

NATIONAL SWOT ANALYSIS ON ECO-INNOVATION – CROATIA



| 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 ERDF PP7 REDEA - Regional Development Agency Međimurje

Country Croatia

2018

Date



1. SWOT analysis: National (governmental) perspective

Internal factors + -

STRENGTHS

- What are your countries strengths?
- What do you do better than others?
- What unique capabilities and resources do you possess?
- What do others perceive as your national strengths?

Croatia likes to see itself as a well-positioned country in EU with rather good road transport network and connectivity to the rest of Europe. Its favourable climate is also something all levels of government administration likes to emphasize.

Croatia is one of the leaders in terms of using renewable energy sources in its energy mix, especially in production of electricity from hydropotential. Beside hydropower, Croatia has a strong potential in using wind power (especially in the coastal region), solar energy, wooden biomass and geothermal power.

The awareness about energy scarcity, energy efficiency and renewables is rather high which makes eco-innovation solutions easier for adoption by people.

Average salaries in Croatia can still be attractive to foreign investors but this advantage diminishes over years due to relative increase of tax burden compared to other neighbouring countries.

The education system, especially in STEM sector still produces talents, hence unemployment rate of young engineers is very small.

Croatia established Environment Protection and Energy Efficiency Fund as a sustainable national support institution with the aim to support R&D and innovation.

WEAKNESSES

- What are your countries weaknesses?
- What do innovation leaders do better than you?
- What can you improve given the current situation?
- What do others perceive as your countries weaknesses?

One of main weaknesses is related to finance. Croatia is a very indebted country with its near junk credit rating which makes it a risky country to invest but it also results in the price of capital which is significantly higher than in other countries. That affects the access to financing of business sector which hinders development, R&D spending and innovation. It also causes reluctance of the government to ease the tax burden, which is among highest in EU, to be able to repay its debt to foreign creditors.

Lack of political commitment to implement structural reforms affects almost all areas of life in Croatia:

- Education system is producing young people with inadequate skills. The gap between market and education system is becoming wider leading to shortage of skilled workforce.
- Frequent changes in legal framework create instable investment climate
- Poor reliability of property registers, slow adoption of e-government services and inefficient administration slow down many legally bonded processes.

Moreover, almost one third of population lacks basic IT skills which forces companies working on innovative products and solutions based on cutting-edge technologies to export their products and solutions due to limited domestic demand. This also determines the structure of the economy which is characterised by traditional business sectors that usually require lower or middle educated workforce. Level of education and readiness to lifelong learning which is among the lowest in EU causes stagnation in productivity. Education is also reflected in readiness to accept changes which is on relatively low levels.



| The overall spending on R&D in Croatia is among the |
|--|
| lowest in EU. Unlike in more developed countries, |
| public spending on R&D is bigger than in private sector. |

Co-operation of R&D institutions and universities and private sector is weak.

Business support infrastructure lacks high added value services to support innovation processes.

| External factors | | |
|--|---|--|
| + | - | |
| OPPORTUNITIES | THREATS | |
| What trends or conditions may positively impact your country? What opportunities are available to your country? | What trends or conditions may negatively impact your country? What are your competitors doing that may impact your country? Does your country have solid financial support? | |
| Croatia's accession to EU opened the possibility to use ESIF as a major lever of economic growth. The mid-term goal of increasing Croatian R&D spending to 1.4% of GDP is reflected in ambitious plans for public calls targeted at strengthening SMEs and innovation landscape. Innovation and more specifically, eco-innovation is a major priority in operational programmes. SMEs as well as other important stakeholders in innovation eco-system will get a financial boost to make all components of the system more competitive. | One of the biggest threats to the entire Croatian economy comes from emigration of its citizens with all levels of education. Ageing is another major problem which puts big challenges on sustainability of health and pension system. The Croatian economy is highly dependable on internal market demand due to low competitiveness of companies. Seasonal character of the economy where almost 20% of GDP comes from tourism makes the overall economy very fragile. Furthermore, export companies (touristic | |
| Broadband infrastructure development is one of major weaknesses of Croatia and a proven impetus of GDP growth. With help of EU funds Croatia plans to do the major overhaul of its infrastructure, especially in areas of reduced commercial interest. Croatia is also a very safe country, and since safety is nowadays an important issue this could also attract some people to live, start or keep their business in Croatia. | companies excluded) rely mostly on couple of EU countries which makes them vulnerable to all sorts of disruptions. | |
| | Technological disruptions are also a major threat to Croatian economy due to its low technological advance, reluctance to innovation and low level of education. | |
| | As the end of cheap money approaches, Croatia faces another threat to repay its debt in due time which makes access to the capital more expensive. | |



2. SWOT analysis: National business perspective

| Internal factors | | |
|------------------|---|--|
| + | - | |

STRENGTHS

- What are your identified strengths of companies operating on the national level?
- What do you do better than others?
- What unique capabilities and resources do you possess?
- What do others perceive as your companies' strengths?

Successful and innovative SMEs are able to find market niches. They tend to find strong relationships to partners/buyers outside Croatia which makes them exposed to new and disruptive technologies and solutions. They also need to fulfil strict standards of their partners that does not always refer to final products or services but also to processes.

Some companies use the advantage of being located close to the market or are in proximity of major transport routes.

Salaries are still one of strengths of Croatian companies and this competitive advantage is also followed by quality.

WEAKNESSES

- What are the weaknesses of companies operating on the national level?
- What do innovation leaders do better than?
- What can be improved given the current situation?
- What do others perceive as your companies' weaknesses?

Private companies of all sizes in Croatia are relatively reluctant to R&D spending which makes their sustainability chances at risk. The major reason for that is relatively poor access to finance and the fact that most of them, especially SMEs rely solely on domestic market demand which lacks depth and is essentially rather traditional. Majority of owners do not consider alternative financing sources like capital markets or crowdfunding, joint ventures etc. They are very traditional in managing their companies without taking more risk than necessary or lack the knowledge to identify opportunities in disruptive technologies that could help them to further develop both horizontally and vertically.

SMEs tend to be very slow in embracing digitalisation and new ways of doing business. Business processes are usually run in traditional manner without much ICT support involved and thus many opportunities missed.

Owners rarely form clusters to reduce the risks of investments in R&D and innovation or share resources in their everyday operations.

Liaisons between private sector and R&D organisations and universities is rather modest. Universities usually do not have much incentives to approach private sector and in many cases the private sector does not know how to approach these organisations. Lack of awareness about possible synergies needs to be addressed as it can be rather simply turned to an opportunity.



| External factors | | |
|------------------|---|--|
| + | - | |

OPPORTUNITIES

- What trends or conditions may positively impact your national companies?
- What opportunities are available to your national companies?

Public spending in Croatia is among the highest in EU. With new legal framework, e.g. Public Procurement law (PPL) that requires public institutions to use most economically advantageous tender (MEAT) criterion, the National action plan on green public procurement, and the national goal of minimum 50% public purchases to have green criteria included, an opportunity opens for SMEs offering green products and solutions. Furthermore, PPL also enables public authorities to engage in so called innovation partnership (public procurement of innovation, precommercial procurement) and directly support private sector in the commercialization of their innovative products and solutions. The same priority provides the opportunity for significant improvements of R&D institutions and business support organisations (BSO). All this should lead to better liaising of private sector, R&D organisations and BSOs and creation of partnerships and clusters.

EU funding provides another big opportunity for private sector to develop its resources in many different facets that will contribute to their competitiveness and increase capacities for innovation. Eco-innovation is specifically addressed in the investment priority of Operational Programme Competitiveness and Cohesion. Another investment priority of EU funding related to energy efficiency and use of renewable energy sources in public buildings indirectly provides opportunity to SMEs to launch their innovations to domestic market.

Economic growth helps exporting companies that could exploit this situation to increase their capacities to grow. Niche target markets will probably remain the best way for innovative companies to penetrate new markets and retain existing ones. Combining with disruptive technologies and the fact that many of these technologies do not require large funding pose a huge opportunity for innovative companies (e.g. Rimac Automobili).

THREATS

- What trends or conditions may negatively impact your national companies?
- What are your competitors doing that may impact your national companies?
- Do you have solid financial support?

Croatia is still waiting for serious structural reforms that would improve business conditions and political impact on Croatian future is decisive. Many changes need to be made to improve legal framework which makes Croatia over-regulated. Changes in Labour law and further tax burden relief are essential.

Using EU funding as major source for financing can also be risky. In the long run subsidies tend to have negative impact on competitiveness and Croatia is not going to be an exception to this rule. In parallel, ageing and brain drain through emigration will pose constant threat to sustainability of Croatian economy and capacities of innovative companies.

Slow adoption of new business paradigm and postponing digitalisation can hinder development or possibly be even devastating to significant number of companies.

Seasonality due to large share of tourism makes Croatian companies extremely vulnerable to any disruption or occurrences out of Croatian influence. Furthermore, many Croatian companies from the private sector depend on public spending and usually neglect innovation or diversification of their business.



Croatia is not an exception in terms of market demand for green products which is constantly growing. Ageing, health service system under huge financial pressure and fast development of (sustainable) tourism can be considered as markets with considerable potential for innovative companies.