

ENERGY SOLUTIONS ON GREENHOUSE GAS (GHG) EMISSIONS REDUCTION – NON-ETS

Reflections from the dialogue with Director for Renewables, Research and Innovation, Mrs. Donnelly, Senior Expert for Clean Transport and Sustainable Urban Mobility, Mr. Honacker, and Buildings Team Leader for Energy Efficiency, Mrs. Rey Garcia.

June 14, 2016, 12:30-14:40, European Parliament, Brussels

Energy Solutions Reflections

Energy Solutions reflections outline key challenges and solutions to legislation related to greenhouse gas (GHG) emissions reduction in sectors not covered by the emission trading system (non-ETS), embracing the role of buildings and transport in the future energy system as well as the interplay between these in supporting the target of GHG emissions reduction by 30% in 2030.

Reflections from the dialogue between the European Commission, European Parliament and industry:

- 1. European leadership in innovative industries is key in synchronizing variable distributed energy production and consumption for an interconnected hybrid energy system an energy system that currently lead within specific sectors; but less across sectors compared to other major economies. Solutions lay within increased investments in research and development including within maturing technologies as well as latest innovations in digital.
- 2. Integrated solutions require a proper market design that supports the decarbonisation of non-ETS sectors through renewable energy sources and decarbonised electricity produced locally or remotely. The deployment of energy efficiency measures should be incentivised by the market, where also prosumers will play a key role within the energy system.
- 3. Primary Energy Factors hinders CO2 mitigation by disincentivizing the electrification of heating, including in the case of deployment of heat pumps and thermal storage in areas with a high share of low-carbon electricity. Electricity produced off-site presents the challenge as well as the solution, currently multiplied by a factor of 2.5 when measuring electricity as part of the energy consumption of buildings regardless of the carbon content of the electricity mix; while instead it should be set following a transparent process based on accurate statistical data. In specific local realities should be reflected in acknowledgement of the effect on the performance of the whole building stock if countries set high the PEF.
- 4. Access to finance unlocks the potential of decarbonising also non-ETS sectors, especially if based on principles related to flow, methods and risks for how to attract finance at different scales. At the large scale, mechanisms aimed towards insurance funds could stimulate private investments in energy efficiency in buildings. At the smaller scale, mechanisms could encourage aggregation of projects while only requiring one 'aggregated' application for energy efficiency projects. The constellations would be possible with ambitious technical assistance (TA) and project development assistance (PDA) programs. Solutions rely on access to private finance in e.g. housing renovations as well as conventional energy saving measures that are expected addressed in the upcoming proposal for smart finance in smart buildings; yet more conventional energy saving measures may face challenges in attracting investments.



- 5. Energy Saving Obligations generate investments in buildings as a positive effect of the current energy and climate framework of 2013-2020. The current energy and climate framework of 2013-2020 has resulted in 42% of investments under article 7. Article 7 on energy saving obligations in the Energy Efficiency Directive (EDD) has proven successful to an extent where it will play an even more crucial role in the future in allowing flexibility to reach required levels of savings.
- **6.** Smart building and renovation add flexibility within the energy system, reduce consumption and emissions, hence, ICT-solutions for buildings should be prioritized.
- 7. Ownership structure, tax incentives and renovation is key in decreasing the total energy consumption of existing buildings and potentially an equal increase in consumption of renewable-based electricity. However, national legislation presents a challenge due to national sovereignty; whereas public buildings and in particular office spaces represent a potential for savings and roll-out of innovative products and systems. The potential for savings and roll-out of products and systems require a large-scale initiative on commercial and office buildings to gather stakeholders including real estate investors, buildings performance certifiers, facility managers, technology providers etc.
- 8. Consumption data belongs to the consumer along with clarity and reassurance on accessibility, purpose and use, managed with a common trusted mechanism to enable the complete control of lifestyles to release the potential of energy system data, digitalisation and ICT in supporting the development of energy services.
- 9. Three pillars to decarbonise transport:
- Vehicle efficiency, incl. continuation and update of CO2 standards for cars etc.
- Decarbonisation of fuels, incl. increase uptake of electro mobility and use of second generation advanced biofuels
- · Demand management, incl. deployment of intelligent transport systems, charging and modal shift
- **10. Smart charging is a prerequisite for flexibility and uptake of low-carbon mobility**, requiring the roll-out of to the wider public, within new buildings, and through hydrogen storage.



Work Stream Reflections from Solution Makers

Work stream reflections on the pathway to the European Energy Union:



2016 is the year of action on the energy agenda. The energy agenda is full in realizing the European Energy Union. A European Energy Union requires integrated energy solutions. Energy Solutions set out to break down silos in legislation. Legislation on non-ETS sectors is what we address at this first Work Stream Meeting to Energy Solutions.

Member of the European Parliament, Vice Chair to ITRE and President to Energy Solutions, Mr. Petersen (ALDE).



Europe is at a cross-road: We want a European Energy Union, but - in reality - we are rather far away from that objective. Therefore policy-makers as well as industry are challenged to build up a more efficient energy system in Europe, thus finding appropriate solutions for buildings and transportation.

Member of the European Parliament and Vice President to Energy Solutions, Mrs. Niebler (EPP).



The move to more clean and efficient technology is no longer an option; it is something we must decide on as soon as possible. The transportation sector is part of the solution of an optimal energy system.

Member of the European Parliament and Vice President to Energy Solutions, Mr. Poche (S&D).



Energy Solutions adds up values by bringing together the different links of the wider energy system. Bringing together the different links of the wider energy system requires integrated energy solutions on legislation – legislation that starts now with stepping stones towards a European Energy Union.

Member of the European Parliament and Vice President to Energy Solutions, Mr. Duncan (ECR).



We are in the industrial race – we cannot waste time on definitions – we need to settle on standards. Standards for transportation are part of the solution for an integrated energy system.

We face an imbalance politically as well as industrially – we cannot allow that imbalance goes into one silo that being geographically or sectorial – we need integrated solutions to reach a zero-carbon building stock by 2050.

Member of the European Parliament and Vice President to Energy Solutions, Mr. Turmes (Greens).

Positions presented do not reflect the positions of the individual representatives, but are a sum of discussions across national, sectorial and individual interests within the European Parliamentary Network on Energy Solutions (Energy Solutions).

Energy Solutions is a platform for developing holistic energy solutions for an integrated energy system towards a European Energy Union.

The European Energy Union is identified as the top priority for the coming years with the aim to deliver secure, affordable and sustainable energy while creating jobs and growth as well as investments in Europe.

The European society is fundamentally shaped by energy as a political issue in terms of security, competitiveness and sustainability. Ensuring security of supply while developing a sustainable and competitive energy sector requires contributions from all parts of the energy system. An integrated energy system requires a bankable energy sector. The energy sector as a whole needs to be the guiding principle when developing energy regulation.

Energy Solutions facilitates dialogue across national, sectorial and individual positions for an integrated system-approach. The integrated system-approach is to develop and promote tangible, holistic and pragmatic solutions to challenges facing industry and society.

Energy Solutions ultimately seeks to strengthen policy development within the European Parliament.



























