RETE ALTA TECNOLOGIA
EMILIA-ROMAGNA
HIGH TECHNOLOGY NETWORK

The EMILIA-ROMAGNA High Technology Network

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Material from ASTER - Lucia Mazzoni

ASTER

CONTENT

- Emilia-Romagna Region
- High Technology Network
  - Competences
  - Locations
  - Strategic Agenda
  - Research demand
  - Results
- ICT Platform

Emilia-Romagna Region – Overview 1/2

Surface: 22,000 Km²

Inhabitants: 4,223,264 (7% Italy)

GDP: 113,824 M€ (8.8 % Italy)

Population Density: 192/Km²

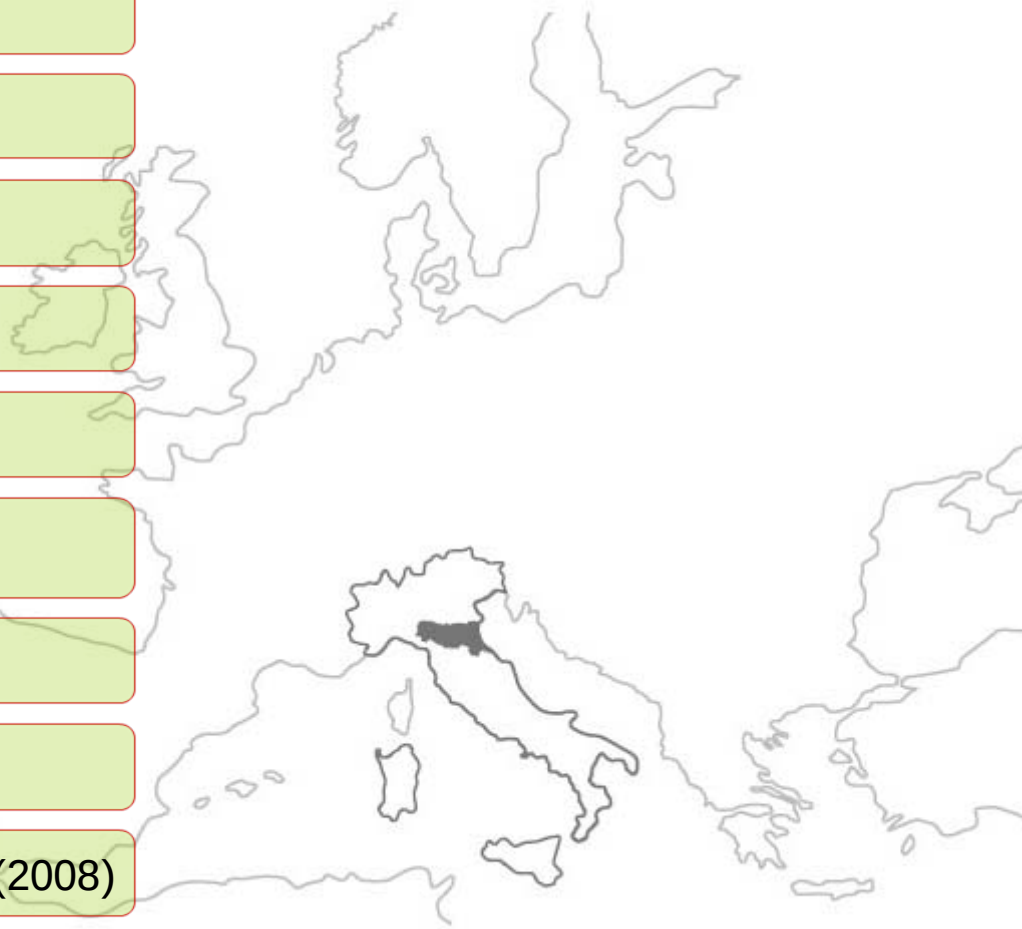
GDP per Capita: 31,746 €

GDP per Capita Index: 132.5
(EU 27 average equal to 100)

Unemployment rate: 3.1% (2008)

N. Companies: 433,412 (2008)

N. Manufacturing Companies: 58,389 (2008)



Sources: Emilia Romagna Eurostat, Istat 2007 - Unioncamere 2008

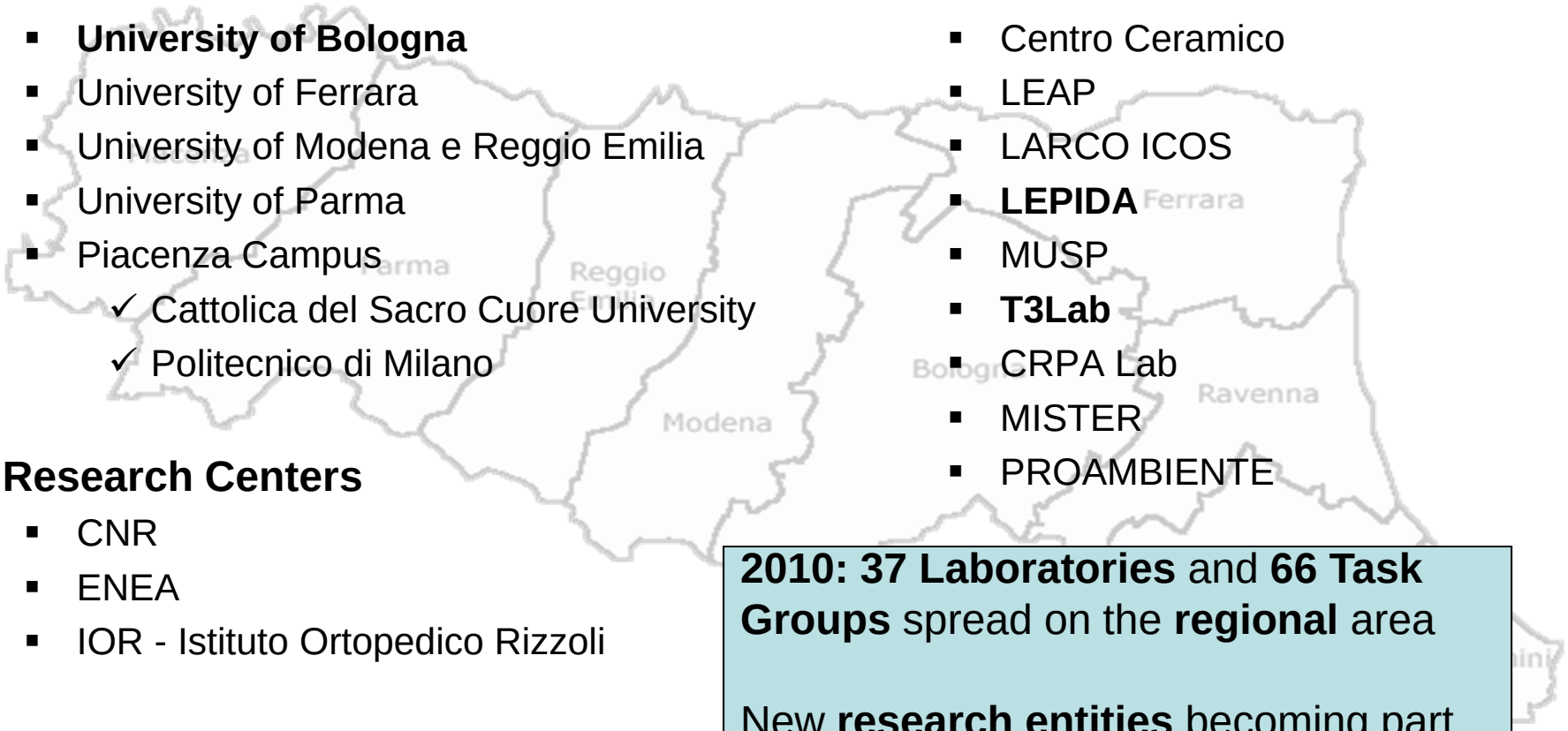
Emilia-Romagna Region (RER) – Overview 2/2

- **Automotive and Motorcycles**
- **Food Industry**
- **Ceramic Tiles**
- **Mechatronics**
- **Machining & Tools**
- **Packaging**
- **Biomedical Equipment**
- **Agricultural Machinery**
- **Woodworking Machinery**
- **Leisure Crafts**

Several important & leading companies are covering the **most relevant industrial sectors,** thus **motivating the person GDP to be 32% higher than the European average**

(RER) EMILIA-ROMAGNA RESEARCH REGIONAL SYSTEM 2010

- **Universities**
  - **University of Bologna**
  - University of Ferrara
  - University of Modena e Reggio Emilia
  - University of Parma
  - Piacenza Campus
    - ✓ Cattolica del Sacro Cuore University
    - ✓ Politecnico di Milano
- **Research Centers**
  - CNR
  - ENEA
  - IOR - Istituto Ortopedico Rizzoli
- **Research Consortia**
  - Centro Ceramico
  - LEAP
  - LARCO ICOS
  - **LEPIDA**
  - MUSP
  - **T3Lab**
  - CRPA Lab
  - MISTER
  - PROAMBIENTE



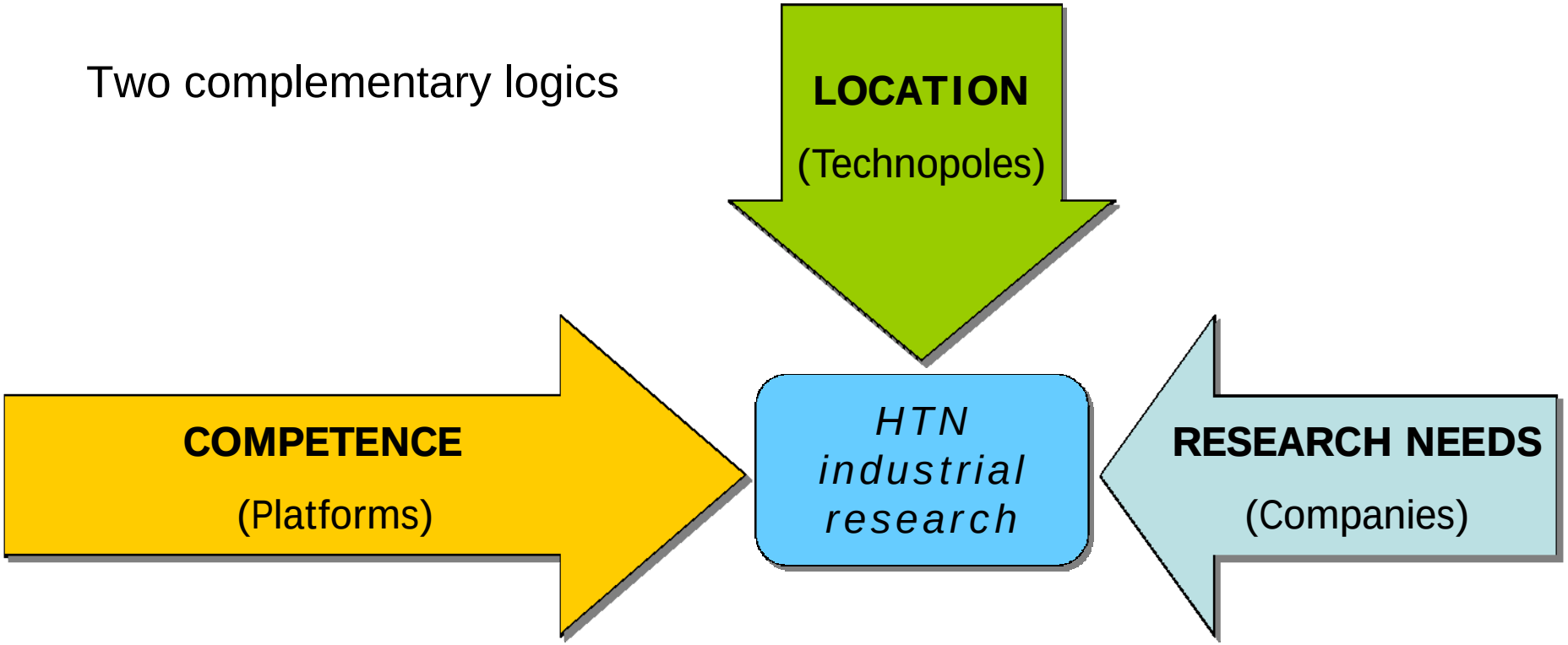
2010: 37 Laboratories and **66 Task Groups** spread on the **regional** area

New **research entities** becoming part of the HTN can improve and enhance the research offer

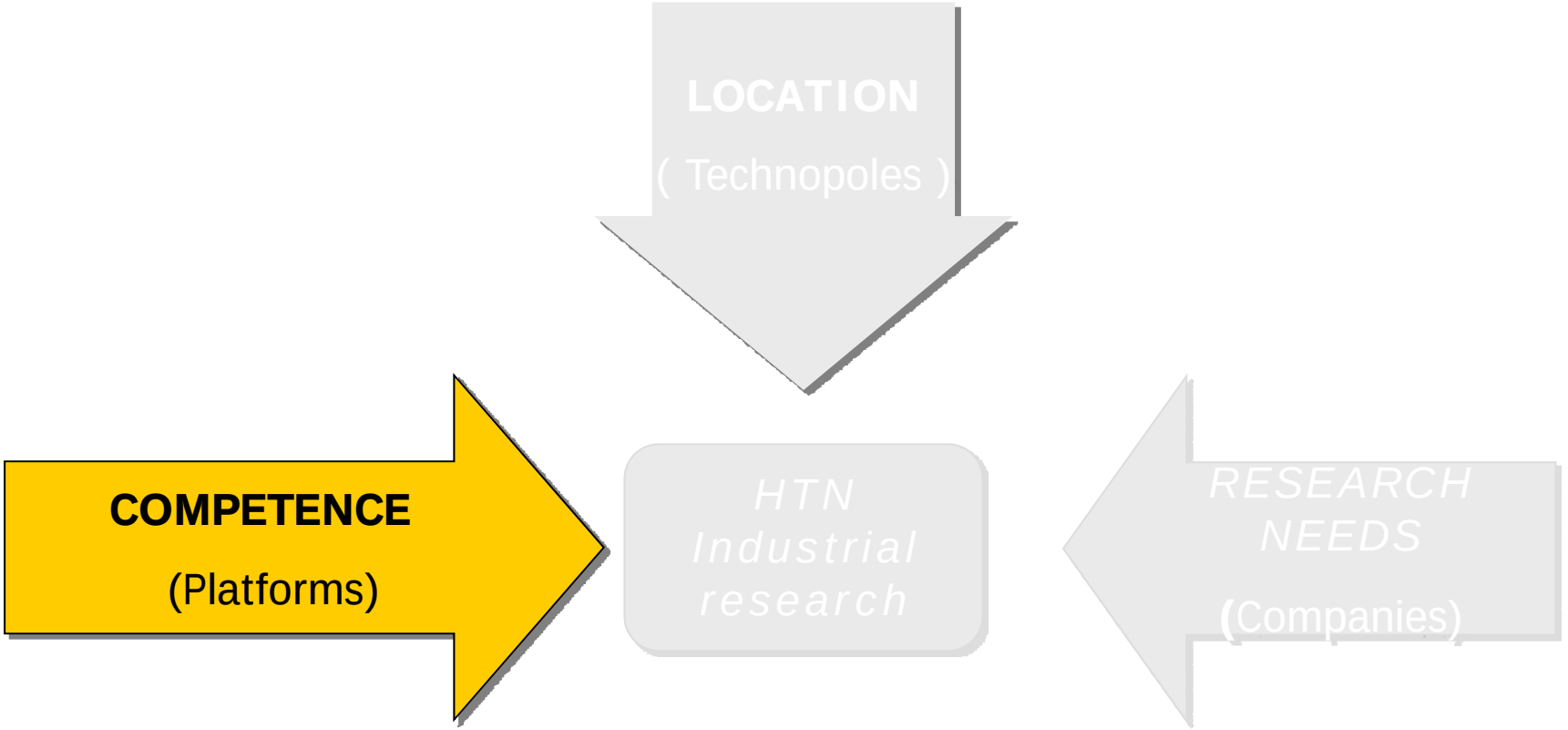
Emilia-Romagna High Technology Network
PLATFORMS & TECHNOPOLES

- **The Laboratories are**
  - **GROUPED in 6 THEMATIC PLATFORMS**
  - **LOCATED in 10 TECHNOPOLES**

Two complementary logics



COMPETENCES



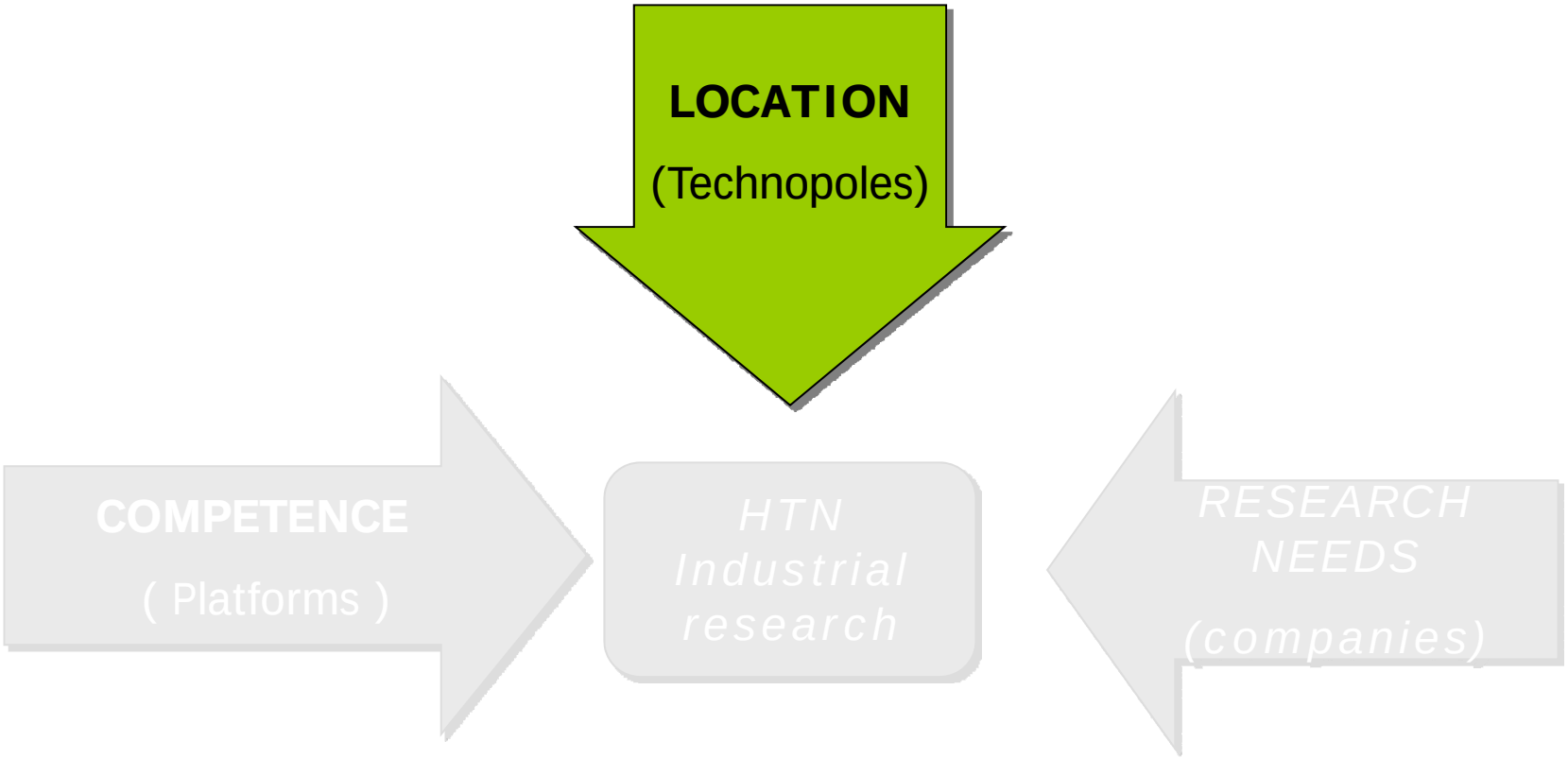
REGIONAL THEMATIC PLATFORMS

- The **H**igh **T**echnology **N**etwork operates within 6 thematic platforms
- Each platform is conceived to gather and put together **regional competences**

MISSION:

- **Give support** to industrial enterprises, upgrading its labs with the most suitable instrumental equipment and tooling
- Outline **marketing** and **product** development tools
- Disseminate **information** among regional local enterprises
- Define **international scenarios** relevant for the regional development patterns
- Keep a close contact with the **European Technological Platforms**
- **Foster** company **innovation attitude**
- Define still to be **developed** and further to be **specialized** areas

LOCATION


LOCATION
(Technopoles)
COMPETENCE
(Platforms)
HTN
Industrial
research
RESEARCH
NEEDS
(companies)

TECHNOPOLES

- Technopoles are facilities dedicated to **industrial research**, **located** and **spread** on the regional territory
  - Equipment
  - Facilities
  - Human Resources
- **Multi-Thematic** Competences
- **Meeting place** for research offer and specific demand on behalf of enterprises
- **Complete geographical coverage** for all nine provinces of the Emilia-Romagna region

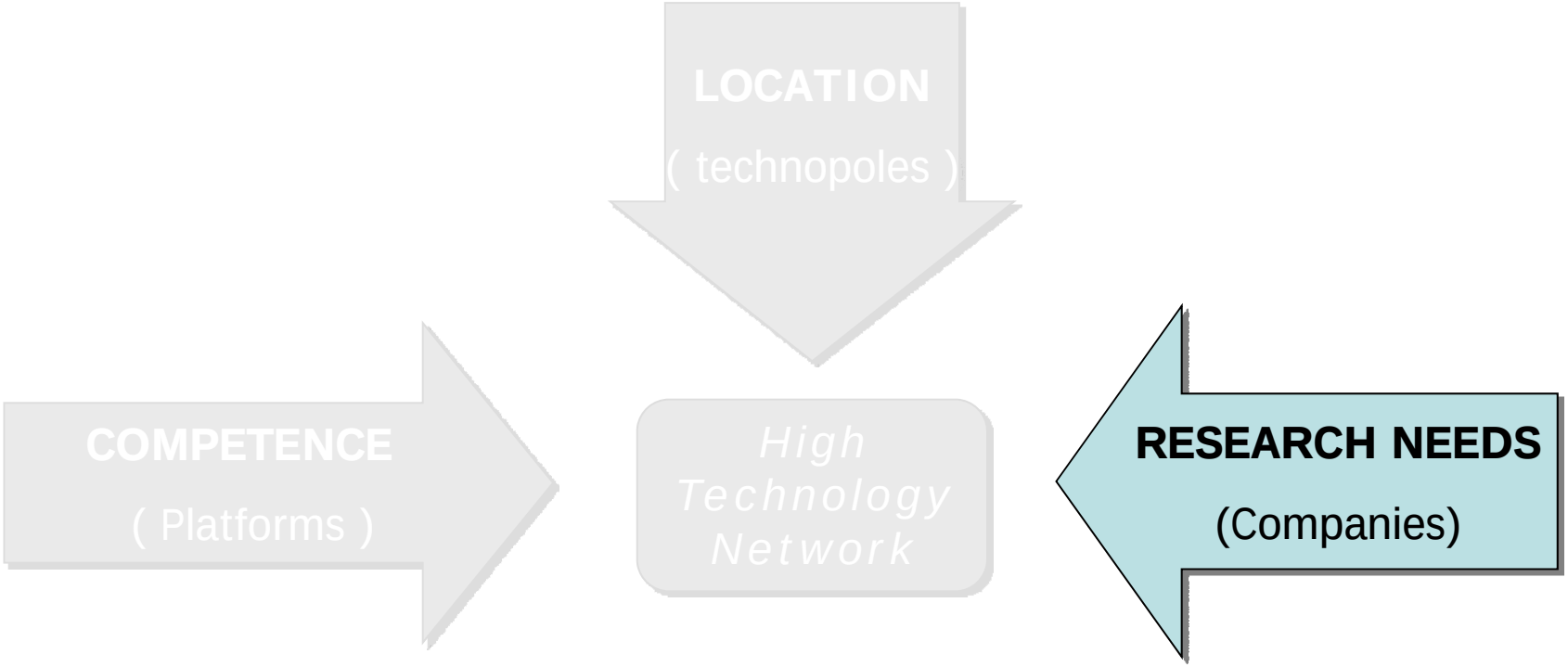
- 246 Mln € Investments:
  - 142 Mln € from Regional Government
  - 90 Mln € from Research Institutions and Universities
  - 14 Mln € from Local Authorities

STRATEGIC AGENDA

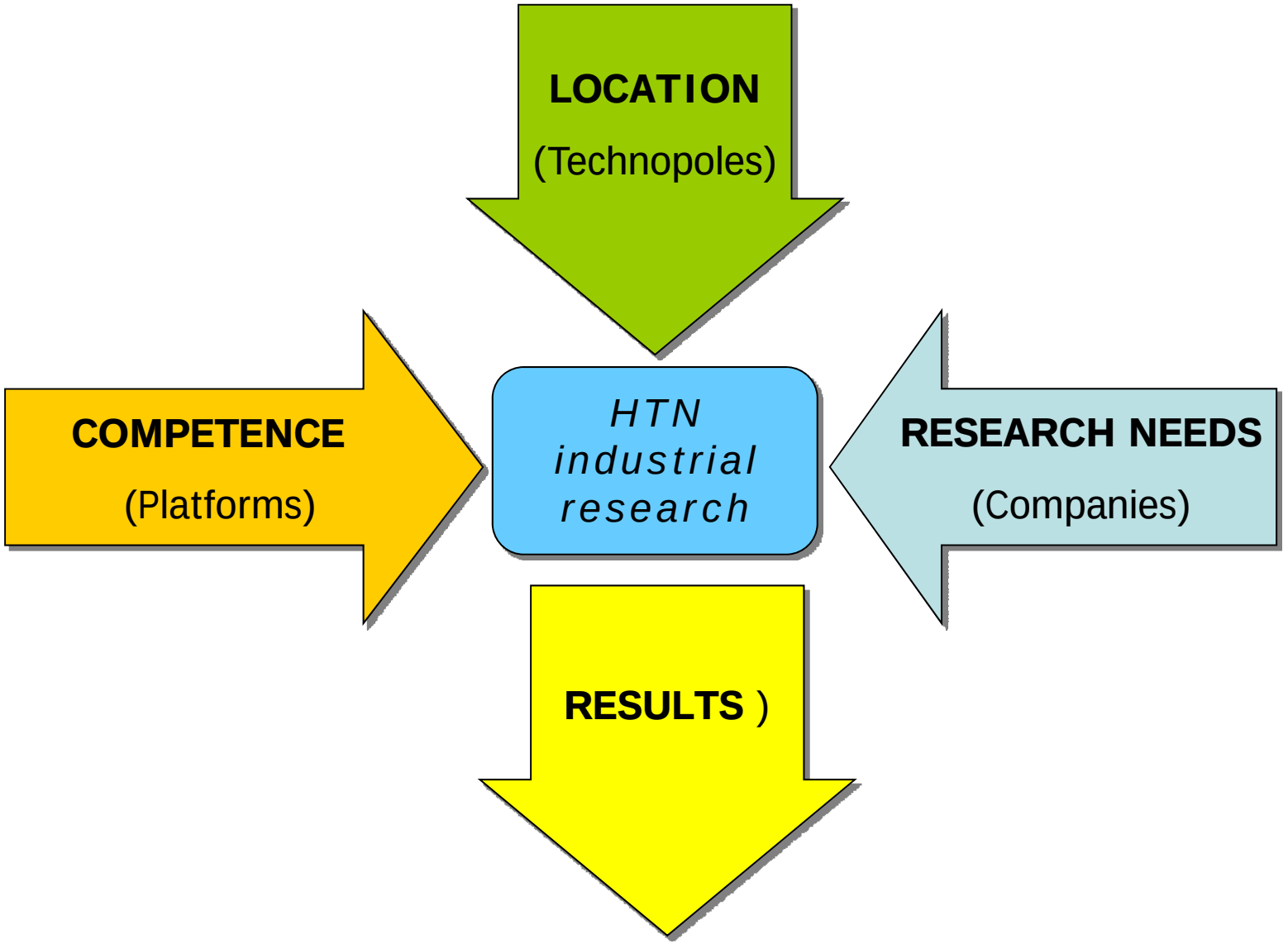
1. To identify the Enterprise **research demand**
2. To identify and promote a "**research offer catalogue**", as a new tool to facilitate SME to get the right research support
3. To **match demand** and research **offer** increasing the productive systems alliance with regional research and innovation
4. To develop and enlarge the **public regional network** to private industrial research and technology transfer Labs
5. To encourage the integration of **research centers** and **companies** thus developing an "**OPEN INNOVATION**" business model
6. To highlight possible technical scenarios to prepare a successful evolution for both **regional research** and **industrial sectors**
7. To foster the development of new highly knowledge-based productive systems, in the sense of a "**knowledge community**"

RESEARCH DEMAND EVALUATION

- In the past 2 years a number of **statistical data** was retrieved by ASTER and analyzed to better understand the industry research **core demand**, with three main targets:
  - Define the **role** of **Research** along the **development process**, depending on the **company size**
  - Recognize **main Research Topics**
  - Recognize **Industry Components not exposed** to **research contacts**



RESULTS


LOCATION
(Technopoles)
COMPETENCE
(Platforms)
HTN
industrial
research
RESEARCH NEEDS
(Companies)
RESULTS)

DASHBOARD
GLOBAL CONTRACT PORTFOLIO (Nov 2010)

Platforms	ALL		Co-financed Contracts								Contracts without co-financing		
	N°	Amount	Global		Regional		National		International				
		[k€]	[N°]	[k€]	[N°]	[k€]	[N°]	[k€]	[N°]	[k€]	[N°]	[k€]	[%]
Agrifood	40	2.772	26	2. 229	19	1.352	5	241	2	636	14	543	19,6%
Constructions	35	7.798	21	5.946	11	1.288	6	4.265	4	393	14	1.852	23,7%
Energy & Environment	39	5.956	12	4.520	8	552	3	3.960	1	8	27	1.436	24,1%
ICT / Design	21	1.774	16	1.559	7	519	3	294	6	746	5	215	12,1%
Mechanics & Materials	107	5.964	59	4.105	44	2.677	13	1.262	1	166	49	1.861	31,2%
Life Science	81	7.196	9	392	6	275			3	117	72	6.804	94,6%
Total	324	31.462	143	18.751	96	6.663	30	10.022	17	2.066	181	12.711	40,4%

ICT & DESIGN PLATFORM

- The **ICT** and Design **Platform** promotes the **development, tuning,** and **adoption of ICT** for
  - tackling **social challenges** depending on the environment, health, aging
  - supporting **business organizations**, through automated and **intelligent management** of **process** and **product** information
  - addressing **individual needs**

- In consideration of **ICT cross-sector** application, the Platform promotes in particular the **cooperation with the other High-Technology Network platforms** in order to increase the innovation offer for the whole business sector

ICT & DESIGN PLATFORM

LABORATORIES	UNIVERSITY INSTITUTION	TECNOPOLE
RFID&VISION	UNI PR	Parma
INTERMECH - MO RE	UNI MORE	Reggio Emilia
		Modena
LABORATORIO REGIONALE PER LA PA	**LEPIDA**	**Bologna**
CROSS-TEC	**ENEA**	**Bologna**
CIRI ICT	**UNIBO**	**Forlì-Cesena Bologna**

Research Structures

COMPANIES	PROVINCE
TEL&CO	Modena
ANASTASIS Soc. Coop.	Bologna
M.R. CONFEZIONI SRL	Modena
ITWAY SPA	Ravenna
LIFE ELETTRONICA	Modena

Industrial Structures