



The challenge of technology transfer

ENEA alongside the agro-food companies

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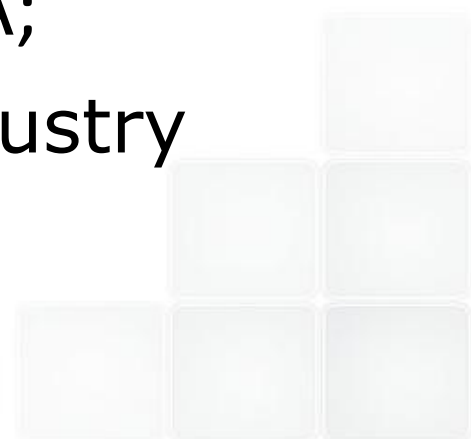
**From nuclear research to the agro-food
industry: the case of Creso wheat
Rome 14 April, 2011**



What I want to talk about



- Relationship between research and innovation;
- Relationship between innovation and enterprises;
- Relationship between ENEA and enterprises;
- Technology Transfer Unit of ENEA;
- Some data on the agro-food industry



Research and Innovation

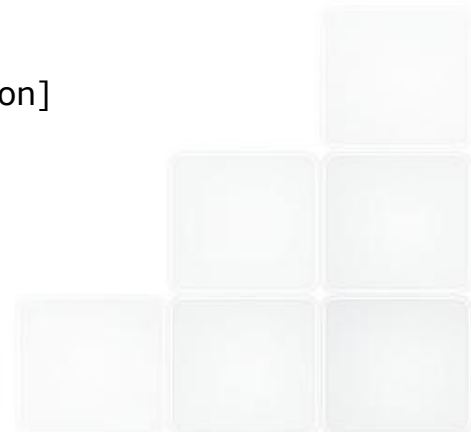


It represents a complex system of relations, for the following reasons:

- The relationship between research and innovation is multidirectional;
- Not all research generates innovation processes;
- Not all innovations result from research activities;
- Innovations do not always result from the application of scientific and technical knowledge;
- Innovation is a typically intersectorial phenomenon

- In innovative processes and in research activities proximity among actors is important;
- Innovative processes have a systemic dimension.

[Act of Multiyear Address in Research and Innovation 2011-2015 - Tuscany Region]



Innovation and enterprises



- The manufacturing industry represents the main source of wealth, jobs and quality of life for Europe and for all developed countries ;
- The »broadened « manufacturing sector offers new business opportunities and ensures the export necessary to a strong economy ;
- The commitment of national companies to invest in research and innovation is growing: policies of industrial research able to ensure competitiveness are needed, stimulating the entrepreneurial system to acquire skills and abilities to develop innovation

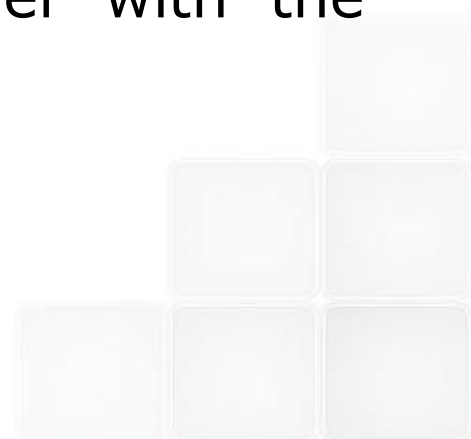
- In our country the research activities involve only a small number of companies, due to:
 - average company size < 9 employees;
 - prevailing specialization in traditional sectors;
 - prevailing reference to local market;
 - scarcity of technical and financial resources
- Companies with less than 50 employees perform only 3.2% of the total industrial research;
- To foster the innovation of our production system:
 - the setting up of ILO and TTO in universities and EPR was encouraged ;
 - initiatives aimed at supporting start-ups and spin-offs of new hi-tech companies are funded from the Government, Regions,...

ENEA and enterprises



ENEA's institutional aims include activities of technology transfer from research to the entrepreneurial world.

The direct transfer of innovative technologies and solutions to the economic system and to the local environment defines a modern Agency, able to increase its own ability to meet specific requirements, thanks to its internal expertise, together with the knowledge of companies' needs



The UTT of ENEA



- It provides protection and exploitation of ENEA's scientific research results;
- It supports the Technical Units to promote their relations with industry;
- It promotes the dissemination and use of know-how and instrumental resources of the Agency and its participated companies, in order to pursue innovation in the economic-productive world also through the Network of Contact Persons for the TT

The services offered to the Technical Units (TU) are:

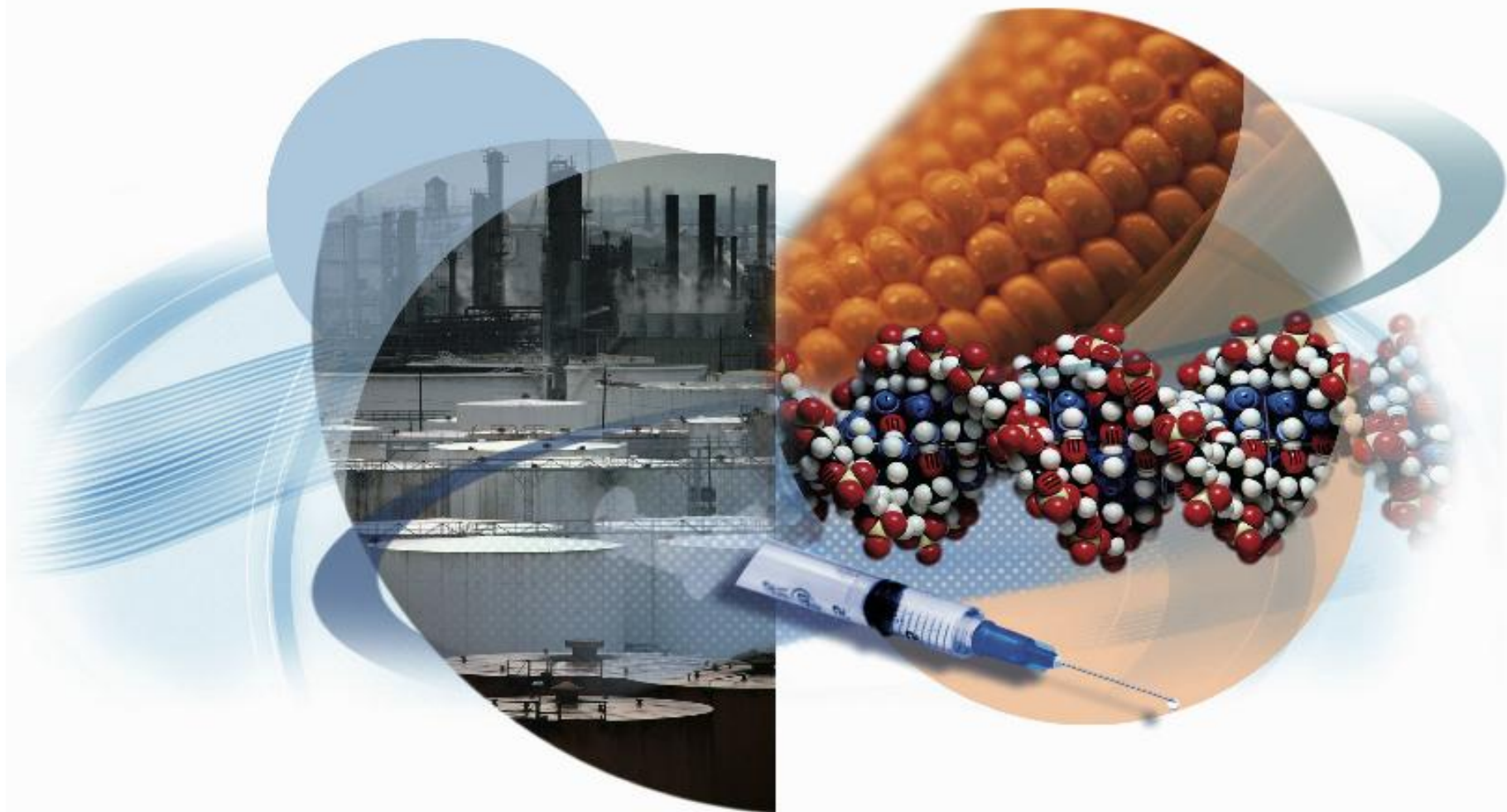
- Protection of innovation;
- Economic and financial evaluation of patents and freedom of operation through the consultation of specialized patent databases;
- Support to TU for the marketing of the technology and the identification of the licensee;
- Negotiation and stipulation of license agreements: from the confidentiality agreements to the closing;
- Agreements on IP in commissioned research contracts;
- Management of the new "ENEA Discipline on Industrial Property";
- Management of « Spin-off Regulation »

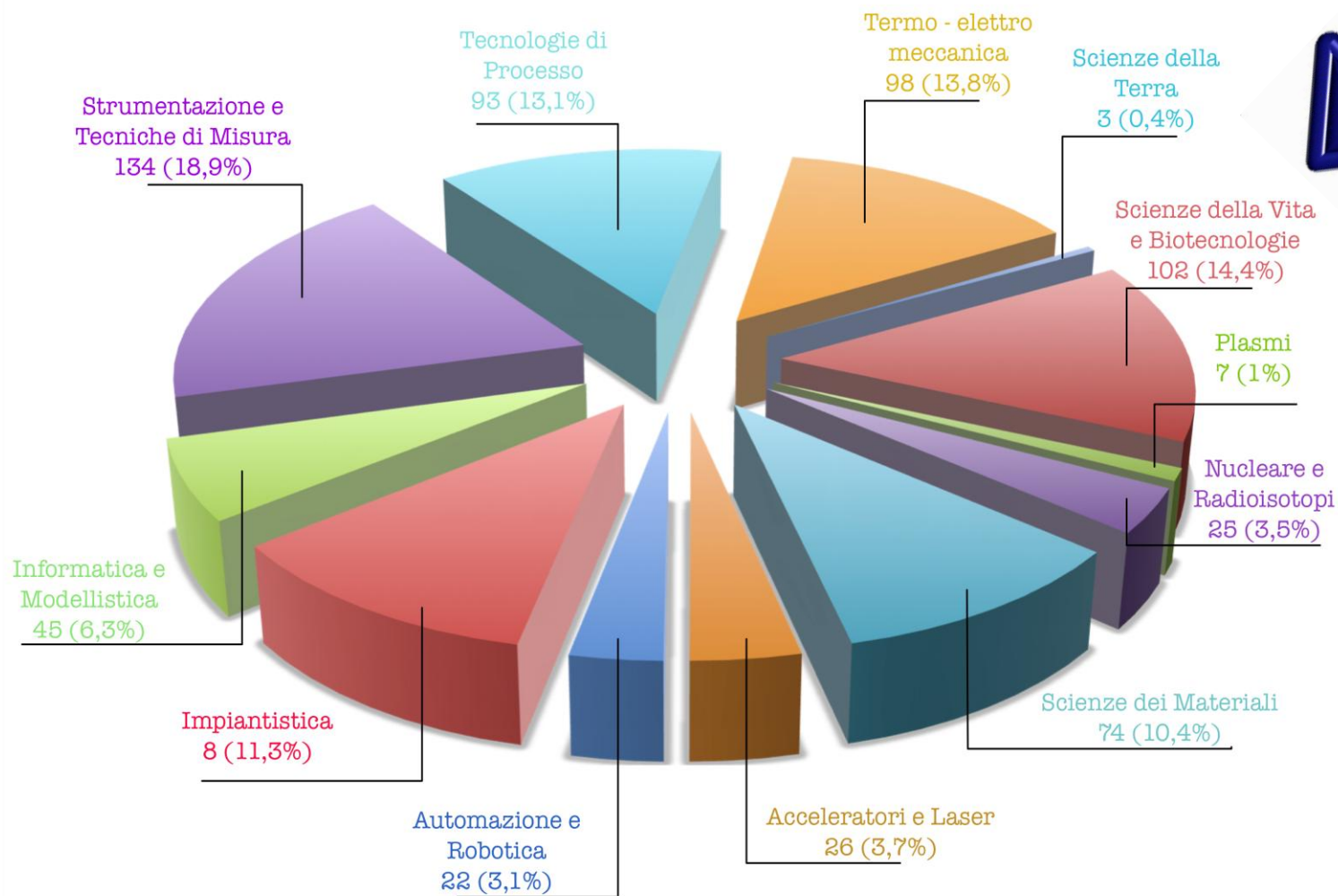
The agro-food sector



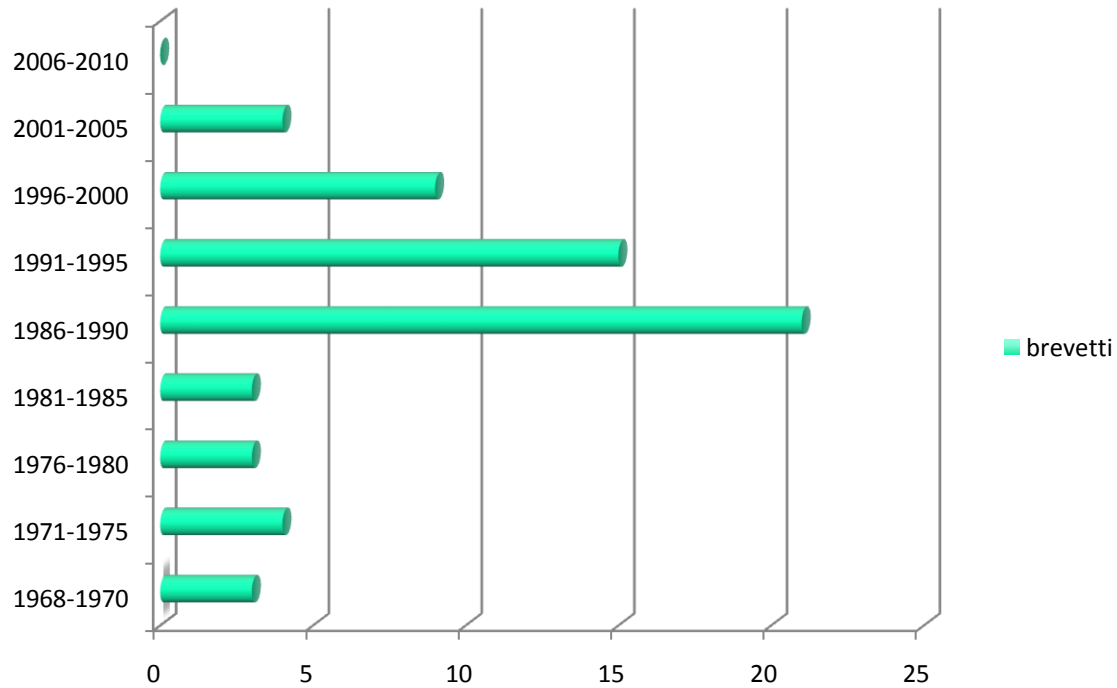
- Within the framework of the European agro-food industry, Italy holds a place of absolute pre-eminence, ranking third after France and Germany;
- In the manufacturing system of our country, the agro-food sector is second only to the engineering sector and has a leading role in the economy of less developed regions of the South of Italy;
- The technology transfer activities developed by ENEA have certainly placed the agro-food industry among the most significant, as demonstrated by:
 - The membership to the Technology Platform "Food for Life"
 - the realization of the Technology Pole "Agrobiopolis"

T brevetti

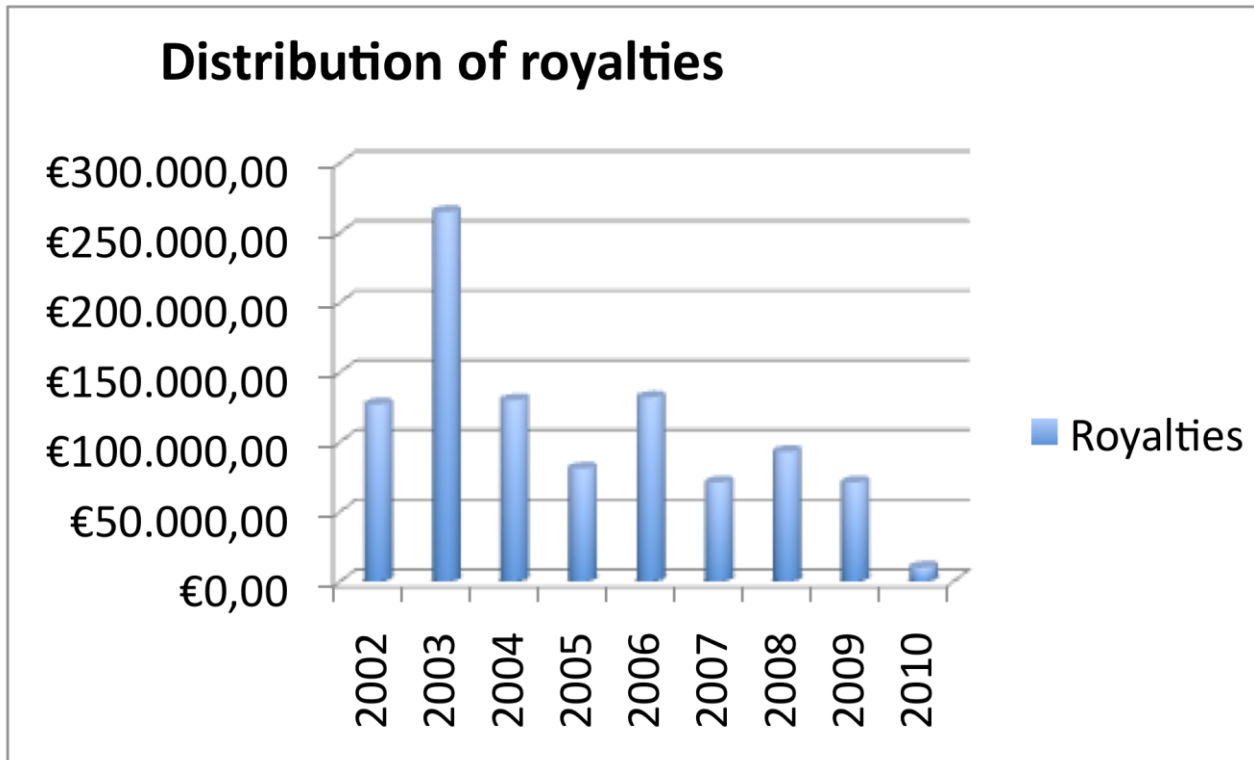




Patents of plant varieties



An intense development activity of new plant varieties is noted from the second mid-80s to late 90s



The total amount of royalties collected equals just less than € 1,000,000

The Creso wheat

- ✓ Patent n.78 del 1975
- ✓ Granted in 1991
- ✓ Deadline extended by
2006 to 2011
- ✓ Licensed to



Blockbuster!!

Conclusions



- ✓ The TT in the agro-food industry requires a convergence of different technologies, thus requiring the integration of different competences;
- ✓ A distinctive characteristic of ENEA in the activity of technology transfer in the agro-food sector is exactly that of being able to integrate the different technical and scientific approaches available inside the agency, to design innovative "complex" solutions in response to the industry demand

THANKS for your attention!

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