

Monitoring and evaluation of Lithuanian smart specialization - experiences and plans for the future

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Smart specialization in Lithuania 2021-2027 Challenges

Low SME capacity to apply innovations (esp. in regions)

Small share of companies generating high added value and small share of R&D expenditures in GDP

Low level of business and science internationalization level (participation in international projects, networks)

Goal – to develop an innovations-driven economy by strengthening the cooperation between business and science, and by concentrating resources into R&D resources of highest potential.

Tasks:

- To strengthen R&D and innovation capacities by developing favorable environment and conditions and by developing the necessary skills and competences.
- To develop and to apply knowledge, advanced technologies and innovations in order to use and integrate the
 newest technologies, products, processes, methods that are available in the market.
- To stimulate active integration of market players into the value chains (local and global), their development and creation. To stimulate active integration of market players into other R&D cooperation forms.

Coverage of 2021-2027 Smart Specialization

1

Health technologies and biotechnologies

2

New manufacturing processes, materials and technologies

3

ICT technologies

- 1. Molecular technologies for medicine and biopharmacy
- 2. Advanced applied technologies for personal and public health
- 3. Advanced medical engineering for early diagnostics and treatment
- 4. Safe food and sustainable agriculture resources

- . Photonic and laser technologies.
- 2. Advanced materials and construction.
- Flexible product development, manufacturing, process management, design technologies.
- 4. Efficient and smart energy consumption.
- 5. Renewable energy resources.

- Artificial intelligence, big data, diverse analytics, processing and installation.
- 2. Internet of things.
- 3. Cyber security.
- 4. Fintech and blockchain.
- 5. Audiovisual media technologies and social innovations.
- 6. Smart transportation systems.

Smart specialization monitoring framework

- Yearly monitoring of progress.
- Goal to monitor implementation progress according different S3 priorities.

Monitoring



- Evaluation conducted in 2025 in order to assess whether the identified priorities and thematic fields are actual, what are the results achieved.
- Goal to assess the potential, efficiency and results of the programme.

Interim evaluation



- Impact evaluation conducted in 2030.
- Goal to assess the impact of the programme in economic terms and to understand what kind of externalities it has produced.

Impact assessmen t

What kind of indicators used?

Input indicators

 To assess how the financial resources are distributed among the priorities, among the financial support measures, which part of demanded amount was assigned.

Product indicators

 To assess what is the progress of implementation, what is the scope of companies supported.

Result indicators

 To assess what are the benefits for the direct target beneficiaries, what kind of results do they produce.

Impact indicators

 To understand what is the broader economic impact of the programme.

indicators (statistical data)

Whole economy

- R&D expenditure (% from GDP)
- Share of turnover from new products (%)
- Share of SMEs which adopted product or process innovations (%)
- Employment in high added sectors (%)
- Impact of high and medium value added products on trade balance of goods
- Knowledge-intensive services exports (%)

According S3 priorities

- GDP growth;
- Added value for an employee;
- Number of employees;
- Turnover;
- Turnover generated by one employee;
- Investment (Investment in equipment, investment in building, investment in patents and software, investment in land);
- Exports of products and services;

Learnings from 2014-2020 period

• Challenge: no ready data on Smart Specialization

 LT Statistics Department was asked to provide additional data on specific companies which are part of Smart specialization → more precise analysis of macroeconomic indicators

•S3 priorities and NACE codes were allied with the help of external experts and analysts of Ministry of Economy and Innovation

•Qaulitative data needs to be more integrated in monitoring process for getting deeper insides

•Statistical data gives only broad overview, but there is to collect and analyze company level data

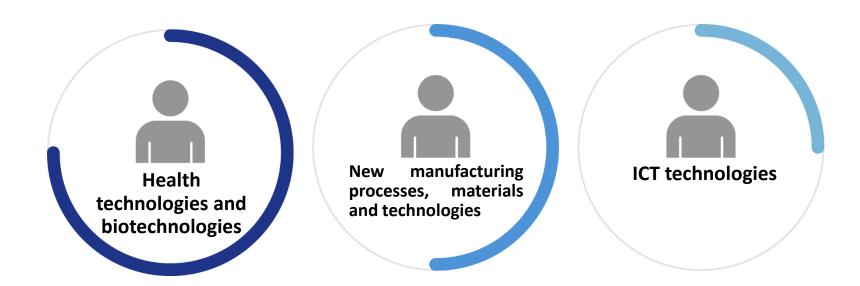
More indepth data of companies

- S4 interim evaluation and final impact assessment will be conducted by external experts.
- Companies surveys and interviews for the interim evaluation and final impact assessment
- Interviews with key stakeholders

IT solution for S4 monitoring

- Data based tool needed for S4 monitoring.
- The tool will be updated every year and it will enable a combination and visualisation of key innovation-related data from various sources of the main stakeholders.
- Indicators related to the performance of R&D activities within different S4 priorities.
- Generating improved innovation evidence through digital tools and open data, to support the regional EDP.

Smart specialization facilitators



Facilitator is assigned to each S4 priority. Facilitator, together with his dedicated team, facilitator is in constant contact with SMEs, science and education institutions, organizations. Facilitator:

- Facilitates S4 ecosystems.
- Organizes discussions of EDP experts and issues conclusions.
- Submits expert insights on S4 priorities.
- Gathers and organizes collection of relevant data.

Thank you!

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