



# GREEN TECH VALLEY: A REGIONAL CLUSTER THAT FUELS INNOVATION IN THE CLEANTECH SECTOR

Austria, Styria & Carinthia

This document is part of a series presenting information and lessons learned on policy approaches at national, regional or local level supporting a just transition to a climate-neutral economy. The Just Transition Platform (JTP) assists EU Member States and regions to unlock the support in this transition. Visit the JTP website: <a href="https://ec.europa.eu/regional\_policy/funding/just-transition-fund/just-transition-platform\_en">https://ec.europa.eu/regional\_policy/funding/just-transition-fund/just-transition-platform\_en</a>

#### **Member State:**

Austria

### **Region:**

Styria & Carinthia

#### Sector:

Green technology

#### Total project budget (€):

A total budget cannot be assigned as the different projects and support activities in the valley are based on different funding steams. Some services are financed by the cluster organisation, other in co-financing with EU funding, other with Austrian national funding.

#### Financing conditions (co-financing rate in %):

N/A

#### Sources of funding:

#### EU funding:

European Regional Development Fund (ERDF) (2014–2020) / ERDF (2021–2027): ERDF 2007–2013: EUR 888 800 (50 % ERDF-rate) (2007–2012)

#### **National funding:**

See above

#### Regional funding:

See above

#### **Duration:**

2005-ongoing

#### Responsible managing authority / agency / company:

Green Tech Valley Cluster GmbH

## **Summary**

The Green Tech Valley started already in 2005¹ with the aim of establishing a location for innovative green tech businesses that are able to be globally competitive. Since then, the valley grew significantly and now hosts around 300 companies and research organisations in the fields of biomass, solar power, hydropower and recycling. The project was able to create jobs for the region and contributed to the regional economic growth. The companies located in the valley show rapid growth, compared to the global average in these sectors. Support for the resident companies is provided by the

Green Tech Valley Cluster organisation which organises matchmaking (with other enterprises but also R&D organisations/institutes), develops joint industrial innovation projects, and promotes the developed innovations on various channels. Besides that, the cluster organisation itself works climate-neutrally since its establishment and the valley aims to reduce its CO2 emissions by 75 % compared to 2013. The valley was awarded the REGIOSTARS Awards twice – one in 2012 (Smart Growth) and again as nominee in the 15th anniversary edition 2022.

<sup>&</sup>lt;sup>1</sup> Back then under the name 'Eco World Styria'.

## Type of activities:

The valley hosts around 300 companies and research organisations that develop green technologies. The valley is managed by the Green Tech Valley Cluster which is a public-private partnership between regional business development agencies, the county and companies. The activities pursued to develop the valley further are diverse and tailored to the target groups. The maintenance and further expansion of the network of global leading technology firms, young innovative companies and research organisations is fuelled by: the initiation of R&D projects between different types of actors; the attraction of national competence centres in different fields, networking events such as the Technology Days or the Green Tech Innovators Club, and the promotion of public awareness of the valley through various means. Although there are common support opportunities, the valley offers specific formats for different target groups, such as the CEO Circle (for an informal exchange between companies' heads), the Green Tech Summer (quasi a summer school for possible founders from universities), the Solution Groups (to work on challenges concerning e.g. battery recycling) or the Marketeers Circle (to exchange to improve future marketing opportunities). Future activities of the valley are also embedded in the Austrian Just Transition Fund programme.

## Goals and approach:

When the project started it aimed at becoming a top location globally for innovative green tech companies by increasing the concentration of cleantech firms in the region. The focus of the project shifted to some extent over the years. First, it was central to provide companies with the right spot to locate. Now, since this goal was achieved and the valley evolved into a successful location for green tech companies it became more important to find employees for the companies and to continue to grow.

In addition, it became more important to focus on the innovation ecosystem in the region and to address how companies, research institutions and the public sector can better work together. A long-term perspective is at the core of the working.

## Important outputs, results or achievements:

The valley could establish itself as a leading location for green tech solutions not only in Austria but also globally. During its existence, 600 solutions were developed in the valley that contribute to circular solutions and to combating climate change. Due to the high concentration of firms in the area and their above-average growth, jobs were created and continue to be created for the region. The valley not only provides business opportunities for companies in the green tech sector but does also offers wide possibilities for the R&D sector and also targets young, innovative start-ups. Up to now, 15 of the 20 competence centres of Austria are located in the valley which illustrates that the valley has a certain attractiveness beyond the region's border. One specific project that is seen as a major achievement are the *Green Transformation Cards* that help companies develop their own transformation plan. Already dozen companies work with this tool, and it is planned to reach a broader audience by translating the cards in English and other EU-languages if required.

The valley has been awarded with different prizes and honours over the years that illustrate the success of the project. Those include national ('Clusterpreis 2020') and international (such as Global Cleantech Directory 2012) or European (REGIOSTARS 2012 and 2022) awards.

## Scalability<sup>2</sup> and transferability<sup>3</sup>:

The project already shows the capability to be scaled up. Besides the general growth of the valley in sheer numbers it also expanded to a neighbouring region.

For a transferability of the approach, it should be noted that a cluster like the Green Tech Valley can only achieve positive results when a certain regional specialisation based on regional strengths is given. A political enforcement of a specialised cluster due to political goals or societal trends without catering to regional needs and strengths will be unlikely successful. It is necessary to consider strengths and upcoming transformations and how those aspect could create synergies when deciding on a local specialisation. Another transferable aspect is the involvement of the cluster in the programming of the JTF. Concrete projects will be implemented in the valley, that are financed by the JTF, such as an incubator for green technologies. Depending on the focus of the Territorial Just Transition Plans, other innovation cluster could strive for something comparable.

## **Key success factors and lessons learnt:**

One central success factor for the valley is the active and close cooperation with companies, research institutions and the public sector. There are exchanges between the actors on a quarterly basis ensuring a close coordination. For the working of the cluster organisation, it is important to put the focus on the clients, to ensure a simple way of working and to follow certain principles of action. In addition, it is seen as a success factor to concentrate on different industries in the green tech sector and to follow a long-term approach. This is also mirrored in the organisational set-up of the cluster organisation which is a public-private partnership and not only organised around timely limited projects.

The Green Tech Valley's history shows the importance of local visions to mobilise the right actors and how important intermediary organisations are to create a successful initiative for the green transition and regional specialisation.

## **Key challenges:**

By now, the project has been running for over 15 years and grew during that time significantly. Due to its long-term existence and perspective the operators faced political changes that are decisive for the political support for the valley. Although by now, the valley is an established cluster in the region, this was not always the case, leading to the need for stronger efforts.

Due to the shift in geo-politics, Greentech is now a sector receiving high attention. For example, in the US the ambitions towards Greentech solutions are experiencing an upward trend. This in turn means for European locations and consequently the Green Tech Valley to exploit given opportunities in a targeted manner. This could prove challenging as the value chain for green tech solutions is a factor that is difficult to influence from a European perspective.

## Tools for supporting economic diversification and reskilling/ upskilling via projects:

- supporting firms to become more innovative and adjust from 'traditional sectors' to new technologies;
- encouraging knowledge exchange and cooperation between larger and smaller firms;
- scaling business innovation networks and support clusters;
- · capitalising on unique regional strengths for innovation;
- strengthening entrepreneurial networks.

## Central framework conditions4:

The valley was founded in 2005 and received funding from 2007 to 2012 under the Austrian Operational Programme 'Regional Competitiveness Styria 2007–2013', which aimed at increasing the region's competitiveness and innovation capacity, keeping Styria's overall attractiveness in mind. Quality of life, income and employment should be guaranteed with this approach.

The region Styria is the second largest county in Austria and lies at the border to Slovenia. The region was strongly industrialised and relied heavily on raw materials. Over the last decades Styria has evolved into a leading technology region with a high innovation potential. In

the Economic Strategy Styria 2025 the core development priorities are enshrined. Besides mobility and health tech, green tech is one of the guiding markets for the further development of the region. The green tech market is seen as having a medium to long-term growth potential. The focus in this market is put on climate and circular solutions.

<sup>&</sup>lt;sup>2</sup> Scalability entails that a policy approach can be adapted to a bigger scale than just the local context.

<sup>&</sup>lt;sup>3</sup> Transferability entails that a policy approach can be applicable to a similar setting and replicated.

<sup>&</sup>lt;sup>4</sup> Framework conditions encompass the institutional, informational and socio-economic factors that determine a given environment (contextual information), e.g. market conditions, access to finance, tax regulation, infrastructure and support.

## **Outlook:**

The project shifted its focus areas over time. Now, a stronger focus is the pioneering and fast green transformation of leading companies. This is a novelty, as the cluster organisation focus is more on supporting solutions providers in the valley. In addition, the cross-regional working, with Kärnten, is a change that will help in achieving a bigger size to have an impact on the transformation.

Furthermore, the valley has evolved to offer concrete tools for implementation in addition to the solutions needed for green transformation. The Green Transformation Cards are a well-suited

example for this shift and received very positive feedback so far. For the future, it is planned to further spread the use of the Cards, including the service of translating them into other languages (English & German are already available).

In addition, there are several activities of the valley that will be embedded in the Austrian JTF programme. Those include a green incubator, a diverse set of start-up support and a circular & recycling hub will be set up.

## **Partners & contacts:**

Green Tech Valley Cluster GmbH

Owners of the cluster organisation:

- Styrian Business Development Corporation (SFG);
- · province of Styria;
- city Graz;
- · Carinthian Economic Development Fund;
- ANDRITZ AG;
- Binder+Co AG;
- e<sup>2</sup> engineering GmbH;
- KWB Kraft und Wärme aus Biomasse GmbH.

#### Website and social media:

https://www.greentech.at/

https://at.linkedin.com/company/greentechvalleycluster

https://www.youtube.com/user/WINenergy

## **Sources:**

European Commission (2012): RegioStars 2012 – ECO WORLD STYRIA – Boosting employment through a world-beating network of greentech companies. Available at: <a href="https://ec.europa.eu/regional\_policy/information-sources/videos/regiostars-2012-eco-world-styria-boosting-employment-through-world-beating-network-of-green-tech-companies\_en.">https://ec.europa.eu/regional\_policy/information-sources/videos/regiostars-2012-eco-world-styria-boosting-employment-through-world-beating-network-of-green-tech-companies\_en.</a>

European Commission: Operational Programme 'Styria'. Available at: <a href="https://ec.europa.eu/regional-policy/in-your-country/programmes/2007-2013/at/operational-programme-styria">https://ec.europa.eu/regional-policy/in-your-country/programmes/2007-2013/at/operational-programme-styria</a>.

Gibbs, David: Sustainability transitions and green regional economies. DOI: 10.1080/13673882.2018.00001004. Available at: <a href="https://regions.regionalstudies.org/ezine/article/sustainability-transitions-and-green-regional-economies/?print=print.">https://regions.regionalstudies.org/ezine/article/sustainability-transitions-and-green-regional-economies/?print=print.</a>

Green Tech Valley Cluster GmbH (2023): Green Tech Valley Cluster. Available at: <a href="https://www.greentech.at/green-tech-cluster/">https://www.greentech.at/green-tech-cluster/</a>.

Green Tech Valley Cluster GmbH (2023): Green Transformation Cards. Available at: <a href="https://www.greentech.at/en/tools/greentransformation-cards/">https://www.greentech.at/en/tools/greentransformation-cards/</a>.

Green Tech Valley Cluster GmbH (2023): Jahresbericht 2022. Available at: <a href="https://www.greentech.at/wp-content/uploads/2022/12/GTV">https://www.greentech.at/wp-content/uploads/2022/12/GTV</a>
<a href="Jahresbericht">Jahresbericht</a> 2022 WEB.pdf.

Interview with representative of Green Tech Valley Cluster GmbH, 23 March 2023.

Land Steiermark (2023): Economic Strategy Styria. Available at: https://www.verwaltung.steiermark.at/cms/beitrag/12493649/75777498/.

Land Steiermark (2023): Wirtschaftsstandort Steiermark. Available at: <a href="https://www.wirtschaft.steiermark.at/cms/">https://www.wirtschaft.steiermark.at/cms/</a> beitrag/10430092/12858961.

This document was prepared by researchers at Prognos AG having conducted desk research, interviews and surveys. Any information and views contained in the present document do not reflect the official opinion of the European Commission. Reuse is authorised provided the source is acknowledged.