

**Enhancing Bilateral Economic Cooperation
and Business Opportunities
between Korea and Canada**

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Lee & Ko Global Commerce Institute



I. Introduction

As the COVID-19 pandemic resurges, uncertainties in the world economy are not declining. Many countries continue to adopt and maintain protectionist policies to safeguard domestic industries and labors. In addition, the U.S.-China trade disputes have expanded into trade, security and science and technology, raising concerns in many countries. Furthermore, the multilateral trading system of WTO currently faces numerous challenges. Under these circumstances, it would be important for middle-power countries like Korea and Canada to discuss how they would cooperate and expand bilateral economic relations in the future.

This report tries to find industry-specific cooperation opportunities by comparing the current state of the economy, trade and industries of Korea and Canada. In addition, as the COVID-19 pandemic accelerates global engagement in ‘green and digital transformation’, the governments of Korea and Canada have implemented relevant initiatives to promote future transformation. With this as a background, this report also draws pathways for the relevant industries to cooperate in responding to the twin transformations. This report also provides some recommendations for the two countries to enhance future bilateral cooperation not only in trade but also in investment and R&D activities.

II. Trade and Investment Relations between Korea and Canada

Korea and Canada, as major middle-power countries, share common values, like democracy and market capitalism and support for open and free trade, international trade rules, and the non-discriminating multilateral trading system. Based on these, both countries should maintain the stance that protectionism will not be the right solution to overcome the global difficulties posed by COVID-19. At the same time, Korea and Canada should work together to strengthen the

multilateral trading system of the WTO.

On January 1, 2015, Korea-Canada FTA (KCFTA), Canada’s first FTA with a country from the Asia Pacific, went into effect. As KCFTA entered into force, Korea and Canada are actively exploiting the advantages from a complementary trade structure. Korea has comparative advantages in industrial products, while Canada has comparative advantages in primary industries, such as energy and resources and high technology industries including AI (Artificial Intelligence) and CCUS (Carbon Capture, Utilization and Storage) technologies. Since 2015, the utilization rate of KCFTA has increased consistently. In 2019, the utilization rate of KCFTA recorded 95.2%, which was the highest record among Korea’s 15 FTAs in effect as can be seen in *Table 1*.

Table1: The Utilization Rate of KCFTA: 2015-2019

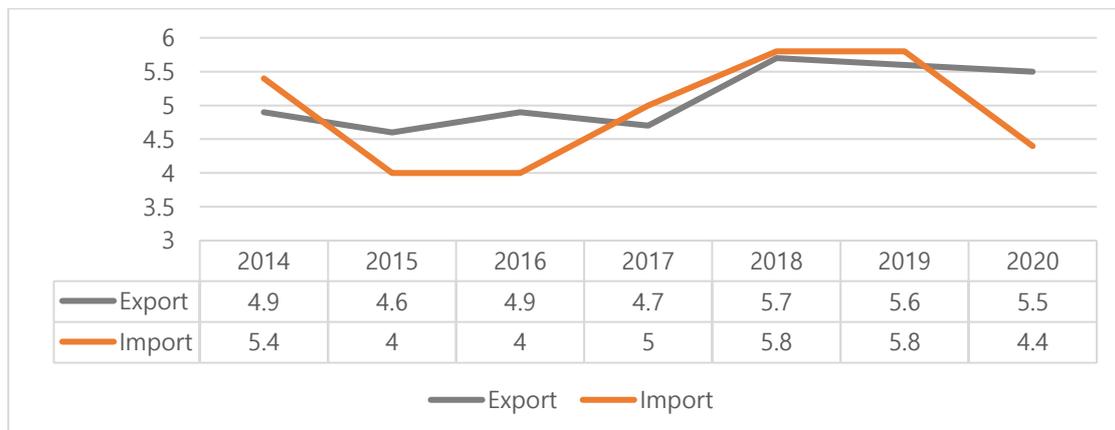
Year	2015	2016	2017	2018	2019
FTA UR	79.9%	89.1%	93.4%	93.6%	95.2%

* **The Utilization Rate** = A country’s amount of export value based on the declaration on Origin of Certificate of Origin / Amount of export value of FTA benefitted items

Source: The Ministry of Trade, Industry, and Energy

Prior to the implementation of the FTA, Korea’s total exports to Canada amounted to US\$4.9 billion in 2014 but jumped approximately 10.2% up to US\$5.4 billion in 2020 (see *Figure 1*). Since the FTA took effect in 2015, the bilateral trade has been growing at an average annual rate of 1.8%. The Korea-Canada total trade recorded above US\$ 11 billion in 2018, which was the first time for both countries’ two-way trade to surpass US\$ 11 billion after the implementation of the bilateral FTA. In 2019, Korea was Canada’s seventh-largest exporting partner, while Canada was Korea’s seventeenth-largest exporter. The total trade between Korea and Canada rose from US\$10.3 billion in 2014 to US\$11.3 billion in 2019. However, in 2020, due to the impact of the COVID-19, the bilateral trade fell to US\$9.8 billion.

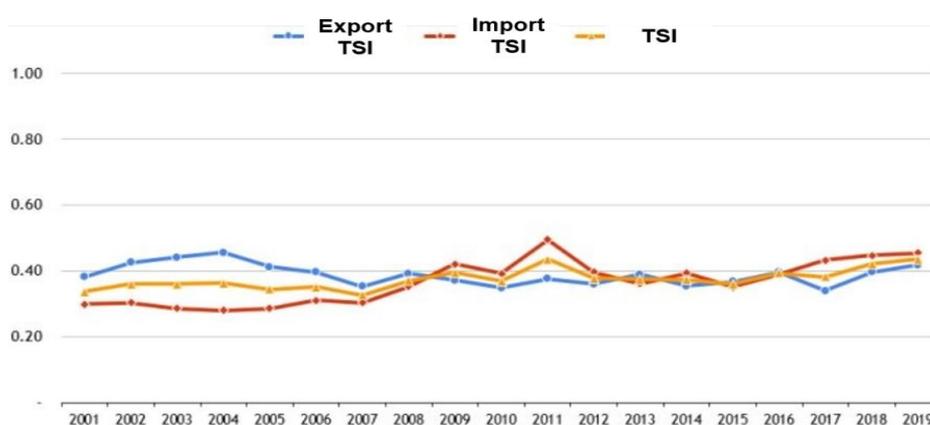
Figure 1 : Korea-Canada Trade: 2014-2020 (Unit: US\$ billion)



Source: KITA

However, the index of trade intensity with Canada has stagnated and remained low over the last decade (see *Figure 2*). The reason for the low trade intensity is Canada’s excessively high dependence on the US for trade. The U.S. share of Canadian exports was 75% in 2019, and the US accounts for about 63% of Canada’s total trade volume. Thus, the calculation of the Korea-Canada trade intensity excluding Canada’s trade with the US shows different results. *Figure 3* shows the trade intensity index is above 1, which represents an above-average trade relation with Canada compared to the trade relation between the rest of the world without the US and Canada.

Figure 2 : Korea-Canada Trade Intensity Index (TII) : 2001-2019

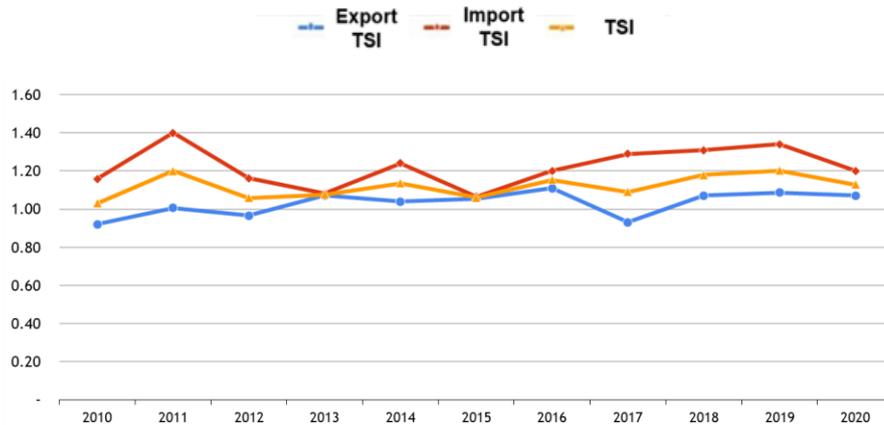


TSI>1: high trade intensity

*TSI<1: low trade intensity

Source: UN Comtrade

Figure 3 : Korea-Canada Trade Intensity Index (w/o USA) : 2010-2019

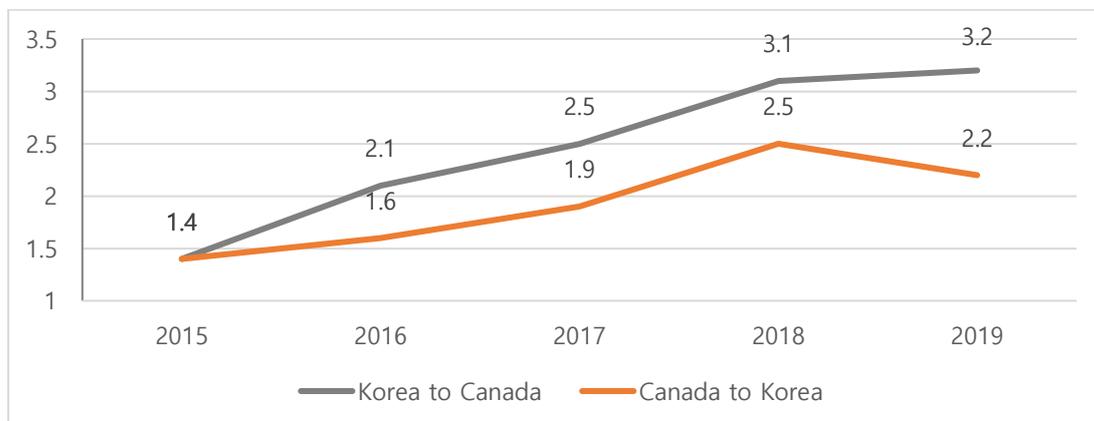


TSI>1: high trade intensity
*TSI<1: low trade intensity

Source: UN Comtrade

Since the KCFTA went into effect, the investment between Korea and Canada has continued to increase. As of 2019, Korea’s cumulative investment in Canada was C\$3.23 billion, ranked ninth among foreign investments in Canada (see Figure 4). Canada’s cumulative investment in Korea was US\$2.152 billion, ranked tenth out of foreign direct investment in Korea. Approximately 75% of the investment was made in the energy sector. In recent years, however, Korea has increased its investment in Canada in the fields of science and technology, such as biopharmaceuticals, renewable energy, and artificial intelligence.

Figure 4 : Korea-Canada Investment Trend : 2015-2019 ((Unit: C\$ billion)



Source: Statistics Canada

With the KCFTA being implemented, both countries are benefitting from more trade, investment, and business opportunities. Korea is a leading country in the manufacturing industry, such as semiconductors, display and chemicals. On the other hand, Canada has competitive advantages in energy and high-technology industries. The complementary relationship will offer strategic access to regional and global value chains.

III. Key Business Sectors for Future Collaboration

As both Korea and Canada are in the process of transforming the nation into a 'digital' and 'green' economy, they can expand cooperation in advanced science and technology industries. *Table 2* classifies the field of industries where Korea and Canada have comparative advantages. Korea is an important global player in the IT sector and semiconductor industry, while Canada has an advantage in source proprietary technologies such as AI technology and green energy. The shaded part in the figure summarizes the potential field of future collaboration: next-generation semiconductors, future cars, green mobility, green infrastructure and green energy.

Table 2: Cooperative Business Sector and Industries

Korea	Industries	Canada
Semiconductor	Next-generation semiconductor Future cars Green mobility Green infrastructure Green energy	AI
Automobile		Automobile
Shipbuilding		Construction
Chemical		Energy

Source: produced by Author

Based on the comparative advantages, Korea and Canada can seek cross-industry cooperation in the next-generation semiconductor and the digital healthcare industries. As a key global player in the semiconductor industry, Korea focuses on developing non-memory semiconductors, the future growth engine for Korea's semiconductor industry. In 2020, the Ministry of Science and ICT of Korea declared its initiatives to develop up to 50 types of AI-focused system semiconductors by 2030. Also, the government announced its plan to spend about 1 trillion won (US\$870 million) for the commercialization and production of AI semiconductors. Canada is an emerging global leader in AI technology. In 2017, Canada announced the world's first AI national strategy called 'Pan Canadian Artificial Intelligence Strategy'. Canada has a high concentration of AI talent with 1,487 researchers, which is the world's third-largest concentration of AI experts after the US and China.

In this context, Korean semiconductor companies can explore ways to cooperate with Canada in AI technology. Korean companies can cooperate with Canada's and establish research centers in Canada to take advantage of the cluster effect of AI technology. Samsung Electronics, one of the world's largest semiconductor companies, has already established its 'Samsung Advanced Institute of Technology (SAIT) AI lab Montreal' in Canada. SAIT AI lab Montreal in Canada will be the base for training professionals and strengthening AI research for next-generation system semiconductors.

Furthermore, establishing a cross-regional link between universities and industry would be another way to build up talents in AI and expand AI research for semiconductors. Korean top semiconductor companies can explore partnerships with Canadian Universities to train AI researchers. In addition, Korean universities can build partnerships with Canadian AI start-ups to create a nurturing ecosystem where global AI talents can gather and share their experiences.

The Covid-19 pandemic emphasized the urgent need for digital health technology, including healthcare devices, smart devices, virtual health care, telehealth platform, digital pharmacy and digital therapy. On May 3, 2020, the Canadian Government announced to invest C\$ 240.5 million in the digital health market to expand access to virtual services and digital tools. Especially, Canada's digital therapeutics market can provide new business opportunities for VR (Virtual Reality) or AR (Augmented Reality) startups in Korea. Digital therapeutics refers to software (SW) such as applications, games or VR that treat disease and improve health.

According to the 'A Health Dialogue' survey conducted by the Canadian government and Canada Health Infoway over the period of 2019 and 2020, Canadians' perception of digital health generally turned out to be very positive and they desired financial support from the government. The demand for digital therapeutics in Canada is on the rise, while Canada's digital therapeutics market is in its early stage. Therefore, Canada's digital health market will be a good opportunity for Korean startups with advanced technology in VR/AR to expand their business in Canada.

As both Korea and Canada pursue the green transition, other potential bilateral cooperation opportunities can be found in future cars, green ships, clean technology and renewable energy. In early 2021, Canada strengthened its climate plan, called 'A Health Environment and A Healthy Economy,' which aims to build a cleaner transportation system in Canada. Canada has adopted an incentive scheme for Zero-Emission Vehicles (ZEVs), which offers up to a C\$5,000 rebate for the purchase of ZEVs. In addition, the Canadian government announced its policy which requires all new cars and passenger trucks in Canada to be zero-emission vehicles by 2035.

With these efforts by the government, the demand for ZEVs in Canada has expanded and the EVs market has also grown. In 2018, Canada's EVs imports were increased by 94% compared to 2017, reaching C\$1.274 million. In 2019, Korea's exports of lithium batteries for EVs to Canada recorded

C\$ 39million. This clearly shows that the EV market in Canada is rapidly increasing. In 2020, LG Electronics has agreed to a US\$1billion joint venture for producing EV parts with Canada's Magna International. In this context, more cooperation and joint venture projects between Korean and Canadian companies are expected in the future. Furthermore, as Canada can serve as a bridgehead into North America, Korean companies should put more effort to establish long-lasting partnerships with their Canadian counterparts.

A Green ship industry also provides a new opportunity for bilateral business cooperation. As the global demand for LNG has led to huge investments in infrastructure and distribution networks, a large-scale LNG project, called LNG Canada, is under construction on the West Coast of Canada since 2018. LNG Canada is a C\$ 14 billion project to build a large-scale LNG export facility in Kitimat, British Columbia. The large-scale LNG projects in Canada as well as the increased global demand for LNG have fueled the demand for LNG shipping. Thus, the major 3 shipbuilding companies in Korea – Hyundai Heavy Industries (HHI), Samsung Heavy Industries (SHI) and Daewoo Shipbuilding & Marine Engineering (DSME) – can find business opportunities based on the global competitiveness on LNG carrier and LNG-powered vessels.

Lastly, Korea and Canada can strengthen technological cooperation related to renewable energy such as solar and wind power, CCUS technologies. In 2018, Samsung C&T (Construction and Trading) created a renewable energy generating complex in Ontario, Canada. During the Covid-19 pandemic, the Canadian government announced its 'Green Recovery Strategy' which will provide chances for cooperation with Korean companies in the field of electric vehicles and parts, charging infrastructure and solar and wind power. Particularly, since Korea's major industries such as cement, steel, and petrochemical emit a lot of carbon dioxide, there will be a large demand for cooperating with Canada in CCUS technologies to reduce carbon emissions in Korea.

IV. Recommendation to Expand Bilateral Economic Cooperation

In addition to increasing bilateral trade and investment relations, Korea and Canada should expand their scope of cooperation. As key middle power countries in the world economy, Korea and Canada should work together to combat global challenges and expand their cooperative business opportunities in the many years to come. The following recommendations are suggested.

First, Korea and Canada should make utmost efforts to revitalize the multilateral trading system of the WTO. A joint effort is needed to draw productive and successful outcomes from the WTO's 12th Ministerial Conference (MC12), which will be held in Geneva in November 2021. In addition, it is also important for both countries to support the roles of the regional trade system and plurilateral agreements as long as they complement the multilateral trading system.

Second, as protectionist policies on high-technology triggered by the U.S.–China dispute is on the rise, a global trend of protectionism on technology has intensified. Korea and Canada should expand their bilateral cooperation in high-technology industries and counter the global high-technology protectionism. The Quadrilateral Security Dialogue (Quad) among the U.S., Japan, India and Australia has been discussing joint responses toward China's government-led high-technology promotion. Korea and Canada, who are not members of the Quad, should enhance bilateral cooperation in high-technology areas and consider joining the working group of the Quad dealing with global technology issues.

Third, Korea and Canada also need to develop a strategy for SMEs to use FTA and participate in the global value chains. The bilateral trade between the two countries has continued to increase since the KCFTA took effect in 2015. However, there is a room for further improvement. In Korea, SMEs are not actively utilizing FTA compared to large companies. Both governments should consider providing special assistance to encourage SMEs' participation in the

CKFTA in the future.

Fourth, Korea and Canada should strengthen their cooperation in the energy sector. Natural gas and oil are Canada's biggest export items with its export of these items highly concentrated in the U.S. In 2019, 90% of Canadian energy-related items were exported to the U.S. In order for Canada's export market diversification of energy, the Canadian government should expand the markets in Asia. The Canadian government and industry are now making efforts to expand their energy trade infrastructure by constructing the trans-mountain pipeline and LNG Canada gas liquefaction facilities to export oil and gas to East Asia. Since Canada is one of the safest investment destinations in the energy sector, Korea should expand its investment in Canada.

Lastly, Korea should expand its investment in Canada in environmentally friendly technologies. Over the last decade, Korea's investment in Canada's energy sector was concentrated on alternative energy equipment manufacturing. As the paradigm shifts to the green economy, Korea has announced a new plan called the 'Korean New Deal' in 2020. 'Korean New Deal' plans to invest US\$37 billion for boosting the green economy. Korea can further expand the scope of its investment to environmentally friendly technologies such as hydrogen energy and renewable energy in Canada.