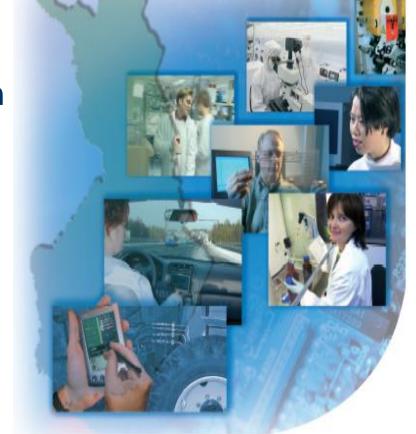
Tekes -

as an Agent of Change in the Finnish Innovation Ecosystem

Visita de la delegacion del Partido EAJ-PNV

Pirjo Kyläkoski, Foresight Manager, Tekes

November 7, 2008





Content

- | Finland's Innovation Ecosystem and Tekes
- | Finland's competitiveness
- | Finland's National Innovation Strategy
- Tekes strategy focus areas and implementation
- | Future challenges



Tekes – in brief

- State agency under the Ministry of Employment and Economy
 - key player implementing national innovation policy
- Over 0,5 BILL. EUR annually tax payers money
- Personnel 360 in Helsinki, abroad and regionally
- Funding R&D&I -projects
- Planning and funding Tekes programmes
- Networking regional national global
- Activating
- Open and confidential communication with companies
- Customers:
 - Companies (start ups, smes, large)
 - Universities, research institutes



Tekes strategy in a nutshell

The basis

Mission statement

Tekes boosts the development of Finnish industry and the service sector by technological means and through innovation.

This will renew the economy and increase added-value, productivity and exports, thereby creating employment and enhancing wellbeing.

Values

Tekes and its staff value and aim to promote the wellbeing, vision, trust, cooperation and development of society, customers and colleagues





Core activities

Core processes

Strategy

Foresight, evaluation and innovation research
Strategy creation and communication

Customerships

CR management and new client acquisition
Activation projects and tailored offerings
Marketing communication

Programmes

Tekes programmes
Strategic Centres for Science,
Technology and Innovation
International cooperation initiatives

Funding

Special innovation funding Funding for public research R&D funding for companies

Resources

- 536 + 30 million euros
- Personnel 284 + 89
- 6 overseas offices

The goal

Objectives

Strong knowledge base on important areas of R&D and innovation

Focus during strategy period:

- Internationality of innovation activities
- Strong and networked Strategic Centres

Productivity and renewal of industries

Focus during strategy period:

- Young innovative companies
 - Growth companies

Combining economic growth with the wellbeing of people and the environment

Focus during strategy period:

- Sustainable energy economics
- Quality health care service system
 - Regional vitality

Vision

Tekes is a leader in boosting innovation.

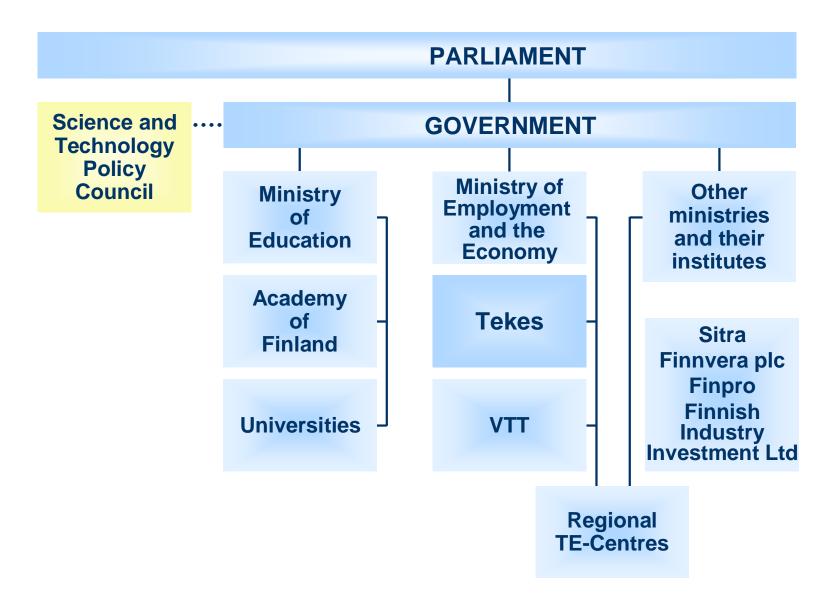


Main messages:

- Active period in science, technology and innovation policy in Finland since early 1980 ties
 - Growing investments in R&D&I good results
 - Dynamic innovation ecosystem
 - Active private public dialog on all levels
- Content of innovation is widening
- Global communication and cooperation growing importance
- Tekes key player in Finnish innovation ecosystem
 - Strategy
 - Funding and services
 - Tekes programmes
 - Strategic Centres for Science, Technology and Innovation
 - Global cooperation



Public sector activities of R&D&I in Finland





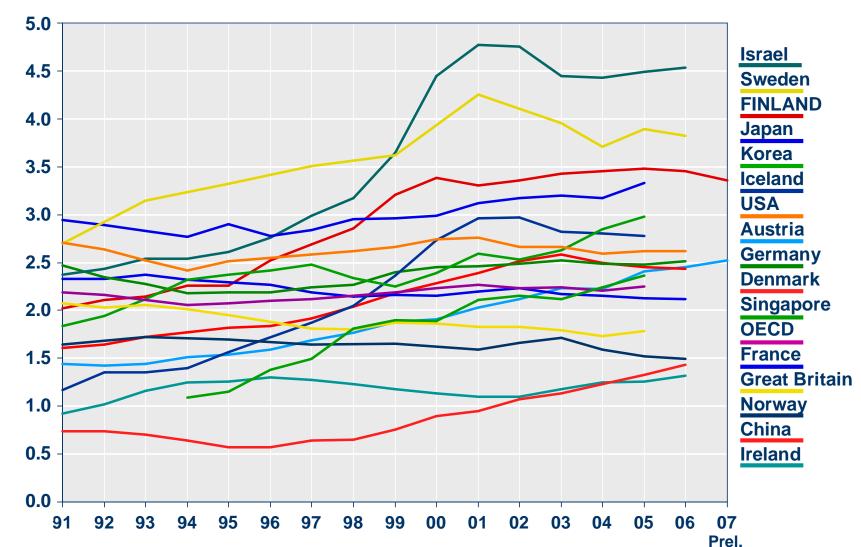
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R&D investments in some countries

Percentage of GDP

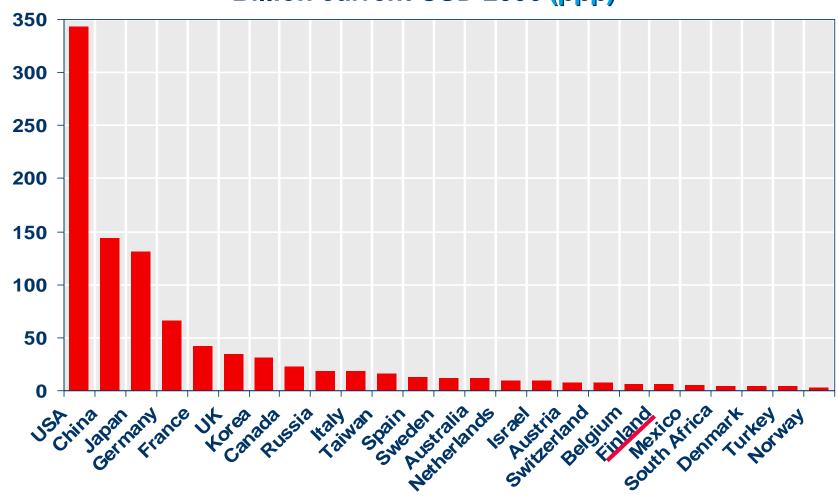




Sources: OECD, Main Science and Technology Indicators and Statistics Finland

Global R&D leaders are outside Europe...

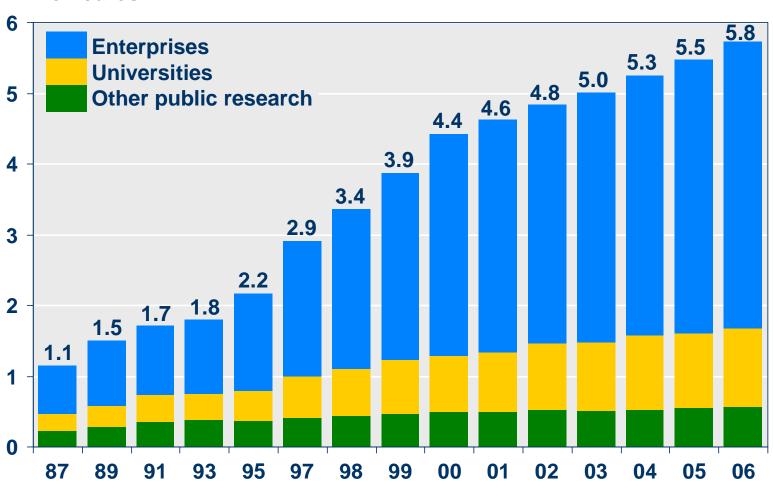
Gross domestic expenditure on R&D Billion current USD 2006 (ppp)





R&D investments in Finland

Billion euros





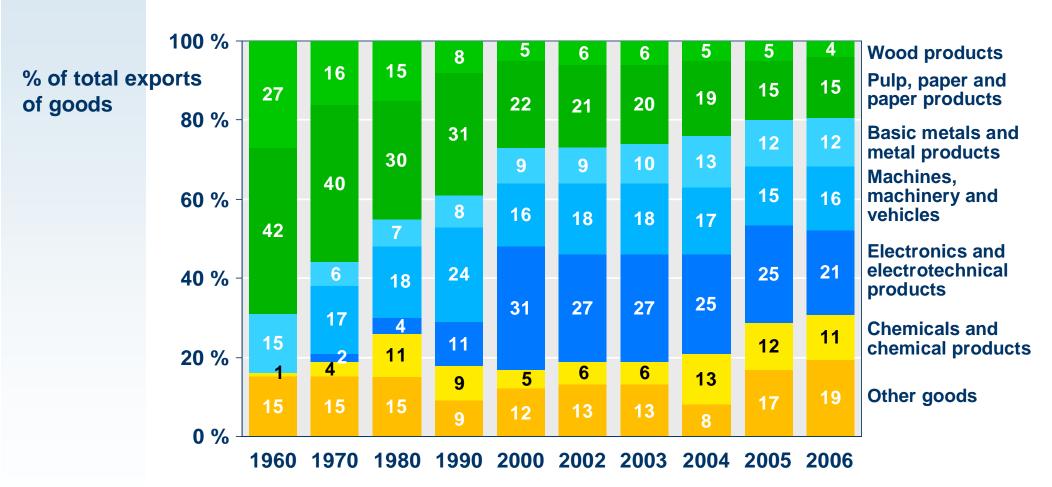
High investments in innovations in Finland.

There are clear results:

- The structure of industries has changed strongly towards knowledge intensive sectors (1980-2005)
- GDP growth figures and productivity growth relatively good
- High tech exports has grown
- | Patenting is active
- Competitiveness scoreboards rank Finland high



Finnish exports of goods

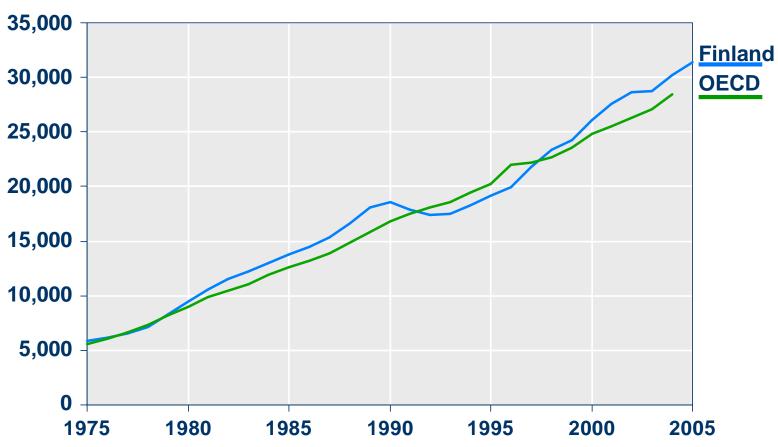




GDP per capita

GDP in Finland has grown at a rate faster than the OECD average both before and after the recession.

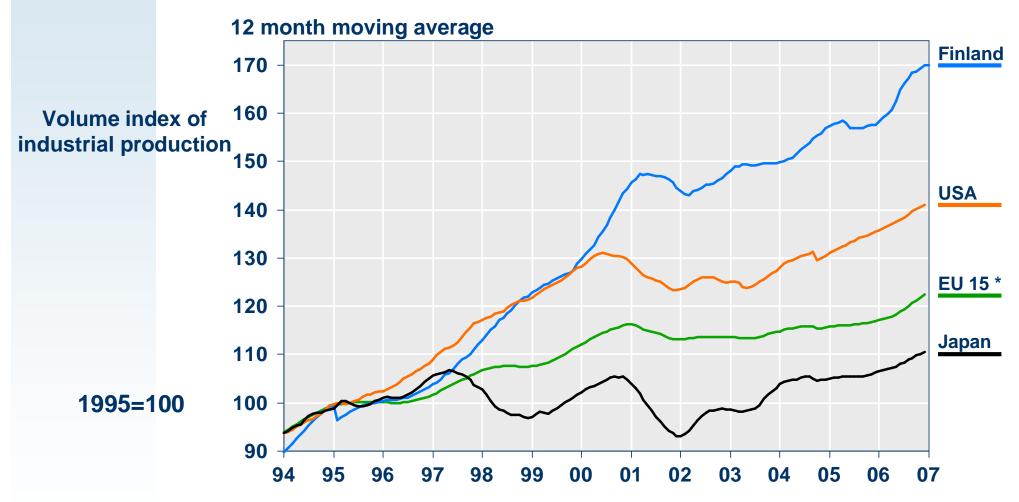
USD in current prices and PPPs







Growth of Industrial Production



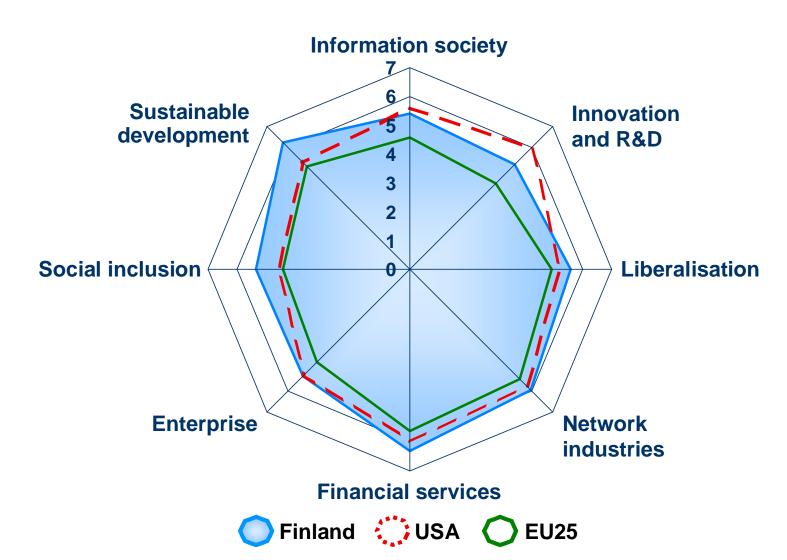


* Until 2006/5 EU15, since then EU 13.

Source: Statistics Finland

Country performance: Finland

The Lisbon Diamond

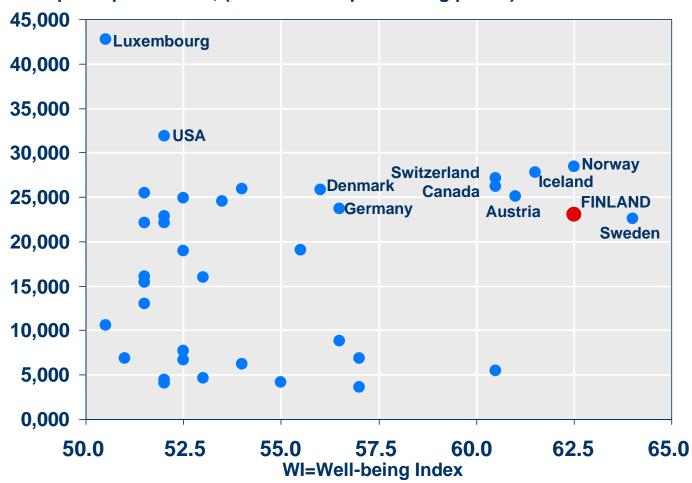




GDP and the Well-being Index

Finland has had better success than other industrialised nations in combining higher income levels with well-being.

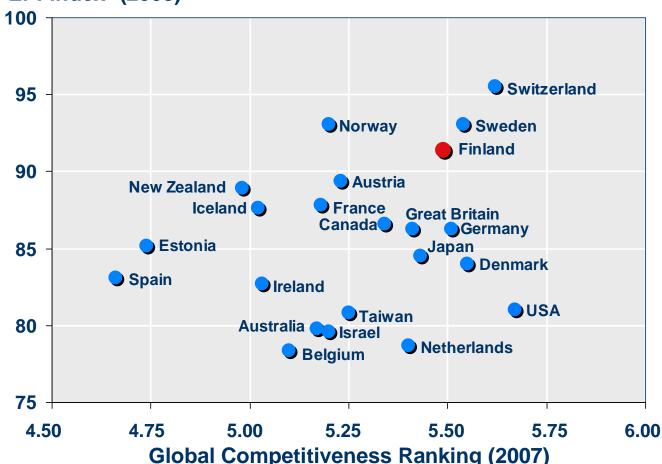
GDP per capita in 1999, (corrected for purchasing power) in US dollars





Environmental quality and growth competitiveness

In Finland, investment in the quality of the environment and competitiveness complement one another. EPI-Index *(2008)





Sources: WEF: Global Competitiveness Report 2007-2008 and Yale and Columbia universities: Environmental Performance Index 2008

* EPI = Environmental Performance Index

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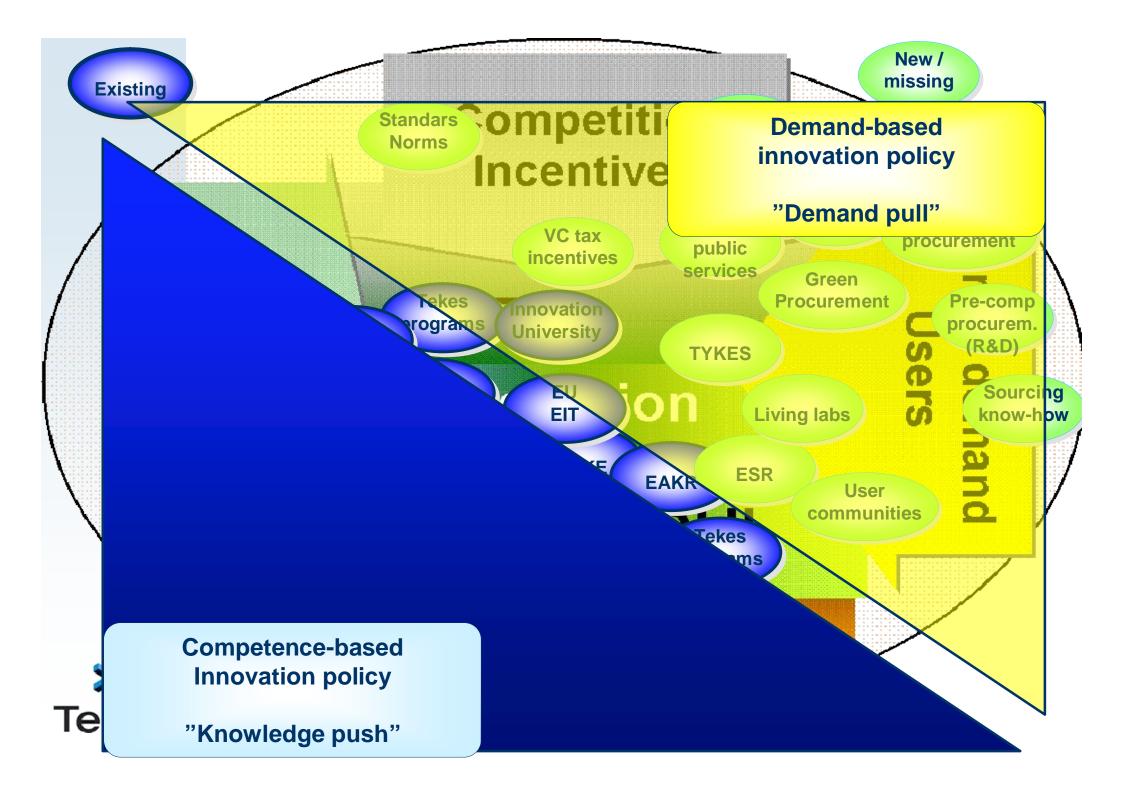
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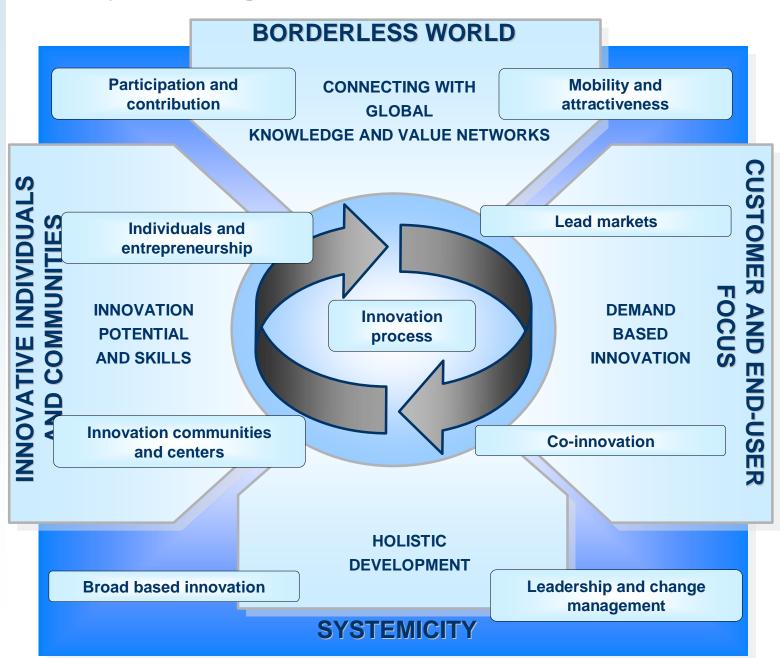
National Innovation Strategy

- A new national strategy was prepared by the Ministry of Employment and the Economy according to Prime Minister Vanhanen's Cabinet Programme
- The task was to:
 - create preconditions for a broad-based innovation policy in the Finnish society (re-conciliate the promotion of innovation activities with various policy sectors as a coordinated entity)
 - ensure global competitiveness of the Finnish innovation ecosystem
 - promote the creation and introduction of innovations
- The aim was to define the policies and choices that renew and will make the Finnish innovation ecosystem one of the best in the world in 2015





Key strategic choices and focus areas

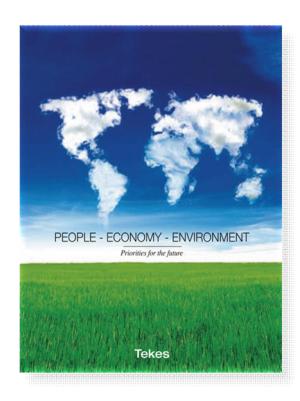


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Tekes strategy focus areas



www.tekes.fi/eng/tekes/focusareas2008.htm



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The interface of Tekes' strategy focus areas

Global business environment and global players

Trends and drivers

Finpro

Regional strategies and visions

Industry organisations and their strategies





Tekes vision, strategy and resources



Tekes' strategy focus areas

- Strategic themesMultidisciplinary competences
- I Strategic areas of clustersI Potential areas for new business

Customer relationships programmes, project funding strategy discussions

Enterprises

Research organisations, universities

Global foresight

EU, USA, China Japan and other countries

Global megatrends and weak signals



FinNode network

Society's values and goals

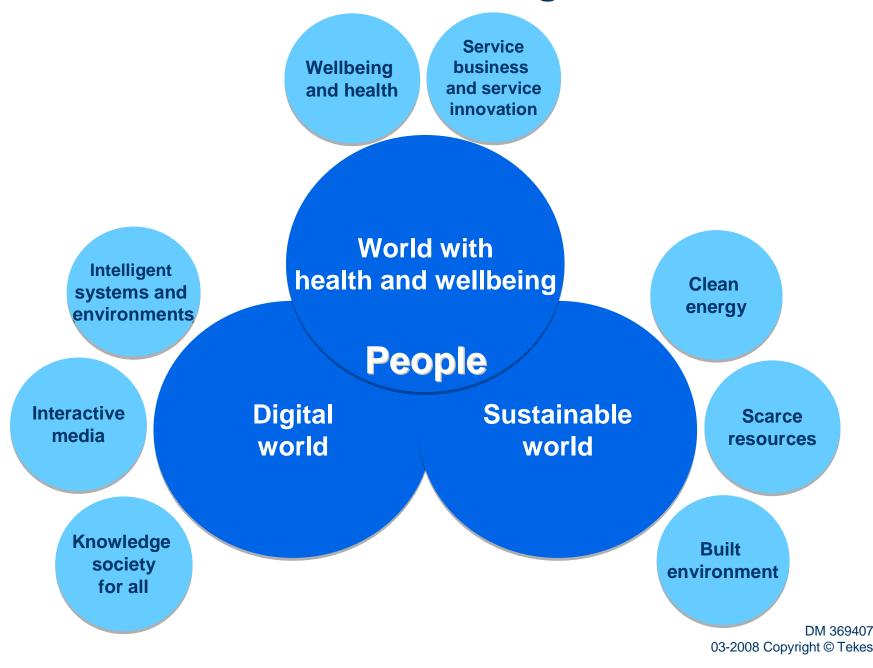
e.g. ETLA and Sitra

Academy of Finland

SCSTIs

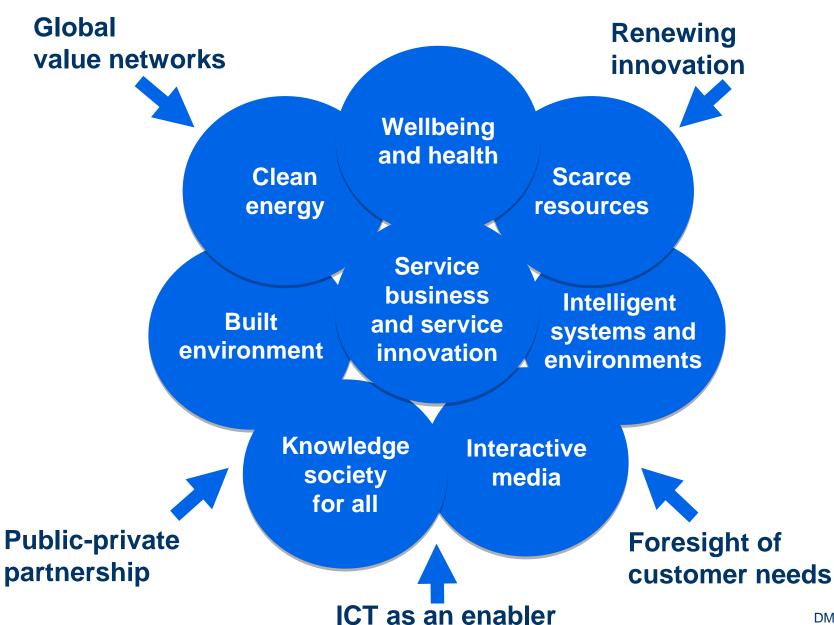


Interaction and integration





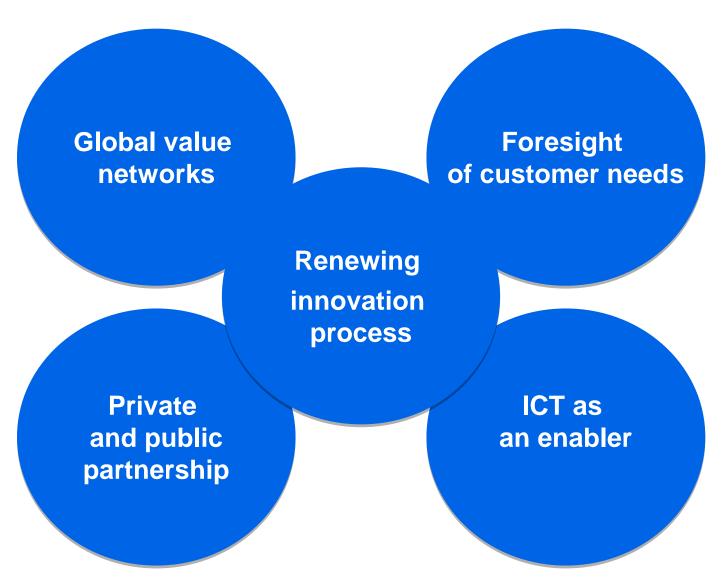
Themes and practices





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Priorities in renewing practices





Crosscutting competences and technologies

INFORMATION AND COMMUNICATIONS

- systems engineering and embedded ICT
- future information networks
- knowledge and content management
- software and digital services

- **BUSINESS COMPETENCE**
- revenue logics in value networks
- **│** innovation competence
- | multicultural management
 - | leadership
 - **I** design

BIOTECHNOLOGY

- in energy, environment and wellbeing
 - | systems biology computational methods
 - bioprocess technology

SERVICE COMPETENCE

MATERIALS

applications

in materials

| nanotechnology

applications

breakthrough

- customer-centric service innovation
- service concepts and technology applications

SOCIETAL COMPETENCE

- I foresight competence
- regulation and standardisation competence
 - productivity and the quality of working life
 - lifelong learning



Programmes are Tekes choices for the greatest impact of R&D&I funding

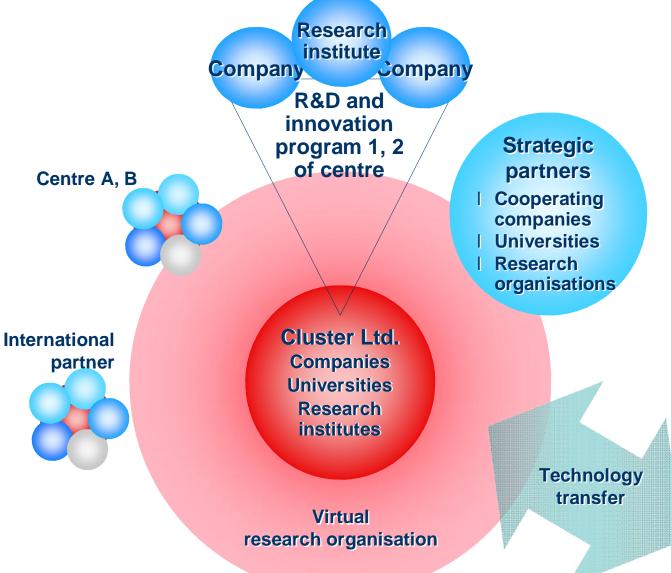
In 2007, 48% of the funding granted by Tekes was channelled via the programmes.

The rest of Tekes funding is granted to projects that are outside the programmes.
The focus areas of these projects are not generally restricted





Strategic Centres for Science, Technology and Innovation





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The Innovation University

- A full merger of three existing universities to Aalto University
 - Helsinki School of Economics
 - Helsinki University of Technology
 - University of Art and Design Helsinki
- The goal for the new university is to be one of the leading institutions in the world in terms of research and education in its own specialised disciplines by 2020
- Operation will start in August 2009
- One of the flagship projects in the extensive higher education reform being implemented by the Ministry of Education, which will increase the financial and administrative autonomy of the universities



Future Challenges

Drivers for renewal

- (rapid) changes in global economy and value networks
- | Population development
- | Environmental issues, resources, energy
- | Evolution of cultures, values, lifestyles

Challenge areas: high-growth companies, entrepreneurship, service business

Finnish investment in R&D&I amounts to less than one percent of global investment. Finland must make strategic choices as to the sectors in which it wants and can be the best in the world.





Thank you!

www.innovaatiostrategia.fi/en/overview www.tekes.fi/eng/tekes/focusareas2008.htm www.innovaatioyliopisto.fi/info/en

