



BIC Bratislava
Business & Innovation Centre

Implementing Cohesion Policy under Smart Specialization Strategies

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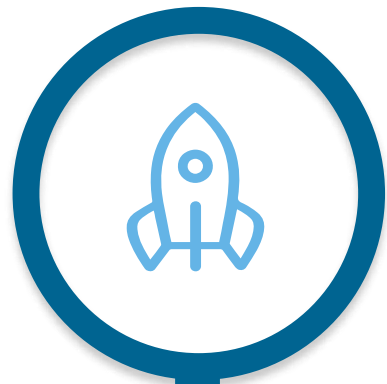
5.6.2019

Experiences of Slovak SMEs within Global Value Chain Processes



BIC Bratislava
Business & Innovation Centre

1. Slovak Republic – Basic Facts



1993

Established



5,4 mil.

Population



49 000 km²

Area

EU member since 2004

Eurozone member since 2009

1. Slovak Republic – Basic Facts

GDP – 88,6 bil., 77% of the EU average, 90% [Export](#), Open Economy Index – 176%

[Industry share of the GDP](#) – 25%, [Automotive industry share of the GDP](#) – 13%, with increasing tendency

[4 OEMS](#): VW, PSA, Kia Motors, JLR, 350+ car suppliers, mostly SMEs, just a minority SK ownership

Other important sectors: IT incl. creative industry, electronics, biomedical technologies, light construction materials, services incl. KIS

Important for national economy the sectors diversification of national economy, e.g. bio-economy development

Necessity of increase the SME share in GDP generation

2. Smart Specialization Domains

Smart Specialization Strategy – S3 approval 2013, Implementation Plan elaborated in 2017

Slovakia – moderate innovator, Bratislava – strong innovator

Fragmentation and under-financing of education and research, development and innovation system

5 Domains: Transportation means, Industry for 21st century, Digital and creative industry incl. IT, healthcare and biomedical technologies, agro-food and environment

Governance insufficiency of S3 implementation

3. Business & Innovation Centre

1

Established in 1991

First BIC in CEE countries

Enterprise Europe Network coordinator in Slovakia since 2008

2

Development of RIS in Nitra, Trnava

Development of Smart Specialization Strategy in Bratislava Region (strong innovator, 2012)

3

Participation in the Slovak Republic Smart Specialization Strategy elaboration

4

Enhancement of Innovation Management Capacities Consulting Services (since 2014)

Establishment of the „Club of Excellence“ (2019)



4. Global Value Chain in Slovak SMEs

Three main groups:



Automotive industry suppliers



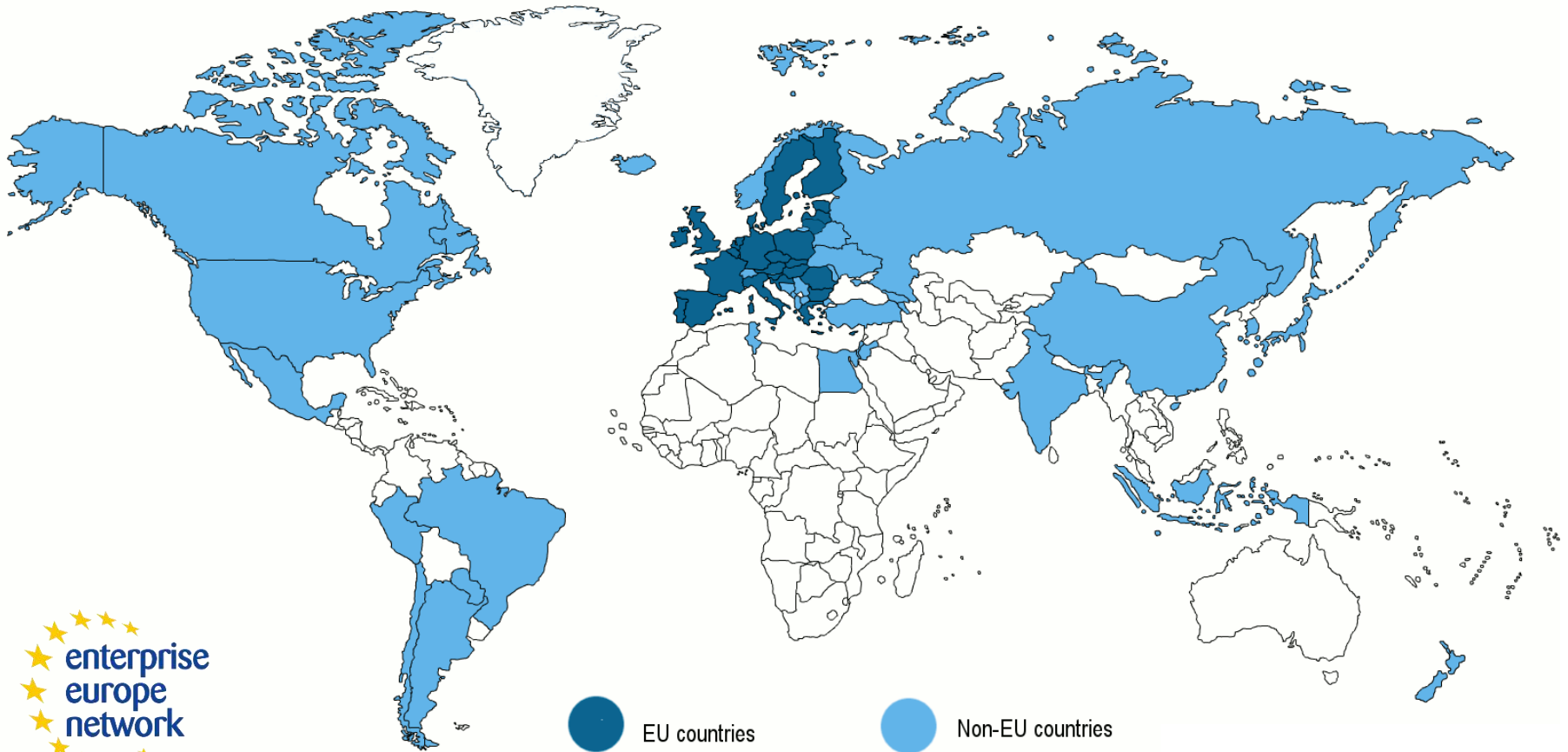
High-tech SMEs



Break-through innovation SMEs (seal of Excellence)

Enterprise Europe Network

the enabler for GVC development



5. Automotive Industry Suppliers

Tier 1, 2 and 3 suppliers

Supply strictly defined products and components – still space for their own process innovation

Limited margins and added value creation

5. Automotive Industry Suppliers

Process innovation providers in OEM companies by Slovak SMEs, e.g.:

- Mobile robotics systems for VW,
- Maintenance processes efficiency increase in PSA



High margins and added value creation – up to 30%

BIC Bratislava has provided EIMC consulting services for these companies

6. High-Tech SMEs

Research, Development and Innovation driven SMEs

Different sectors: biomedical engineering, renewable energy, environment, prototyping (the fastest on the market)

Trend-setters: products and services new to the world

Close to the market

High margins and added value creation – up to 40%



10x faster than anything on the market

Photogrammetry software that changes the industry

Search map
e.g. "2 bridge st, galway" or "53.27, -8.05"

Site info

Browse position (lat/lon)
00° 31' 38" 28° 39' 08"

Site position (lat/lon)
-02° 49' 20", -42° 24' 26" (show decimal)
Unnamed Road, Tutóia - MA, 65580-000, Brazil

Solar radiation (yearly average)

- ☉ horizontal: 2101 kWh/m² (show MJ/m²)
- Diffuse horizontal: 838 kWh/m²
- Direct normal: 1769 kWh/m²

Air temperature

- Yearly: 27.7 °C (show F)
- January: 27.8 °C
- July: 27.3 °C

Terrain (SRTM3)

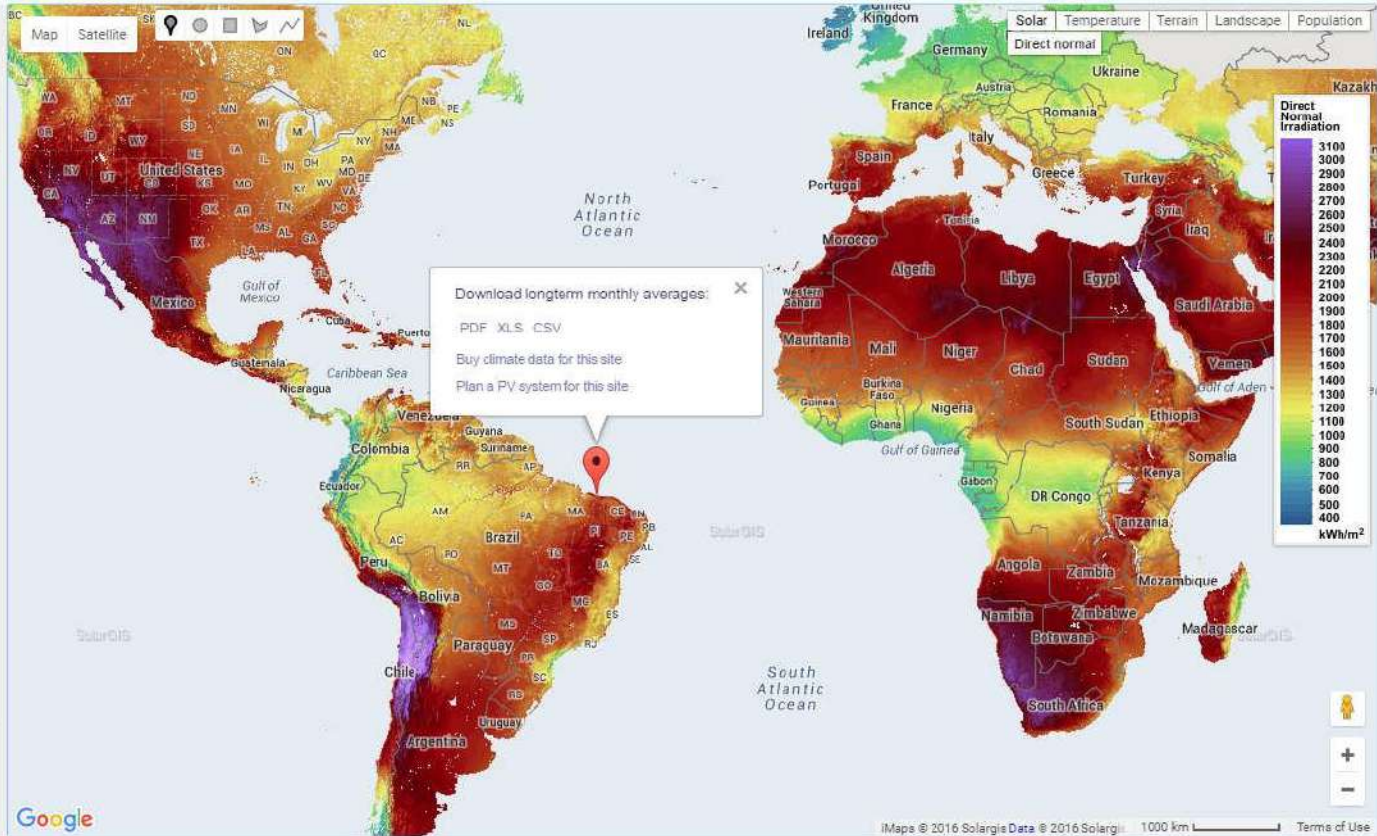
- Altitude: 31 m (show ft)
- Slope inclination: 1.1 ° (show %)
- Slope azimuth: 124° (SE)

Landscape (GLC/C/LC)

Population (GPW)

Site list

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Integrated System for Solar Powerplant Management

backbone discs

development of soft tissues

85,84%

facial restoration



7. Break-through Innovation SMEs



Seal of Excellence

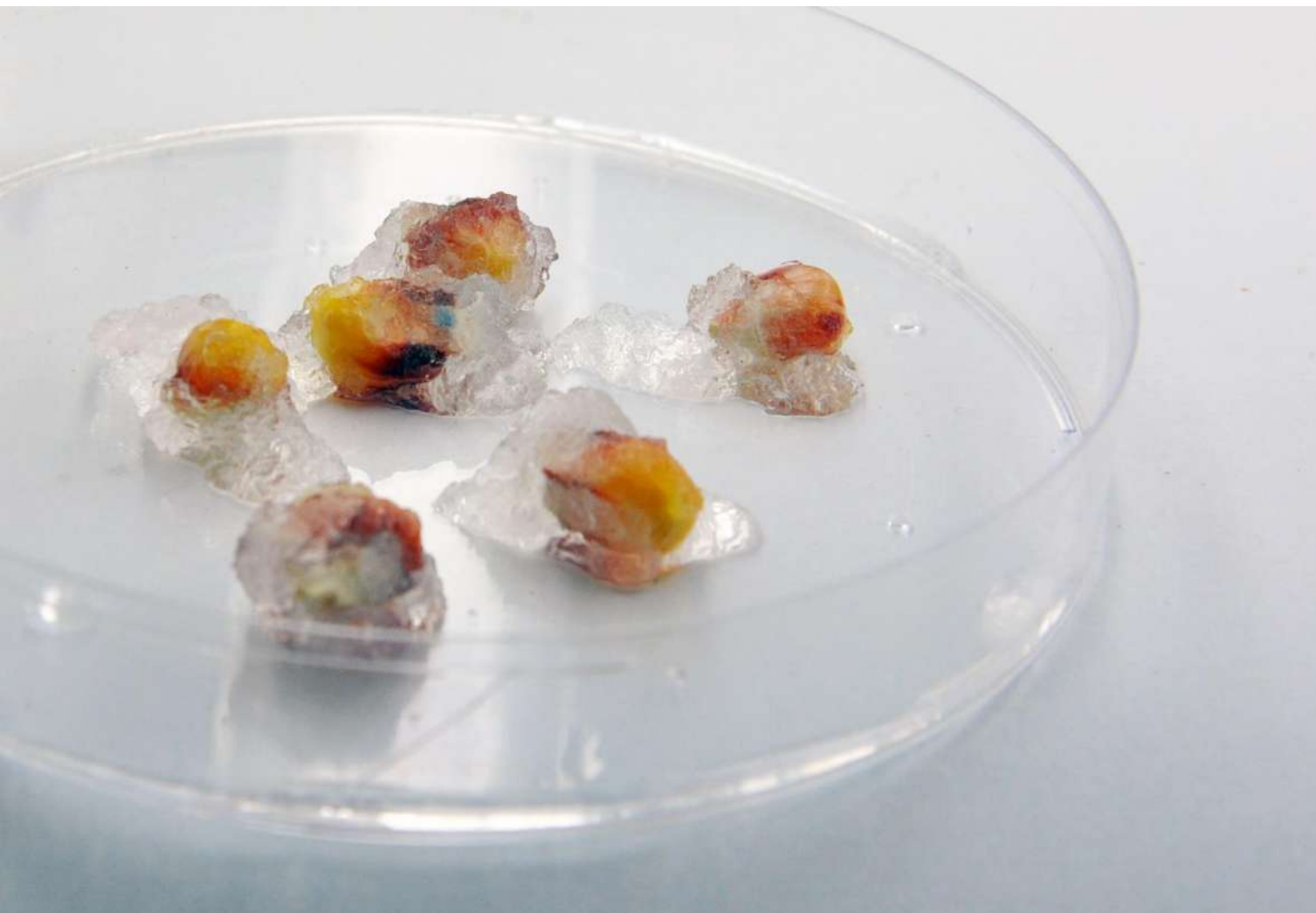
Development of disruptive products, technologies and services

Different sectors: environment, chemistry, agriculture, healthcare



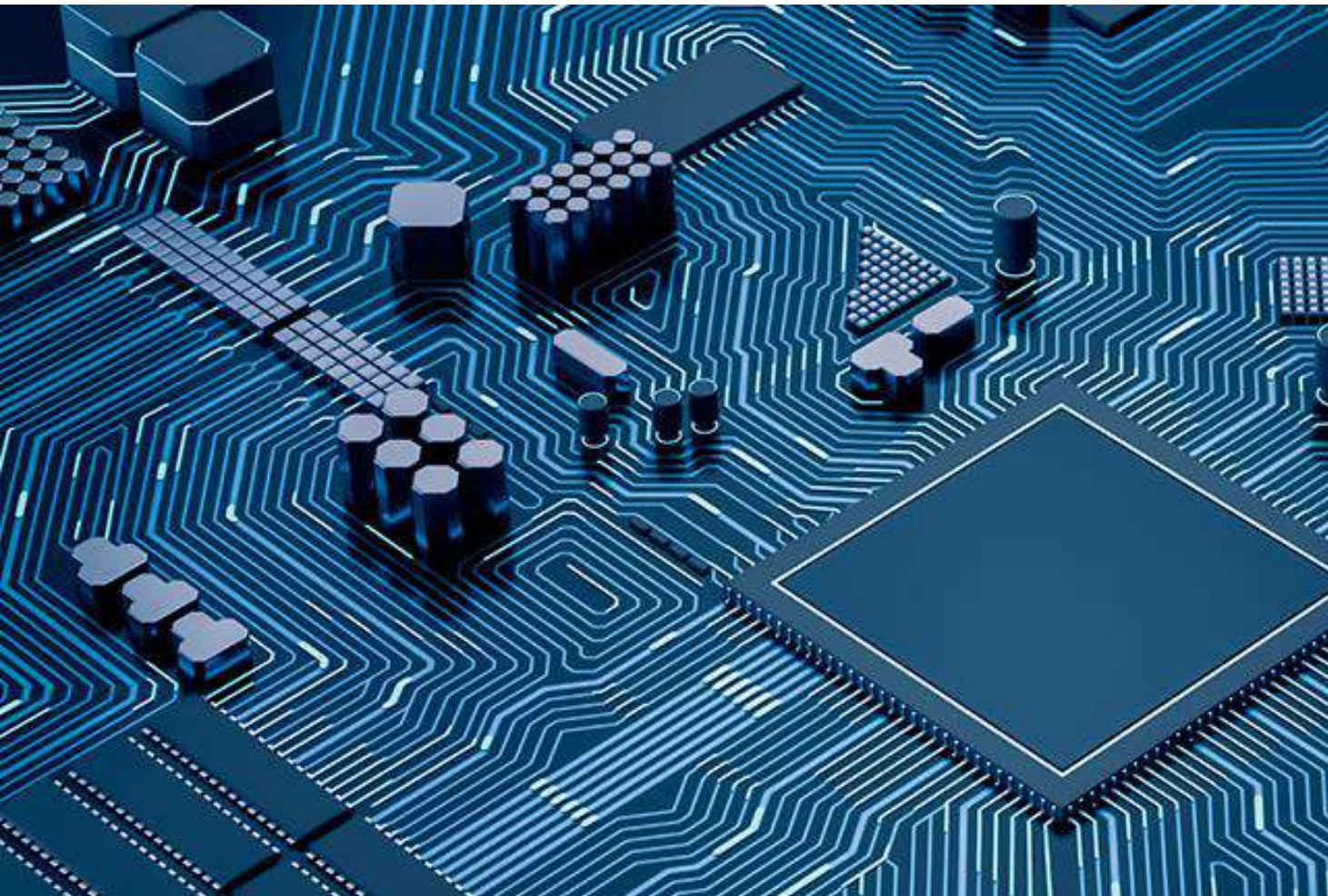
Fast diagnostics methods of cancer diseases (breast/prostate cancer)

Development of nano-transportation system for drugs for tumor cells treatment



Aquaholder® Seed

Innovative seed coating technology to increase agricultural productivity



Development of Universal Processor

10x lower power | 3x lower sell price | 4x lower data center costs

7. Break-through Innovation SMEs

Development in close cooperation with universities, Slovak Academy of Sciences, Science Parks (state of the art labs)

Further support needed, e.g. access to finance, incl. blended financing (grants, loans, guarantees, equity – incl. public one - financing)

Extrem high added value creation

Club of Excellence establishment initiated by BIC Bratislava

8. Recommendations

Human resources development and stimulation

Efficiency increase of educational system – fragmentation and under-financing

Research, development and innovation performance stimulation – fragmentation and extreme under-financing – 0,79% of GDP, the lowest in V4 and almost in the EU

Efficiency increase of public administration within research, development and innovation process design and supporting systems

Strengthening the industry – academia cooperation and creation of industrial research

8. Recommendations

- | IPR support for academia and industry

- | Access to finance improvement, especially grants, loans, guarantees, equity – incl. public one – financing schemes development

- | Entrepreneurial environment improvement

- | Innovation and high-tech SMEs stimulation schemes development

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