

KOTEC Newsletter

No.34

January, 2016

www.kibo.or.kr

Korea Technology Finance Corporation
33 Munhyeon Geumyung-Ro, Nam-Gu, Busan, Korea 608-040



KOTEC Collaborates with UNITAR JITC to Promote Transfer of Green Technologies in Asia Pacific Region

On October 6, KOTEC (Korea Technology Finance Corporation), led by Kim, Han-chul, signed an MOU with UNITAR JITC (Jeju International Training Center, Director Shin, Hyun-suk) to promote the exchange and transfer of green technologies in the Asia Pacific region.

With a shared interest in promoting the transfer of green technologies in the region, the two organizations have sought out numerous ways of cooperating for the transfer of technologies developed by small Korean companies to developing countries. The MOU is the first step towards creating a more collaborative atmosphere, and was signed as part of the efforts to determine the roles of each organization based on their characteristics and functions.

In accordance with the ideas of openness, sharing, and cooperation promoted by Government 3.0, KOTEC has led consistent efforts in transferring technologies in partnership with local industries, academics, and research organizations. KOTEC agreed to cooperate with the JITC based on these experiences in order to introduce the green technologies of small companies to potential customers in developing countries in the Asia Pacific region.

The JITC plans to develop training programs to improve the capabilities needed for the transfer of technologies and to put its efforts into introducing best practices and running international cooperative projects.

A KOTEC official said, "With this agreement, local small businesses now have reliable support in introducing their technologies to overseas markets, and developing countries in the Asia Pacific region will get help in resolving their environmental issues using advanced technologies tailored to their unique conditions."



[KOTEC Executive Director, Mr. Kang, Rak-kyu(3rd from the left)
and JITC Director, Mr. Shin, Hyun-suk(4th from the left)]

KOTEC Introduces Technology Financing Techniques to Thailand

Shares financial expertise as part of the KSP Project

KOTEC, led by Kim, Han-chul, announced that it had introduced its technology financing techniques to a Thai delegation at its Busan headquarters on November 26 and 27, 2015. The training program was held under the title of "Support for Small Businesses with the Establishment of a Technology Financing System in Thailand." It was designed to share Korea's well-established technology financing expertise as part of the KSP (Knowledge Sharing Program), developed by the Ministry of Strategy and Finance.

The Thai delegation was comprised of 12 members from the Thai government and relevant organizations, including the Ministry of Finance, Thai Credit Guarantee Corp, and National Science and Technology Development Agency. They visited KOTEC branches and local companies, and took part in a practical computing class to learn how the KOTEC system is put into action. In addition, KOTEC and the delegation had an interim reporting session, and reviewed what needs to be done to establish a technology guarantee system in Thailand.

At the request of the Thai Finance Minister, KOTEC has been conducting the KSP Consulting Project with the Korea Small Business Institute since this past August to introduce a technology financing system to the Thai government and relevant organizations.

A KOTEC official said, "KOTEC has been globally recognized for its excellent technology evaluation system, and has shared its advanced financing techniques with other Asian countries, such as Thailand, Singapore, and Vietnam. We expect that our experience and expertise will help the Thai government develop technology-oriented small companies for its country."



[KOTEC and Thai Participants for the KSP(Knowledge Sharing Program)]

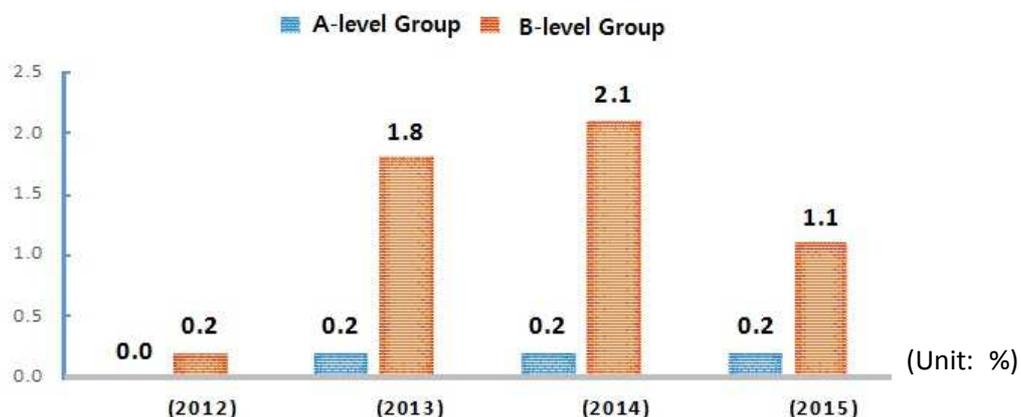
Companies with Advanced Technologies Have Lower Likelihood of Bankruptcy

*Technological innovations combined with
business capabilities create synergy*

After analyzing the business performances of 3,686 companies, using the KTRS (KOTEC Technology Rating System) applied for the evaluation of businesses' technologies in 2012, KOTEC announced the finding that companies with higher technology ratings had lower bankruptcy rates. It was found that businesses with advanced technologies could create synergy by combining their business capabilities with technological innovations, resulting in better business and technological performance, as well as a lower likelihood of bankruptcy.

For the analysis of the association between technology ratings and rates of bankruptcy, KOTEC divided the evaluated companies into A-level (AAA-A levels) and B-level (BBB-B levels) groups, and analyzed their performances over a four-year period. The bankruptcy rate of the A-level group was 0.0 in 2012, and has since stayed around 0.2 with a cumulative rate of 0.6. On the other hand, the B-level group has experienced much higher rates, recording 0.2 in 2012, 1.8 in 2013, 2.1 in 2014, and 1.1 in 2015 (cumulative rate of 5.1).

<Year-by-year bankruptcy rates>



* The bankruptcy rates refer to year-by-year bankruptcy rates compared with the number of cases of financial support in 2012. A-level group (ratings of AAA~A), B-level group (ratings of BBB~B)

Meanwhile, the KTRS performance analysis for companies that received financial support shows that they have made improvements in revenue and job creation since receiving the support. In addition to the improvements in business activities, they have also achieved better results in technological innovation, recording increases in R&D investments, the degree of R&D integration, and intangible assets.

Preceding factors that affect technology ratings relate to the companies' internal characteristics and technological capabilities. It was found that financial characteristics, however, did not have a strong association. According to the results of analysis on 26 input variables for each phase, nine of them (five in technological capabilities, three in business characteristics, and one in financial levels) had statistical significance. The commercialization and use of technologies, including intellectual properties, records of technological development, and technology teams, were critical factors in determining the ratings. The owners' experience in relevant industries, the form of business, and revenue were also found to be important.

<Major technological innovations by companies evaluated (average)>

	R&D investment (million KRW)	Degree of R&D integration (%)	Intangible assets (million KRW)
Before support	181	3.7	204
After support	203	4.5	323
Growth	22	0.8	119

* Before support (2011), after support (2013~2014)

* Degree of R&D investment integration = (R&D investment/revenue)×100

<Critical factors for technology ratings>

	Critical Factors
Technology	Intellectual property, Technology development records, Technology teams, Technology organization (e.g. research centers)
Business	Experience of owner in the industry, Revenue, Business form (corporate body)
Finance	Financial Levels

A KOTEC official said, "It appears that the success of technology financing support projects requires the continuous improvement of technology evaluation models and the establishment of a reliable technology financing support system." He added, "It is important to build the capability to identify companies with positive business prospects by developing a sophisticated evaluation model in order to keep bankruptcy rates low for companies receiving support."

The analysis by KOTEC showed clear differences in bankruptcy rates and business performances between companies with advanced technologies and those without them. Further development of technology financing appears to require the expansion of a growth base, for instance, by cultivating more professionals and making the infrastructure for technology evaluation more stable.