Korea’s Innovation Policy

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1-1. Korea’s Growth Miracle

- The successful economic growth

  ✓ From the one of the poorest countries
to economic powerhouse

  ✓ Consistently invest in science and technology along with
human capital as a lever for economic growth

* driven by scarcity of natural resources
1-1. Korea’s Growth Miracle

- **Can Do Spirit! Venture Korea!**
  - Entrepreneurs with Can-Do Spirit
  - Hard Working and Educational Zeal of the Korean People
  - Strong Drive of the Korean Government

- **Staying Resilient through Tough Times**
  - Oil Crises: 1973 & 1978
  - Asian Financial Crisis: 1998
  - Global Financial Crisis: 2008

- **The Only Country**
  - Transition from Aid Recipient to Donor Country
  - OECD DAC(*) Member since 2009

* Development Assistance Committee
1-2. Korea’s Innovation Strengths

Bloomberg 2018 Innovation Index

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※Source: Bloomberg, 2018

✓ 1st Place in the Global-Innovation Index for the consecutive Five Years
✓ Samsung Electronics Co., is ranked fourth among the world’s most innovative companies.

※According to The 2017 Global Innovation 1000: Key Findings

✓ Top Level: R&D intensity, value added manufacturing and patent activity
✓ Within 5th: High-tech Density, Higher Education and Researcher Concentration
2-1. Development Stages of Innovation Policy

- Prominent role of national champions in selected industrial sectors such as car, electronics, etc.
- Creation of backward linkages and long-term production networks between Large firms with local SMEs
- Government encouraged large firms to embark on intensive investment in indigenous R&D

※ Source: UNU-MERIT, 2008
2-2. SWOT Analysis: Korea’s Innovation System

**S - Strengths**
- Investments in science, technology, engineering and mathematics education
- Strong government support for science, technology and innovation
- Strong manufacturing base

**W - Weaknesses**
- Small domestic market
- Lack of natural resource
- Relatively weak SME sector

**O - Opportunities**
- Geopolitical positioning in dynamic region
- High tolerance for risk in business
- High levels of business innovation

**T - Threats**
- Arrival of strong new competitors in fields of ICTs and others
- Lack of knowledge transfer between university research and industry

※Source: UNU-MERIT 2008, IDA 2013
2-3. Key Observations

- Korea drove an “Industry-Focused” innovation policy
  - The promotion of “targeted” industries in Korea

- The role of the Korean government in R&D promotion has been around 20% (Private Sector: 80%)

- Government’s policy directions are aiming at upgrading S&T capabilities in line with national social, cultural and economic developments to satisfy the following goals:
  - Value-creating industrial structure
  - Knowledge, information and intelligence-based society
  - Society that focuses on a healthy life
  - Sustainable society
  - National security and prestige
1. Innovate the Challenging & Creative R&D
   - Expand creative, challenging research opportunities based on researchers' ideas
   - Strengthen long-term, stable research support

2. Growth Engines by Innovation
   - Strategic investment
     - Focusing on high-risk, uncertainty field & convergence-based technology development
   - Develop the core source technologies

3. Resolve the Social Problems through R&D
   - Deal with social problems through ICT R&D
     - Transportation, Welfare, Environment, Security, National Defense, etc.

4. Strong R&D Infrastructure
   - Skilled human resources for the 4th industrial revolution
   - Strengthen global cooperation
   - Nurture local area as a self-sustaining innovation platform
2-4. R&D for Growth Engines 2018

### 4th Industrial Revolution & Source Technology Related R&D

#### 4th Industrial Revolution
- Intelligent Technologies
  - Network, Data-driven Artificial Intelligence, Big Data, Cloud & AI Computing, IoT
- Convergence-based Technologies
  - Infrastructure for integration of intelligent technology, Block Chain, and Quantum Information Communication

#### Core Source Technologies
- ICT Core technology development
  - 5G convergence service, Beyond 5G, AI-based Data Analysis and Management
- Digital Health Care
  - Stem cell therapy, gene correction, synthetic biology
- Climate technology
  - Photovoltaic power generation, rapid & large capacity charger for electric car, etc.
The goal is to help Korean startups & SMEs to set their eyes on the global market from the initial ideation stage, aiming not only for Korea’s number one but also global number one.

Korea Innovation Center (KIC)

- Local networking, information analysis and mentoring services have been supported R&D cooperation and business creation of startups and SMEs
3-1. KIC Europe

About KIC Europe

The Korean government has recently been promoting the internationalization of national researchers, venture companies and SMEs to the world market. Especially an on-site continuous dialogue between Korea and the EU should be built up to enhance greater reciprocity in terms of mutual interest.

To achieve this, the KIC-Europe (Korea Innovation Centre-Europe) as the systemic collaborative infrastructure was established in Berlin, on 16th of March. Our three pillars of activities are:

- Innovation cooperation for Korean Startups
- Technology commercialization (technology transfer; licensing; joint ventures)
- Business acceleration and innovation-based incubation services for Korean SMEs

KIC Europe opens up access opportunities for Korean Startups and SMEs to expand into European markets by providing strategic solutions and networking.
3-2. K-Startup Grand Challenge 2018

Expanding into Asian Markets via the Korean Global Start-up Challenge Program!

☐ Worldwide Start-up Challenge program supported by the Korean Government since 2016
  - about 500 European Start-ups out of 1,500 from the world applied in 2017.

☐ 2017 final winning team from Germany was awarded a $100,000 cash prize
  - All 50 Startups received about U$12,000~U$27,000 grant(cash and in kind).

☐ Benefits at a glance
  ✓ Four-Month Accelerating Program (including office, equipment, etc.)
  ✓ Financial Incentives
  ✓ Korea’s top Corporate Sponsorship and Support

Application begins at April @ www.k-startupgc.org
  - Contact: kstartupgc@kiceurope.eu
Thank you!