Capacity Building in CEE countries

ÚSTÍ REGION – CZECH REPUBLIC

Brussels, 1.3.2023
Basic information

- We are...

- ...in the heart of Europe, on important trans-European transport network.

- ...as well as Hydrogen Europe Regional Pillar.

- ...Hydrogen Valleys Smart Specialization Platform...
Some of the hydrogen features of the region

- The region's historical hydrogen tradition - hydrogen was produced in the region and was used productively more than 100 years ago
  - On December 7, 1912, Viktor Franz Hess took a flight in Ústí nad Labem with a balloon filled with hydrogen from a local chemical plant - later he became the laureate of the Nobel Prize for the discovery of cosmic rays, which existence he proved also thanks to this flight.

- The region is the energy and petrochemical heart of the Czech Republic - there are a number of strong companies of supraregional importance in the region, which traditionally produce a significant amount of hydrogen and have rich experience with its processing, transport and use
  - Companies operating in the chemical industry such as ORLEN Unipetrol or SPOLCHEMIE produce a total of tens of thousands of tons of hydrogen and they are actively working on the development of projects aimed at the production of green hydrogen.
  - Traditional energy companies such as ČEZ or Sev.en Energy are preparing investments in the development of installations of renewable energy sources directly linked to the production of green hydrogen.
  - Extremely wide value chain of other large, medium and small companies, as well as innovative technological start-ups operating in the field of hydrogen technology supply.
Some of the hydrogen features of the region

- Existence of the Hydrogen Platform of the Ústí Region and the Memorandum on partnership and cooperation in the development of the comprehensive use of hydrogen as a source of clean energy in the Ústí Region
  - Cooperation of local actors developed since 2018.
  - Consensus on the importance of the theme and objectives of the joint effort in the hydrogen field.

- A number of post-mining sites effectively usable for the development of the hydrogen economy
  - Up to thousands of hectares of land usable for renewable energy sources installations and interconnected production of green hydrogen.

- One of three Czech “coal regions” – extraordinary funding opportunities for innovative projects also in the field of hydrogen production and storage
  - Just Transition Mechanism and Modernization Fund.

- Proximity to Germany and the tradition of long-term cross-border cooperation
  - Connection to the German infrastructure through neighboring Saxony.
  - Number of cooperating partners and possibility to develop large scale cross-border hydrogen projects.
Ústí Region and the support and Development of the hydrogen economy – cooperation of regional stakeholders

- Memorandum on partnership and cooperation in the development of the comprehensive use of hydrogen as a source of clean energy in the Ústí Region
  - Directly linked to the activities of the Hydrogen Platform of the Ústí Region coordinated from the level of the Economic and Social Council of the Ústí Region (ESCUR) the memorandum was concluded in autumn 2019.
  - 23 signatories (incl. the Ústí Region, ICUK, UJEP and the City of Ústí nad Labem) - other entities are interested in membership, number of cooperating partners and guests.
  - Regular meetings of memorandum members, ensuring the transfer of information from the European and departmental level, implementation of joint seminars.
  - Development of cooperation with foreign partners and development of cross-border projects.
- Active communication and cooperation with the national as well as european stakeholders
- Organizing events related to hydrogen economy – e.g. International Hydrogen Forum in September 2022
- Joint definition and effort to solve barriers and challenges that limit the development of projects in the field of hydrogen economy
Ústí Region and the support and development of the hydrogen economy – Hydrogen Strategy of the Ústí Region

ICUK – coordination and support from the Ústí Region Authority level
Regional chamber of commerce of the Usti region – expert guarantee

Renewable and low-carbon H2 production
H2 for mobility
H2 in the energy sector
H2 in industrial applications
H2 for residential applications
H2 transmission & distribution

Expert round tables

Management of the Ústí Region – monitoring the development on the leadership level

Hydrogen Platform of the Ústí Region under the management of ESCUR – communication with members
The Hydrogen Strategy of the Ústí Region is part of the Regional Innovation Strategy of the Ústí Region.

The preparation of the strategy and related processes was coordinated from the level of the Economic and Social Council of the Ústí Region with active participation with relevant regional stakeholders.

Data inputs were obtained through the so called Expert round tables.

The strategy is used as a tool for defining the specific steps on the way of development of the hydrogen economy and also as a tool to highlight the visibility of the region as a region actively addressing its future competitiveness - at the national as well as international level.

The strategy frame the maximum effectiveness of regional communication and cooperation of stakeholders in the Ústí Region.
Ústí Region and the support and development of the hydrogen economy – Hydrogen Strategy of the Ústí Region

▶ Strategic vision for 2050

▶ The Ústí Region has successfully undergone an energy transition towards a strong hydrogen economy, which significantly increases the regional economic performance, prosperity and competitiveness, creates a number of new jobs with high added value and supports further development and use of technologies significantly contributing to environmental improvement.

▶ Global goal

▶ The aim of the activities developed by the strategy is to support the development of a comprehensive hydrogen economy chain in the Ústí Region, within which the potential of individual segments of the chain from hydrogen production, through its distribution to application in a wide range of areas will be utilized. The development of scientific research capacities in the field of hydrogen will also be significantly supported in order to maximize the potential of using the results and outputs of these capacities to strengthen the regional economy.
New Interreg CE project – Empowering H2-ready Regions in Central Europe

- The project aims at anchoring the European requirements of the energy transition with a focus on transferable energy planning at the local and regional level in regions in central Europe.

- The project partners will jointly develop strategies and action plans, establish competence centres and design a hydrogen incentive scheme.

- 9 partners from 7 CE countries (Austria, Czechia, Germany, Italy, Poland, Slovakia, Slovenia)

- Project objectives:

  - Integration of hydrogen into regional and transnational strategies
  - Identification of regulatory hurdles
  - Coordination with regional actors – Multi-level governance
  - Empowerment of institutions involved and their integration into the planning process
  - Strengthening local and regional capacities and building competencies
  - Consolidation of hydrogen projects.
Thank you for your attention!

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