

# **R&D Capabilities of Korea & Korea-EU R&D Cooperation**

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Joint Press Conference in Brussels, November 8, 2013 → More co-work in the Science and Technology field





# KIC-Europe [Introduction]

#### Background

- Increasing need for strengthening international cooperation with the EU after the signing of FTA with the EU, particularly in the field of Economy, Science & Technology, with a view to enlarging partnership in terms of world-wide collaboration
- Europe-based platform for Korea-EU R&D Innovation policies on behalf of the Korean government with a motto of "the creative economy"

#### Promotes Korea-Europe Research Collaboration

- Support Local Researchers for Forming Consortiums and Joint Research Programs
- Establish long-terms strategies by analyzing Korea-EU related policies

#### Agenda



R&D

Supports Technology Transfer – SMEs Entering the European Market

- Provide On-site integrated consulting service for local advanced technology transfer and commercialization

- Implement Tailor-made service for start-up and ventures by cooperating closely with the governmental agencies

Policy

Coordinates policies – Collects relevant information

- Build network with EU institutions for Korea-EU cooperation infrastructure

- Establish and Analyze Database for a rapid response to changing EU landscape



# KIC-Europe [Introduction]

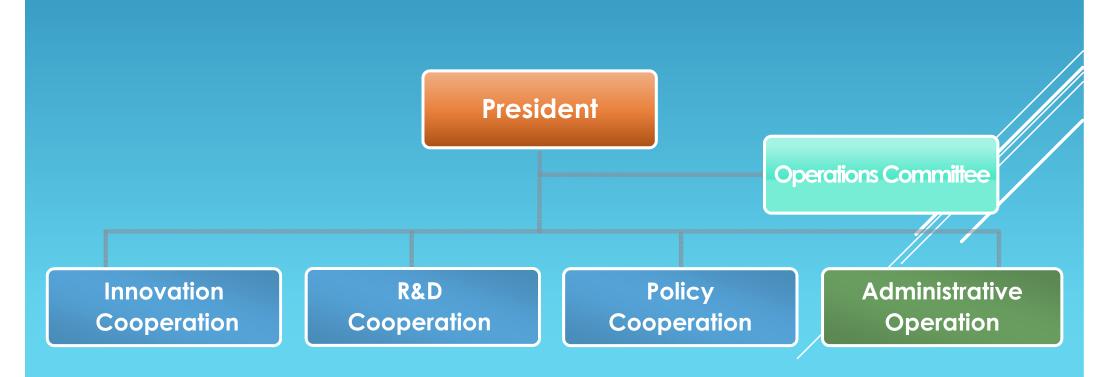
#### Operations

● Location: EC Neighborhood → Easy to access the EC

Rue de la Science 14 1<sup>st</sup> floor

- Type: Non-profit Organization (since 22.12.2013)
- Organization Chart: President , Board of Directors, Four Divisions
- Employees: 15 employees (Local Recruitment & Participating organizations\*)

\*as of 2014: NRF Korea, KIST-Europe, KISA, ETRI, KIMM, iPET, KRICT, KISTEP





# KIC-Europe Agency Participants (as of 2014)



Electronics and Telecommunications Research Institute



Korea Internet & Security Agency



Korea Institute of Science and Technology-Europe



National Research Foundation of Korea



Korea Institute of Machinery and Materials



Korea Institute of Science & Technology Evaluation and Planning



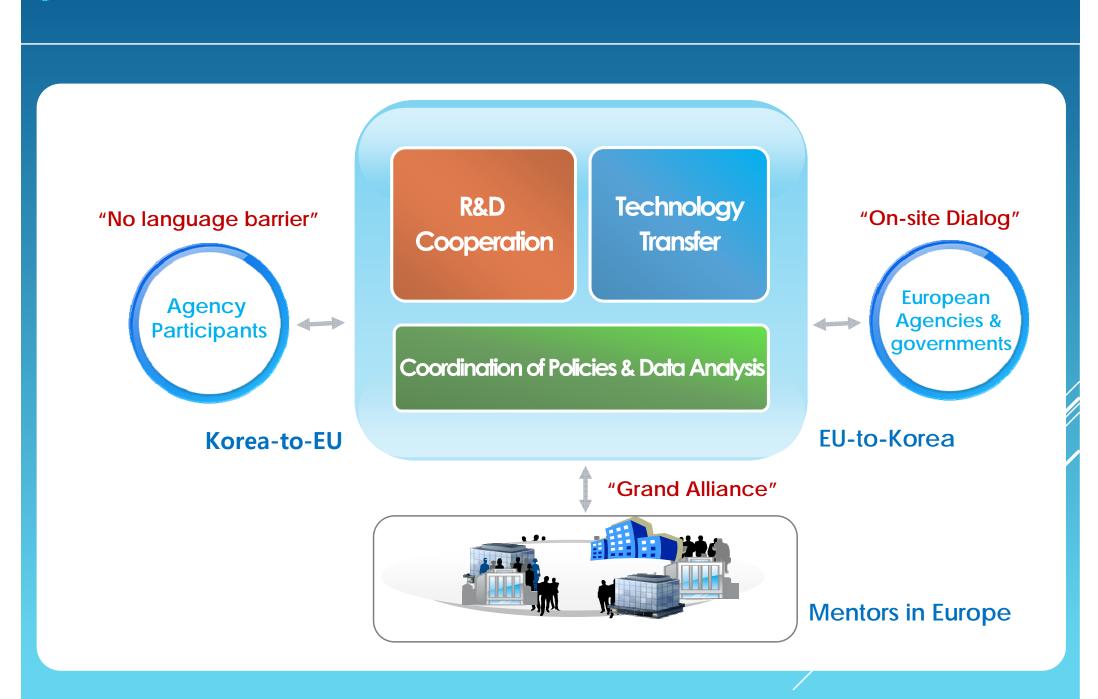
Korea Research Institute of Chemical Technology



Korea Institute of Planning and Evaluation for Technology of Food, Agriculture, Forestry and Fisheries



### Main Function





# **R&D** Cooperation

#### Providing Advice on Research Collaboration for Domestic Researchers

- Help Desk | HORIZON 2020 Training Support
- Support for forming Consortiums, Consulting Intellectual Property Law, Marketing and Localization for Start-ups and Ventures

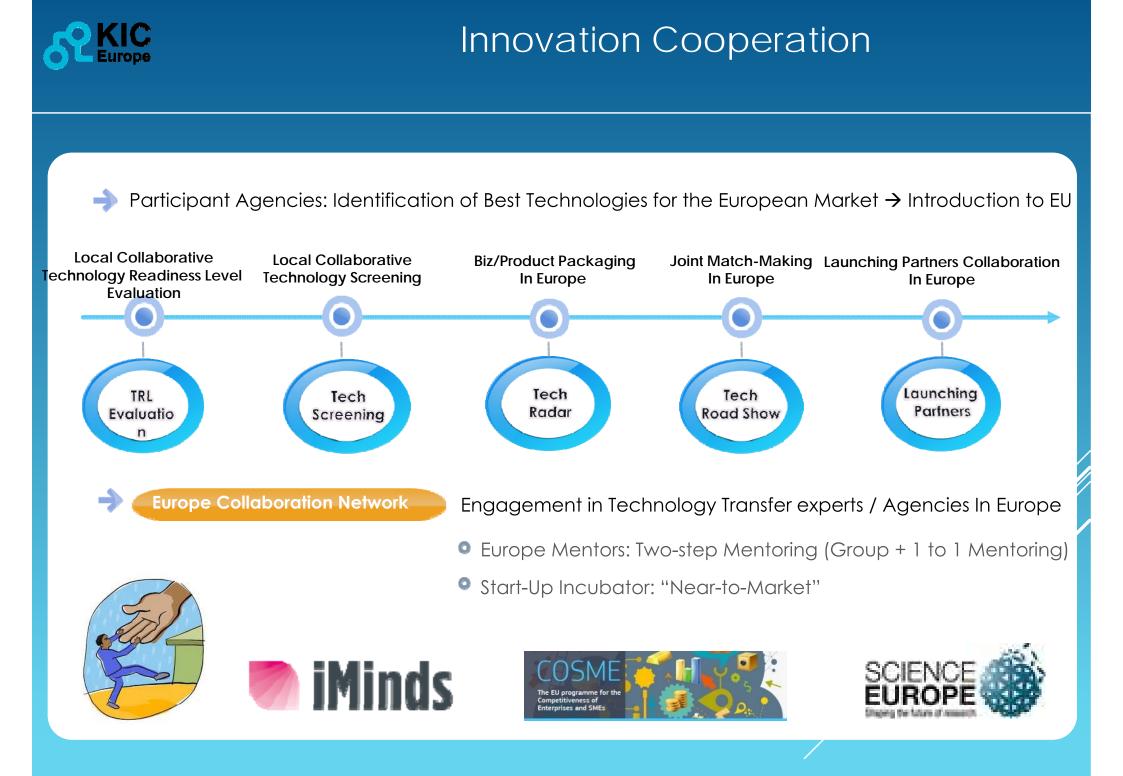
NCP Coordinator ICT | BT | SME NCP (National Contact Point)

- Consulting on planning Consortiums and Business –Related Policies
- Development of Roadmap on the R&D policies (Korea-EU) and the topic selection of R&D Cooperation

Research Collaboration Planning and Coordination of collaboration with European Institutes

- Bilateral (Multi-lateral) Research Collaboration: S&T, ICT, Research Commercialization
- "Collaborative Labs" Model







# Policy Cooperation

#### Build Systematic EU-Based Database

- Publish EU Research/Technology/Market Analysis
- Launch Newsletter, Webinar, APPs Service

#### Broaden & Strengthen EU Network in each field

- Build Database by Holding a Monthly Future Forum: by Nation/ Field
- Strengthen Cooperation with KOTRA, KIST-Europe, KIAT-Europe, Europe-based Science Associations, etc.

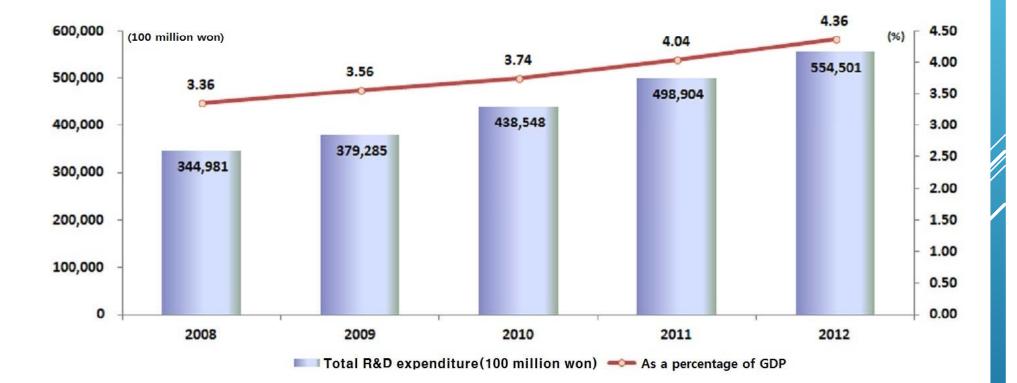




# R&D Landscape in Korea

#### → Total R&D Expenditure

- In 2012: 55,450 billion won (equivalent to \$49.2 billion)
- The second-highest R&D investment ratio(4.36) after Israel



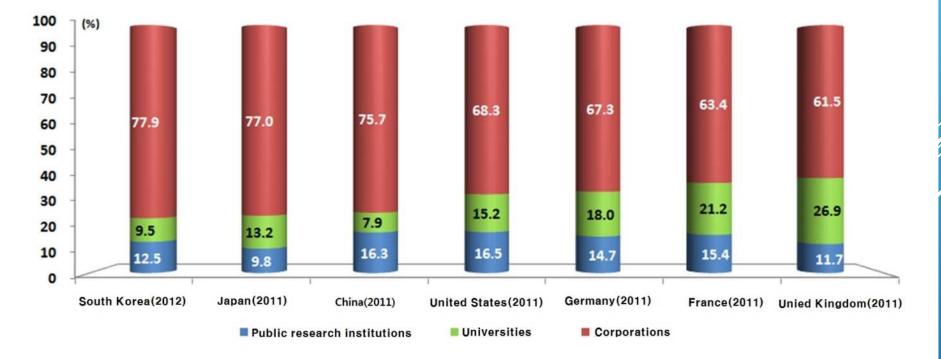


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# R&D Landscape in Korea

#### International Comparison of R&D Expenditure by Actor

- Corporations: 43,222.9 billion won (77.9%)
- Public Research Institutions: 6.950.3billion won (12.5%)
- Universities: 5,276.9 billions won (9.5%)





## R&D Landscape in Korea: R&D Quantity

#### R&D Investment by field (2012)

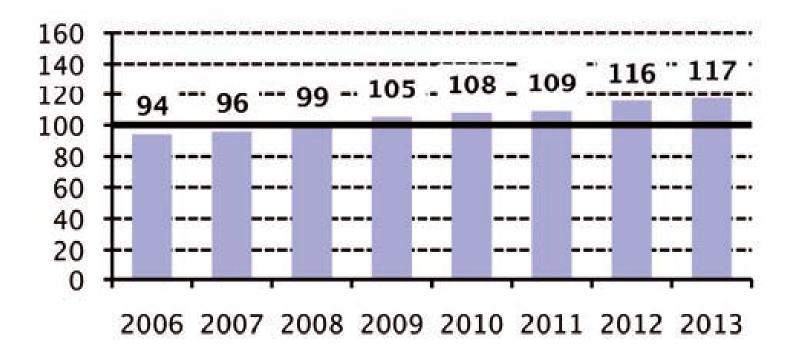
Field	Government-Assisted Fund (million won)				Research
	Research Activities (%)	Research Infra (%)	Total (%)	Number of Projects	Fund per Project (million won)
ΙΤ	242,727 (13.2)	14,202 (3.4)	256,931 (11.4)	2,011	130.6
BT	650,076 (35.7)	153,324 (36.1)	803,400 (35.5)	5,615	136.5
NT	178,106 (9.7)	43,274 (10.2)	221,380 (9.8)	1,731	128.6
ET	135,332 (7.4)	73,245 (17.2)	208,577 (9.3)	864	109.8
ST	68,164 (3.7)	4,800 (1.1)	72,964 (3.2)	931	166.7
СТ	17,144 (1.0)	1,094 (0.3)	18,283 (0.8)	169	106.7
Other	536,247 (29.3)	135,278 (31.7)	672,526 (30.0)	7,651	144.0
Total	1,827,842	426,218	2,254,060	18,972	134.8



## Innovation Union Scoreboard 2014

#### Innovation Performance by EC Innovation Scoreboard

- South Korea is relatively more innovative than the EI and the innovation is further increasing
- From 2009 onwards the performance gap has been reversed into a performance lead





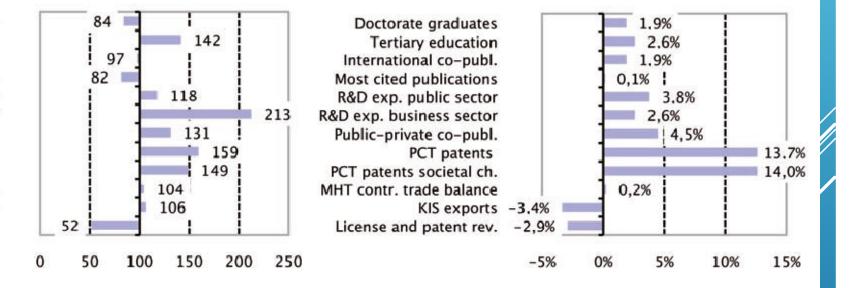
# Innovation Union Scoreboard 2014

#### Performance Lead

• South Korea is Performing better on 8 indicators

Change in Performance Lead The Relative growth performance has improved for 10 indicators

Doctorate graduates Tertiary education International co-publ. Most cited publications R&D exp. public sector R&D exp. business sector Public-private co-publ. PCT patents PCT patents Societal ch. MHT contr. trade balance KIS exports License and patent rev.

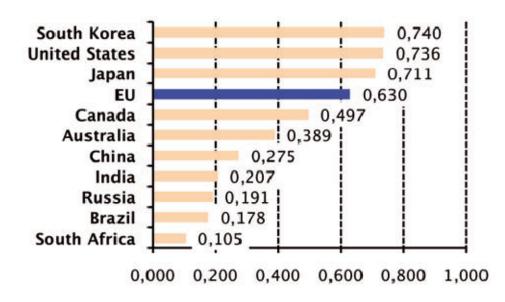


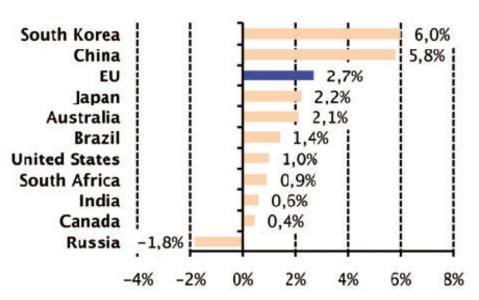


#### A Comparison of the EU with the main global economic partners with the EU

 Dominating in indicators capturing business activity as measured by R&D expenditures in the business sector, Public-private co-publications and PCT patents but also in educational attainments

**Global Innovation Performance** 





#### **Global Innovation Growth Rates**

# Thank You

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# **KIC-Europe**

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