

Being at the cross-roads of R+D+I+B: the Károly Róbert College - Gyöngyös

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From the beginning until today

- 1962:** establishing the College of Agriculture – 3 degree programs, 300 students, 50 teachers
- 1986:** 2 faculties – Faculty of Agriculture (3 programs)
 - Faculty of Economics (3 programs)
- **2000:** 2 faculties, 10 programs, 11.000 students (distance teaching!), teaching staff: 100 people
- **2004:** new name – „Károly Róbert” College, 8.000 students (decline of distance teaching!) = new strategy:

„To be a regional knowledge centre based on the green economy”



Developments

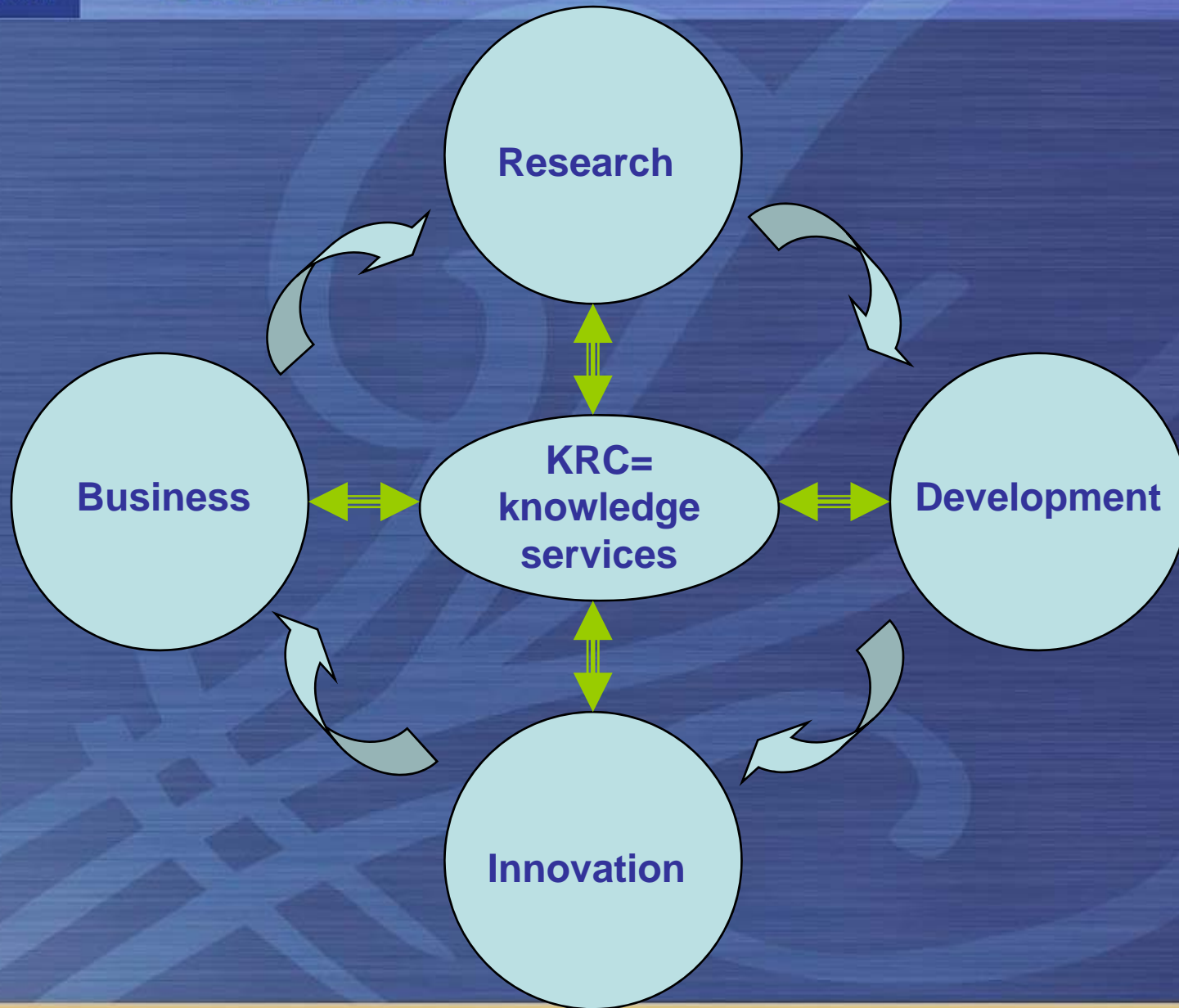
- **Infrastructure**: establishing pilot plants for the bioenergy branch + total reconstruction of the existing facilities
- **Staff**: 70% of teaching staff having scientific qualification, average age: 37 years
- **Organisation**: joining former independent R+D institutions, establishing spin-off companies + knowledge networks
- **Portfolio**: concentrating to the most perspective branches
 - ecoenergy
 - ecoindustry



„KRC” = Károly Róbert College = Knowledge and Research Centre



Knowledge Centre = R+D+I+B



Knowledge services of the KRC

- A portfolio of knowledge services competing on different markets:
 - Teaching programs – competing with similar institutions
 - Degrees – students competing on the labour market
 - R+D+I – competing for financial sources
 - Business – consulting, spin-off companies, projects, etc...
- Main R+D topics:
 - Bioenergy: integrated biomass-based heat- biogas and biofuel production systems
 - Ecoindustry: ecological agricultural technologies, environment management
 - Knowledge networks: management of networks, clusters
- Basic principle: „til now: we provided what we knew - from now: we have to know, what is needed!”
- Initiating governmental programs, actions:
 - Legal proposals, elaborating standards for the green energy
 - Sustainable energy management strategy
 - Nation-wide projects:
 - MEGA-program: a range of greenhouses based on local energy sources
 - Social green energy program: local heating systems based on biomass



From 2009: Innovation in the education structure

- To be the „First Green Hungarian HEI”
- Establishing the 3-rd Faculty: „Faculty of Natural Resources Management”
 - 4 new departments, 12 new professors
 - National and international networks
 - 3 new teaching programs:
 - BSc-level: „Natural Resources Management”
 - „Ecoenergetical Engineer”
 - MSc-level: „Sustainable Management



Integrated R + D programs

Heat

Biogas

Bio fuel

Producing, processing of biomass, technologies

Economical evaluation

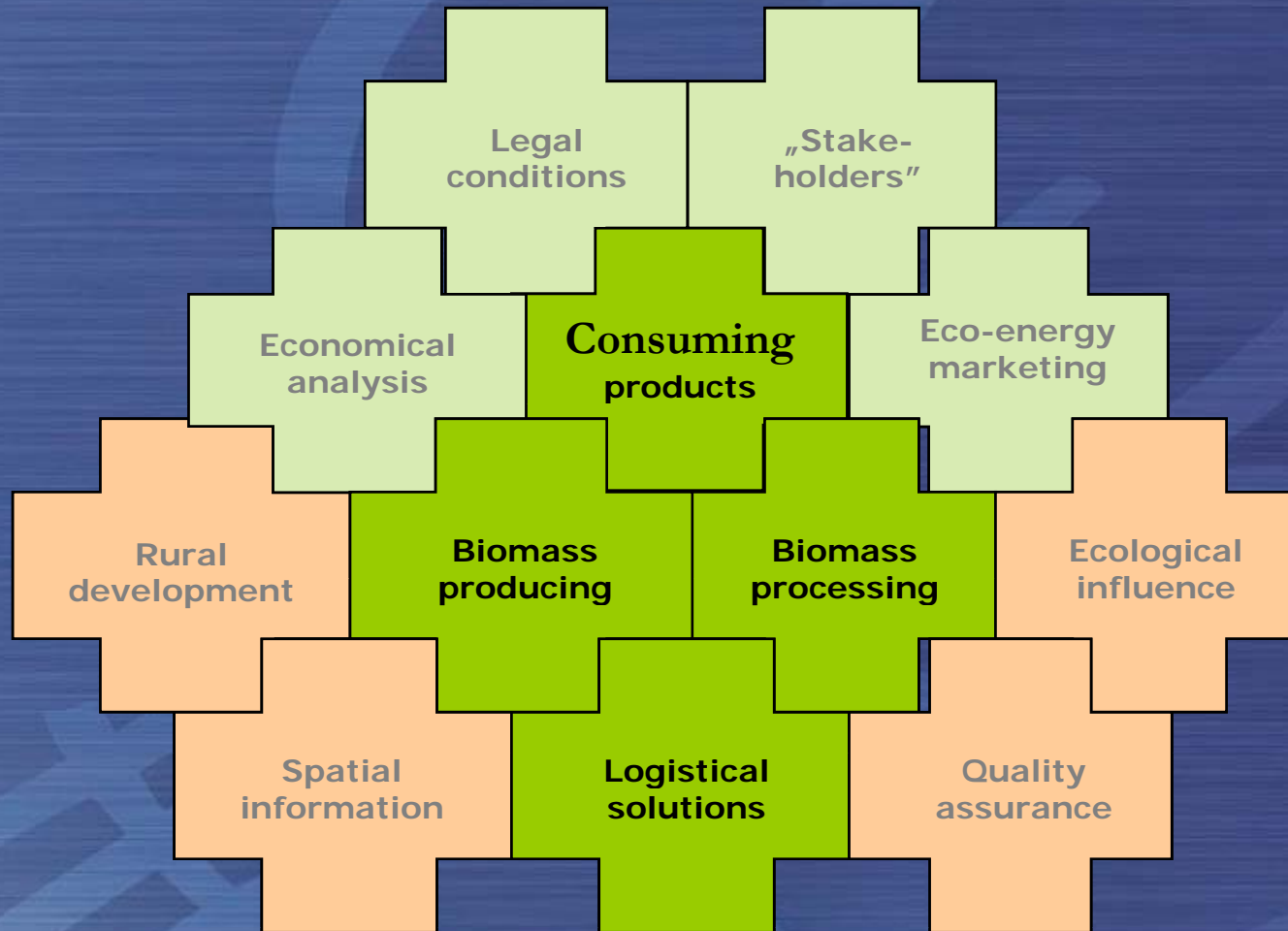
Analysis of environmental and rural developmental issues

Marketing and communication

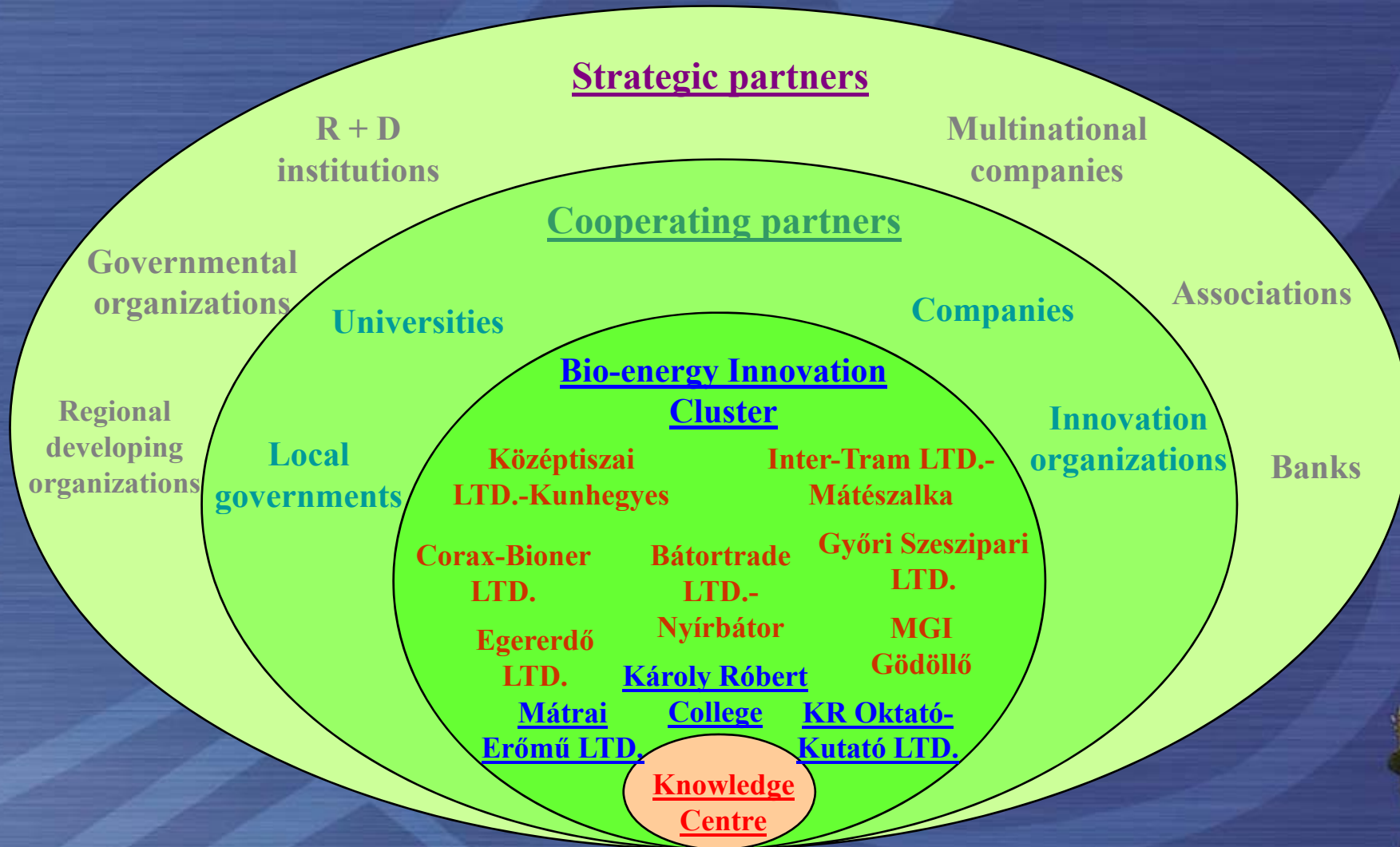
Elaboration of complex system models



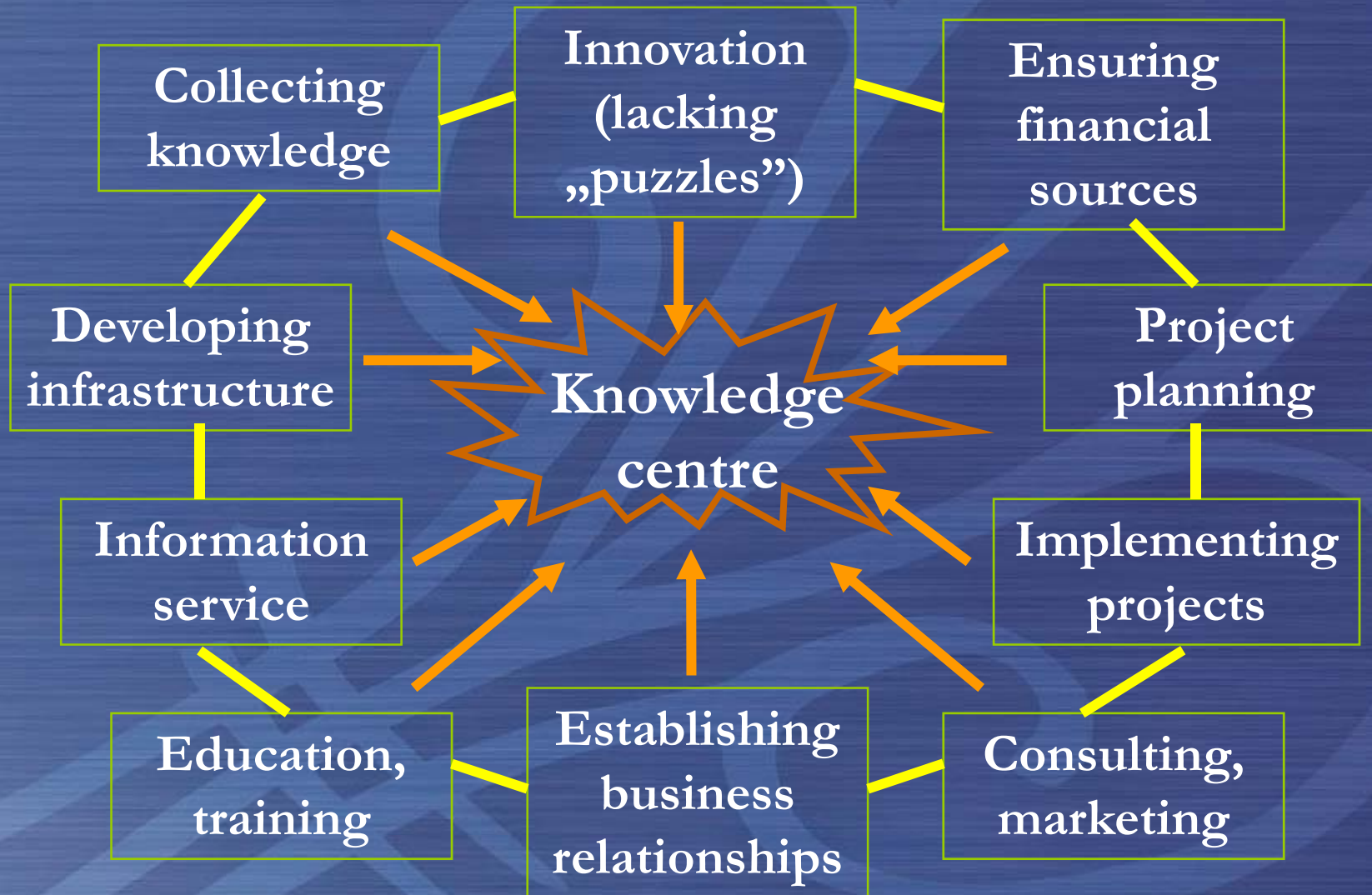
System-like innovation in the bioenergy projects



Bioenergy Innovation Cluster and Knowledge Centre



Different roles of the Bioenergy Knowledge Centre



Mobilizing about 150 „stake-holders” in the „bioenergy and eco-industry”

- **National Bioenergy Association („NAESZ”, located in Gyöngyös):**
 - 50 founders (in 2006) related directly /indirectly to the bioenergy branch,
 - Basic activity: representing interests of members, legal – marketing – information services, initiating business and innovation projects, financing
- **„Öko-Land” Association (located in Gyöngyös) :**
 - 65 founders (in 2007) related directly /indirectly to the eco-industry,
 - Basic activity: harmonizing struggles in the bioenergy and eco-industry branches, standardization
- **„Bioenergy Product Line Council” (BITESZ, located in Budapest)**
 - 46 founders (in 2008), actors of business – civil and public sectors,
 - Basic activity: regulating the bioenergy market



Integrating into the global business = forming a „mega-cluster across Europe”

- **The CENCE-program:**
 - „Establishing a cooperative learning platform that facilitates the promotion of entrepreneurial innovation through Connecting Energy Clusters across Europe”
 - The program is subsidized by the EU 6-th FP between 2006-2008
 - 11 partners from 8 countries
- **Continuing the program in the frame of RESGEN-project (financed by the FP-7 2009-2012): enhancing innovation potential for implementing renewable energy regions**

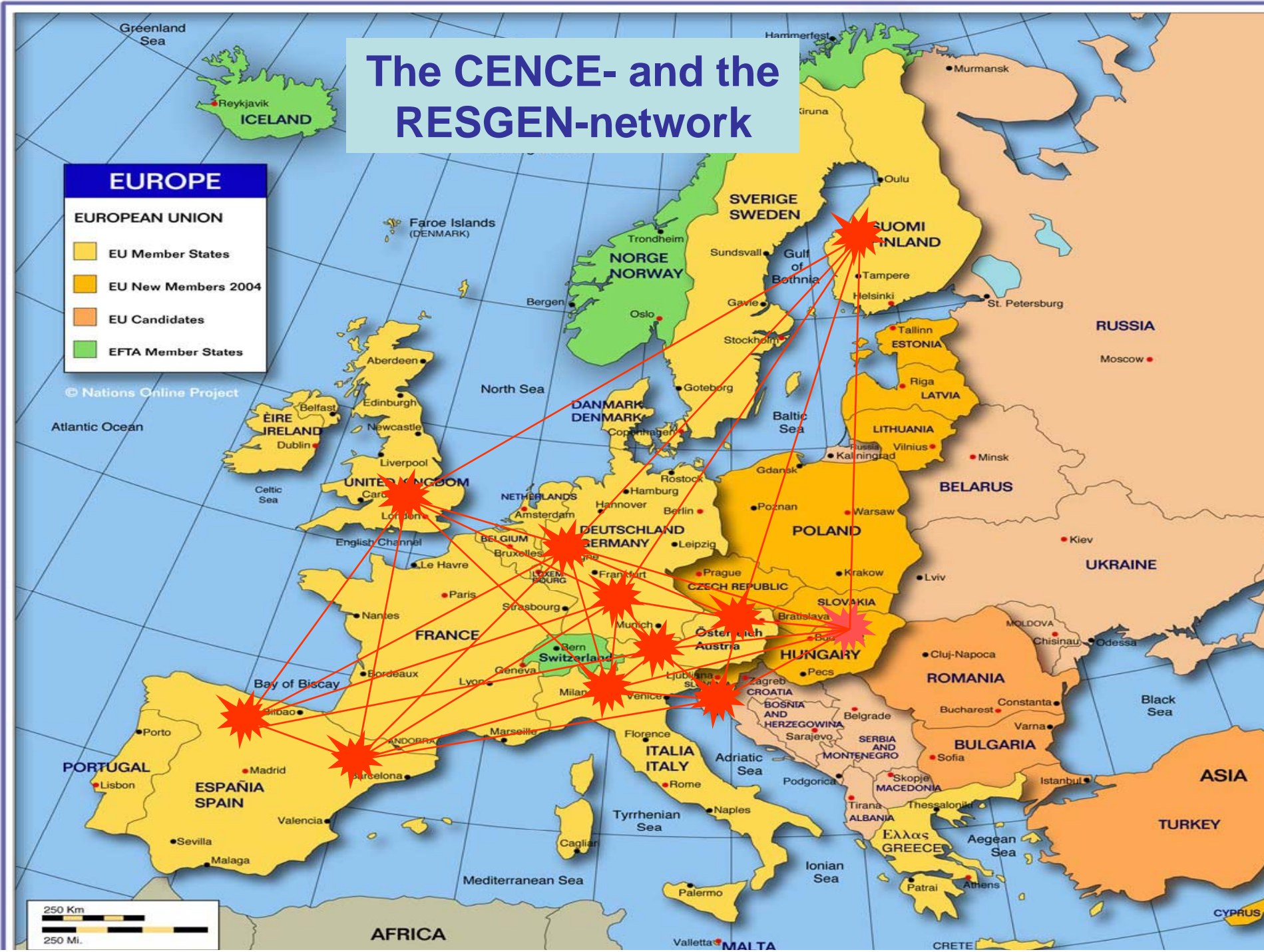


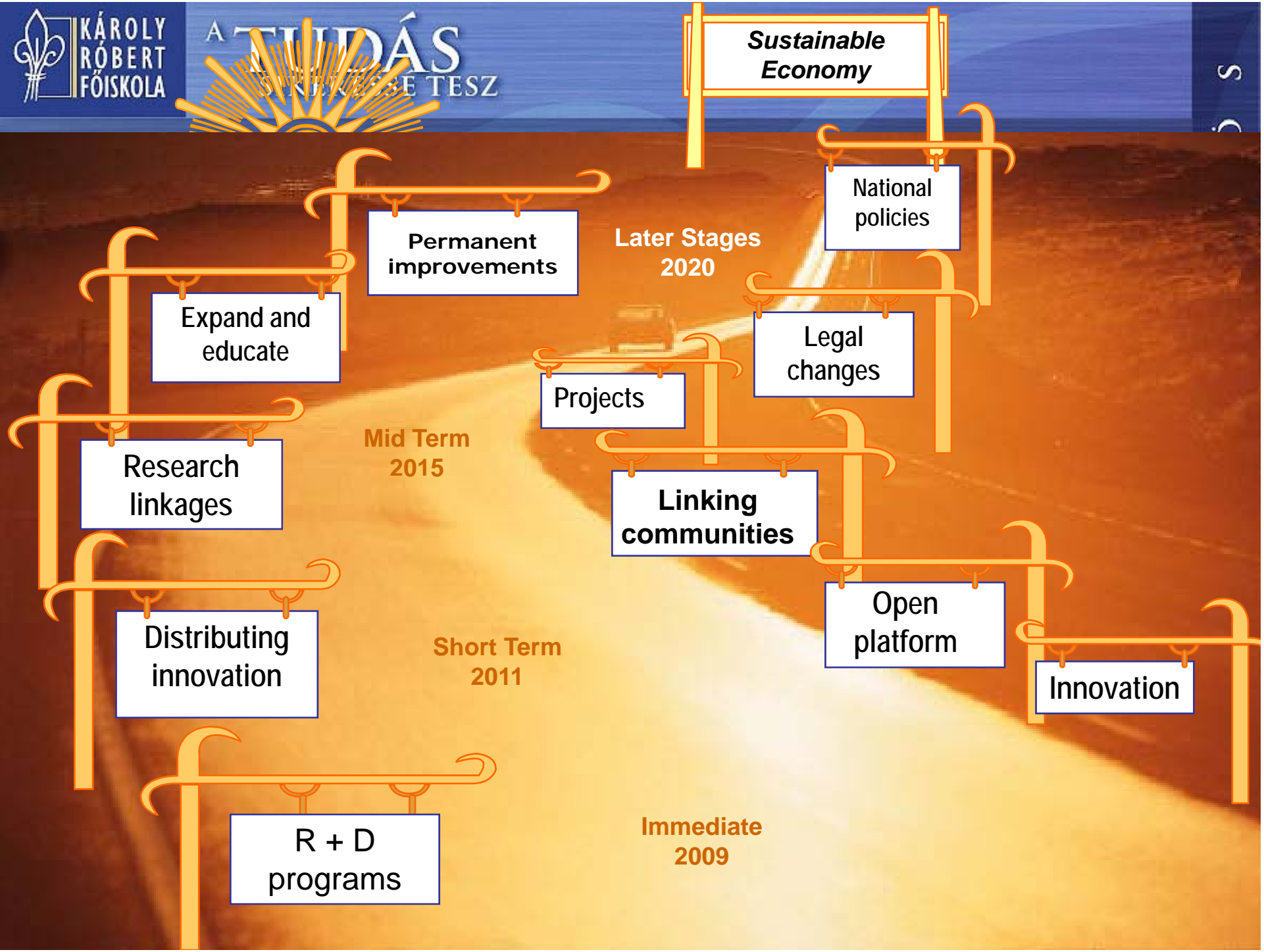
The CENCE- and the RESGEN-network

EUROPE

EUROPEAN UNION

- EU Member States
- EU New Members 2004
- EU Candidates
- EFTA Member States





Thank you for the attention!

