European Parliament

Workshop on

National strategies for renewables: energy efficiency, building renovation and self-consumption

Organised by Policy Department for Economic, Scientific and Quality of Life Policies
at the request of the Committee on Industry, Research and Energy (ITRE)

European Parliament, Brussels
22 February 2018, 09.00 - 10.30
Room József Antall 4Q2

Topic Summary and Speaker Biography

Topic 1: Best practices in Member States to reach the renewable energy and energy efficiency targets

- At the request of the European Commission IRENA has issued a perspective on the renewable energy potentials for 2030 in the context of its REmap roadmap programme. The analysis concludes that 34% renewables share would be technically and economically feasible. Additional potentials have been identified especially for wind, solar, in combination with electrification of end uses, as well as bioenergy. Enabling policy frameworks are critical for these potentials to materialise.
- The analysis points to important synergies between renewable energy and energy efficiency. On one hand, renewable power and electrification can help to increase the overall systems efficiency. On the other hand, higher efficiency makes that the same amount of renewable energy can cover a larger share of total energy supply. Earlier analysis indicates that around a quarter of efficiency gains can be attributed to renewables.
- Best practice suggests that a combination of energy efficiency and renewable energy is the best way to accelerate energy transition. The analysis suggests that all European countries have additional potential. Apart from the power sector more attention is needed for end use sectors, sector coupling and systems integration. Technical measures must be supplemented with new policy framework design and business models.

Speaker: Dolf Gielen

- As director of the IRENA Innovation and Technology Centre in Bonn since 2011, Dolf Gielen oversees the agency's work on advising member countries in technology status and roadmaps, energy planning, costs and markets and innovation policy frameworks.
- Before joining IRENA, Dolf Gielen was Chief of the Energy Efficiency and Policy Unit at the United Nations Industrial Development Organisation (UNIDO). Previously, he was a Senior Energy Technology Policy Analyst at the International Energy Agency. He was on a Fellowship with NIES Tsukuba Japan, from 2000 to 2002

Topic 2: Benchmarking Member States' national energy efficiency strategies

- This presentation first highlights the substantial energy savings realised in buildings in Upper Austria. It then presents the results of the Energy Efficiency Watch Project, which evaluates the "real-life" progress in energy efficiency policies in the 28 EU Member States.
- Energy efficiency policies work over a longer period and despite political changes, because a consensus has been reached on the rationale for energy saving actions, although the narrative differs between Member States/regions/cities: energy independence and supply security, innovation, social and health benefits, industrial competitiveness, climate change, etc.
- In the ranking of policy instruments, energy efficiency requirements for buildings, energy labelling and certification are considered as the most effective; experts confirm that strong, EU regulatory, longer term policies are an efficient means to realise energy savings.
- The presentation concludes that ambitious targets and strong EU energy efficiency and renewable energy policy and regulation are needed, with policy packages that combine regulatory, financial and information/training measures to speed up market developments. Policies should be reliable and facilitate market frameworks that facilitate SMEs to offer energy efficiency services. Adequate energy efficiency policies can make Europe the global leader in sustainable energy efficiency markets and technologies.

Speaker: Christiane Egger

- Christiane Egger is Deputy Manager of the OÖ Energiesparverband, the energy agency of Upper Austria, and the Manager of the Cleantech-Cluster Energy, a business network of 140 companies active in renewable energy and energy efficiency. Christiane is also the Vice-President of FEDARENE, the European network of regional energy and environment agencies. She is the conference director of the World Sustainable Energy Days, one of the largest annual conferences in Europe on energy efficiency and renewable energy sources.
- Christiane is an expert in energy efficiency in buildings, in renewable heating as well market and policy development in the field of sustainable energy production and use. She has developed and implemented a large number of scientific and dissemination European projects.
- She holds a law degree and a post-graduate degree in environmental engineering.

Topic 3: How national and regional strategies can be an efficient tool for the modernisation of the existing EU building stock

- This presentation will highlight key learnings on how to implement effective national renovation strategies - taken from the 'BUILD UPON' project: the world's largest collaborative project on building renovation. This project brought together over 2,000 key organisations, across 13 countries, at over 100 events in 2016-17, focused on designing and implementing ambitious national renovation strategies.
- The speaker will in particular focus on key aspects of the new EPBD text which should be priorities for efficient and effective building renovation strategies aimed at scaling up and deepening the rate of renovation.

Speaker: James Drinkwater

- WorldGBC is a global network of 'Green Building Councils' in over 70 countries which is transforming the places we live, work, play and learn. James coordinates WorldGBC's Europe Regional Network; a community of 25 national Green Building Councils, 8 Regional Partners, and nearly 5,000 members from across the buildings sector.
- The network is focused on transforming Europe's built environment by networking leaders; assessment and certification; awareness raising; skills and capacity building; supporting financial and economic initiatives; and work on policy and regulation.
- James Drinkwater is advising on and coordinating global and European political processes in the sustainable buildings arena, recently including UNEP's 10 Year Framework Programme on Sustainable Consumption and Production, UNFCCC Technical Experts Meetings and the European Commission's 'Resource Efficient Buildings' project. He co-leads the Europe Regional Network's flagship Horizon 2020 project 'BUILD UPON'; a multi-stakeholder dialogue involving 2,000 key stakeholders across 13 European countries to design and implement ambitious national renovation strategies. He also coordinates the energy efficiency workstream within the Horizon 2020 'EeMAP' project; which aims to establish a pan-EU 'energy efficiency mortgage' product.
- He has a Master's from the University of Cambridge, and a background in corporate and finance law. Previously an associate with the Environment and Climate Change practice of global law firm Linklaters LLP, he specialised in advising global corporations on UK and EU sustainable real estate law and policy, renewable energy projects and chemicals regulation. He also previously worked for the Royal Institute of British Architects, focusing on sustainable building policy and EU public procurement policy.

Topic 4: The contribution of research and innovation in the construction sector to energy efficiency and integration of renewable energy in buildings

- The presentation is focusing on 3 messages:
    - Policy makers and the related implementation processes should pay specific attention to the correct assessment of innovative building and control technologies in regulatory approaches;
    - Construction 4.0 (with Building Information Modelling) can substantially contribute to smart implementation of energy policy implementation but requires adequate preparation;
    - Renovation policies and solutions should not only think with the typical solutions of today.
- For each of these 3 messages, the context is briefly described and the motivations behind these messages are highlighted.

Speaker: Peter Wouters

- Civil engineer in Architecture, University of Leuven, 1980
- PhD in engineering, Université de Louvain-La-Neuve, 2000 'Quality in relation to energy performance and indoor climate in buildings: trends, achievements and remaining challenges"
- Director development and valorisation at Belgian Building Research Institute (2006 - …)
- Manager of INIVE EEIG, International Network for Information on Ventilation and Energy Performance (2001 -)
- Belgian representative in IEA Executive Committee 'Energy in Buildings'
- Operating Agent of Air Infiltration and Ventilation Centre, the IEA's information centre on ventilation (2001 -)
- Coordinator European airtightness platform TightVent Europe (2011 -)
- Coordinator European venticool platform (2012 - …)
- Director Belgian Union for Technical Approval in Construction (2009 -…)
- Director technical approval at Belgian Construction Certification Association (2009 - …)
- Chairman of ie-net society "Building physics, building technology and architecture"
- Chairman of NBN Belgian standardisation Committee on Ventilation (E156)
- Coordinator of EPBD Buildings Platform I (2006-2008), BUILD UP 1(2008-2010) and BUILD UP 2 (2011-2014), partner in BUILD UP 3 (2015-2017)
- International and external communication EPBD for Concerted Action I (2005-2007), Concerted Action II (2007-2010), Concerted Action III (2010-2015) and Concerted Action IV (2015-2018)
- Coordinator of several European research projects (1990 – 2010), i.e. PASLINK, COMPASS, PV-HYBRID-PAS, ENPER, ASIEPI and QUALICHECK (2014-2017)

Topic 5: Lessons learned from different approaches across Europe in facilitating self-consumption of electricity

- This presentation highlights the current situation in Europe regarding the implementation of photovoltaic (PV) systems for self-consumption. First, an overview is given of the installed PV capacity and related electricity production across the EU, and the share it covers in national electricity demand. Second, the main regulatory or support schemes which are currently applied in the EU Member States are presented.
- Case studies are shown from selected countries with different approaches to electricity self-consumption in residential or commercial buildings.
- On the basis of these case-studies and specific European initiatives, amongst others the ENERSELVES project (Interreg Europe Program), and the PV financing project (H2020 Program), lessons learned are presented.
- Finally, the presentation refers to the “Clean Energy for All Europeans” package, and formulates conclusions and proposals that could contribute to facilitating the electricity self-consumption in those EU Member States where it is still hampered.

Speaker: Cosme Segador Vegas

- Holds a MS degree in Industrial Engineering and a MS degree in Renewable Energy Sources. He also holds a PhD in Industrial Engineering, specialised in the field of energy.
- He is Professor at the University of Extremadura, in the Department of Thermal Motors and Engines of the Industrial Engineering School. He is also Extremadura President of the Spanish Professional Association of Heating and Cooling, ATECYR.
- He has 15-years of experience in the energy private sector, both in companies and as an independent Engineer, especially in the field of renewable energies, where he ensures the design and on-field coordination of PV, Solar Thermal and biomass projects with an installed power of over 25MW.
- His experience in the renewable sector has been accompanied with a large knowledge of the HVAC and electrical sector, where he has developed projects in heating, cooling and electricity. To be mentioned the Spanish National Award of Eneragen granted in 2012 for a project of a bioclimatic pool 100% heated by integration of biomass heaters, solar thermal panels and PV for self-consumption.
- As a researcher and university Professor, he is coordinating studies in the field of renewable energy integration in public buildings, energy management impact in small municipalities and Smart rural mobility. He also teaches courses in several Spanish universities, such as Extremadura, Huelva, Madrid, Zaragoza y Barcelona. Since 2010, he is working for the Extremadura Energy Agency, where he is currently Director, leading an institution with more than 45 technicians and covering the fields of energy efficiency, renewable energy and strategic energy planning.