

The experience of CLUST-ER in Emilia-Romagna within S3 and research and innovation regional policy

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Marco Piunti - Research and Innovation Division (ex ASTER)
marco.piunti@art-er.it



ART-ER

Attractiveness Research Territory

is the new Emilia-Romagna Joint Stock Consortium Company that was born in May from the merger of **ASTER** and **ERVET**.



*Together
for an ever more attractive
and international region*



Mission: fostering the region's sustainable growth by developing innovation and knowledge, attractiveness and internationalisation of the territorial system.



Shareholding and Organisation

SHAREHOLDERS

- ✓ the **Emilia-Romagna Region**
- ✓ the **regional Universities**
- ✓ National Research Centres located in the region (**CNR, ENEA, INFN**)
- ✓ the **Regional Union of Chambers of Commerce**
- ✓ Other **local representatives**

The new company is organized into **two Divisions**:

- **Research and Innovation Division** (ex **ASTER**)
- **Sustainable Territorial Development Division** (ex **ERVET**)

Research and Innovation Division

(former ASTER)

Supports the
Regional
Government for the
definition of
innovation policies

Coordinates and
represents the
**regional
innovation
system**

Promotes **industrial
research**, fostering
collaboration
between enterprises
and research labs

Designs and
develops **strategic
projects**

THE REGIONAL CONTEXT: RESEARCH AND INNOVATION POLICIES

Regional law 7/2002: Promotion of a regional system for R&I

- Improving the capacity of industrial system (SMEs) to invest in R&D&I, fostering in particular:
 - Employment of new researchers
 - Cooperation with universities and research centres
- Building a regional network organizing the “offer” of research and innovation of the public system
 - Industrial research laboratories
 - Innovation centres
 - Shared governance (ASTER)

Promoting a network for R&D&I

Industrial Research Laboratories

- Research centres (public, private or private/public) focused on industrial research and technology transfer
- Autonomous from organization to which they belongs
- Researchers focused and trained on industrial applications

Innovation Centres

- Promoted by entrepreneurial associations, local administrations, chamber of commerce....
- Promoting innovation through consultancy, events, training....
- Addressed to technological and organizational SMEs needs

Towards High Technology Network

- 2003 – Adoption of a Regional Programme for Industrial Research, Innovation and Technology Transfer
- 2004/2007 - First experimental phase with about 30 research programmes financed by regional funds
- 2007- Adoption of a certification scheme for Industrial Research Labs and Innovation Centres
- 2007-2011 Startup of 35 Industrial Research Laboratories financed by the European Regional Development Fund (ERDF)
- 2009 – Official launch of High Technology Network

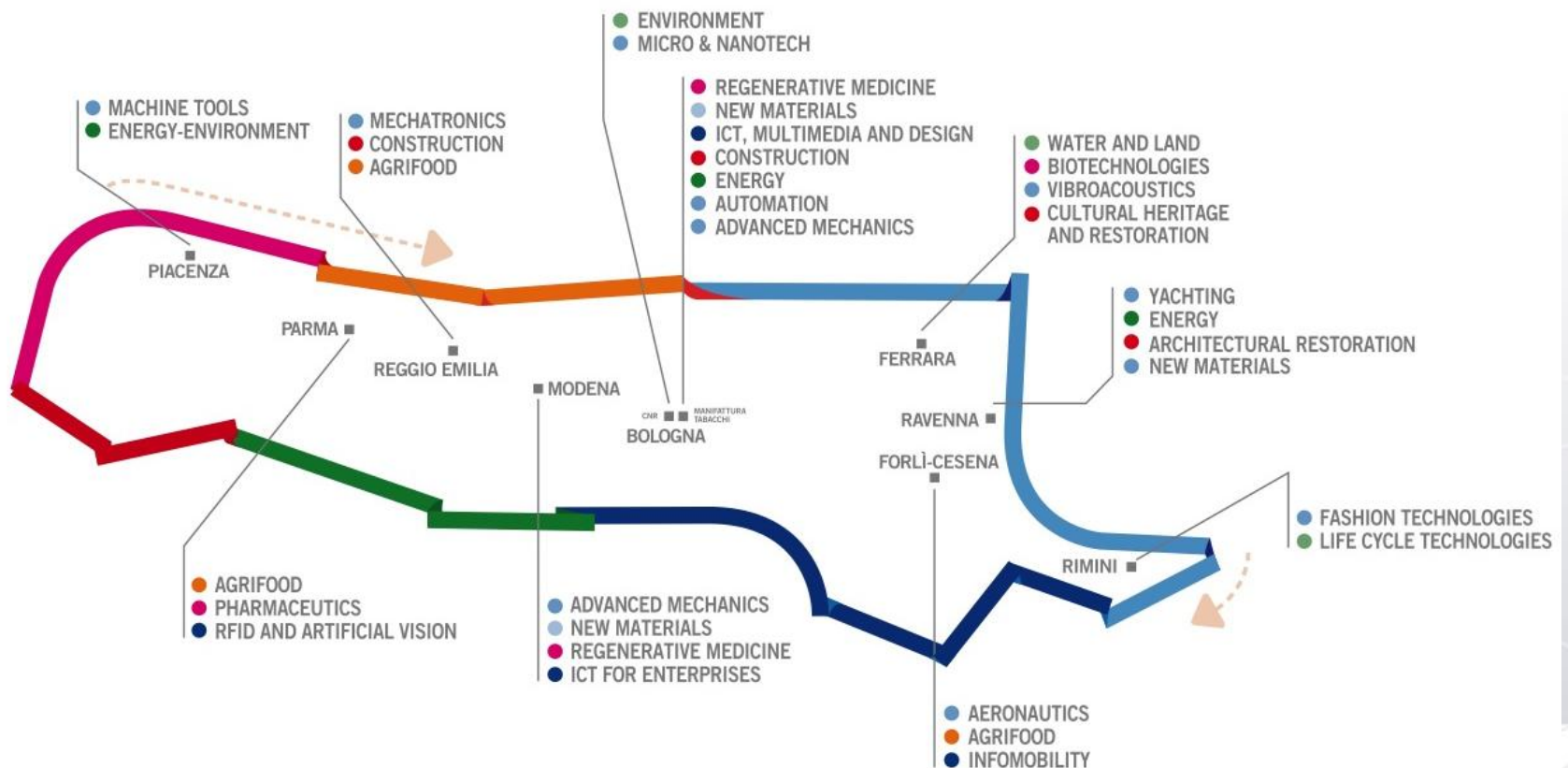


- 2011-2016 Enlargement and reinforcement of HTN



High Technology Network Today

- 81 Industrial Research Labs
- 14 Innovation Centres
- Mainly located in 10 Technopoles (also financed by ERDF)





Strengths

- Industrial research labs **well recognized by companies**
- Improved capacity of labs **answer to company needs**
- Large number of **young researchers** trained in applied research
- Shared **sense of belonging** (even if HTN is not a legal entity)
- **well known brand**, not only in Emilia-Romagna

Weaknesses

- Presence of **very small labs** with few researchers
- Presence of research activities **overlapping** more than cooperation
- Governance of HTN too much focused on research institutions, **weak involvement of companies**
- Good attitude in on-demand research, not so good attitude towards **strategic research projects**

A new model of governance

- Larger and more inclusive, with the active participation of companies and education institutes
- Favouring multidisciplinary in research projects
- Improving the capacity of laboratories to promote strategic projects with a higher regional impact
- Focused on industrial systems identified in Smart Specialization Strategy

**Not only a governance of HTN,
but a governance of the whole
regional ecosystem focused
on S3 priorities**



S3: 5 AREAS OF SPECIALIZATION FOR INNOVATION POLICIES

Pillars of the regional economy

(% of the total number of employees)



16,7%
AGRI-FOOD



18,8%
BUILDING
AND CONSTRUCTION



18,2%
MECHATRONICS
AND TRANSPORT



Over **1 million** EMPLOYEES,
more than **50%** of regional employment



80% OF REGIONAL EXPORT

Emerging areas with high growth potential

(% of the total number of employees)



8,9%
HEALTH AND WELL-BEING INDUSTRIES



6,9%
CULTURAL AND CREATIVE INDUSTRIES



Over **300,000** EMPLOYEES,
more than **15%** of regional employment

Towards Clust-ERs

- Call for proposals 2015 for HTN: mandatory for funded labs to promote the constitution of Associations focused on S3 priorities
- Projects approved in April 2016, with 63 labs beneficiaries
- Process towards Associations started in June 2016, managed by ASTER
- Setting up of 27 working groups focused on S3 technological priorities, including in the first phase only HTN labs, with a chair leading the group
- S3 technological priorities were redefined as “Value Chains”
- Definition of a “manifesto” for each Value Chain
- Presentation and involvement of companies, entrepreneurial associations, educational institutes
- Definition of common Statute for each Association Clust-ER
- Establishment of the 7 Clust-ERs: **30th May 2017**

Clust-ERs and Value Chains

CLUST-ER
AGRIFOOD
AGROALIMENTARE

**Sustainable
Agriculture**

**Quality &
Safety**

**Byproducts
and waste
reuse**

CLUST-ER
BUILD
EDILIZIA E COSTRUZIONI

**Cultural
Heritage**

**Energy
efficiency**

**Secure
buildings**

CLUST-ER
MECH
MECCATRONICA E MOTORISTICA

**Digital
manufacturing**

**Automation and
robotics**

Aerospace

Nautical

Fluid Power

Materials

**Motors and
veichles**

CLUST-ER
HEALTH
SALUTE E BENESSERE

**Regenerative
Medicine**

**New
generation
MedTech**

**Pharmaceuti
cal and
Omics**

**Smart and
Active Living**

CLUST-ER
CREATE
CULTURA E CREATIVITÀ

Digital Culture

**Design and
Digital
handicraft**

Fashion

Multimedia

CLUST-ER
GREENTECH
ENERGIA E SOSTENIBILITÀ

**Low carbon
economy**

**Environmen
tal
protection**

CLUST-ER
INNOVATE
INNOVAZIONE NEI SERVIZI

**Intelligent IT
services**

**Service
platform for
IoT**

Cybersecurity

Big Data

Logistic

CLUST-ER
EMILIA-ROMAGNA

ART-ER
ATTRACTIVENESS
RESEARCH
TERRITORY

Clust-ERs organization

- Legal entities, in form of “Associazione”
- Category of members:
 - Laboratories belonging to HTN
 - Companies, single or grouped (for ex. Consortia)
 - Educational institutes
 - Other organizations active in innovation in the Clust-ER domains
- Membership fees: 1.000 euro entrance fee + 500 euro annual fee (50% for small companies).
- Board: 9 members; min 3 - max 4 are elected by companies
- President and vicepresident named by the Board (usually one from labs and one from companies)
- One manager for each Clust-ER
- 3-years working plan (2018-2020), funded by Region (ERDF) up to 100k euro per year



The main goals

- Supporting Emilia-Romagna Region in the **definition of policies for research and innovation in S3 domains**: proposals for technological priorities, pilot actions, regulation... (Forum 2018 for S3 middle term review)
- **Representing each industrial system** at national and international level
- **Proposing strategic projects with high potential impact** at regional level for development of industrial system: research and innovation projects, infrastructures, demo plants,...

Clust-ERs don't act only in the interest of the members of the Association, but in the interest of the whole ecosystem they represent.



The role of ART-ER (ASTER)

- Clust-ER office in ASTER
- ASTER provides administrative and secretariat services
- Management of activities requested by the Region (Forum)
- Involvement in projects with specific interest for each Clust-ER
- Training for Clust-ER managers
- Support in identification of call of proposals and other funding opportunities
- Support in the international activities and connection with other cluster organizations
- Support in communication activities, mainly to ensure a common image



Members of Clust-ER (at 31/01/2019)

CLUST-ER
AGRIFOOD
AGROALIMENTARE

CLUST-ER
BUILD
EDILIZIA E COSTRUZIONI

CLUST-ER
MECH
MECCATRONICA E MOTORISTICA

CLUST-ER
HEALTH
SALUTE E BENESSERE

CLUST-ER
CREATE
CULTURA E CREATIVITÀ

CLUST-ER
INNOVATE
INNOVAZIONE NEI SERVIZI

CLUST-ER
GREENTECH
ENERGIA E SOSTENIBILITÀ

Total

Research

Companies

Other

Founders

59

35

16

8

39

76

23

45

8

24

71

38

29

4

48

70

32

29

9

41

58

18

26

14

25

54

25

19

10

30

58

29

24

5

31

446

200

188

58

238



ART-ER

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