IP Monetization in Climate Technology Transfer Promotion

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Introduction: Idea Bridge’s Role in Climatech PPP*

- **Established: October 7, 2011**
  - Special asset management firm licensed by Korean Financial Services Commission

- **Paid in Capital: KRW 4 Billion (USD 4M)**

- **Ownership Structure:**
  - 100% Intellectual Discovery: First invention capital of Korea, specializing in patent acquisition

- **Major Investment Targets:**
  - Intellectual Property Rights and Beneficiary Rights based on IP
  - Other Alternative Investment Assets

- **AUM: KRW 265 Billion (committed)**
  - (USD 265 M)

Source: Idea Bridge

Note:* PPP = private public partnership

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‘Climatech’ Transfer / R&D Cooperation

Start-Up
Developing Biz

Growth

Venture
Commercialization

Growth

Mighty Middle
Innovation/R&BD

Company

Research Institute
IP Monetization Model: Korean Case A

- **Strong IP** can provide “Level Playing Field” for SME.
- IP fund offers **growth capital** to SMEs with strong IP.
- IP fund provides **investors** with **current income** as well as **upside potential** based on the combination of IP investment and mezzanine investment.

### IP Monetization Scheme Example: IP Sales & License-back

- **Invest**
- **IP FUND**
- **Sell IP**
- **Pay the purchase price of IP**
- **3rd Party Technology Escrow**
- **Pay the licensing fee**
- **Give license (exclusive) & a call option to repurchase IP**

**Note:** *IP includes patents, trade marks, and copyrights etc.*

**Source:** Idea Bridge
IP Monetization Model: Korean Case B

- IP fund can provide "climatech promotion funding" to a research institute
  - Cooperation with domestic and overseas "climatech" companies
  - Creation, development, and dissemination of knowledge and technology required for R&BD as well as commercialization in the field of climate change

**IP Monetization Scheme Example: Patent Royalty Securitization**

- **ETRI** ranked top for three straight years in "Innovation Anchor Scorecard" by the US patent data consultancy ipIQ's comprehensive patent evaluation

**Source:** Idea Bridge, *The main function of ETRI presented at its homepage* (http://www.etri.re.kr/eng/int/int_02000000.etri)
Understanding of IP financing in Korean Financial Field

- I know Intellectual property (IP) financing and IP secured loan.
  - 25% Strongly agree
  - 40% Agree
  - 34% Average
  - 47% Disagree

- I believe that IP based financial methods are needed considering the growing portion of intangible assets in the corporate value.
  - 34% Strongly agree
  - 47% Agree
  - 25% Average
  - 10% Disagree

- IP Financing is desired to be based on IP valuation results
  - 27% Strongly agree
  - 50% Agree
  - 25% Average
  - 7% Disagree

- I am very familiar with IP valuation.
  - 25% Strongly agree
  - 38% Agree
  - 24% Average
  - 7% Disagree

- I can trust IP valuation results.
  - 7% Strongly agree
  - 24% Agree
  - 25% Average
  - 10% Disagree

Source: A study of IP valuation model for IP secured lending (KIPo, October 2013)
Note: Survey results of 146 people in Korean financial field
Frequently Asked Issues of IP Monetization

Valuation
- Option to resolve valuation gap

Liquidity
- Future cash flow generation abilities of IP
- IP registration in the key global markets
- Technology escrow

Transparency
- Participation of external experts in subject matters

Risk hedging methods
- Insurance product development
- Combination with mezzanine investment

Source: Idea Bridge Analysis, Interview with investors and investees
Expected Return and Investment Risk of “IP FUND”

- **2~3%**
  - MMF, CMA,
  - Bank deposits,
  - Financial note,
  - Government bond

- **7~8%**
  - ELS, Bond Fund
  - Corporate Bond (AAA~BBB)
  - Stock Fund, NPL Fund
  - Corporate Bond (BB~C)

- **10%~**
  - Hybrid Fund,
  - IP FUND

- **High**
  - Private Equity Fund (Venture Capital, Buyout, Hedge Fund, etc.)

‘Climatech’ IP Monetization : PPP Case in Korea (1/2)
Automatic Battery Swapping-type Electric Bus

IP Sale & License-back + Mezzanine Investment

- **Investee Outline**
  - Established in 2010
  - 2014 Revenue : about USD 2.5 M

- **Core Technology**
  - Monitoring & maintaining
  - All-in-one system

  | Monitoring of exchange, charge and drive | Combination of e-bus, quick charge machine, and monitoring system |

- **Comparison**
  - Battery-swapping electric bus
  - Plug-in electric bus

Korea introduces “automatic battery swapping-type electric bus(ABS E-Bus)” with proven economic feasibility.

Cities introducing “ABS E-Bus”
- Local government budgets were approved for introducing ABS E-bus.
- Cities are selecting “ABS E-Bus” SPC operators.
  - Cheju Island – May 2015
  - Kimpo – June 2015

Source: PMGROW
‘Climatech’ IP Monetization: PPP Case in Korea (2/2)
Automatic Battery Swapping-type Electric Bus (ABS E-bus)

IP Fund

Battery maker
Battery development & maintaining optimal conditions

Charging machine maker
ABS charging machine development

Electric-bus maker
ABS E-bus development

Source: Idea Bridge Analysis
## Success Factors for ‘Climatech’ Transfer Promotion in Asia

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<thead>
<tr>
<th>A</th>
<th>Provide <strong>emerging-market expansion opportunities</strong> for advanced technology holders</th>
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<td>B</td>
<td>Identify and source target companies in developing countries that are <strong>mature enough to absorb technologies</strong></td>
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<td>C</td>
<td>Provide a <strong>funding pool</strong> to acquire/transfer IP and technologies that may be too <strong>expensive</strong> for the target companies</td>
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<td>D</td>
<td>Link up <strong>international entities</strong> such as ADB, UN, World Bank, etc. to facilitate ‘climatech’ transfer</td>
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<td>E</td>
<td>Engage <strong>local governments</strong> for various <strong>incentives</strong> (land, infrastructure, funds, tax, IP protection, labor force, etc.)</td>
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IP Monetization Scheme to Promote ‘Climatech’ Transfer

PPP Investment Scheme to Facilitate Global “Climatech” Transfer into Emerging Asian Market

- Joint Venture with Local Company
- Local Company with Market Presence
- IP Protection
  - Pre-requisite for Technology Transfer
- Good IP
- Technology Transferor
- Company/Research Institute
- Emerging Market
- Countries with Advanced Technology
- IP Transfer FUND
- Joint Venture with Local Company as Technology Transferee
- Local Company with Market Presence
- International Advisory
  - Policy-driven Public Investors
  - Private Investors
- Fund Investment
  - Technology Transfer

Source: Idea Bridge
Closing Remarks

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