

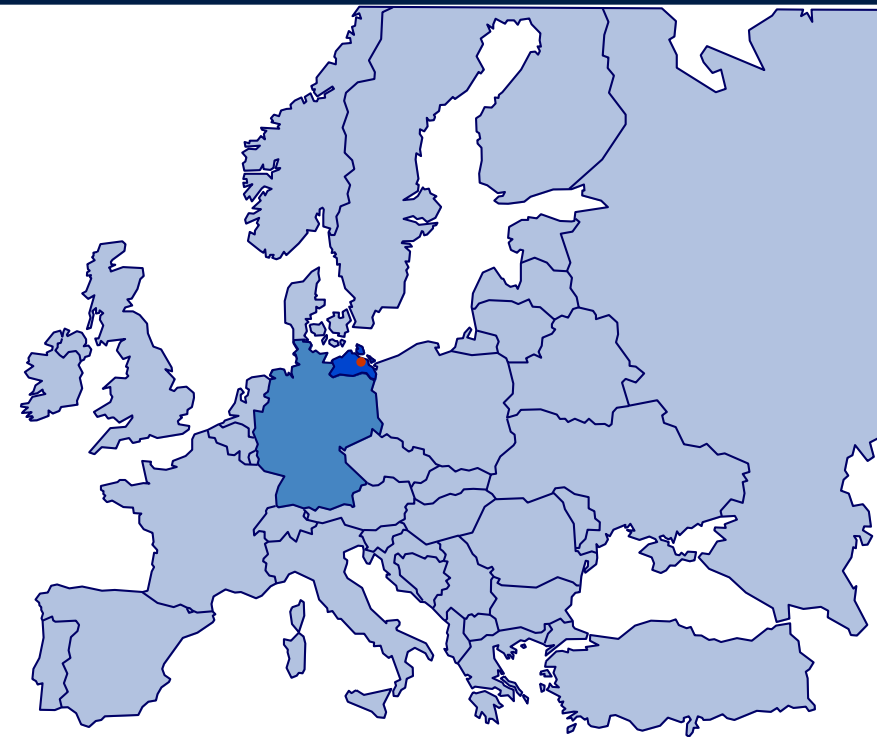
Technology Transfer as Recruiting Instrument and Facilitator of Entrepreneurship



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Leibniz Institute for Plasma Science and Technology (INP)

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TII Annual Conference – “Innovation, Prosperity, Quality of Life”

The Leibniz Association



- 86 non-universitary institutes
- 14.200 employees
- jointly funded by state and federal governments
- evaluated quality
- €1,1 bn total budget
- €220 m third party funds

INP Greifswald in numbers

Building (new building 1999)

main floor space 3.700 qm

130 workstations

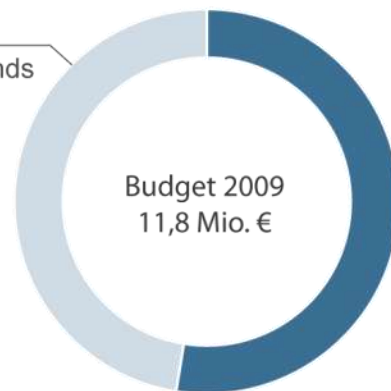
37 laboratories

in construction building
540m² (8 laboratories)



Budget (2009)

third-party funds
5,6 Mio. €



Staff (2009)

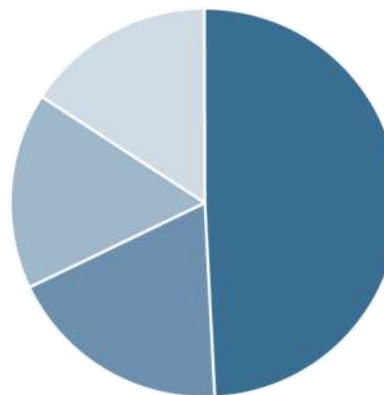
165 employees (2009)

■ scientists 81

■ engineers 31

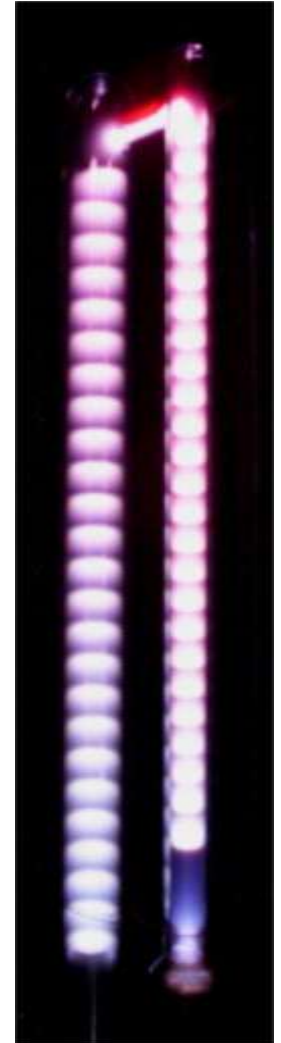
■ administration/infrastructure 27

■ assistants/trainees 26

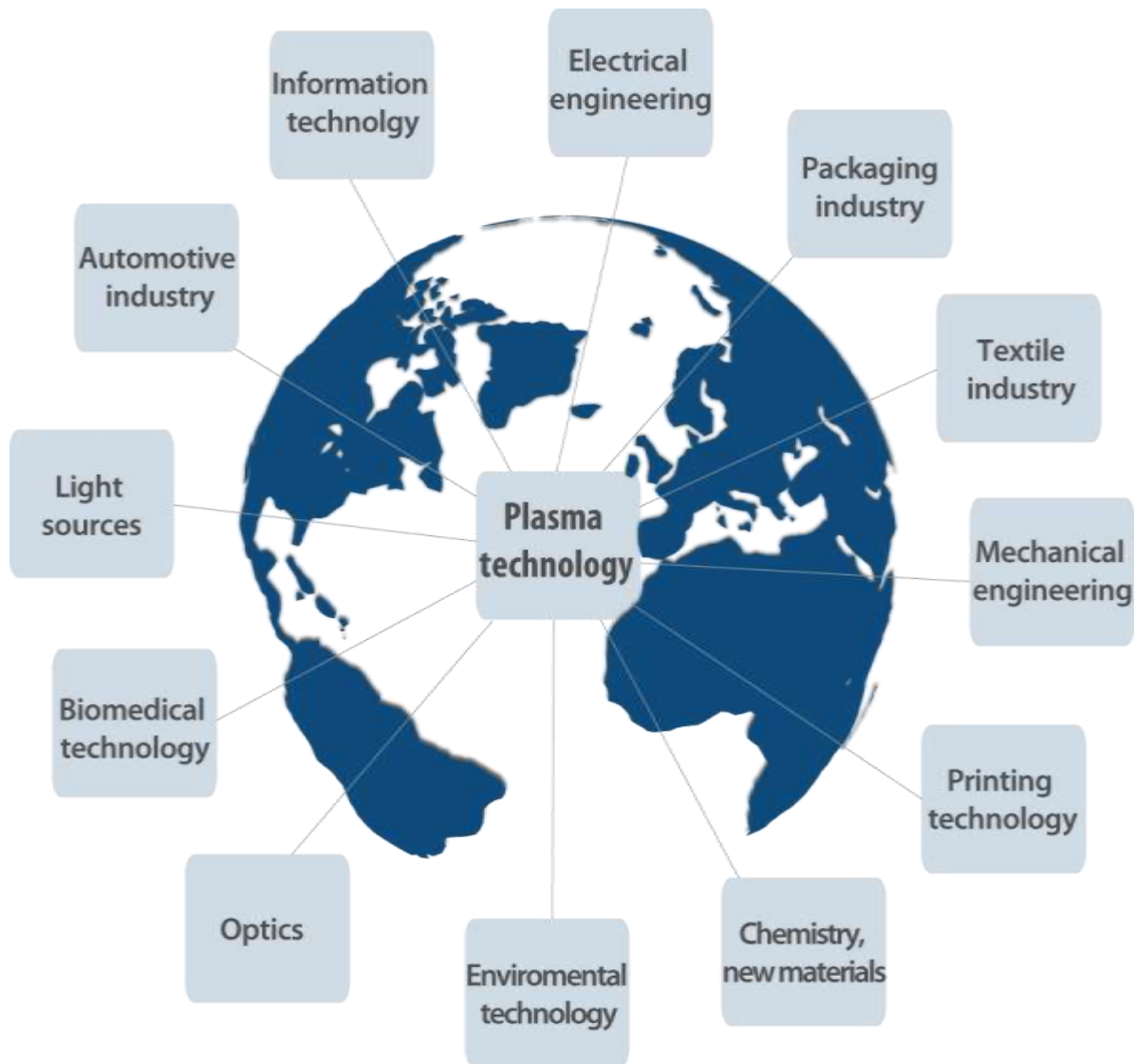


What is a Plasma ?

+ energy + energy + energy
 Solid → Liquid → Gas → Plasma



Plasma technology – application areas

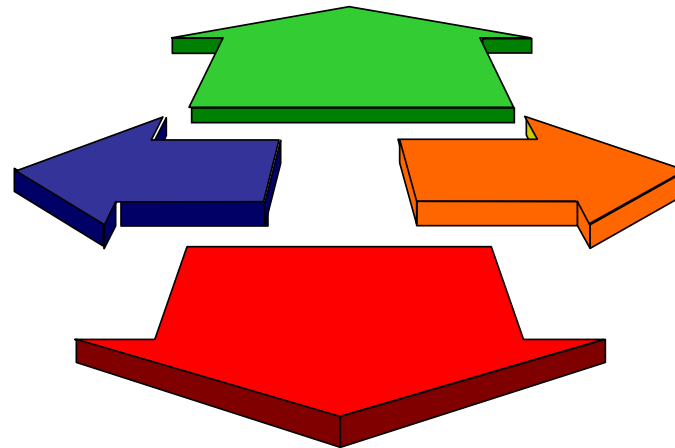


Strengths

- World renown leaders in plasma theory
- Experience in plasma generation
- Technical equipment, diagnostic procedures
- Established scientific work in the four departments

Opportunities:

- Interdisciplinarity
- EU enlargement
- Realization of high-risk research topics
- Timely adaptation to environment
- Potential of the technology not utilized
- Clear strategy to realize



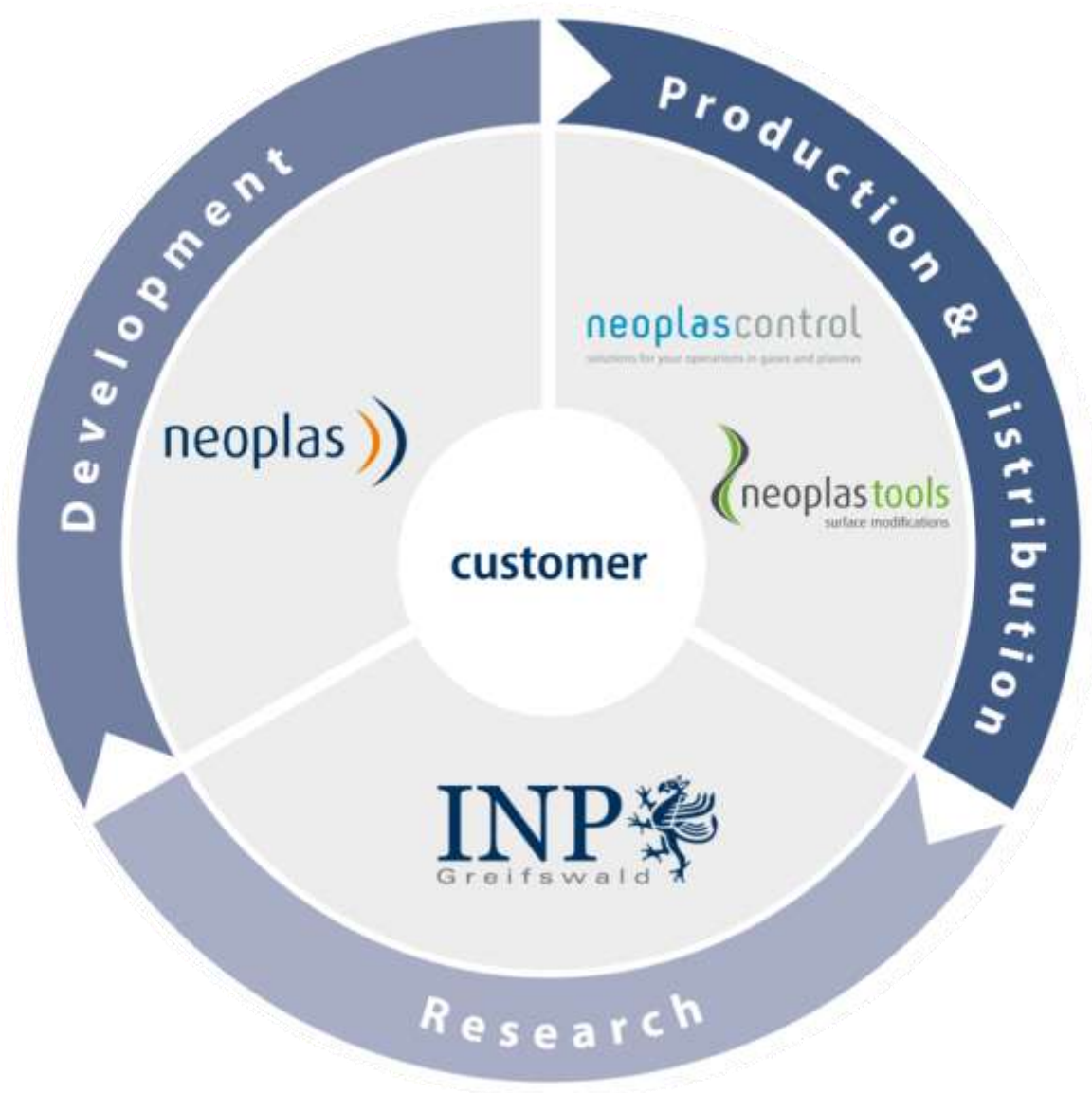
Threats:

- Financial resources
- Proximity to economy
- Recruiting difficulties
- Decreasing readiness to invest
- Missing engineering know-how
- Know-how loss through resignations

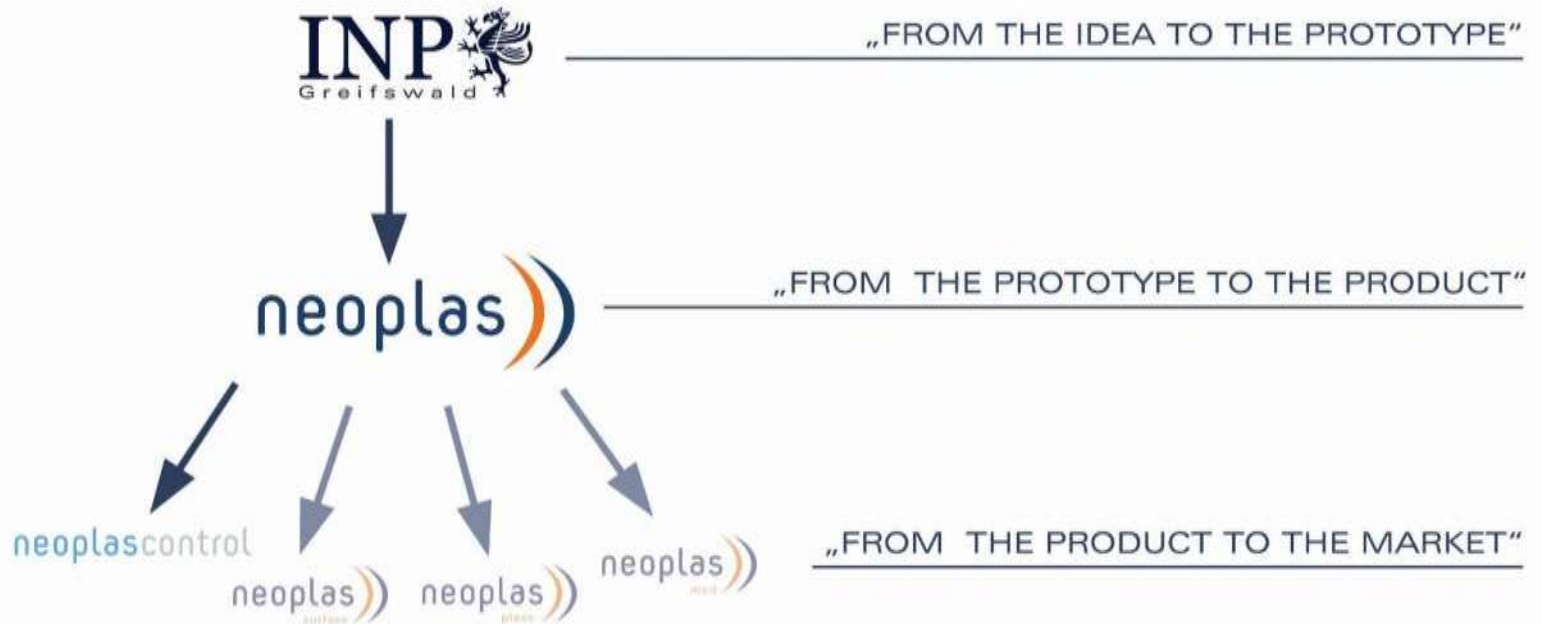
Weaknesses:

- No overall strategy
- No alternative concepts regarding change in work environment
- Insufficient project fundraising (2004/2005)
- Information/communication/project management inflexible
- budget
- Low degree of awareness about applicability

Transfer - cooperation



3 -Pillar Model



Spin-offs from INP Greifswald

neoplas GmbH (est. November 29, 2005)

- FROM PROTOTYPE TO PRODUCT
- Transfer centre of INP Greifswald
- Technology transfer
- Technology management
- Product development



neoplas control GmbH (est. January 13, 2006)

- FROM PRODUCT TO MARKET
- Production, sales and distribution of Q-MACS diagnostic systems
 - Analysis of plasma chemical processes (e.g. semiconductor and automotive industry), Trace gas analysis

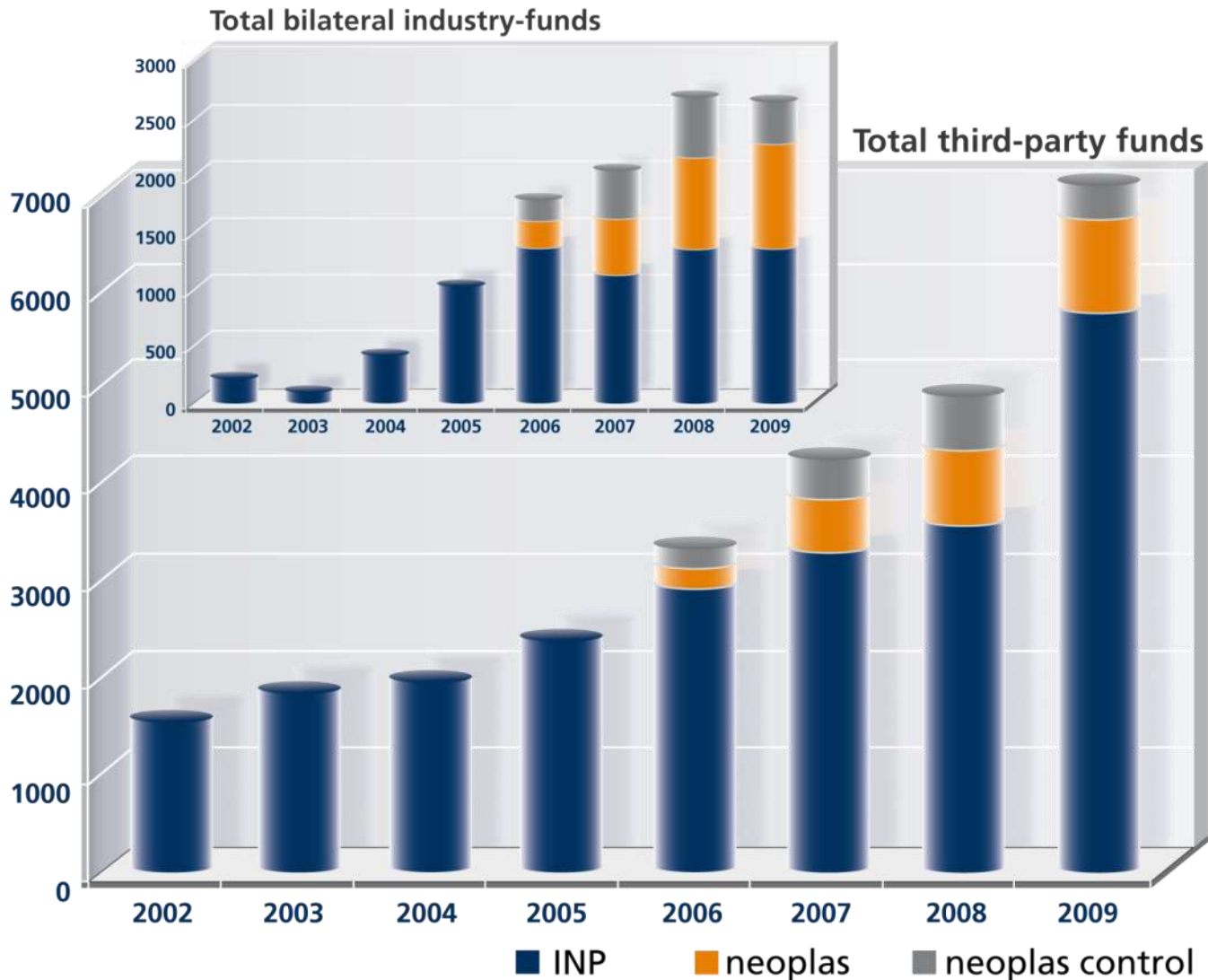


neoplas tools GmbH (est. August 18, 2009)

- FROM PRODUCT TO MARKET
- Production and distribution of plasma sources
 - Improvement of adhesion, printability (e.g. plastics industry)



Status INP 2009



Focus

Exploitation of scientific research



Specific technology transfer

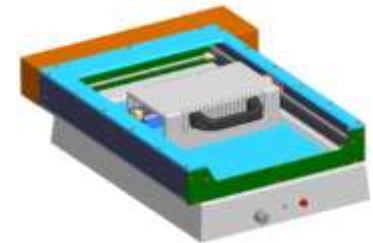
Spin-off incubator, prototype construction / small series, construction (CAD)

Efficient technology management

(EU) project management and acquisitions, market analysis, consulting

Visible technology marketing

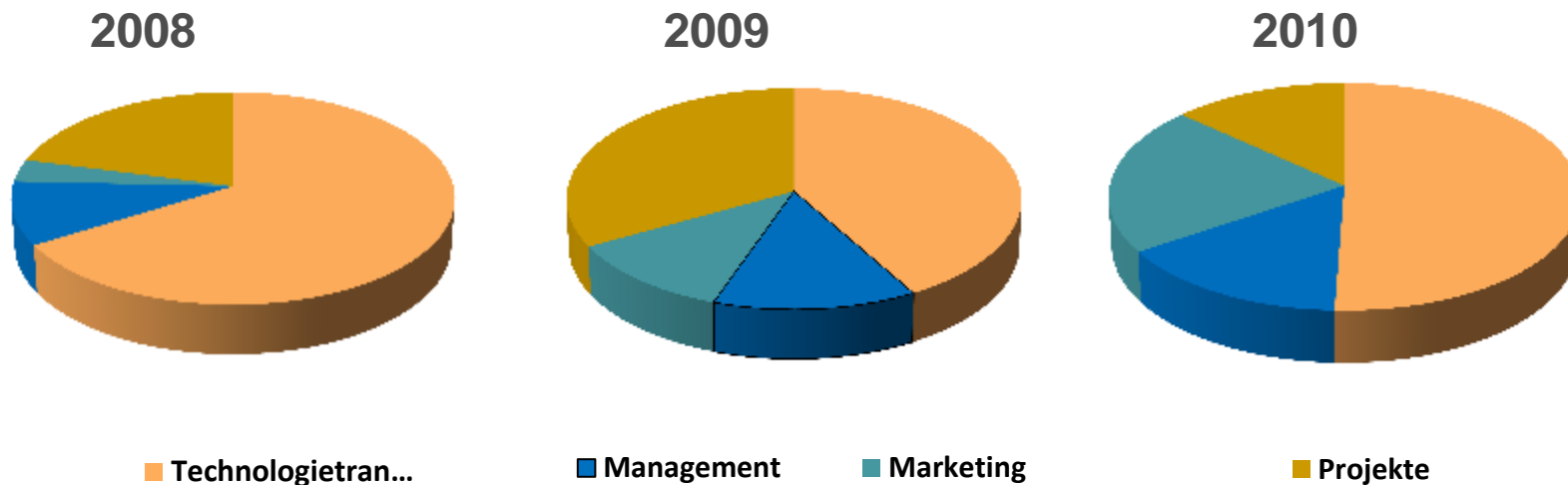
Networks & consortia, science marketing



neoplas key figures

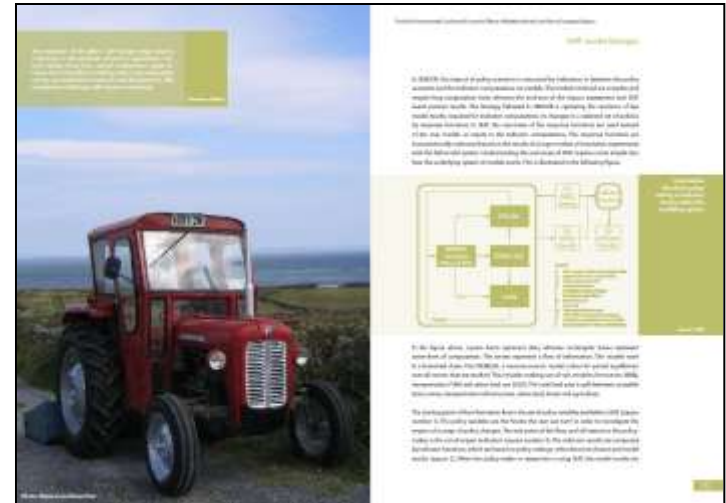
	2005	2006	2007	2008	2009
Personnel growth					
Full-time	0	1	5	7	9
Part-time	1	10	15	15	15
Economic growth					
Budget (k€)	25	200	500	750	1000
Turnover (k€)	0	222	572	770	980

Turnover 2008 - 2010

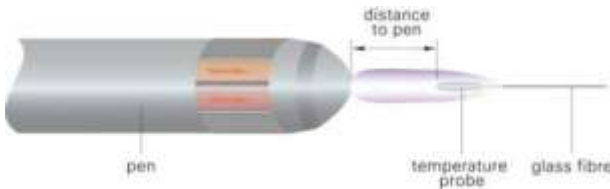
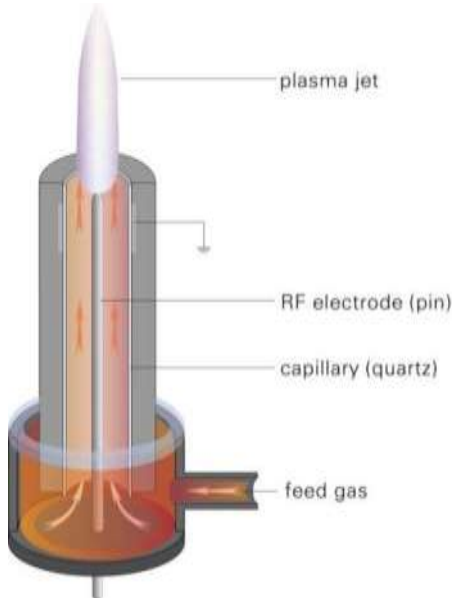
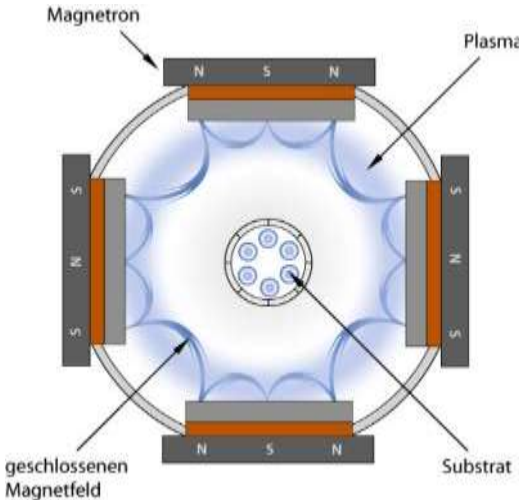
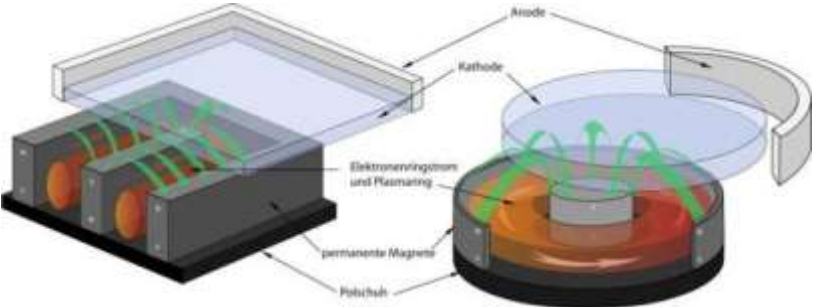
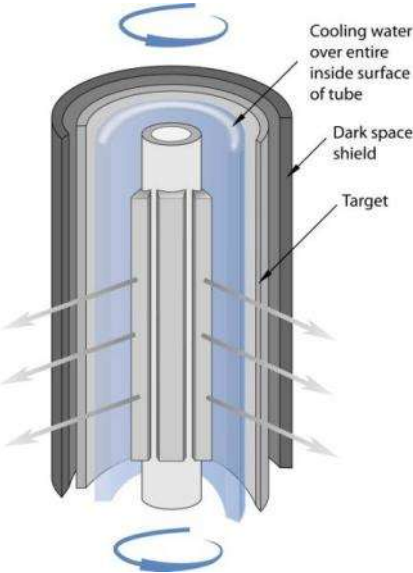


	Transfer	Management	Marketing	Projekte
2008	599.000 €	87.000 €	31.000 €	189.000 €
2009	423.000 €	138.000 €	117.000 €	335.000 €
2010	625.000 €	185.000 €	261.000 €	164.000 €

Example 1 Technology Marketing



Example 2 Technology Marketing



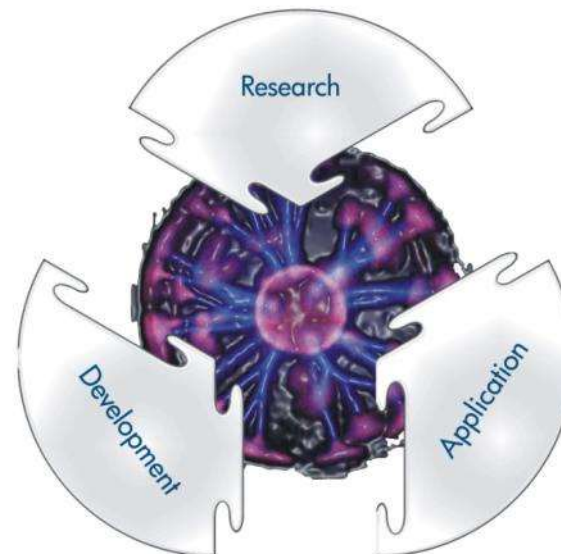
- Hiring additional staff with other educational backgrounds
-> increasing the interdisciplinary know-how
- Widening the spectrum of services and therefore increasing INP's competitiveness
- Specialization in R&D management
- Possible acquisition of follow-up orders
- Other national or international funding programs can be made use of
- neoplas can act as an industrial partner in consortia alongside INP or others
- Possibility of non-tariff payments
- Incubator for spin-offs
- Tax payer
- Services may be offered to other interested institutions

- No product liability towards third parties for public bodies
- The development process of prototypes is removed step-by-step from the research department and therefore INP gradually returns to an intensified research focus
- Relocating the necessary independent economic enterprises to the “outside” therefore not jeopardizing INP’s non-profit status
- Personnel transfer possible -> fixed-term employment can be counteracted and additional earnings possible
- Activities attract more activities → coordination tasks for Ministry of Education and Research: Business Plan Competition, Mentoring Programme for founders

Crucial success factors

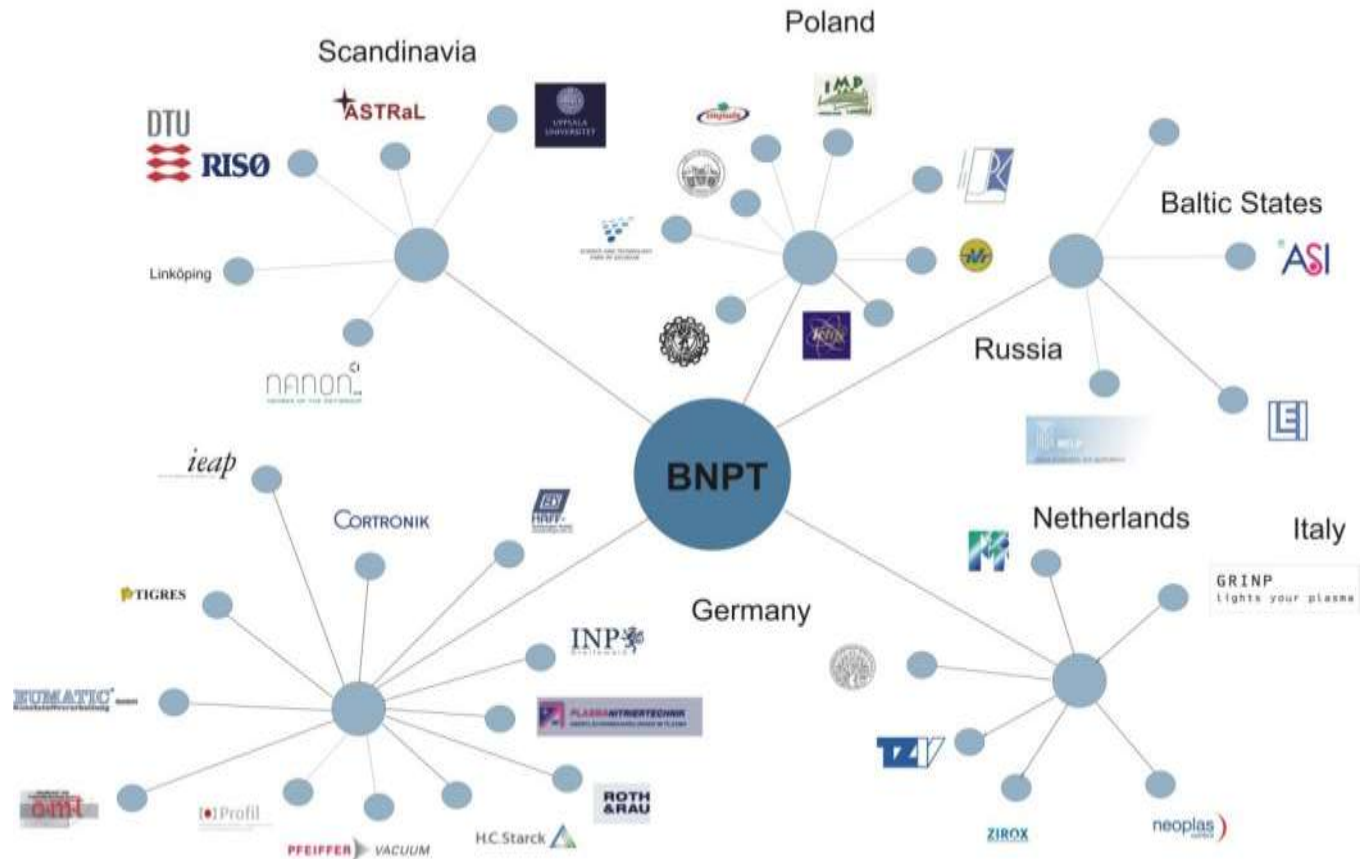
- „Bad“ starting conditions (no more willingness to suffer, need to change is widely accepted)
- New leader team
- Clear strategy
- Mature technology (platform for several applications)
- Strong scientific basis
- Supervisory committees are willing to follow a down-to earth approach

- International centre of attraction
- Bundling of the best ideas from the Baltic Sea Region and other countries
- Expansion of multidisciplinary research
- Participation in regional, national and European innovation programmes
- Matching European rural and metropolitan areas for joint post-research activities (technology transfer, investments, recruiting)

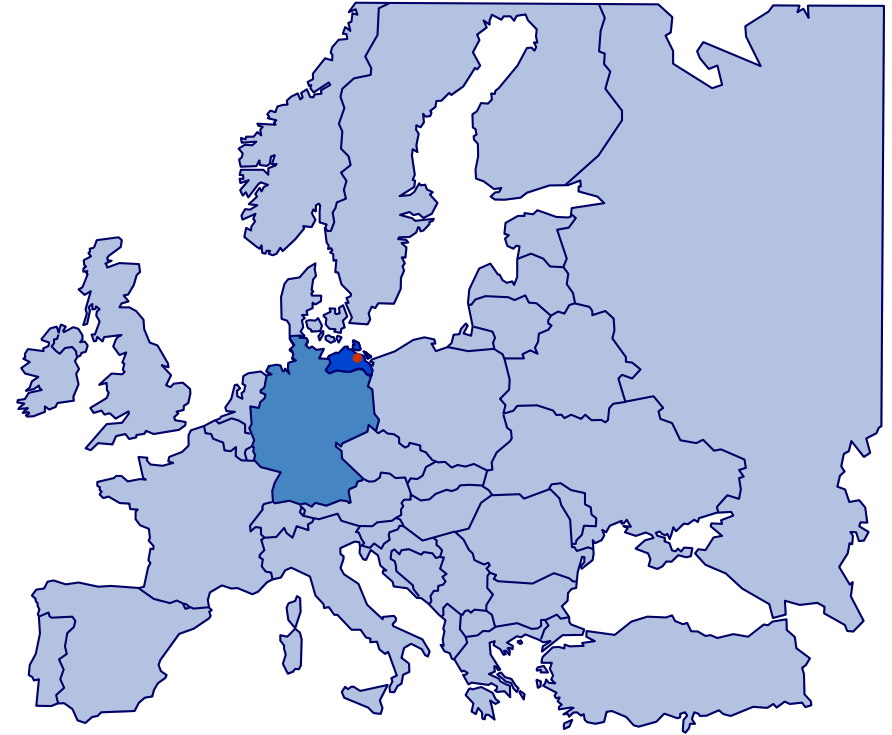


Operational approach to utilize this model for more actors in Europe

BalticNet-PlasmaTec - The network for plasma technology in the Baltic Sea Region: 38 partners, 10 countries, 1 focus



Thank you!



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