



Final Highlights

4th CA-RES3 Plenary Meeting

28th - 29th November 2018, Vienna



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Core Theme 1: RES Electricity

Headline 1: Update and Q&A on the Revised Renewable Energy Directive

On 13th June 2018, the Council, the European Parliament and the Commission reached an agreement on the revised Renewable Energy Directive (RED II), which sets the new framework for renewables until 2030. The Directive is expected to enter into force in December 2018 and will have to be transposed by Member States until June 2021. The RED II establishes inter alia new rules for RES electricity. Amongst others, these rules are related to approaches for increasing the stability of financial support, making support schemes more market-based by introducing competitive bidding procedures and improving RES integration in the market by direct marketing of the generated electricity. The revised Directive also includes provisions to strengthen the role of consumers by fostering renewable self-consumption as well as renewable energy communities. It also includes provisions on streamlined administrative procedures of new and repowered renewable energy installations. It also includes provisions for a voluntary partial opening of support schemes.. During the first CT1 parallel session, participants, together with DG ENER representatives, took a closer look at the provisions of the RED II on electricity to discuss the challenges, which may arise as a result for Member States. Questions and challenges raised by MS were the lack of definitions and experiences regarding energy communities and opening of support schemes as well as regards the implementation and challenging timeframes of the administrative procedures required. Furthermore, the CT1 taskforce led by Spain and Italy gave a short presentation on the intermediate results on the opening of support schemes. The results showed that there exists a wide array of drivers as well as barriers for opening support schemes. However, the survey also showed that Member States expect significantly fewer barriers in the long-term inter alia due to additional provisions in the REDII as well as the Governance Regulation that are expected to increase the incentives for opening. Public acceptance however is expected to remain a key challenge for opening.

Headline 2: Repowering – How to Make the Most out of Existing RES Potentials and Installations

A significant number of Europe's renewable energy installations will reach the end of their financial support periods between 2020 and 2030. The respective projects will be decommissioned, will continue operation without support or will be repowered. In case revenues from the market alone do not provide sufficient economic profitability, incentives for repowering or lifetime extensions can prevent the decommissioning of a significant proportion of existing RES installations. The topic of RES installation reaching their end of support will become particularly relevant over the next years for onshore wind energy projects, followed by PV installations. Countries most affected are DNK, DEU, ESP and ITA. The replacement of old installations (e.g. wind farms) with new turbines (repowering) can increase site efficiency and leverage further RES potentials. During the 2nd CT1 parallel session, discussions showed that Member States are very interested in this topic, but that limited experience exists. Italy presented an overview of the policies it has in place in order to support lifetime extension after the end of the official support period; this presentation was followed by a discussion on Member State experiences with financial incentives for lifetime extension or repowering and on the possible need for regulatory action. CT1 participants came to the conclusion that lifetime extension of RES installations could be interesting where repowering is not possible or to serve as a preparatory phase in order to prepare for the eventual repowering of the site.



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Headline 3: Enhancing Citizen Participation in the Energy Transition

Article 22 of the RED II introduces the concept of "renewable energy communities", thereby acknowledging the important role of citizen participation in the energy transition. Citizen participation can help to increase local acceptance, create access to additional financial capital and trigger the development of new, innovative business models such as crowdfunding or peer-to-peer energy trading.

During this session, CT1 participants tried to gain a better understanding of the implications of citizen participation and in particular of the REDII provisions on renewable energy communities. The participants discussed the potentials and challenges of citizen participation in generation, storage and trade of renewable electricity. The situation across Member States on the topic of renewable energy communities is quite diverse: some Member States already have some experience, while others are new to the concept. There are various business models of (renewable) energy communities that all try to increase actor diversity and local acceptance for RES deployment.

Therefore financial guarantees or specific funding instruments might be necessary. However, the experience of some Member States has shown that it can be challenging to select the right instruments in order to enhance citizen participation and ensure that privileges remain restricted to those actors that Member States wish to target. Key challenge in this regards will be to find a smart definition of renewable energy communities that avoids fraud, while eliminating barriers and preventing potential discrimination and avoiding market distortion. Examples discussed to support renewable energy communities included direct financial support schemes, removing regulatory barriers, simplifying the permitting process and facilitating cooperation between DSOs and the communities.







Core Theme 2: RES Heat

Core Theme 2 on RES Heat held a total of three parallel sessions on the topic of renewable district heating and cooling, a topic that was determined to be of interest during the 3rd Plenary Meeting in Warsaw.

Headline 1: Assessment of the potential for new infrastructure for renewable district heating and cooling

During the 1st parallel session, the CT2 participants were provided with an overview of the broader policy context in order to get a better understanding of the links between the Energy Efficiency Directive and the Renewable Energy Directive. A representative from the Concerted Action for the Energy Efficiency Directive (CA EED) presented the work of their expert groups Efficiency in Energy Supply, high efficiency CHP and heating/cooling on Member States' experience of the comprehensive assessments of the potential of high-efficiency cogeneration and efficient district heating and cooling. A presentation by Denmark helped CT2 participants get a better understanding of current policies and future infrastructure plans within the country.

Headline 2: How to make district heating and cooling renewable

The 2nd parallel session focused on the topic of district heating and cooling and how Member States can convert and optimise existing district heating and cooling systems from largely fossil fuels to largely renewable sources. CT2 participants took a look at this topic from the perspective of financing and support schemes and technical issues. Three Member States, namely Germany, United Kingdom and Estonia, presented their approaches on decarbonising heating networks and increasing the share of renewables in their national district heating and cooling networks. Furthermore, a representative from the H2020 progRESsHEAT project showcased learnings from across Europe. The situation across Member States is very different. District Heating shares of the heat supply and RES shares in district heating have substantial variations across Member States and generally, are more common than district cooling. Southern Member States are more interested in cooling rather than heating and are looking for guidance from experienced countries. Future strategies by Member States encompass different measures such as connecting existing buildings to DHC networks, increasing RES shares, improving efficiency of buildings and modernizing/expanding existing networks. Regional legislation can support the deployment of smart and flexible district heating and cooling systems based on a higher share of RES. Integrating RES DHC into the heat planning of regions and municipalities is key to design an optimal heating and cooling supply that works for local conditions.

Headline 3: The role of waste heat and cold in renewable district heating and cooling systems

The recast of the Renewable Energy Directive (RED II) specifically mentions how waste heat and cold can count towards the Member States' renewable energy targets. Waste heat and cold from industry, sewage systems, underground ventilation systems, waste incineration and other sources can be integrated into district heating networks. They allow district heating companies to optimise the production of heat plants and CHP plants. The RED II requires Member States to carry out an assessment of the use of waste heat and cold as part of the comprehensive assessments conducted under Art. 14 of the EED to guide the development of national measures. CT2 participants took the opportunity presented in this 3rd parallel session to learn from participating Member States about current practices in regards to waste heat and cold and to discuss what their plans are for accounting



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for waste heat and cold in the future. The Netherlands gave a presentation on their plans of including waste heat in their building code in the future. Furthermore, representatives from DG ENER and EUROSTAT presented an update on the new provisions and changes resulting from the RED II.

In summary, CT2 participants came to the conclusion that local parameters strongly influence district heating and cooling potential in individual countries and that stronger ambition is needed to move things forward. CT2 participants noted that, in many countries, municipalities are in charge of district heating and cooling development. As district heating and cooling systems are large infrastructure investments, starting long-term planning as well as leveraging investment into DHC now is important for a decarbonised future.



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Core Theme 3: Guarantees of Origin & Disclosure

Headline 1: Commercial Offers and Non-Tracked Electricity

During the first session on Guarantees of Origin and Disclosure, CT3 participants discussed how suppliers demonstrate the source of the power supplied to consumers when the commercial offer is based on non-tracked electricity (i.e. on a residual mix). By sharing current practices, participating Member States came to the conclusion that this is currently being handled differently in each Member State, even between those countries that use the figures of the EU Residual Mix. This situation was recognized as causing a high risk of double counting and immediately calls for more coordination among bodies competent for disclosure in Member States. There is a strong need for more transparency on the assumptions for the European attribute mix as well as harmonisation of accounting for imports or exports to/from third countries, the impacts of "ex domain cancellations" as well as the ripple effects of one or several Member States using regional mixes like the Nordic mix or a mix for a regulation zone. Potentially insufficient (or maybe even the total absence of) regular compliance checks of disclosure statements was also identified as a risk for the EU-wide system and needs more coordination. Participants also stated that guidance about disclosure practices by the Commission would be highly appreciated (e.g. what is the minimum standard).

Headline 2: Update on the Latest RES Policies and Developments in the Fields of GO and Disclosure

This session was dedicated to look at the provisions on Guarantees of Origin and disclosure in the RED II and discuss future related challenges. The new directive requires mandatory issuance of GOs at the request of producers of RES of electricity, H&C or gas (including hydrogen). Members States can decide whether or not to issue a GO for energy benefitting from a support scheme but when GOs are issued for supported energy there is a need to avoid double compensation. CT3 participants concluded that the consequences of the revised article 19, especially the interactions between the various vectors and also with other articles, would need to be looked at more closely during future Plenary Meetings. In particular, participants identified several issues regarding implementation that should be explored in more detail, including the timeline for GOs and disclosure, sector coupling (RES electricity, combined heat and power, biogas, heating and cooling), and labelling.

Headline 3: Electricity Labelling

The final session of CT3 looked at the existing good practices for labelling electricity for consumers in the participating Member States. Electricity labels provide a more explicit view of the electricity supplied and more adequate third-party controlled information for the consumer as to the electricity that he/she should buy (or was actually supplied). This assessment of the state-of-play in the Member States showed that in some countries electricity labelling is already used in practice, while there is currently no demand for such labelling in others. In addition, participants assessed the advantages and disadvantages of labelling electricity, while also attempting to outline a definition of electricity labelling.



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Core Theme 4: Biomass Mobilisation and Sustainability

Headline 1: Impacts of New Provisions on Sustainability of Biomass Fuels Laid Down in the Revised Renewable Energy Directive

During the first CT4 session, the Commission presented an overview of the new requirements for biomass sustainability (land criteria and end-use criteria) included in the recast of the Renewable Energy Directive (RED II). These criteria enhance resource efficiency and are required for biomass to be compliant with RES obligations and be eligible for financial support. Verification of compliance has been strengthened and bioenergy generators have to ensure an independent audit of the sustainability claim. Participating Member States then used the opportunity to come up with a common understanding of the provisions in order to aid not only the implementation of the current Directive, but also the RED II. Prior to the session, a first inventory of questions from Member States on the interpretation of the new provisions in the RED2 on biomass sustainability was made in order to discuss questions, such as the interpretation of land and end-use criteria, the compatibility of current (national/voluntary) sustainability schemes for solid, liquid and gaseous biomass, compliance issues with GHG emissions saving criteria and the impacts of new legislation on existing bioenergy installations.

Member States are currently faced with several choices for verifying compliance. Verification can be achieved through national certification systems or international voluntary schemes. The EC will undertake an assessment of existing national systems for biomass fuels and will define detailed certification rules. Case studies on the compliance of existing tools with the new GHG savings criteria are necessary. Participating Member States requested that guidance from the European Commission would be greatly appreciated in coming up with a harmonized verification system. Further for following workshops examples of countries already verifying sustainability criteria for biomass fuels and examples of GHG emission savings calculations were requested to help implementation of these provisions.

Headline 2: Biomass Reporting Obligations on Biomass Residues and Waste

Based on Article 22(g) of the Renewable Energy Directive (2009/28/EC), Member States have to provide "detailed information on the biomass supply" and "describe the developments in the 2 preceding years in the availability and use of biomass resources for energy purposes" in their biannual progress report for the Renewable Energy Directive. The European Commission provides a template for this report; in particular, Table 4 – Biomass Supply for Energy Use has proven to be quite difficult to fill out for many Member States. During this session, Germany presented the approach and raised questions on challenges they faced when preparing the last Progress Report (December 2017). EUROSTAT explained the relation between the data collected and the formal statistics used for renewable energy. Based on the current reporting experiences and on additional requirements arising from new regulations (e.g. governance regulation), recommendations were made to improve the reliability and quality of these reports by exchange of methods in a Task Force.

The CT4 survey results and the discussions between the participating Member States came to the conclusion that data collection continues to be a difficult matter for most due to the high complexity and high costs associated with it. In most Member States, the availability and data quality is quite poor. Furthermore, various Member States need to make assumptions and adopt methodologies



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specific to their Member State. As a result, data cannot be easily compared between the Member States. There is a strong need for more transparency and harmonization across the EU, which could be done through the exchange of good practices between MS, via a global balance or the use of non-energy databases or statistics.



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Core Theme 4 & 5: Biomass Mobilisation & Sustainability and RES in Transport

Headline for the Joint Session: Biomethane in the Transport Sector

This joint session was led by Core Themes (CT) 4 and 5, after previous discussions in CT4 had shown a clear link between biogas mobilisation and transport policies, with many Member States planning to incentivise biomethane use in the transport sector. The CT4 and CT5 joint session consequently explored different aspects of the use of biomethane in the transport sector, cross-sectoral and cross-border challenges that arise in particular from the use of gas grids for the transport of the biomethane.

The session started off with a presentation of the CT survey results, which showed that the current use of biomethane is still limited across Member States. While several Member States have started encouraging the use of biomethane in transport, more consideration still needs to be given to various questions as to the design of such support scheme with more specific priorities to be set. This includes, for example, an assessment in which sector biomethane is best used to achieve the highest possible GHG savings, taking the particular situation in each Member State into consideration. A presentation by Ecofys showed that the potential for biomethane production in the Member States could be more than 1000 TWh in the period to 2050 and that its use would have high carbon benefits, reducing costs by up to 40%. However, Member States would need to make a choice in which sectors biomethane should be used for the highest benefits, with use for dispatchable power and industrial applications potentially providing more significant energy system cost reductions in the medium- to long-term than biomethane use in the transport sector (where use in long-distance trucks or container shipping might be promising options though).

During the next part of the joint session, a representative of the Austrian Gas Clearing and Settlement AG (ASCG) showed how some national authorities are developing systems to support cross-border trade of biomethane, while also ensuring that the systems are compatible with sustainability certification requirements. The presentation by EUROSTAT looked at the complexity of the accounting challenges with the cross-border trade of biomethane. The EUROSTAT representative stated that the SHARES tool has now been adapted to allocate injection of biomethane to transport at the Member State level, but not yet for cross-border trade. There are still ongoing discussions for adaption of the SHARES tool on trade and other sectors in order to better address cross-border trade. Measures to ensure that biomethane does not receive double subsidies and its use in the transport sector is additional are necessary. For this purpose, information on support schemes has to be provided along the chain of custody.







Core Theme 5: RES in Transport

Headline 1: Progress on the 2020 Renewable Energy Target and an Update on the Revised Renewable Energy Directive

In the first session, CT5 participants were presented with key results from the CT5 survey, including results on the progress made towards the 2020 target of 10% renewable energy in transport. The Commission provided an update on recent policy developments, in particular in relation to the revised Renewable Energy Directive (RED II). The RED II requires Member States to put in place a fuel supplier obligation to ensure that the share of renewable energy in final consumption in the transport sector is at least 14% and that a minimum share of 3.5% advanced biofuels and biogas is reached by 2030. The Directive also gives Member States flexibility to consider or not consider recycled carbon fuels in the obligation. The presentation by DG ENERGY was followed by an in-depth discussion to reach a common understanding of the complex new provisions set out in RED II, as well as a discussion on the need for further harmonization regarding the waste and residues listed in Annex IX part A.

Headline 2: Renewable Electricity, Renewable Fuels of Non-Biological Origin (RFNBOs) and Recycled Carbon Fuels in the Transport Sector

The third session of CT5 continued the discussions on "new fuels", including renewable electricity, renewable fuels of non-biological origin (RFNBOs) and recycled carbon fuels, started during the 3rd Plenary Meeting in Warsaw. In particular, the participants looked at key challenges in accounting and developing methodologies for these new fuels, including cross-border and cross-sectoral challenges. While RFNBOs are already supported in some Member States, a harmonised EU-wide methodology is still missing. Through two Member States presentations, it was shown what types of challenges Member States face in introducing policies for "new fuels". A presentation by the Joint Research Centre (JRC) explained the key factors to consider in developing a methodology and demonstrated, for example, how GHG emissions vary widely for the new fuels depending on existing uses of energy.



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