

Czech Technology Platform for Textile

Possibilities of Cooperation



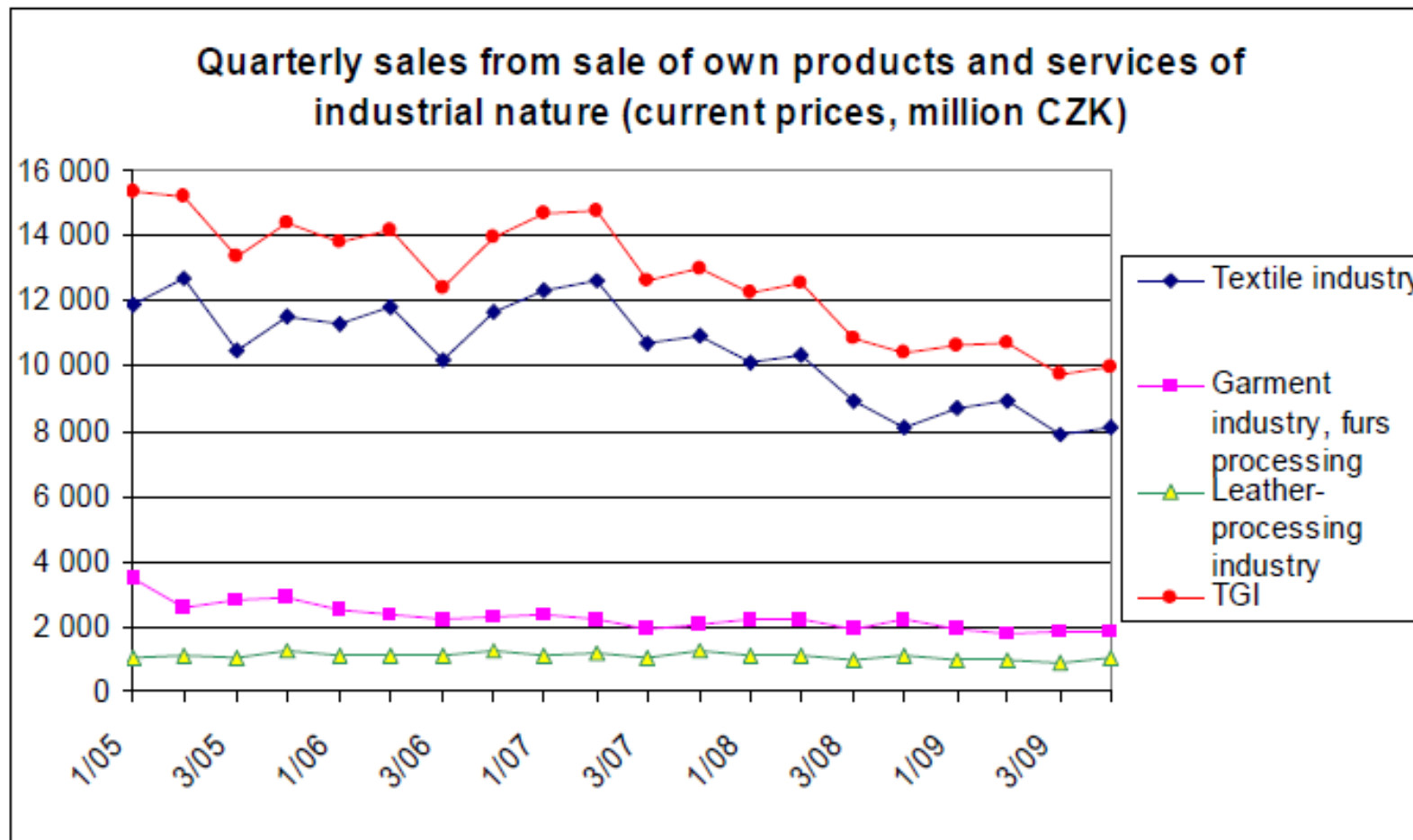
EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND
INVESTMENT IN YOUR FUTURE

Budapest, 23.9.2010

Content:

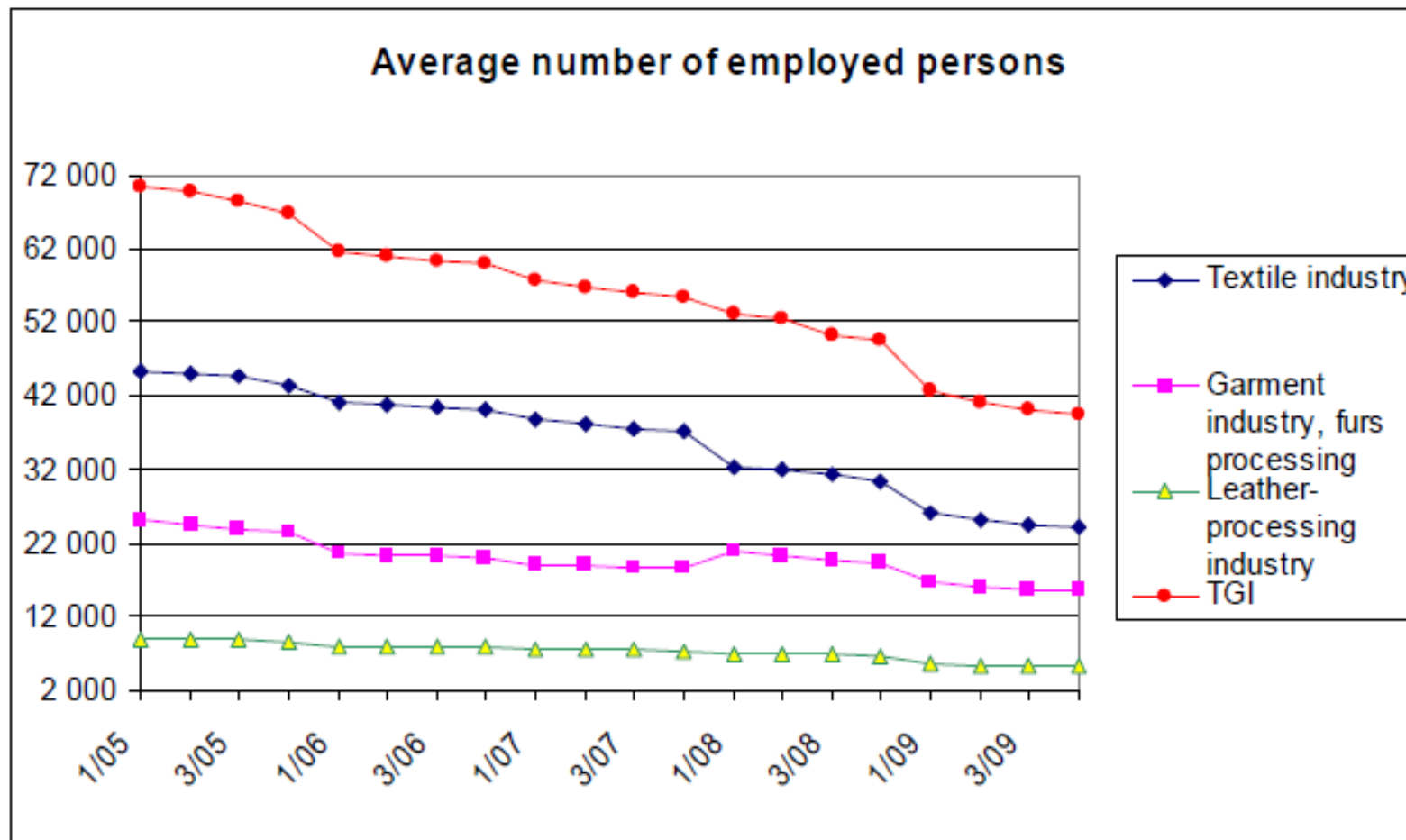
- TCI Situation in Czech Republic
- Perspectives of Czech TCI
- TC Associations in Czech Republic and its objectives (ATOK, CLUTEX, CTPT)
- R&D&I in Czech TCI (CLUTEX + CTPT)
- Cooperation

TCI Situation in Czech Republic



Source of data: ATOK

TCI Situation in Czech Republic



Source of data: ATOK

TCI Situation in Czech Republic

No mass production
Less big companies
Less clothing producers

BUT

More technical textiles
Higher productivity
More competitive companies
Companies with vision, strategy, R&D skills

Perspectives of Czech TCI

- Like TCI of whole EU
 - Technical textiles
 - Mass customisation
 - New textiles applications
 - High added value textile

TC Associations in Czech Republic and its objectives

- ATOK – Association of Textile, Clothing and Leather Industry
- CLUTEX – Cluster of Technical Textiles
- CTPT – Czech Technology Platform for Textile

TC Associations in Czech Republic and its objectives

- **ATOK – Association of Textile, Clothing and Leather Industry**
 - Established 1990
 - National TCI association
 - Communication with Public Bodies (ministries, public agencies, ...)

TC Associations in Czech Republic and its objectives

- **CLUTEX – Cluster of Technical Textiles**
 - Established on 14. March 2006
 - Regional cluster focused on technical textiles
 - Granted from Structural Funds
 - Solve predefined R&D projects
 - Partner in several national projects

TC Associations in Czech Republic and its objectives

- CTPT – Czech Technology Platform for Textile
 - Established on 24. June 2008
 - Main aim: prepare strategy vision of R&D in Czech TCI
 - Members: SME companies, big companies, university, R&D institutions

Associations and R&D

- CLUTEX
 - regional cooperation
 - Pre-defined projects – in progress
- CTPT
 - Goals: create vision of Czech TCI R&D
 - CTPT experts: Interconnection ETP – CTPT

Czech Technology Platform for Textile

- Outputs:
 - STUDIES
 - Strategic Research Agenda
 - Implementation Plan
 - > Projects



CTPT – Strategic Research Agenda

- Main R&D topics
 - Inputs
 - Outputs (applications)

CTPT – Strategic Research Agenda

- Main R&D topics
 - Inputs
 - Textile machinery
 - Agricultural
 - Biotechnology
 - Electronics
 - IT Technology

CTPT – Strategic Research Agenda

- Main R&D topics
 - Outputs
 - Healthcare
 - Remote supervision of the elderly and newborns, monitoring
 - PPE
 - Protection against chemicals, cold, heat ..., high visibility
 - Army
 - Ballistic protection, masking, capture vital signs
 - Building, geotextiles
 - ...

Possibility of Cooperation

- Prepare a joint project ideas
 - Introduction of CTPT members
- Use existing proposals

Introduction of CTPT members

Associations:

- ATOK – Association of Textile, Clothing, Leather Industry (www.atok.cz)
 - Education, Entrepreneurial atmosphere
- AVOZ CZ – Association of manufacturers and Traders with Sports Goods (www.avoz.cz)
 - R&D in textile goods for sport
- CLUTEX – Cluster of Technical Textiles (www.clutex.cz)
 - Coordination of project - R&D in technical textiles

Introduction of CTPT members

Manufacturers:

- CNM Textil
 - Finishing mill (bleaching, dyeing, calendering, ...)
- Nová Mosilana
 - Producers of woolen yarns and fabrics (MARZOTTO S.p.A)
- Silk & Prograss
 - Special fabrics by weaving and warp frame technologies

Introduction of CTPT members

Manufacturers:

- Svitap J.H.J.
 - technical fabrics (canvas, flax fabrics, filtration fabrics) and technical confection, POE tarpaulins, nonwoven textiles, upholstery fabrics and blankets, geotextiles etc
- Texsr
 - Home textile, textile for hotels, bathrobes
- Veba
 - Producer of cotton Jacquard fabrics, home and clothing textile goods

Introduction of CTPT members

R&D and testing institutions

- **Inotex**
 - New Technologies, Colouristic Services, Short-yardage Textile Finishing, Short-run Machinery Production, Centre of Ecology, Technical Informatics
- **Sintex**
 - Knitted fabrics and cloth form trend and special fibres, R&D activities
- **VUTS**
 - research, development and design of machines and equipments for manufacturing industry in field of textile machines, packers, blue printing machines, ...
- **TZU – Textile Testing Institute**
 - Certification authority
 - Certification, testing, R&D

Introduction of CTPT members

University

– Technical University of Liberec, Faculty of Textile engineering

- The most popular: industrial production of nanofibers – Nanospider
- But it is only small part of university points of interest

Introduction of CTPT members

Members experiences with projects:

- Nanopowders
- Optical fibers in textiles
- „Nondamageable“ Building
- Healthcare – protective clothing, patients clothing, antidekubitus, ...
- Special fabrics for textile
- New type of textile machines
- Etc.

Horizontal themes: Themes for common projects?

- Education
- Standardization
- IPR
- MARKETING
- IMAGE OF TCI

Actual project proposal – FP7 (TZU – Textile Testing Institute)

NMP.2011.1.1-1

Smart and multifunctional packaging concepts utilizing nanotechnology

New packaging materials with specific protective functions would be developed. Some materials with this function are already on market. We have experience with barrier properties and microbiology penetration through nano-membranes. These materials can be used for protection of foodstuffs, medicals, cosmetics etc. These applications are also applicable for environmental protection of herbal tissues.

We are looking for:

- partners who are interested in packaging area and applications
- project coordinator

Actual project proposal – FP7 (TZU – Textile Testing Institute)

NMP.2011.1.2-3

Active nanomembranes/-filters/-adsorbents for efficient water treatment with stable or regenerable low-fouling surfaces

We develop filtration materials with adsorptive attributes and strong reductive potential. These attributes are ensured by nanoFe(0). Ferrum is non-toxic, ecological, cheap material which can be integrated into filters. We test these applications for small drinking and waste water cleaning units. We are able to adsorb organic molecules (e.g. pesticides in drinking water) and also heavy metals (e.g. U, Cr, Pb, etc). We cooperate with local producer of drinking water and also have strong potential in cooperation with partner working in geology and environmental remediation area. Other applications like cleaning of air pollutants are possible (organic, O₃ etc.).

We are looking for:

- partners
- project coordinator



Thank you for your attention

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