

## HORIZON EUROPE RESEARCH AND INNOVATION PROGRAMME - EUROPEAN GREEN DEAL

25<sup>th</sup> of February 2021, Carina Ioana ZIDARU

The European Commission (EC) launched the European Green Deal with the objective of making Europe climate neutral by 2050. EC made €1 billion available under the Green Deal Call to boost the green and digital transition – the biggest call under the Horizon 2020 program, which is running from 2021-2027. The call aims to respond to the climate crisis, to provide more protection to Europe's biodiversity and habitats under threat and accelerate a sustainable recovery. For becoming the world's first climate-neutral continent by 2050, this is once in a lifetime opportunity to modernise the EU economy and society, and lead them towards a sustainable future. Research and Innovation will play an important role in accelerating and navigating the necessary transitions, deploying and demonstrating solutions, and engaging citizens in social innovation.

Climate change and environmental degradation are an existential threat to Europe and the world. To overcome these challenges, Europe needs a new growth strategy that will transform the Union into a modern, resource-efficient and competitive economy, where: there are no net greenhouse gas emissions until 2050, economic growth is decoupled from resource use, no person and no place is left behind. The European Green Deal is European Commission plan to make the EU's economy sustainable. EC's purpose is to do this by turning climate and environmental challenges into opportunities and making the transition just and inclusive for all.

The European Green Deal provides an action plan to: boost the efficient use of resources by moving to a clean, circular economy; restore biodiversity and cut pollution. Horizon Europe is the EU's next Research and Innovation programme starting this year. Its powerful instruments and innovative governance will drive the necessary systemic changes to reach climate neutrality and ensure an inclusive ecological and economic transition.

Horizon Europe in synergy with other EU programmes, will be key to highlight national public and private investments. Together they will foster new technologies, sustainable solutions and disruptive innovation and spread successful new solutions across Europe and the world. Over 35% of Horizon Europe spending will contribute to climate objectives. Horizon Europe will promote excellence and provide valuable support to top researchers and innovators to drive the systemic changes needed to ensure a green, healthy and resilient Europe.

The digital transformation plays an important role in European Projects funded by the European Commission. In this regard, the Romanian Energy Center Association (CRE) is constantly preoccupied to create synergies between the telecommunications, energy and transport sectors in terms of investments in ICT, digitalization and infrastructure. The CRE Association is currently part of a Digitization Hub, one of the 12 Hubs proposed by the Authority for the Digitalization of Romania (ADR) in Brussels.

In this direction, the H2020 Project of Romanian Energy Center Innovation Portfolio entitled „EDGEFLEX” - „*Providing flexibility to the grid by enabling VPPs to offer both fast and slow dynamics control services*”, has the main objective to revision of the concept of Virtual Power Plants (VPPs), concept in the context of the exponential growth of generation from renewable energy sources through digitalization and the use of 5G technology. EDGEFLEX cloud-based solutions, incorporating a high degree of digital transformation, will be promoted as services on the energy market, and their functionality will require adaptations and new skills for the actors involved, both from those who they will integrate and provide these solutions, as well as from those to whom they are addressed.

Innovation projects are a priority for CRE association, for its Members and for all entities that have related concerns in this field. The Association is in a continuous development and aims to successfully implement the 11 European Projects, funded by the European Commission through the H2020 and Erasmus + Programs, in which it is a member, together with its partners. The Innovation and Development Department within the CRE association is permanently concerned with achieving the strategic objectives of the association and maintaining the important position of the CRE, as a representative of the members working in the energy field, providing a constant contribution in the process of Development and Innovation of the National and European energy system.

Moreover, the CRE Association is an active and strategic partner together with its members and other potential members in international consortia for deploying energy projects funded by the EC, such as: CROSSBOW, PHOENIX, TRINITY, EDDIE, EDGEFLEX, SUCCESS, RESERVE, NRG5, WISEGRID, SOGNO and CYBERSEAS.

