

RESET – RESEARCH CENTERS OF EXCELLENCE IN THE TEXTILE SECTOR



REGIONAL ACTION PLAN FOR THE LODZKIE REGION

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PARTNER NUMBER & NAME REGION	PP3 Łódzkie Region – Łódzkie (PL)
VERSION	Final

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1. GENERAL INTRODUCTION

1.1 AIM OF THE RESET PROJECT

European textile and clothing sector is a most relevant economical source for the EU, accounting for 4% of the total added value of the manufacturing sector, with 173.000 companies and a turnover of 165 billion €. Its competitiveness is linked to increased investments in innovation and research both public and private which are key drivers for European companies to lead the market in the coming years. Due to its enormous environmental impact, sustainability and environment-friendly production is emerging as a new driver of textile process, product innovation and technology development. The overall objective of the project is to generate a policy change in the implementation of regional policies and programmes of the Structural Funds related to the strengthening of research, technological development and innovation to assure the sustainability of the T&C sector in the partner regions. It will be achieved through policy learning and capacity building activities on public policies supporting innovative, green and sustainable T&C production and processes. The learning potential embedded in **interregional exchange** will result in the **uptake of new Good Practices and projects by the partner regions** enabling to support excellence in R&D, to promote investments by enterprises, to develop innovative skills of T&C Stakeholders, and in a deeper integration between research and innovation policies for the sector's sustainability. Sustainability driven research and innovation will concern primarily the production processes and product development and addresses **six key themes**:

// Recycling in textile and waste disposal

// Water consumption and energy saving, sustainable company organisations

// New sustainable chemistry, including reduction of chemical substances

// Smart textiles and new ways of production

// Eco-creativity, natural fibres, short value chains

// New materials and new applications

1.2 OBJECTIVE OF THE ACTION PLAN

An action plan in general is a sequence of steps that must be taken or activities that must be performed successfully for a strategy to succeed. An action plan has three major elements (1) Specific tasks: what will be done and by whom. (2) Time horizon: when will it be done. (3) Resource allocation: what specific funds are available for specific activities.

Produced by each region, the action plan of RESET project is a document providing details on how the lessons learnt during the project and from the cooperation with other Partners and regions will be exploited in order to improve the policy instrument tackled within that region. It specifies the nature of the actions to be implemented, their timeframe, the players involved, occurring costs and potential funding sources.

1.3 REGIONAL ANALYSIS OF PARTNER REGIONS

The Lodzkie Region is located in central Poland, which is of great importance to its economic, social and cultural development. The region has an area of more than 18 thousand km² and a population of 2,5 million, with the majority of the inhabitants living in the city of Lodz and its agglomeration. Lodzkie, in terms of its administrative division, is made up of 24 districts (poviats) and 177 municipalities.

Lodz, the capital of the region, with a history of almost 600 years is a place where the postindustrial past intertwines with the present and innovativeness. Lodz is not only a cultural centre (with many museums, theatres, cinemas, galleries) but also an academic center (28 colleges and universities) as well as an economic centre – apart from the textile industry that led to the prosperity of the city, three branches of particular importance impact the development now: BPO (Business Process Outsourcing), logistics and appliances.

The favourable geographical position of the region is conducive to the development of the logistic industry, thanks to which the Lodzkie Region has become a strong Polish player in this area. The Lodzkie Region is a place where EU funds are used most effectively, and where there has been one of the largest increases in GDP in recent years. An effective tool in stimulating the region's economic development is the acquisition of EU funds under the Regional Operational Programme of the Lodzkie Region for the years 2014-2020.

In April 2013 in the Regional Innovation Strategy for the Lodzkie Region LORIS 2030, industries with the greatest potential for the further long-term economic development of the region were identified. Strategic industries for the Lodzkie Region according to RIS LORIS 2030 include:

- modern textiles and the fashion industry (including design);
- advanced construction materials;
- medicine, pharmacy, cosmetics;
- energy, including renewable energy sources;
- innovative agriculture and agricultural and food processing;
- information technology and telecommunications.

Also key technology areas have been identified which, due to the existing potential in the region, have a chance to develop and support the economic growth of the region. These include:

- biotechnology;
- nanotechnology and functional materials;
- mechatronics;
- communication and information technologies.

On the territory of the Lodzkie Region there are about 240 thousand economic entities, mainly small and medium. Over 97% of all entities are private companies. The number of commercial companies with foreign capital share is about 1,900.

The Lodzkie Region has a strong economy which is continually developing new branches.

It is traditionally strong in light industry and in industries such as household appliances, production of construction materials, and agricultural and food processing.

The Lodzkie Region is among the most important Polish centres bringing together companies from the sector of modern services for business (BPO/SSC).

Another important industry is the power industry, located in Bełchatów, where more than 20% of domestic electricity is produced.

Lodz is one of the most important Polish centres for external business support. According to the ABSL report "The sector of modern business services in Poland 2014", BPO and SSC companies in the region's capital employ almost 11 thousand people, that is 8% of all employees.

Another key sector for the region is logistics, which is no surprise given its strategic location. The biggest logistics centre in the region is Stryków, partly due to the fact that it is situated at the intersection of the A1 and A2 motorways. The following logistics parks have been created there: Business Park, Segro Logistic Park Stryków, Tulipan Park Stryków, Panattoni Park Stryków and registered offices of the companies in this industry. The second place with logistics importance is Piotrków Trybunalski. Also here there are logistics parks. They include: Logistic City Piotrkow Distribution Center, P3 Park Piotrkow, Kaufland Logistic Center, Regional Distribution Center IKEA, ProLogis Park Piotrkow.

The Polish textile industry is an important sector of the national economy. In 2016, the industry's share in GDP amounted to 21,8%, whereas its share of the textile sector yielded in 5.1%. After a period of crisis and long-term underinvestment in the sector at the end of the 1990s, it started to reconstruct the market position. In place of the old large enterprises, new, rapidly growing companies were established, which in the vast majority are SMEs. The production of all sectoral products has dramatically increased, especially in the sector of the innovative products (medical, technical textiles, etc.). The employment amounted to 116.6 thousand people in 2016, which puts it at the forefront of the national economy.

Traditions of the textile industry in the Lodzkie Region date back more than 150 years. Now, thanks to the scientific and research support as well as EU funds, the textiles and clothing industry has been transformed into a thriving and modern industry which is one of the strengths of the region. In the Lodzkie Region there are more than 10 thousand companies from this industry. These companies can count on an extremely strong scientific and research base and qualified personnel.

Geared towards the production of high quality and unique clothing, overcoats and outer garments, cotton wool, and synthetic fabrics, hosiery, towels, velvet, and underwear, this traditional industry has recently seized yet another opportunity to develop and match international competition. This has happened largely due to its existing potential, including:

- high-tech textile sector (Pro Humano Tex),
- highly qualified staff with ample experience and professional expertise,
- strong scientific and academic base, including the Stakeholders of the RESET project.

The Lodzkie Region is also a major fashion centre. The city of Rzgów - Ptak Fashion City is the only City of Fashion in Europe - a place in where there are thousands of companies producing clothing, mostly from Polish manufacturers. The City of Fashion is created by people working creatively in the fashion business. It is a place for trade exchange between manufacturers, importers and purchasers from the whole world. It is here where the International Fashion Fair Ptak Expo takes place. There is also the International Fair of Fabrics and Accessories. A big event for the whole industry is the Fashion Philosophy Fashion Week Poland / Łódź Young Fashion - a great fashion week in Lodz with the participation of leading Polish designers. It is the largest industry festival of fashion designers in Poland.

2. ACTION PLAN

PART I – GENERAL INFORMATION

Project: **RESearch centers of Excellence in the Textile sector - RESET**

Partner organisation: **Lodzkie Region**

Other partner organisations involved (if relevant): -

Country: Poland

Country (NUTS1) MAKROREGION CENTRALNY

Region (NUTS2) Łódzkie

City (NUTS3) Miasto Łódź

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PART II – POLICY CONTEXT

The Action Plan aims to impact:

- Investment for Growth and Jobs programme**
- European Territorial Cooperation programme
- Other regional development policy instrument

Name of the policy instrument addressed:

Regional Operational Programme for the Lodzkie Region for years 2014-2020

Priority Axis I 'Research, development and commercialization of knowledge'

Measure 1.1 'Development of R&D infrastructure'

implemented under the Thematic Objective 1 'Strengthening of research, technological development and innovation'.

PART III – DETAILS OF THE ACTIONS ENVISAGED

ACTION 1 – ‘NEW PROJECTS STRENGTHENING REGIONAL DEVELOPMENT’

1. The background

The Lodzkie Region plays a key role in shaping regional policy through the preparation and drafting of the most important strategic documents: the Development Strategy for the Lodzkie Region 2020 and the Regional Innovation Strategy for the Lodzkie Region - LORIS 2030.

Furthermore, the Board of the Lodzkie Region acts as the Managing Authority of the Regional Operational Programme for the Lodzkie Region for years 2014-2020.

One of the objectives, which encouraged the Lodzkie Region to join the partnership of RESET project, was to improve the implementation of the policy instrument (ROP for the Lodzkie Region 2014-2020) by bringing more valuable real projects that would strengthen regional development. From the point of view of the Lodzkie Region as the MA of ROP, spending the EU allocation on important initiatives is a very important feature of managing regional development.

During the project life, the representatives of the Stakeholders and of the Regional Government of the Region (Project Partner) participated in 6 thematic seminars organized within the RESET project in 2016 – 2018 in order to exchange knowledge and experience in the area of modern textiles, and – as a result – to define best practices which can be implemented in the Lodzkie region.

The 5th RESET interregional seminar on ‘Eco-creativity, natural fibres, short value chains’ was hosted by the Lodzkie Region in Lodz (PL) in October 2017. The seminar brought the conclusion that eco-friendly textile goods and technologies that minimize power consumption, CO2 emissions and the volume of waste generated at every manufacturing stage, are a priority for the textile and clothing sector, stimulating the development of modern technologies in European regions. During the seminar the Partners and their regional Stakeholders presented good practices and concluded the day with the exchange session between the policy practitioners and Partners interested in their transferring to deepen their knowledge on specific areas of interest. All Stakeholders of the Region were actively involved in that event.

The staff exchange visits that took place in the 5th semester, in Lille and in Bucharest, helped the participants (the Lodzkie Region’s employees and the Stakeholders – representatives of R&D institutes and academic institutions) to obtain detailed information and deepen their knowledge on the selected Good Practices.

In particular, **2 Good Practices** were recognised in the general discussion with the Stakeholders as the most interesting and possible to be transferred into the Lodzkie region.

They are:

1. **'Manucoat: Photocatalytic self-cleaning textile'** presented by National Research & Development Institute for Textiles and Leather (INCDTP) from Bucharest, Romania in the Policy Theme: **'New sustainable chemistry, including reduction of chemical substances'**.
The objective of Manucoat is to develop new, longlife and environmentally stable photocatalytic textiles with sensitivity in the solar visible spectrum and wool with durability to environmental conditions. Introduction of nanoparticles TiO₂ into textiles and leather offers not only self-cleaning possibility, but also UV protection, antimicrobial action and possible other interesting bio-active properties, what was of special interest to the visitors from the Lodzkie Region. The study tour was combined with the meeting at INCDTP, as well as the visit to the National Institute for Non Ferrous and Rare Metals and in the company MGM Star Construct.
2. **'Bicomponent spunbond nonwovens'** presented by Centre of European textile Innovation (CETI) from Lille, France in the Policy Theme: **'Smart textiles and new ways of production'**.
The GP presented a unique process of combining 2 polymers in order to obtain a lofty material. During the staff exchange visit the participants from the Lodzkie Region were able to get acquainted with the details of the process of spunbond. An additional benefit was the opportunity to visit the whole Center, get acquainted with its activities, partners, contractors and all processes and technologies conducted in the field of modern textiles operated in CETI.

2. Actions

Under the influence of the RESET project, the Stakeholder institutions (Lodz University of Technology - Department of Materials Science, Commodity Science and Textile Metrology; Institute of Security Technologies MORATEX in Lodz; and Institute of Biopolymers and Chemical Fibres in Lodz) worked in mutual co-operation on new project proposals for the Regional Operational Programme for the Lodzkie Region for years 2014-2020, Priority Axis I 'Research, development and commercialization of knowledge', Measure 1.1 'Development of R&D infrastructure'.

As the result of the co-operation 2 new project proposals have been prepared and successfully submitted as part of the recruitment for co-financing:

Project 1: **'Innovative Textile 2020'**:

- **Beneficiary:** the consortium of R&D institutions from the Lodzkie region, with the leading

role of Lodz University of Technology - Department of Materials Science, Commodity Science and Textile Metrology (the Institute of Security Technologies MORATEX and the Institute of Biopolymers as the partners in consortium);

- Costs: total budget about 22,6m PLN (ca. 5,0m EUR), ERDF about 12,5m PLN (ca. 2,8m EUR);
- Implementation timeframe: 2018 – 2020;

- The main objectives:
 - Increasing the degree of commercialization and internationalization of scientific research in the field of textile industry;
 - Increasing interdisciplinary knowledge resources in the field of textile industry recognized as a priority for the development of the Lodzkie region;
 - Ensuring the coherence of the Polish science sector with the European Research Area and continuously raising financial outlays on the R & D sphere, which will result in the improvement of research and innovation infrastructure and increase the ability to achieve excellence in the field of textile research and innovation.
- The project has been partly inspired by 'Manucoat: Photocatalytic self-cleaning textile'. Some of the solutions presented in Manucoat will find application in the new project proposal. The project assumes the purchase of new R&D infrastructure that could allow to conduct similar research and obtain good results in photocatalytic textiles.

Project 2: 'Transparent Research and Innovation Zone in MORATEX':

- Beneficiary: the Institute of Security Technologies MORATEX in Lodz;
- Costs: total budget about 20,1m PLN (ca. 4,5m EUR), ERDF about 11,2m PLN (ca. 2,5m EUR);
- Implementation timeframe: 2018 – 2020;
- The project assumes the investment in the construction, technical and research infrastructure that leads to the creation of two highly specialized research laboratories with a significantly individual character and economic significance both in the region and in the interregional and international approach;
- The project proposal has been partly inspired by CETI. During the study visit to CETI the Stakeholders were able to visit the Center and learn about the details of the machinery park and all kinds of infrastructure and processes conducted by the Center. After the visit a lot of new research ideas started to be defined by the Stakeholders. In the result, the project prepared by MORATEX contains some of the ideas and solutions observed at CETI.

Added value:

What is important, as the requirement of the ROP, the enterprises from the Lodzkie region will be involved in the projects. As the recipients of scientific research they will be given the preferential terms to carry out their research with the use of the research infrastructure purchased within the projects.

Importance:

Both above mentioned project proposals are very complex and aim to provide an innovative research infrastructure for the textile sector in general, that has not been available to these institutions so far. The need for the research infrastructure was inspired by the RESET project and

observed in particular during the study visits and within all substantial discussions with the Partners.

Next ideas:

Further project proposals are in preparation. The Institute of Biopolymers and Chemical of Fibres in Lodz has started its works on a new proposal inspired by the technology park and processes observed at CETI and also other GPs. Once it's ready, it will be put in the system of the ROP according to the procedures.

3. Players involved

A strong regional partnership has been built within the RESET project, and the following regional institutions constitute **the Stakeholder Group**:

- Lodz University of Technology, Department of Material and Commodity Sciences and Textile Metrology;
- Institute of Biopolymers and Chemical Fibres in Lodz;
- Institute of Security Technologies MORATEX in Lodz;
- Lodz Academy of Fine Arts, Department of Textiles and Clothing.

The role of the Stakeholders / Beneficiaries of project 1 'Innovative Textile 2020' and project 2 'Transparent Research and Innovation Zone in MORATEX':

- The Stakeholder institutions invited to the RESET project were actively involved from the beginning of the project. Their representatives participated in 6 thematic seminars and 2 staff exchange visits. Observations, discussions, exchange of knowledge and experience during meetings with other Partners and Stakeholders, inspired the regional Stakeholders of the Lodzkie Region to take action and create new projects (described above).
- As the Beneficiaries of the projects they will be responsible for the projects' implementation, that will take place in the 2nd phase of the RESET project. The implementation of projects will be conducted with the respect of the public procurement.

The role of the Lodzkie Region:

- As the regional authority and the Managing Authority of the ROP, the role of the Lodzkie Region has been to introduce the Stakeholders to the Good Practices and to encourage regional institutions to develop the project proposals in the field of R&D in Textile and Clothing sector.
- On the other hand the Lodzkie Region has been promoting the ROP as a source of co-financing for potential project proposals.
- As the MA of ROP, in the implementation phase of Action Plan Lodzkie Region will assist the Beneficiaries during the projects, monitor the progress and indicators, as well as will help in solving problems that may arise.

General remarks:

- It should also be noted that both - the allocation of Priority Axis I of the ROP for the Lodzkie Region 2014-2020 as well as the eligibility of funds - are available for subsequent projects.

- In order to maximize the use of EU funds in the region, the Lodzkie Region will disseminate the results of the RESET project and encourage potential beneficiaries to be active and implement new ideas within the ROP.

3. Timeframe

- Project 1 'Innovative Textile 2020' – implementation timeframe: 2018 – 2020.
- Project 2 'Transparent Research and Innovation Zone in MORATEX' – implementation timeframe: 2018 - 2020.
- According to the current schedule of calls, 2 calls for proposals within Priority Axis I 'Research, development and commercialization of knowledge' Measure I.1 'Development of R&D infrastructure' of the Regional Operational Programme for the Lodzkie Region for years 2014-2020 will be announced in 2019.
- The expenditures under the Regional Operational Programme for the Lodzkie Region for years 2014-2020 are eligible to 2023.

5. Costs (if relevant)

- Project 1 'Innovative Textile 2020' – European Regional Development Fund: ca. 2,8m EUR
- Project 2 'Transparent Research and Innovation Zone in MORATEX' – ERDF: ca. 2,5m EUR
- The allocation in Priority Investment 1a in ROP for Lodzkie Region 2014-2020 (Measure I.1 of ROP): 50 913 930.00 EUR.
- There are still funds available for the coming calls in 2019.

6. Funding sources (if relevant)

- Up to 85% of eligible costs from ERDF:
Regional Operational Programme for the Lodzkie Region for years 2014-2020
Priority Axis I 'Research, development and commercialization of knowledge'
Measure I.1 'Development of R&D infrastructure'

3. SUMMARY

The Lodzkie Region appreciated a great idea of the RESET project based upon a principle of knowledge and experience transfer between the Partners of the project. The idea with a principle of connecting Partners operating in the Textile & Clothing sector from different regions of Europe to allow them to learn from one another and inspire each other – enabled them to get acquainted with the best examples of innovative solutions as well as to transfer the most interesting ideas to the Partners' regions and institutions.

The structure of the project was very well thought out, and the division into thematic areas allowed for a detailed analysis of the problems of the T&C sector in six key themes.

The project partnership has been very well planned, including the representation of research institutes, municipal and regional authorities.

The representatives of the Lodzkie Region had a chance to participate in the interregional learning process - thematic seminars and study visits to Partners' institutions, during which they took part in fruitful discussions and presentations leading to the exchange of knowledge, and – in longer perspective – leading to the inspiration for the future project proposals created in the Lodzkie region. In the process of working on new proposals, it was noticed that it is not possible to transfer the good practices in 100%. This is mainly due to regional context, the needs of potential beneficiaries, as well as the possibility of financing. As the main source of EU funds for the Lodzkie Region, Regional Operational Programme still demands the own financial contribution (at least 15%) from the beneficiaries. This is a significant obstacle to the implementation of high-budget projects.

Although a full transfer of the observed Good Practices has not been possible, the Lodzkie Region considers the RESET project to be a success. Thanks to the formula of exchanging knowledge and experience among the project Partners, as well as the commitment of the regional Stakeholders, the Region has gained valuable new ideas that will strengthen its development.

The RESET project has marked its impact on the increase of the involvement of the T&C sector from the Lodzkie region in the regional development through its participation in the calls for R&D infrastructure within the ROP for the Lodzkie Region.

Two new project proposals for the RPO for the Lodzkie Region, inspired by the RESET project, are meaningful for the regional development. Once the projects are finished, the new R&D infrastructure will be used to cover the needs of 3 leading regional institutions to conduct research in the textile sector. The involvement of the economic sector in this process will increase the competitiveness of enterprises. Moreover, the awareness of the impact of the T&C sector on the environment and how to prevent the negative effects by using new technologies, has been raised.

The possibility of obtaining funds from the Regional Operational Programme for the Lodzkie Region 2014-2020 is still open and the Region will support new initiatives proposed by the Stakeholders and other institutions acting in the R&D sector.

The Lodzkie Region declares the assistance for potential beneficiaries in applying for EU funds by providing the information about the procedures needed to be completed, as well as by disseminating the knowledge gained through the partnership in the RESET project.

Place/Date:	_____
Signature:	_____
Stamp of the organisation:	_____