



LIFE VIIEW 2050

“The impact assessment
of the EU Emission Trading System
with the long-term vision for a climate
neutral economy by 2050
(LIFE VIIEW 2050)”

#LIFEVIIEW2050

www.climatecake.pl

 **Climate Cake**
Centre for Climate
and Energy Analyses

 **National Centre for
Emissions Management**
Institute of Environmental Protection
National Research Institute



CAKE - who we are?

The Centre for Climate and Energy Analysis (CAKE) is a specialized analytical unit established within the National Centre for Emissions Management (KOBiZE), that is a part of the Institute of Environmental Protection – National Research Institute (IOS-PIB).

A highly qualified team of experts is involved in the CAKE works, that through employing and developing analytical tools, networks and communication channels, constantly produces and provides knowledge supporting the decision-making process in climate and energy policy.

CAKE experts have an extensive analytical and negotiating experience in climate and energy policy gained both at the UN Framework Convention on Climate Change (UNFCCC) level and in the European Union since the very beginning of the EU ETS implementation. The CAKE team includes also experts and academics from universities and other research centres dealing with modelling the effects of the climate and energy policy solutions. The results of CAKE's analytical work are recognized and appreciated in the international community.

Analytical Tools in LIFE VII EW 2050

Analytical work in the LIFE VII EW 2050 project employs macroeconomic and sectoral models, developed and being constantly improved by CAKE experts. Thanks to this advanced toolkit, it is possible to carry out comprehensive analyses concerning the functioning and development of the EU ETS to enhance achieving the EU climate neutral economy by 2050.

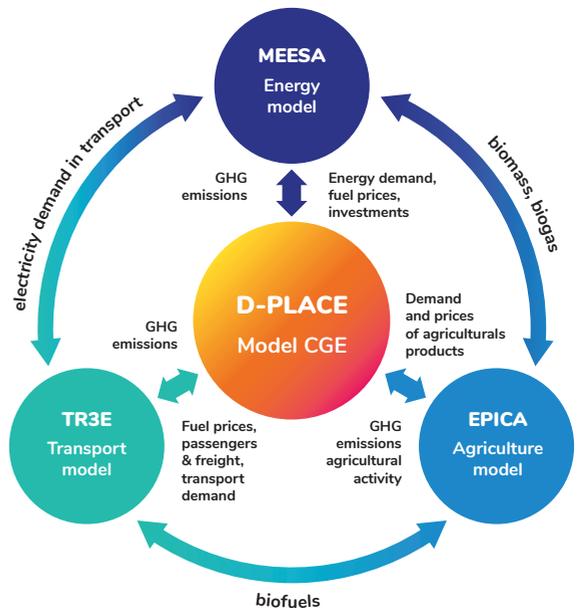
Analytical Toolkit:

Model d-PLACE (CGE) – the global macroeconomic general equilibrium model allows for a comprehensive assessment of the climate and energy policy economic impacts.

Energy model MEESA (Model for European Energy System Analysis) the model allows for a thorough simulation of various transformation options of the energy sector in the EU.

Transport model TR3E (Transport European Economic Model) – the model allows for the analysis of various options to reduce CO₂ emissions in the transport sector, including the new technologies implementation.

Agriculture model EPICA (Evaluation of Policy Impacts – Climate and Agriculture) – the model enables analysing the impact of various climate policy measures on agriculture, including emissions, production volume and structure, and farmers income in Poland.



WHAT IS THE EU ETS?

European Union Emissions Trading Scheme – EU ETS is the key policy measure for reducing greenhouse gas emissions, operating in the European Union since January 1, 2005. The objective of the Emissions Trading System is to reduce greenhouse gas emissions cost-effectively. The EU ETS works on the „cap and trade” principle, that includes setting the cap on the total amount of greenhouse gases that can be emitted, then allocating emission allowances among emitting installations, that can trade them with one another on the market.

Currently, there are 31 regional, national and transnational emission trading systems operating in the world, regulating 14% of global greenhouse gas emissions (7.5 Gt CO₂ eq.). Adding to this the 30 countries that have implemented a tax on emissions, together these countries regulate around 22% of global GHG emissions (12 Gt CO₂ eq.). Adoption of the Paris Agreement facilitates the development of ETS systems in the world as well as – according to article 6.2 - allows national and regional instruments such as the EU ETS to be linked with similar systems in order to create a common cross-border carbon market.

LIFE VII EW 2050 Project Objectives

The **main objective** of the Project is to assess of the functioning of the EU ETS, its impacts and interaction with other EU policy measures, other international systems and its possible further development with the view of the EU climate neutral economy by 2050. Parallel objective is to support and promote the EU ETS and other carbon pricing policies, and disseminate EU experience in this regard to improve climate and energy policy at the EU and international level.

EU ETS interaction with other policy instruments:

- RES
- EE

New sectors in EU ETS:

- Transport
- Agriculture
- Buildings
- Shipping

EU ETS interaction with other ETS/border tax:

- China/Korea/Canada/ USA/New Zealand and others
- Art. 6 Paris Agreement

LIFE VII EW 2050 basic information

The Project structure is based on three research Working Packages (WP), focused on the assessment of the EU ETS functioning, including its synergies and interactions with:

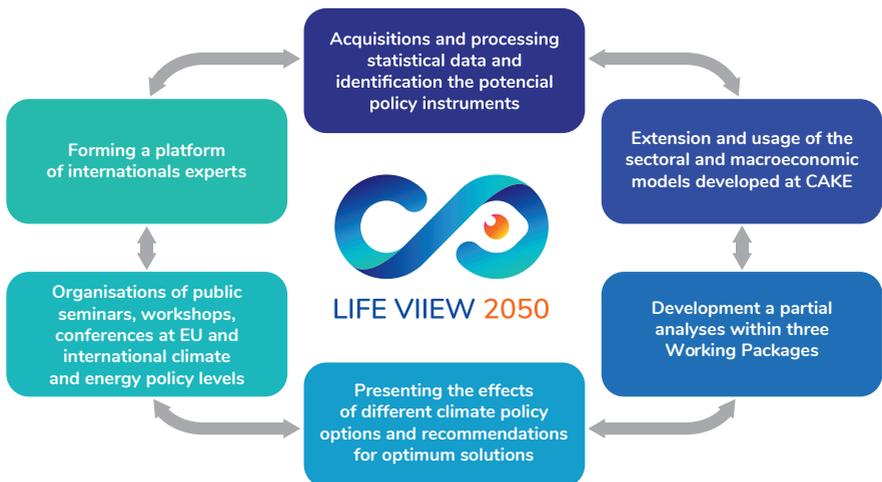
WP1: other climate-energy policy instruments supporting deployment of low-carbon technologies and measures such as RES and EE,

WP2: non-ETS sectors in the EU,

WP3: other ETS systems and carbon market mechanisms worldwide.

Goals to be achieved in the project:

- 1 Extending and applying the sectoral and macroeconomic models developed in the LIFE Climate CAKE PL project** to identify and include in models current and prospective measures and mechanisms that may affect the operation of the EU ETS.
- 2 Developing a high-quality, accessible information and data** within the three Working Packages mentioned above, including advanced modelling employing CGE, energy and transport models as well as the knowledge and experience of CAKE experts.
- 3 Providing a high-quality, easy accessible information and data** on three Working Packages mentioned above to the European Commission, European and international public administration, policy makers, NGO's, private entities and the public.
- 4 Building broader and stronger international networks of experts** to disseminate a high-quality information and data on evaluation of the EU ETS and to create an international political support for EU ETS and other carbon pricing mechanisms.
- 5 Improving environmental awareness of the public** through wide dissemination of high-quality information and data developed during the project implementation.





Opinions about LIFE VII EW 2050

„The effectiveness of the EU ETS also depends on other climate policy instruments. A reliable assessment of the EU ETS requires the consideration of these dependencies and an integrated approach involving particular policies and tools. This assessment is necessary to ensure synergies between different policies in the future. In this context, the activities carried out under the LIFE VII EW 2050 project appear particularly relevant.”

Michał Kurtyka, Minister of Climate and Environment

„The next project - LIFE VII EW 2050 - implemented by the Centre for Climate and Energy Analyses (CAKE) is a positive example of the development of Polish research centres and making our voice heard in the ongoing discussions on the development of European climate policy. Professionalism and experience presented by employees and the entire team allowed IOŚ-PIB/KOBI ZE/CAKE to further use EU funds available under the LIFE Programme.”

**Krystian Szczepański,
Director of the Institute for Environmental Protection - National Research Institute**

„More and more countries and regions around the world are developing or implementing emissions trading systems as a cost efficient way to put a price on greenhouse gas emissions. Given the global dimension of the problem, it is highly desirable to analyse the interaction between such systems and whether and how they could be linked up creating an international market. Objectives of the LIFE VII EW 2050 project correspond precisely to filling this knowledge gap.”

**Artur Runge-Metzger, Former Director, DG Climate Action,
European Commission, Member of the Advisory Board, LIFE VII EW 2050 Project**

„Climate Change is the most severe, complex and urgent environmental problem that humanity is currently facing. The multifaceted interrelations between sectors, countries and technologies and the pressing need to curb global greenhouse gas emissions calls for careful assessment of policy options that seek to deliver a quick decarbonisation of the economies shifting to a new growth paradigm based on technologies, solidarity and resource efficiency. The LIFE VII EW 2050 will shed light on how to tackle this challenge.”

**Piotr Szymański, Director Energy, Transport and Climate,
Joint Research Centre, European Commission**





Are you interested in the LIFE VIEEW 2050 Project?

The project supports the EU climate change policy development and implementation, including the EU climate policy framework until 2030 and achieving a climate-neutral EU economy by 2050.

We are happy to share the results of our work at the website of the Centre for Climate and Energy Analyse <http://climatecake.pl>.

You are welcome to follow us on Twitter: [@climate_cake](https://twitter.com/climate_cake).

Do not hesitate to contact us directly.

Project Coordinator: **Robert Jeszke**

Chmielna 132/134,
00-805 Warsaw, Poland

www.climatecake.pl

#LIFEVIEEW2050

cake@kobize.pl

+48 22 56 96 570

Twitter: [@climate_cake](https://twitter.com/climate_cake)



LIFE VIEEW 2050



National Centre for
Emissions Management
Institute of Environmental Protection
National Research Institute



Project entitled „The impact assessment of the EU Emission Trading System with the long-term vision for a climate neutral economy by 2050” (LIFE VIEEW 2050 – LIFE19 GIC/PL/001205) is co-funded by the Life Programme of the European Union and the National Fund for Environmental Protection and Water Management.

