Interreg
EUROPEAN UNION
Danube Transnational Programme
EcoInn Danube

NATIONAL SWOT ANALYSIS ON ECO-INNOVATION – SLOVAKIA

Project co-funded by European Union funds (ERDF and IPA)
Contact: ecoinn.danube@cvtisr.sk

2018

WP3	Strategy for eco-knowledge
ACTIVITY 3.2	Analysing the environment for ecoinnovation in partner countries
DELIVERABLE 3.2.4	National SWOT analysis on Eco-innovation

Project number	DTP1-191-1.1
Title of the project	Eco-innovately connected Danube Region (EcoInn Danube)
Version	Final
Author	LP Slovak Centre of Scientific and Technical Information
Country	Slovakia
Date	2018

1. SWOT analysis: National (governmental) perspective

Internal factors	
+	**-**
STRENGTHS • Safe investment environment and good economic stability • Geographic location in the Central Europe, therefore great location regarding export of goods • Resource efficiency • Application of European initiatives – concepts. • Fastest growing Eurozone member during the past 10 years. • The country has substantially reduced its greenhouse gas emissions and the share of the population exposed to the worst level of air pollution is lower than the OECD average. • Slovak Republic adopted a new manifesto, which recognizes a resource efficient low carbon economy as one of the priorities in the environmental agenda. • Vouchers to co-fund the installation of renewable energy technologies. • Improvement of the circular economy is a legal Act on Waste (Act. No. 79/2015) which entered into force on January 1, 2016. • Slovakia scores significantly well in Resource efficiency outcome index • The accessibility of support structures is relatively easy. • So far, Slovak institutions have received support for 250 projects in Horizon 2020 with a budget of 77.5 million euros. Positive fact is, that private companies received 49% of founding. Food and agriculture and the environment and climate are the most successful Slovak thematic areas according to success rate.	**WEAKNESSES** • One of the main barriers in further uptake and support of eco-innovation are ineffective policies and fragmented administrative framework, • Very slow progress in implementing measures supporting research and development, insufficient financial backing in this area • There is low investment into the ecology and eco-technologies. • Slovakia lacks qualified human capacities in the area of eco-innovations. • Innovators, Intellectual assets and attractive research systems remain rather weak. • Slovakia is not so successful in ERC grants in Horizon 2020 for basic research where, only one of 30 projects has succeeded.

External factors	
+	**-**
OPPORTUNITIES • Energy efficiency is improving but the energy intensity of the economy still ranks among the highest in the EU • Strong policy framework with coherent approach towards circular economy and eco-innovation as well as adequate financial allocations for this purpose stays one of the main challenges. • fostering international cooperation on science and technology, • more engagement of the private and financial sector • Support for higher education focused on eco-innovation and research. • Total BERD expenditure has encountered increased within the observed period. • Further boost to BERD expenditure, especially increased involvement in international initiatives • Slovakia performs also research with significant success in new environmental friendly material development • Focus government R&D on emerging environmental areas that could boost Slovakia´s long-term competitiveness.	**THREATS** • Lack of financial support to research and development • Low commercialization of R&D results. • Regional discrepancies in R&D activities and spending between Bratislava region and rest of the country. • Public funding of Business expenditure in research and development is very low, which is a clear obstacle hampering the support of eco-innovation. • Government budget appropriations or outlays for R&D as is the case in general for public funding in Slovakia, has lagged far behind the EUs and Danube regions average • There is a clear lack of intramural expenditure for R&D across all sectors, which can be seen as an obstacle of further development of eco-innovations.

2. SWOT analysis: National business perspective

Internal factors	
+	-
STRENGTHS • Companies in Slovak Republic have invested into eco-innovations in order to improve their production processes or their organisation methods. • Most of the companies with implemented eco-technologies noticed reduction of materials in production process. • Healthy banking sector, specific financial schemes, projects, and venture capital companies provide recourse to good business models. • Slovak government prepared tax incentives for companies with own research and development. • 15 incubators of two types: business and technological are available in different regions of Slovakia. • Companies providing mentoring services are available. The most services are offered for free, but few programs are charged. • Co-working initiatives, fablab and Creative point with technologies for rapid prototyping are available for entrepreneurs	**WEAKNESSES** • Slovakia`s private sector has been investing poorly in research and development • Insufficient finances in order to found out new eco-innovations. • Slovakia achieves only 3% success rate in Horizon 200 SMEs instruments, representing 10 companies in the first phase and only one company in the second phase. • Lack of public awareness resulting in weak market demand for eco-innovation

External factors	
+	**-**
OPPORTUNITIES • main assets in the innovations are Employment impacts, Sales impacts and Human resources • Despite of the fact that Slovakia generates comparable amounts of waste per capita than similar economies, waste management remains a great challenge. • Companies implement only partial measures that save costs, but they are far away from the transition to the circular economy. • The shares of turnover from innovation in both the industry and service sectors have been volatile, despite of that in 2004 and 2010 largely exceeded the average of the EU 28 and the DR region average. In spite of the certain inconsistency in the turnover from products new to the enterprise and the market in both the industry and service sectors in Slovakia, overall high shares of total turnover indicate an opportunity for Slovakia for further uptake of innovation • Slovakia is one of the major producers in car industry. This industry focus a lot on improvement and R&D of their components to be more environmentally friendly.	**THREATS** • Highly educated persons in the field of engineering and science present a very low share of the population active in the national workforce. This indicates that Slovakia has a poor representation in the highest fields of knowledge, technical development and specialization. • brain-drain.