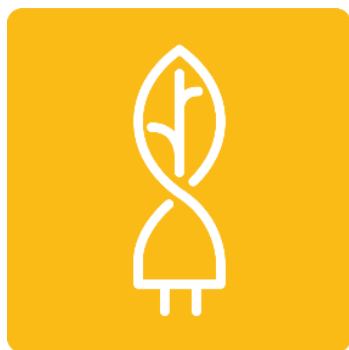


Regional Development Plans on the regional needs and skills to innovate

Deliverable 3.3: Turku, Valencia, Bochum, Kozani and
Utrecht



SEED
sustainable energy education



Document history

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Summary sheet

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Summary	This document compiles information from the 5 regional skills plans of the regions of Bochum, Kozani, Turku, Utrecht and Valencia. Divided by region you will find first an executive summary in the local language and the detailed plan in English.



COVE SEED

COVE SEED (Centre of Vocational Excellence – Sustainable Energy Education) is focused on providing excellent and innovative vocational education to become a fossil free energy continent. While challenges on the energy transition develop rapidly and technologies are constantly evolving, well-equipped students, professionals and suitable labor capacity are needed. SEED sees vocational education as an important driver for innovation and growth, agile in adapting to the labor market. The objectives of the project are therefore focused on innovative energy education that meets the needs of the labor market: a) Preparing learners, students and professionals with skills and competences for the future; b) Empowering regional innovation based on regional needs; c) Upscaling and promote work-based education, and will lead to d) the establishment of an international learning community and e) establishment of Centres of Vocational Excellence (COVES) in five regions. SEED consists of educational VET providers (EQF level 2-7), working professionals and policymakers from The Netherlands, Finland, Spain, Germany and Greece. The result is an international community on vocational excellence dedicated to sustainable energy. During the project the partners will co-create and increase not only regional cooperation, but also transnational cooperation. Good practices and innovative approaches for learning with impact will be exchanged and developed.

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Introduction

This document, Deliverable 3.3: Regional Development Plans on the regional needs and the skills needed to innovate, provides a comprehensive and detailed framework for the skills development of CoVE SEED's five regions: Bochum, Kozani, Turku, Utrecht and Valencia. Each region's plan is meticulously documented, with a detailed description on the region's needs (based on the skills and maturity analysis) and a clear overview of the goals for each category (teaching and learning, cooperation and partnership, governance and finance). To complement these comprehensive plans, we have included executive summaries of each respective region, ensuring that local stakeholders can easily access and understand the core elements of the plans. For each of the plans an abstract is created. These abstracts are included in chapter 2.

The regional plans are available in both English and the regional languages. This serves multiple strategic purposes. Firstly, it enables cross-regional learning and the sharing of best practices. By having access to the detailed plans of other regions, partners can gain valuable insights into the various strategies and methodologies being employed. This comparative analysis fosters an environment of mutual learning, where regions can adopt and adapt successful elements from their counterparts to enhance their own plans. Secondly, it ensures that there is a common language for discussion and collaboration among international partners. This commonality is crucial for fostering effective communication and cooperation, allowing regions to engage in meaningful dialogue and exchange of ideas without language barriers.

Furthermore, the availability of local translations of the regional development plan acknowledges the importance of regional specificity and stakeholder engagement. By providing summaries in the local languages, we ensure that key stakeholders in each region can easily grasp the essential aspects of the plans, facilitating their involvement and support. This dual-language approach bridges the gap between local and international perspectives, creating a holistic framework for skills development that is both globally informed and locally relevant.

1.1 Order of the regional development plans

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2. Abstracts of the regional development plans

2.1 Bochum

The regional development plan for establishing a center of vocational excellence (CoVE) around Bochum University of Applied Sciences aims to foster innovation, collaboration, and sustainable development in North Rhine-Westphalia (NRW). It reviews the region's historical context, energy strategies, and labour market, setting a foundation for targeted interventions. The plan focuses on enhancing teaching, fostering partnerships, and leveraging governance models to bridge the gap between renewable energy and education, thus accelerating NRW's energy transition. By aligning educational programs with industry needs and demonstrating effective practices, the plan aims to increase skilled workforce participation in the energy sector. Strategic partnerships and collective action are emphasized to drive meaningful change and create lasting impact, ultimately transforming NRW into a hub of renewable energy education and training.

2.2 Kozani

The Region of Western Macedonia, historically Greece's energy backbone, is transitioning from lignite to sustainable energy, presenting both opportunities and challenges. This shift aims to address high unemployment and low innovation by leveraging the region's energy expertise. The region's labor market, impacted by the 2008 crisis and reliance on fossil fuels, faces potential unemployment increases and brain drain. Transitioning to sustainable sectors is crucial, necessitating targeted labor market programs and workforce upskilling. A comprehensive skills gap analysis revealed significant mismatches between current vocational education and labor market needs, particularly in sustainable energy skills. To address these challenges, the CoVE will focus on enhancing teaching, strengthening partnerships, and improving governance. Good practices like the Higher Level VET program and the Vocational Training Digitalization Plan will align education with industry needs, ensuring relevant skills development. Implementing these strategies promises to transform the region's educational landscape, fostering innovation, economic diversification, and environmental sustainability. The CoVE's strategic curriculum alignment and collaborative networks will support the region's sustainable development and just transition goals.

2.3 Turku

The Turku COVE initiative aims to transform the energy landscape of the Turku region through strategic planning and addressing key challenges. Its primary objectives include adopting best practices from successful initiatives, fostering collaboration between educational institutions and industry stakeholders, and enhancing the region's sustainable development. Key initiatives involve reviving the Solarleap PV training, developing the Turku Machine Technology Center, and improving business management through Business Turku. The project aspires to enhance the workforce, boost research capabilities, and drive economic growth, positioning Turku as a hub for renewable energy innovation. Benefits will accrue to institutions like Raseko Vocational Education and Training School, Turku University of Applied Sciences, and industry partners.



2.4 Utrecht

The Utrecht region aims to be energy neutral by 2030 but faces a shortage of technically skilled workers, including those with digital, practical, and creative skills. To address this, the region's energy curricula need to be more responsive and attract more students to energy-related programs. The CoVE (Center of Vocational Excellence) will focus on three main goals: enhancing sustainable energy education with innovative teaching methods and flexible pathways, strengthening CoVE network partnerships and international activities, and building a self-sustaining CoVE. Partnerships with industry, particularly RoyalHaskoningDHV, and existing public-private networks will be leveraged. Good practices like Bobby Energy Hub and Uptrain, which focus on innovative teaching with external stakeholders, will be implemented to achieve these goals. Existing practices will also be improved to support the region's objectives.

2.5 Valencia

The Valencian Center of Vocational Excellence (CoVE) faces challenges in curriculum development, collaboration with industry, and innovative teaching approaches. There is a need for structured professional development for teachers and clearer governance and financing models. A skills scan revealed gaps in both generic and technical skills, highlighting the need for better planning, problem-solving, communication, and technical expertise, especially in hydrogen-related fields. A five-year strategic plan has been established to transform the educational landscape, focusing on aligning educational offerings with industry needs. Key objectives include creating a learning system connected to industry, anticipating skill needs, and securing sustainable funding. The action plan involves short-term, medium-term, and long-term goals to establish the CoVE as a hub of excellence, with initiatives like vocational training digitalization, inclusive energy projects, and public-private partnerships. Success depends on the active collaboration of all stakeholders to provide high-quality vocational education and training, meeting the dynamic needs of the economy and workforce.