

# ENERGY VISION

Region: Vidzemes planning Region  
English version

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PANEL 2050 – Partnership for New Energy Leadership 2050  
Deliverable 3.3



CENTRAL EASTERN EUROPEAN  
SUSTAINABLE ENERGY NETWORK

Date: 18/05/2018



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 696173. Disclaimer: The sole responsibility for the content of this material lies with the authors. It does not necessarily represent the views of the European Union, and neither EASME nor the European Commission are responsible for any use of this material.

## Vision Statement

In 2050, Vidzeme planning Region is the region of smart solutions and climate aware population. Based on ICT and smart technologies & networks the Region effectively utilizes all kinds of available renewable energy resources (RES) and widely implement energy efficiency (EE) measures. The economy of the region is based on circular economy principles and ensures competitive development and increased well-being alongside with minimal CO<sub>2</sub> emissions. The region in 2050 emit around 70% less CO<sub>2</sub> than in 2015, the emissions reduction is reached in all sectors of region economy. Regional and local governments implement highly competent governance aimed at sustainable use of natural capital and responding/adapting to climate change.

## Vision Description

In 2015, the main energy end-use sectors of Vidzeme planning region were households (29%) and transport (26%) followed by industry (18%), services (16%), agriculture (11%). For heat supply, district heating (DH) systems are widely used. In 2015 ~56% of supplied heat had been produced by utilizing local biomass (wood) fuel. In its turn, the RES utilizing power plants, placed in the region, supplied only ~23% of electricity consumed in the region. The largest share (45%) of region's total CO<sub>2</sub> emissions had been created due to road transport; the rest of them divided roughly proportionally among other sectors (services, industry and agriculture).

Based on macro-economic development indices of the region, in the BAU scenario in 2050 the implemented EE and RES measures will result in CO<sub>2</sub> emissions decrease per about 30% compared to 2015. Thus, to meet Vision's GHG emissions reduction target in 2050 (i) energy consumption shall be reduced by 25% compared to BAU scenario, (ii) heat and power production shall be almost entirely based on RES utilization.

The priority areas, in which the planning region and local governments can provide high impact, is energy efficiency in both public and residential buildings, and bioenergy production from available in the region biomass resources. On top of it, to provide the adequate governance in these areas and promote stakeholders' co-operation, establishment at regional level comprehensive and qualitative energy information system and cross-sectorial cooperation networks devoted to noted energy issues are necessary.

The key features of the Vidzeme planning region in 2050 in these areas are: (i) considerable amount of new nearly zero energy buildings is on place, the dominating part of existing buildings are renovated to increase their energy efficiency, (ii) efficient DH supply in combination with effective decentralized technologies is used for urban heating systems, including the integrated feedback which enables consumers' flexible energy consumption and production; (iii) the demand-driven energy management systems are implemented in both public and residential buildings; smart, real time monitoring tools promote energy efficient life-style and supportive flexible infrastructure regarding energy consumption and decentralized production, (iv) public buildings serve as an guiding example, (v) well-considered spatial planning and by-laws on building promotes energy efficiency raising and local/regional RES utilisation.

## Addressed barriers and challenges

The principal need to reach the vision is the establishment of supportive and consistent overall framework. To reach it, the barriers and challenges of different type - policy/planning, legislative, institutional, infrastructural, socio-economical, communicative ones - are addressed in the roadmap.

## Contribution to national and regional energy sector targets



**National targets** in energy sector (energy efficiency and RES targets) are approved for 2020 only. National Energy Policy Strategy 2014-2020 states to reach 40% RES share in gross Final energy consumption in 2020. Related to 2030, "Latvia 2030 Sustainable Development Strategy", adopted June 2010, states to reach RES share at least 50% indicatively.

**National 2050 targets** at the present are not yet adopted. At the same time, it can be said with certainty that national 2050 targets to be adopted in the future, will ensure required Latvia contribution for meeting EU-wide 2050 GHG emissions reduction target.

**Regional targets.** Developed energy scenario for Vidzeme planning region takes into account the regional targets and development directions, adopted by "Vidzeme planning region Sustainable Development Strategy – 2030" and tasks stated by "Vidzeme planning region Development Programme 2015-2020" and contributes in meeting of them.

## Contribution to climate change mitigation

Latvia's participation in global climate policy efforts and actions is key priority of national climate policy. Latvia's national position clearly supports the EU strategic goals related to long-term, 2050, GHG emission reduction by at least 80% compared to 1990.

## Involvement of Stakeholders

The involvement of stakeholders was done by such methods as meeting, interview and survey questionnaire for inhabitants. The main stakeholders involved in the visioning and public discussion were: representatives of local municipalities, inhabitants of the region, business sector, representatives of district heating utilities as well as other parties interested in the development of the region.

Meetings, devoted to vision development, had been participated mainly by representatives of municipalities and experts. The focus of the meetings were presentation of the developed alternative scenarios of region energy sector development and discussion on the challenges brought by the vision and principal pathway to meet the vision.

In its turn, by interview and questionnaire the attitude of different stakeholders regarding the defined vision statement, GHG emissions reduction target, implementation of RES and energy efficiency measures as well as how to actively involve the stakeholders in this process had been identified. These applied methods successfully replaced the face-to-face workshop for the stakeholders, which are not represented by non-governmental organisations or other institutions and for which it had been difficult attend the meetings due to the relatively large geographical area of the region.

The entities participated in the vision development process and roadmapping see in Annex.