenergy prices, fostering the emergence of new market players and the introduction of product standards. Not only did the platform improve the transparency of the market, it also reduced fragmentation. Platforms of this kind can also integrate sustainability criteria, facilitating the purchase of sustainable biomass by market participants. In conclusion, participants discussed the potential of replication in other Member States and the possibility to make use of such platforms not only for domestic trade, but also for biomass trade across Member States.

### Headline 2: Cascading Use of Solid Biomass. State-of-Play in MS and Role of Sustainability Schemes

Sustainability of the sourcing of biomass is a requirement for the current acceptance of bioenergy. The concerns related to this issue go way beyond the cultivation and collection of biomass and also touches upon how bioenergy has an impact on the material use of biomass. As a result of these concerns, many countries are discussing the pros and cons of cascading with a regard to sustainability considerations. Many participating Member States highlighted the difficulties with this issue in a view to the implementation of the current Renewable Energy Directive. Cascading use of biomass encompasses not only the energy sector, but also agriculture, industry and waste sectors. In addition, there is no common definition, since cascading use depends on (environmental/economic) policy goals, local conditions, project-based approaches and biomass feedstocks, among others.

A guest speaker, who recently reviewed current national sustainability requirements and criteria for solid biomass (<http://onlinelibrary.wiley.com/doi/10.1002/bbb.1822/full>), gave an overview of the framework used today to secure sustainability in several Member States. The European Commission presented a state-of-play of EU bioenergy sustainability policy and the ongoing initiative on a “guidance on cascading use” to be published at the end of 2018. Input from MS for this project is welcomed.

In conclusion, participants discussed the status quo of the state-of-play regarding biomass cascading criteria in order to help improve harmonisation of criteria and reporting requirements, both which are vital for the sustainable mobilisation of bioenergy for the future. Participants came to the



conclusion that market-driven cascading – based on price difference – is already effective, but that support mechanisms must be adapted to avoid distortion on the biomass feedstock markets.

### **Headline 3: Optimising the Use of Biomethane. Current Issues and Policy Trends in MS**

The production of biogas out of mostly wet biomass materials is the most effective way to produce energy out of these materials and could therefore be a major strategy in mobilisation of the biomass streams with limited other potential use. Conversion of this biogas into biomethane, for grid injection or direct use in transport is currently one of the most promising options selected in several Member States. Though the injection of biomethane into the national grid is low, an increase in the short-term is foreseen in a number of Member States. Representatives of France and Italy, in which the injection of biomethane into the grid actively supported or planned for the coming years, gave a short presentation on their national policies. Adaptations to support schemes are ongoing in several Member States either for injection into natural gas grids or for use in the transport sector or in high efficiency CHP plants. Afterwards, CT4 participants discussed both the advantages and disadvantages with a view towards discovering best practices and most efficient options regarding GHG savings.



## Core Theme 5: RES in Transport

### Headline 1: Progress on ILUC Implementation and 2020 Renewable Energy Target

CT5 participants discussed the implementation of the ILUC Directive and progress towards the 2020 target of 10% renewable energy in transport, with the Commission providing an update on recent policy developments and two Member States setting out their respective implementation of the Directive in order to discuss similarities and highlight common challenges. Based on the CT5 survey results, participants also discussed additional measures that some Member States are envisaging to meet the 2020 targets, with two Member States also presenting on their policies that have helped them to already overachieve the 2020 target.

### Headline 2: Alternative Perspectives on Addressing Indirect Land Use Change

In the second session, the discussions turned to the topic of alternative policy measures that are available to Member States to address indirect land-use change (ILUC) risks from biofuels (i.e. in addition to the 7% crop cap contained in the ILUC Directive). This includes measures to promote waste-based biofuels such as double rewards, tax incentives, advanced biofuels targets, industry development support or reporting requirements. Germany also provided an overview of how it uses a greenhouse gas-based scheme to address ILUC. In conclusion, CT5 participants discussed policies and specific measures to address ILUC risks, including the benefits, key challenges and risks when setting out such policies.

### Headline 3: Methodologies for “New Fuels” and Ensuring Sustainability of Biofuels

The third session of CT5 was dedicated to the issue of renewable fuels of non-biological origin and recycled carbon fuels as well as fraud risks and prevention in relation to used cooking oil. The session included a presentation on the methodological options and challenges to calculate the greenhouse gas emissions of “new fuels” such as renewable fuels of non-biological origin (RFNBOs) and recycled carbon fuels. While RFNBOs are already supported in some Member States, a harmonised EU-wide methodology is still missing. In relation to recycled carbon fuels, policies and methodologies are still at an earlier stage of development. Furthermore, the session included a presentation on how a voluntary scheme like the ISCC (International Sustainability and Carbon Certification) can be used to prevent fraud regarding waste feedstocks, such as used cooking oil (UCO).

