

CANADA'S FAST TRACK PARTNERSHIP TO ASIA

The Republic of Korea

ASIAN
INSTITUTE

munkschool
OF GLOBAL AFFAIRS & PUBLIC POLICY



UNIVERSITY OF
TORONTO



Canada's Fast-Track Partnership to Asia: The Republic of Korea

May 25, 2022

Written by:

Yuna Ban, Master of Global Affairs (MGA) candidate, class of 2022

Madeline Hieneman, Master of Global Affairs (MGA) candidate, class of 2022

Jerry Zhu, Juris Doctor (JD) candidate, class of 2023

Supervised by:

Deanna Horton, Senior Fellow

Academic Oversight:

Professor Mark Manger

Project administered under the auspices of:

Asian Institute, Munk School of Global Affairs and Public Policy

Rachel Silvey, Director

Table of Contents

A. <i>Why Korea?</i>	2
B. <i>Canada-Korea Current Trade and Investment Relationship</i>	3
C. <i>Korea’s Economy and Foreign Trade and Investment Relations</i>	7
D. <i>Sectors of Opportunity: Korean New Deal and E-Commerce</i>	10
1) Cleantech and the Green New Deal	11
2) ICT and the Digital New Deal	12
3) E-Commerce	13
4) Services and Investment.....	14
E. <i>Recommendations for Canadian Government</i>	14
F. <i>Recommendations for Businesses</i>	15
G. <i>Conclusion</i>	18
1) Annex 1. Canada-South Korea Direct Investment	17
2) Annex 2. Korea’s Top 5 Import Partners in Asia: China, Japan, Taiwan, Vietnam, and Malaysia.....	17
3) Annex 3. Korea’s Top 5 Export Partners in Asia: China, Vietnam, Hong Kong, Taiwan, Japan	18
4) Annex 4. Korea’s Foreign Trade and Investment Relations	19
5) Annex 5. Additional Information for Sectors of Opportunity	21
6) Annex 6. Korea’s Technical and Regulatory Barriers to Trade.....	24

A. Why Korea?

As Canada looks beyond the U.S. market to Asia in order to expand its export, technology and partnering horizons, the world's top ranking country according to [Bloomberg's Innovation Index](#) must not be overlooked.

As of January 1, 2019, [95%](#) of Canada's exports have benefited from duty-free access into the Republic of Korea ("Korea") under the Canada-Korea Free Trade Agreement enacted in 2015 (CKFTA). The agreement presents a great opportunity for Canadian businesses seeking to expand abroad, as Korea is the world's [10th](#) largest economy and Canada's ninth-largest importer. While many Canadian businesses have taken advantage of the agreement—exports to Korea have increased from \$4 billion CAD in 2015 to [\\$6.3 billion CAD](#) in 2021—there is room for future expansion as Canadian businesses wishing to also access the potential of the Korean market can continue to take advantage of an economy with a GDP of \$1.6 trillion USD.

In 2018, Korea's individual consumer expenditure growth was \$14,174 USD per capita and grew an average of [2.5%](#) annually over the past five years. It is Asia's third largest e-commerce market. The high disposable income per capita presents a strong consumer opportunity for Canadian businesses, including SMEs.

Korea has also emerged as a major player in the growing electric vehicle (EV) industry. According to [SNE Research](#), Korea's three main battery manufacturers – LG Energy Solution (LGES), SK Innovation and Samsung SDI – accounted for more than 30% of global EV battery shipments in the first half of 2021. In March 2022, [LGES and Stellantis announced the largest single automotive investment](#) in Canadian history with a new joint partnership to build a \$5 billion CAD lithium-ion battery production plant in Windsor, Ontario.

In this report, which draws on research by the Government of Canada's Trade Commissioner Service along with other sources, we explore the opportunities for growth in the commercial relationship and further collaboration between Canada and Korea. Taking into account the increased trade opportunities resulting from the CKFTA's enactment, we look at what key sectors in the Korean New Deal (KND)—a [220 trillion won](#) (\$233 billion CAD) investment aimed at accelerating the adoption of digitalization and green technologies—offer in terms of business potential for Canada. We also examine Korea's influence in Asia as a possible avenue of collaboration for Canadian business-- relationships in Asia which will no doubt be continued and expanded under Korea's recently elected President Yoon Suk-yeol.

To prompt further action, at the end of the report we outline several suggestions for the Canadian government and Canadian businesses.

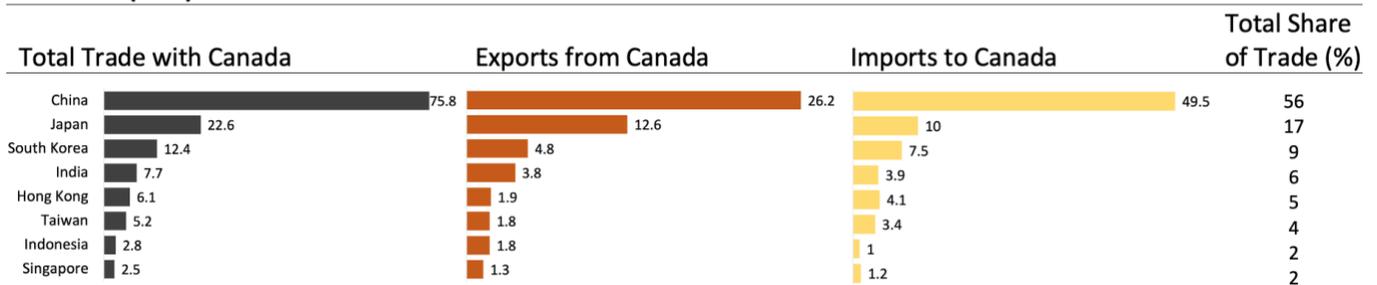
B. Canada-Korea Current Trade and Investment Relationship

It is important for Canada to tap into the Asia-Pacific region’s growth potential; expanded trade can provide opportunities for businesses and ultimately foster Canadian competitiveness in the global market. One way Canada can access diverse Asia-Pacific trading partners is through improving its trade with Korea.

Korea is Canada’s 3rd largest Asian trading partner in goods, but 6th in services.

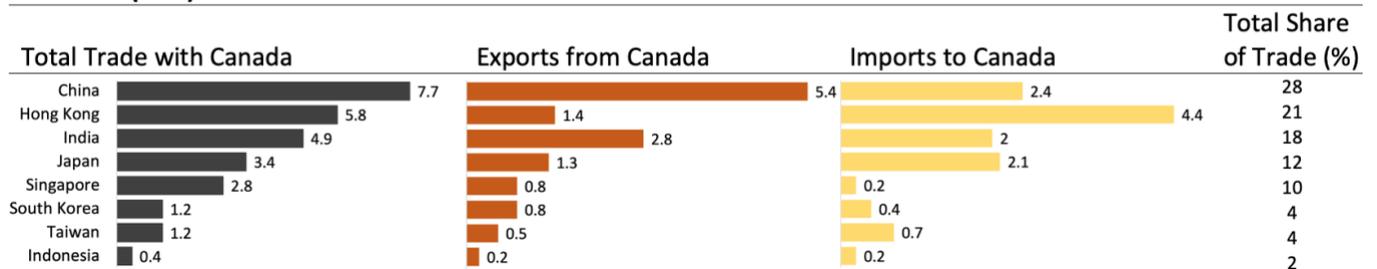
2020 CANADA-ASIA TRADE FLOWS, GOODS BILLIONS (CAD)

Source: Statistics Canada



2020 CANADA-ASIA TRADE FLOWS, SERVICES BILLIONS (CAD)

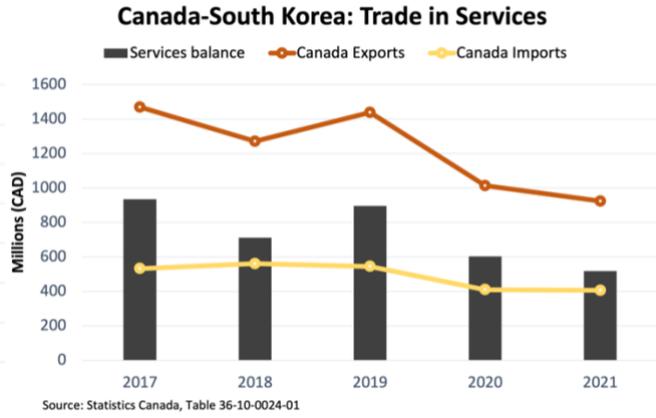
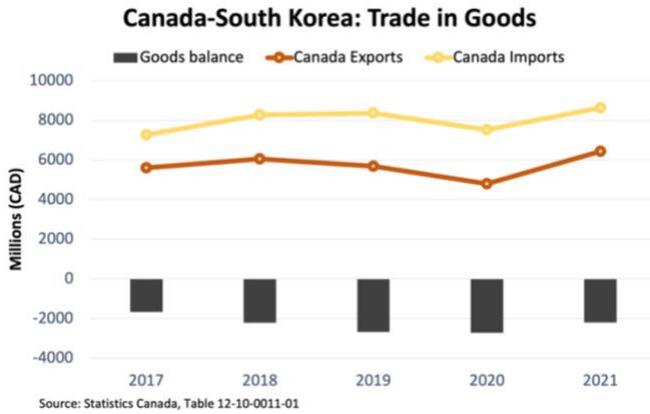
Source: Statistics Canada



In 2020, Korea was Canada’s third largest trading partner in Asia, although traded goods with Korea made up only 9% of Canada’s total goods traded with Asian countries.

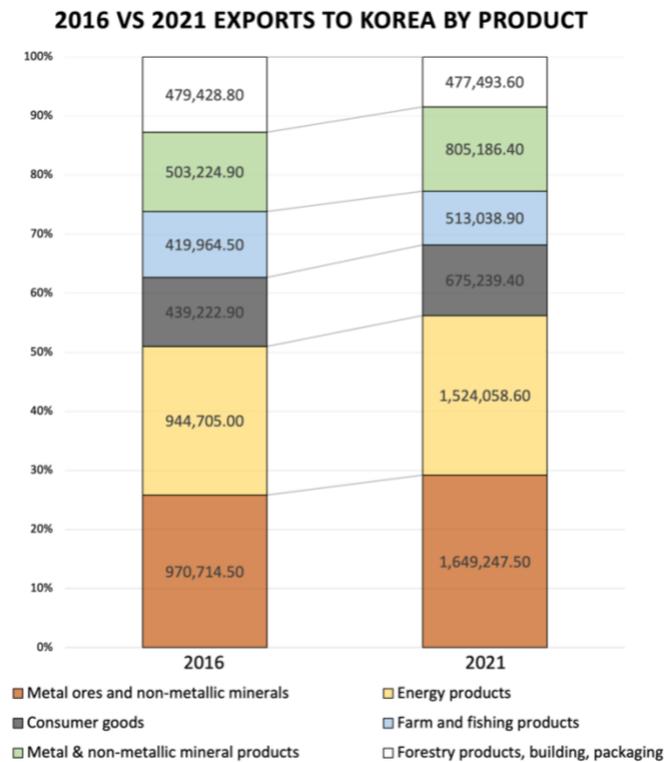
To expand the trading relationship, the President of the Canada-Korea Business Association, [Sung Van](#) pointed out that both countries should seek trading partners aside from geographically proximate ones and make room for a Canada-Korea trade partnership: “Considering the geographical proximity and the size of trade, it seems natural that Korea focuses on trade with China and Canada with the United States. However, it should not be forgotten that in today’s era of uncertainty, a strategy to diversify trade is indispensable.”

There is an imbalance between traded goods and services between Korea and Canada.



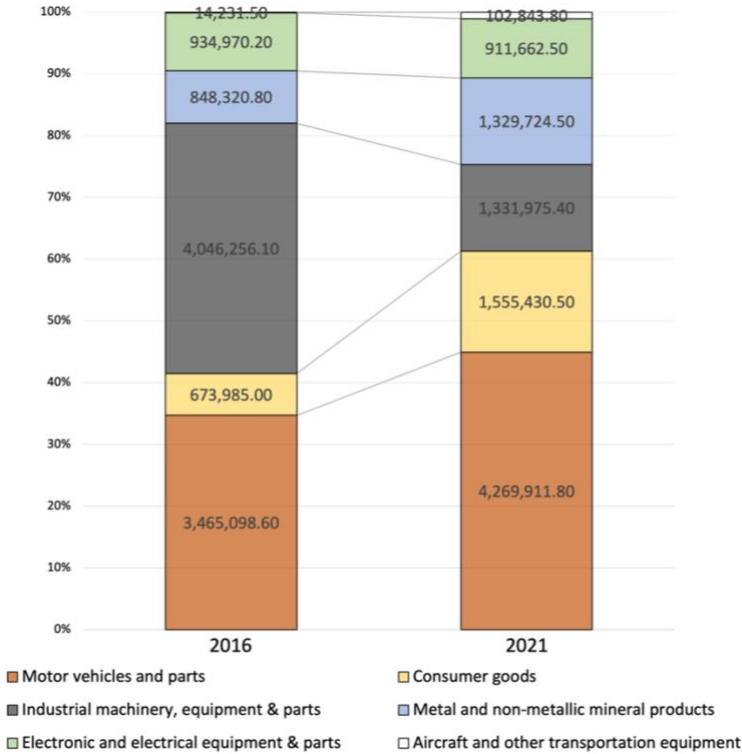
To understand how the current Canada-Korea trade relationship can be improved, we must first look at the current trade statistics. During the past five years, Canada’s net balance of traded goods with Korea has been negative. While the net balance in trade of services has been positive, Canadian trade in services with Korea still ranks low (6th) compared to services traded with other Asian comparators. Services traded with Korea only accounted for 3% of the total share of services traded. However, it is important to note that the COVID-19 pandemic caused a slight decline in trade in 2020.

Some changes in products Canada exported and imported with Korea in 2021.



Since 2016, [Canada’s largest exports](#) to Korea have remained relatively static, led by metal ores and non-metallic minerals. However, the same cannot be said of Canada’s imports from Korea (see graph below).

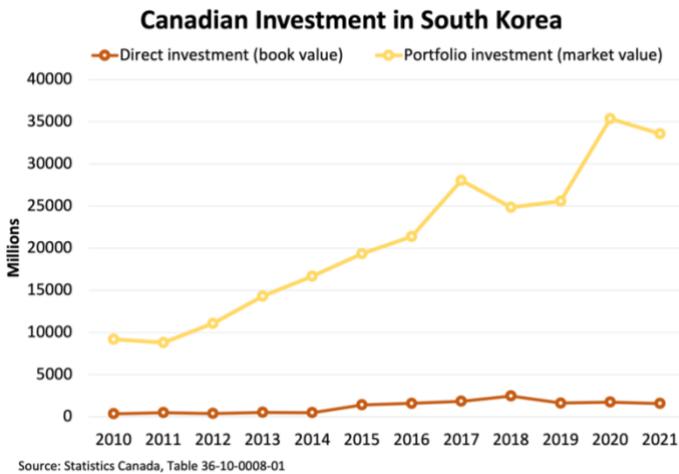
2016 VS 2021 IMPORTS FROM KOREA BY PRODUCT



Source: Statistics Canada, Table 12-10-0132-01

Industrial machinery, equipment and parts has been replaced as the largest import from Korea by motor vehicles and parts. Aircraft and other transportation equipment and parts imports have increased steadily. The import of consumer goods has also doubled in the past five years. The share of the other large import sectors, however, remains relatively constant over the same time span.

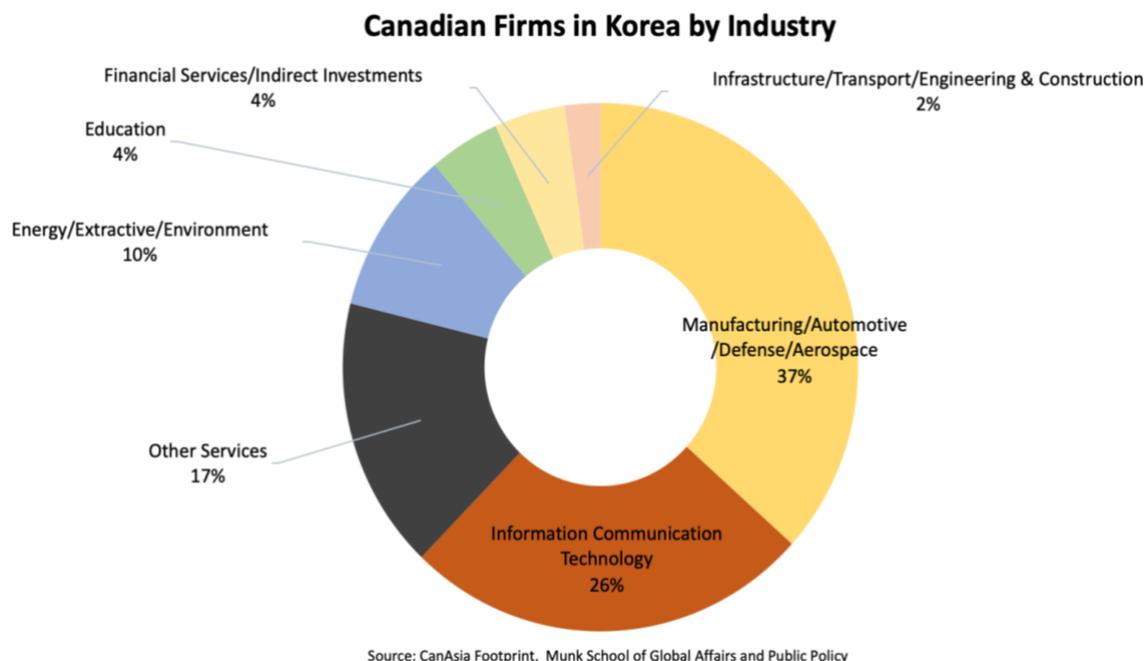
Since 2010, Canadian portfolio investment in Korea has increased steadily.



Source: Statistics Canada, Table 36-10-0008-01

Canada’s direct investment in Korea has shown a steady increase since 2010, ranging from \$369 million to \$2.5 billion CAD. Korea has been investing more into Canada than Canada into Korea, resulting in an increasingly negative net direct investment (See Annex 1). However, the growth in Canada’s portfolio investment is noteworthy—since 2010, a 265% increase (from \$9.2 billion to \$34 billion CAD in 2021).

Canadian firms in Korea are concentrated in the manufacturing, automotive, defense, and aerospace industries.



The World Bank’s Doing Business Report ranked Korea [fifth](#) out of 190 economies in terms of ease of doing business. According to the [Munk School’s CanAsia Footprint map data](#), there are 90 Canadian companies with locations in Korea. Over one third of them are manufacturing-related, fitting into the Republic of Korea’s local and international value chains, including companies such as Celestica, Linamar, Blackberry/QNX Software, Cadex Electronics and Solace Systems Inc. About 26% are information and communications technology-related, including Open Text, Kinaxis, Caseware and Crosslight. This reflects Korea’s strong global position in advanced technologies.

C. Korea's Economy and Foreign Trade and Investment Relations

Overview of Korea's Economy



In 2020, Korea was the 10th largest economy in the world, just after Canada (9th). Korea's growth is an economic success story—between 1960 and 2019, the Korean economy grew at an average rate of [7.3%](#) real gross domestic product (GDP) annually. The IMF estimates the average 2020 and 2021 economic growth rate for Korea to be [1.3%](#) during the COVID-19 pandemic, greater than other developed economies at 0.2%. According to OECD projections, Korea's 2026 real GDP growth rate will be [2.3%](#), higher than the 1.5% average of advanced economy growth.

Korean Companies Listed in *Fortune Global 500*



[Fortune Global 500](#) ranks the world's largest companies by annual revenue. In 2020, Samsung Electronics ranked 19th on the *Fortune Global 500* list. Hyundai Motor and SK Holdings each also ranked within the 100, being 84 and 97 respectively. To note: many of these companies are in the business of key technologies that are important to Canada's future, including EVs and batteries.

Korea's Foreign Trade and Investment Relations

Canada's competitors have identified sectors of opportunity for foreign businesses in Korea, including ICT, agriculture, and sustainable technologies (see Annex 4 for further information on U.S., EU, and Australia's trade relationships with Korea).

The U.S.-Korea Free Trade Agreement (KORUS FTA) entered into force in [2012](#). Since then, U.S. foreign direct investment in Korea increased from \$28.2 billion in 2011 to \$39.1 billion USD in 2019. In particular, U.S. companies are investing in Korea's cybersecurity infrastructure.

The Korea and Australia Free Trade Agreement (KAFTA) entered into force in [2014](#). 99% of Australian export goods are given either duty free status or preferred access. The 40% tariffs on beef will be eliminated by 2028, while tariffs on dairy products not including cheese, butter, or infant formula will be eliminated by 2033.

The EU-South Korea FTA entered into force in [2015](#). The agreement eliminated duties on 98.7% of all goods. Within five years of the agreement's enactment, EU exports to Korea increased by 55%. Between 2010 and 2017, the EU's top three exports to Korea were machinery and appliances, transport equipment, and chemical products. In terms of investments, EU inward FDI stocks increased by 112% and EU outward FDI stocks increased by 39%.

The new UK-South Korea FTA entered into force in [2019](#). The agreement eliminated tariffs on every industrial product and maintained [zero-tariffs](#) for Korea's major export items, such as automobiles and parts, similar to the EU-Korea FTA.

The Regional Comprehensive Economic Partnership (RCEP) was signed in November [2020](#), and will take effect 60 days after it has been ratified by at least six ASEAN and three non-ASEAN signatories. Signatory countries include the ten ASEAN countries, China, Japan, South Korea, Australia, and New Zealand. It is the world's largest free trade agreement, covering approximately a third of the world's population and global GDP.

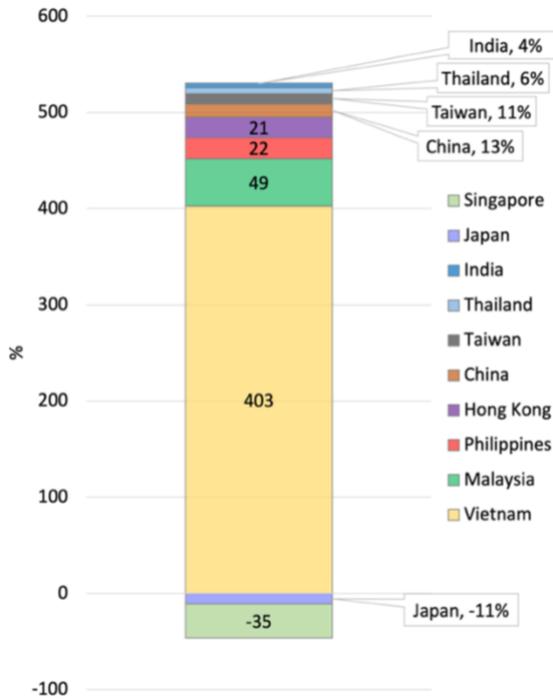
Korea's Influence in Asia: Trade

Taking advantage of the positive relations between Korea and other Asian countries such as Vietnam through commercial ties with Korean companies could be another avenue of entry to the wider Asian market.

Canadian businesses can look to partnering with Korean businesses to access the rest of the Asian market, where Korea's presence is growing. The most compelling example is Vietnam where in 2019, Samsung Electronics made up nearly [1/3 of Vietnam's total exports](#) and is Vietnam's largest foreign investor with investments totaling \$17 billion USD. From 2010 to 2020, exports to Vietnam increased 403% from \$9.7 billion to \$48.6 billion USD. This is in part due to Samsung Electronics' extensive relationship with Vietnam. The relationship is evident through Samsung's construction of a [\\$220 million](#) research and development center in Vietnam; Nguyen Xuan Phuc, President of Vietnam, told Samsung's current president Lee Jae-yong that ["Samsung's success is Vietnam's success."](#) Likewise, Korean

businesses have recognized Vietnam’s important role as an alternative to China, which is also relevant for Canada as Vietnam is also a CPTPP partner.

Change in % of Export from Korea (2010-2020)



Source: International Monetary Fund

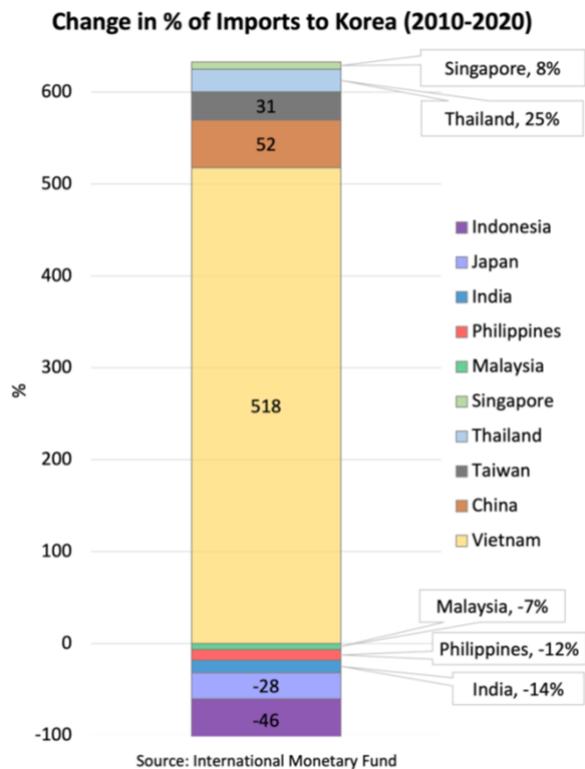
Korea’s top 5 export partners in Asia are China, Vietnam, Hong Kong, Taiwan, and Japan (see Annex 3).

Over the past ten years, Korea’s export relationship with Asian countries has generally improved. From 2010 to 2020, exports to Vietnam increased 403% from \$9.7 to 48.6 billion USD. From 2010 to 2020, exports to Malaysia increased 49% from \$6.1 billion to \$9.1 billion USD. As of 2020, Malaysia is the 8th largest export partner to Korea. Likewise, Korean companies are focusing on countries outside of China.

Korea’s top 5 import partners in Asia are China, Japan, Taiwan, Vietnam, and Malaysia (see Annex 2).

Korea’s imports from its Asian partners have not grown at the rate of export growth in the past 10 years. However, some countries stand out, particularly China and Vietnam.

Even with the large Vietnamese import increase (518% since 2010), Korea’s largest trading partner remains China (total imports of \$109 billion USD in 2020).



Korea’s Influence in Asia: Investment

Korea increased its attractiveness as a gateway to other Asian countries recently through its recent [New Southern Policy \(NSP\)](#) investment in Southeast Asia and India. Korean companies have invested in its relationship with its Southern partners through contributions to the following sectors: processing and manufacturing, logistics, and shipbuilding.

In 2020, [16,856 Korean companies’](#) FDI inflows amounted to \$9.2 billion USD. ASEAN surpassed the EU as the second largest destination for Korean FDI, followed by the U.S. As of 2019, [Korean investments](#) were concentrated in manufacturing (39.3%), financial and insurance (30.7%), and real estate (6.2%) sectors. Korea has been heavily focusing on providing official development assistance (ODA) in Southeast Asia in support of Korea’s investment presence. Korea’s popular culture (the “Korean Wave”) also contributed positively to bilateral relationships. Former President Moon visited ASEAN countries [negotiating agreements](#) on trade and investment covering tourism, biotechnology, e-government, education, infrastructure, digital, and smart cities. These are also areas of potential for Canadian collaborations as well.

Canadian firms should be focusing on leveraging Korea’s relationships and proactive investment profile in Asia to partner with Korea firms in infrastructure. Canadian companies’ expertise in [public-private partnerships](#), along with a wide range of engineering, consulting, software and other services solutions could be utilized for these projects. Further opportunities could also arise out of the [G7 initiative](#) on “building back better for the world”.

D. Sectors of Opportunity: Korean New Deal and E-Commerce

Canada's Trade Commissioner Service has identified the following sectors as possible opportunities arising from the CKFTA: *agriculture and processed foods, consumer health products, and in innovation and the automotive sector* (detailed summary in Annex 5). An additional dimension, which also takes the CKFTA into account, are the opportunities afforded by the KND's Green New Deal and Digital New Deal components. And Korea's growing middle class, aging society and burgeoning e-commerce market offers opportunities for Canadian companies, including SMEs specialized in direct-to-consumer products and marketing.

Cleantech and the Green New Deal

There are two main parts of the KND: the Green New Deal and the Digital New Deal. In July 2021, Korea launched "[KND 2.0](#)" including a "Human New Deal" component and plans to expand the investment amount from 160 trillion won (\$169 billion CAD) to 220 trillion won (\$233 billion CAD) by 2025. The Green New Deal makes up [61 trillion won](#) (\$64 billion CAD) and the Digital New Deal makes up 49 trillion won (\$52 billion CAD). The Green New Deal seeks to accelerate [Korea's transition](#) towards a forward-looking society with an eco-friendly economy. However, Canadian exports of Environment and Clean Technology (ECT) products to Korea only made up [10%](#) of total Canadian ECT exports to Asia.

The CKFTA provides Canadian firms with [improved market access](#), removing tariffs on over 95% of industrial goods to Korea's sustainable technology industry. Remaining tariffs on other clean technology goods were eliminated in 2017. Canada can leverage its research expertise in clean technology sectors, particularly in fuel cell technologies, to attract R&D-minded Korean investors and partnership as Korea expands its own research in hydrogen through the KND. Today, Canada is one of the [top 10 hydrogen](#) producers in the world and advantaged by the country's feedstocks, strong innovation, strong energy sector, established international collaborations, and energy export channels to market.

Opportunities:

There is significant opportunity for Canadian investment and exports of sustainable technologies to Korea. Canada has [identified](#) the following areas for sustainable technology:

- Carbon capture and storage
- Energy and waste management
- Water treatment
- Hydrogen and fuel cell electricity generation
- Energy storage
- Smart grid technologies

Canada currently ranks [fourth](#) in the Global Cleantech Innovation Index and in 2016 exports were valued at \$7.8 billion. Cleantech companies like Axine Water Technologies, Carbon Engineering and Carbon Cure can leverage their cutting-edge technologies and tariff free access offered by the CKFTA to competitively supply Korean companies procuring parts for renewable energy installations.

In July 2021, to take advantage of Canada's integration into the North American automotive sector, Korea's [LG Electronics and Ontario's Magna International established a joint venture](#). Known as LG-Magna e-Powertrain, it merges Magna's strength in electric powertrain systems and world-class

automotive manufacturing with LG's expertise in component development for e-motors and inverters. This along with [Stellantis' recent announcement](#) of its partnership with LGES on battery production facility in Windsor, Ontario points to how businesses in both countries can share their expertise to compete globally.

Top Partner Companies:

- [LSIS](#)
- [Hanwha](#)
- [VSB Renewable Energy Korea, Ltd](#)

Canadian companies interested in pursuing international research and development collaboration with Korean firms can apply for [Canadian International Innovation Program](#) funding or propose their project to annual [Canada-South Korea Collaborative Industrial Research and Development](#) funding.

ICT and the Digital New Deal

Korea is a leading global player in Information and Communication Technology (ICT). In 2021, it ranked first in [Bloomberg's Innovation Index](#). Under the Digital New Deal, ICT is the second largest investment category: the government [plans to transform Korea](#) into "a smart country that is at the center of a digital transition based on data, network, and artificial intelligence (DNA) infrastructure." Key projects for ICT include AI government, smart healthcare, and data dams.

The Digital New Deal focuses on the development of advanced technologies such as AI, 5G, and big data. Korea has been a leader in 5G and has been avoiding its dependence on [China](#). However, Korea lacks competitiveness in the [AI sector](#) and has emphasized AI technology development. On the other hand, Toronto is growing as one city with the highest concentrations of AI startups. The Government of Canada committed \$125 million CAD to the [Pan-Canadian Artificial Intelligence Strategy](#) to help AI development. Further, many Canadians in the Tech industry are [bilingual](#) in Korean and English, which can help collaboration and cooperation between the two countries.

Elimination of tariffs under the CKFTA provides Canadian firms with better entry access to Korea's ICT industry. All ICT exports from Canada are [tariff-free](#) as of January 2015. This includes electric sound amplifier sets, certain video projectors, cameras, transmission apparatus parts, and electrical conductors. Importantly, this allows Canada to compete in Korea's ICT industry equally alongside other Korean FTA parties (i.e., U.S., EU, Australia).

Opportunities:

Korea's ICT industry provides an invaluable opportunity for Canadian firms to invest and do business in one of the world's top ICT industries. [Areas](#) that provide the most opportunity for Canadian firms and investors include:

- Game development
- Development of mobile applications
- Innovative network solutions

- IT solutions for shipbuilding and marine industries
- Machine learning AI

Top Partner Companies:

Korea’s ICT industry is led by top *chaebol* or large conglomerate groups such as Samsung Electronics, LG Electronics, and SK Hynix. Although the sector is primarily dominated by these large firms, there are also a [growing number of SMEs](#) in Korea. This provides a wide range of opportunities for Canadian firms who may be interested in partnering with either large or small Korean firms.

Leading Korean firms including Samsung, LG, and Shinhan Bank have collaborated with [Canadian AI R&D](#) institutes such as Vector Institute, Alberta Machine Intelligence Institute, and the Montreal Institute for Learning Algorithms. Canadian firms should continue these collaborations and consider strengthening ties with Korean firms specializing in AI. In addition, there may be potential for Canadian and Korean companies to jointly contribute to like-minded initiatives on digital coherency such as those set out in a [G7 communique](#).

E-Commerce

Over 30% of Koreans spend [more than half](#) of their monthly disposable income through online shopping. In 2018, domestic online purchases in Korea are currently valued at \$115.4 billion USD, more than twice the value of Canada’s online purchases ([\\$47.5 billion USD](#)).

Opportunities:

Korea has many factors that point to future sustained e-commerce growth. The technology and online infrastructure investments by major local firms continues to drive e-commerce usage in the country. Further, Korean consumers’ increasing prosperity and online usage trends suggest a continuation of growth into the future. Lastly, the Korean government may also move to provide its consumers with offerings at lower prices than traditional offline markets, [to benefit the economy](#) as a whole.

Top Partner Companies:

Canadian businesses looking to expand into Korea’s e-commerce market should consider gaining familiarity with the top websites in Korea:

Korean e-commerce sites	Major Korean websites	Popular Korean phone apps	
Coupang  Gmarket  11st 	Naver.com  Daum.net 	 Daangn Market : local buying & selling community	
		Baedal Minjok : food delivery 	KakaoTalk : mobile messaging app 

Services and Investment

The Korean services market offers areas of opportunities for Canadian service exporters under the KND. Canadian service exporters can focus on exporting the following [high-demand professional services](#): foreign legal consultancy, commercial education and training, research and development, financial services (i.e., fintech and insurance), services incidental to air transportation, sustainable technologies services, or ICT related services. The CKFTA also facilitates the movement of businesspersons by providing preferential access for business visitors, traders, investors and professionals in Korea; traders, investors and professionals can stay up to 5 years. The increased mobility will permit Koreans to access Canadian talent and specialized services for Canadian businesses that wish to pursue the sectors of opportunity as identified above.

It should be noted in particular that Korean government support for fintech, including technology such as blockchain, bitcoin, crowdfunding, and big data and data analytics is available. Both the Korean national government and Seoul municipal government provide support for startups and [encourage foreign investment](#) in startups.

Investment opportunities are generally open for ICT and cleantech sectors, areas where Canadian companies have proven strengths. Seoul also provides incentives that include major income, corporate, and property tax breaks for FDI that brings [“new growth engine”](#) technologies to sectors such as AI, robotics, and cleantech.

E. Recommendations for Canadian Government

- 1. Cooperate on cleantech, including low-carbon hydrogen and EVs** - In 2020, the Government of Canada released the *Hydrogen Strategy for Canada*. The government emphasized the critical nature of hydrogen in its path towards achieving the goal of [net-zero carbon emissions](#) by 2050, affirming that the development of low-carbon hydrogen is a strategic priority for Canada. Canada’s support for the development of the hydrogen economy, along with its expertise in fuel cells and related technologies signal potential for cooperation with the Korean government, which is also investing [42.7 trillion won](#) (\$47.6 billion CAD) over the next three years including into low-carbon and decentralized energy projects. The Korean government is also seeking to shift petroleum-run vehicles to electric and hydrogen vehicles, meaning both countries’ interests are aligned in supporting cleantech.
- 2. Support Korea’s entry into the CPTPP** - Seoul has begun [to actively pursue joining the CPTPP](#), a mega-sized free trade pact currently composed of 11 countries, including Canada. The combined 11 CPTPP economies currently account for [13.5%](#) of the world’s GDP. Korea’s inclusion would increase the size to 15.15%, increasing the bargaining power of CPTPP signatories to bring in new members. The accession of new economies to the CPTPP is an opportunity for Canada to further diversify and expand preferential access to markets throughout the Asia-Pacific region and beyond. Canada should support Korea’s entry.

3. **Prioritize enhanced cooperation through existing mechanisms** - At forums where Canadian and Korean leaders and Ministers will be present (for example, at bilateral consultations for CPTPP entry, APEC, OECD and other meetings), Canada should take the opportunity to discuss and facilitate collaboration between the countries. These discussions could also serve to promote regulatory coherence and business and investment opportunities along with furthering policy exchanges on issues of importance to both countries.
4. **Promote education and cultural exchanges to increase market awareness** - Korea is [one of the world's most educated countries](#). The Korean government currently offers [scholarships](#) for Canadians to study in Korea. This presents a great opportunity for Canada to promote further cross-cultural exchanges between the two countries through scholarships and exchange programs. To enhance awareness of Korean culture and history among Canadians, Canada should use existing programs to support Canadian research institutes and cultural organizations focusing on Korea and seek collaborative opportunities between Canadian and Korean cultural and academic institutions.

There are also technical and regulatory barriers that should be pursued by the Government of Canada. Please see Annex 6 for steps the Canadian Government can take in reducing regulatory barriers to trade on wood products, agricultural biotechnology, information and communication technology, and automotive products.

F. Recommendations for Businesses

1. **Identify opportunities to co-invest in infrastructure throughout Asia** – In June 2021, the [G7 committed to investing](#) in quality infrastructure as a priority, as well as accelerating the infrastructure necessary to support sustainable and decarbonized transportation technologies. The group also committed to adjusting infrastructure financing rules to aid low and middle-income countries who have been most affected by the pandemic. When considering investments in Asian markets, Canadian businesses should seek to co-invest with Korean businesses and should look to Korea as a prime Asian partner as Korea continues to build its presence in Southeast Asia and India. Opportunities should be identified at both the infrastructure-related and sectoral levels. Korea and Korean businesses should be incorporated into Asian business planning.
2. **Develop exchange/working opportunities in Korea** - Canadian firms should invest in future leaders to strengthen ties with Korea. For example, businesses can sponsor short student programs to work with Korean businesses, opportunities for Canadians to work at Canadian firms with offices in Korea, and secondments with Korean firms. Canadian businesses should also take advantage of the Korean diaspora in Canada and graduates with knowledge of the Korean market to help explore opportunities.
3. **Build cooperation between Canadian and Korean SMEs through e-commerce** - SMEs make up [88% of total employment](#) in Korea and [receive support](#) from the Korean government. Korea is

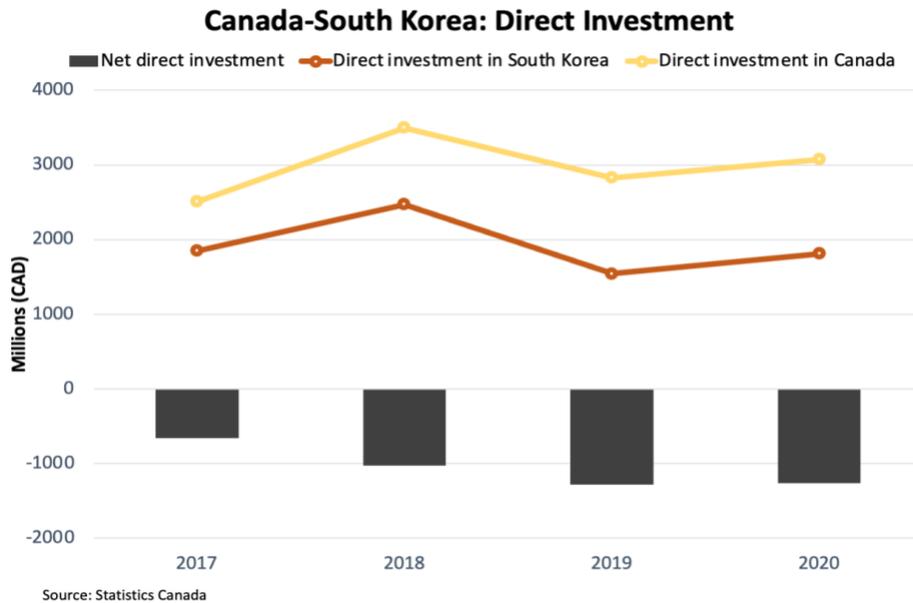
the [third](#) largest e-commerce market in Asia. Canadian SMEs should take advantage of this opportunity and consider establishing an online market presence in Korea.

- 4. Promote global digital economy collaboration** - Canadian businesses looking to expand their presence in global markets should look to Korean partners. Apart from the sectors cited in the report, Korea's culture and creative industries (CCI) exports have [increased by 82%](#) in the last 5 years and have solidified their global presence. Two examples are the internationally renowned Korean band BTS—a boy band often compared to the *Beatles*—and NCSOFT, one of the largest game publishers in the world. Canadian businesses could exploit Korea's CCI success through collaborating with Korean businesses on global initiatives that make use of Canada's expertise in data analytics, software, digital and media.

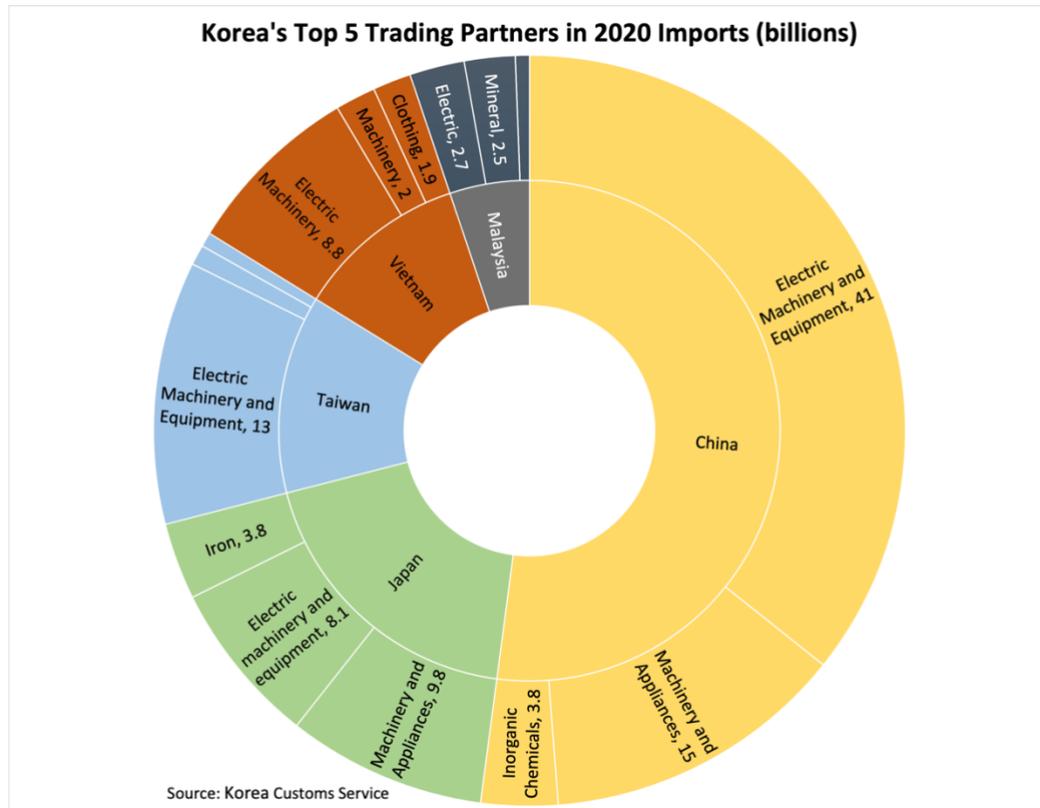
G. Conclusion

The COVID-19 pandemic has spurred governments around the world to not only adopt economic stimulus measures, but at the same time address challenges such as climate change. Canada and Korea are implementing initiatives to promote digital innovation and decarbonization. As outlined in this Report, the pathways to cooperation and business development are numerous—it is up to the business communities in Canada and Korea to explore the opportunities in each other's markets and beyond.

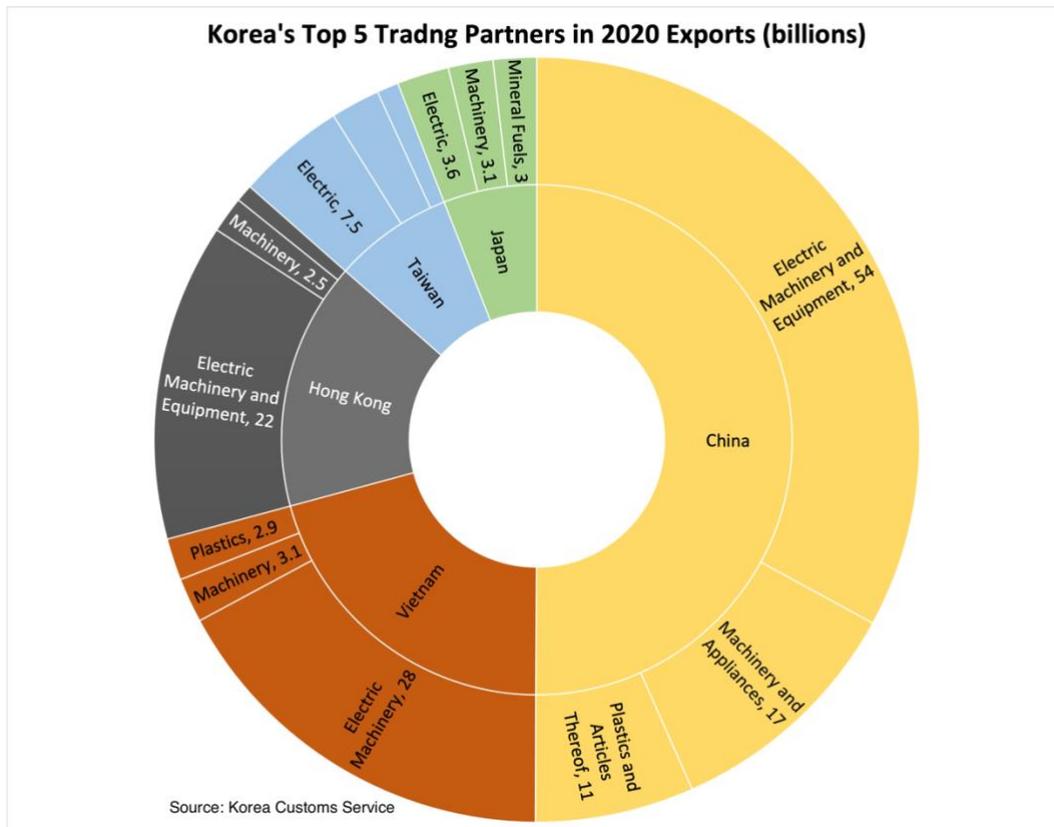
Annex 1. Canada-South Korea Direct Investment



Annex 2. Korea's Top 5 Import Partners in Asia: China, Japan, Taiwan, Vietnam, Malaysia



Annex 3. Korea's Top 5 Export Partners in Asia: China, Vietnam, Hong Kong, Taiwan, Japan



Korea maintains strong [trade relationships](#) with Asian partners, namely: China, Vietnam, Hong Kong, Taiwan, Japan, India, Singapore, Malaysia, Philippines, and Thailand. Out of these top 10 export partners, China consumed the largest amount of Korean industry exports: China purchased \$54 billion USD, or 45% of all Korean electric machinery and equipment, \$17 billion in machinery and appliances, and \$11 billion in plastics. Vietnam also was among Korea's top 10 export partners and purchased 16% of Korea's exports: Vietnam's three largest export categories were electric machinery, machinery and appliances, and plastics.

Annex 4. Korea's Foreign Trade and Investment Relations

United States

Overview: The United States currently ranks as Korea's second biggest trading partner. In terms of total trade, Korea ranks sixth among all U.S. trading partners. In 2019, U.S. exports to Korea were valued at [\\$80.5 billion USD](#). Top U.S. exports to Korea include:

- 1) Mineral fuel and oil
- 2) Nuclear reactors, boilers, machinery
- 3) Electric machinery, sound and TV equipment
- 4) Optic, photo, medical, and surgical instruments
- 5) Organic chemicals

The U.S. Department of Commerce [currently identifies fourteen leading sectors](#) for U.S. investors including:

- 1) Defense
- 2) Energy: New and Renewable
- 3) Agriculture
- 4) Medical Equipment and Devices
- 5) Information and Communication Technology

Developments in technology spurred due to the COVID-19 pandemic have increased the potential for Asia-Pacific's rapid digital development. According to a [recent report](#) by the National Bureau of Asian Research, to capitalize on this opportunity, Korea's new Southern Policy Plus focuses on digital development and expanded coordination with major powers like the U.S. There are three ways the two governments can cooperate: they can seek to improve Asia-Pacific's regional Digital capacity, revisit and amending legal and policy frameworks, and cooperate in building Asia-Pacific's cybersecurity standards.

Among these sectors, several have important implications for Canadian businesses. Currently, the U.S is a leading exporter of defense equipment to Korea, making up [84% of its defense imports](#). Although the U.S. dominates this sector, there may be increased opportunities for Canadian investors as Korea is looking to [expand](#) its supply base.

The U.S. Department of Commerce also [identifies](#) Information and Communication Technology as an important sector, including areas such as 5G network, AI, cybersecurity, cloud computing, and semiconductors. In particular, U.S. companies are investing in Korea's cybersecurity infrastructure. According to the [International Trade Administration \(ITA\)](#), Korea's "high degree of network connectedness, high penetration of mobile devices, and significant intellectual property" make it highly vulnerable to cyberattacks. As recommended by the ITA, U.S. companies are encouraged to work with Korean cybersecurity companies to help support their technologies. This provides a comparable opportunity for Canadian firms who may be interested in partnering with Korean cybersecurity firms.

Medical equipment is another sector of American competitiveness. In 2018, the U.S made up [47%](#) of Korea's total imports of medical equipment. Demand for high-quality medical equipment has grown in

the past ten years. Given Korea's aging population, it is expected that this sector will remain viable for foreign investors. This represents another opportunity for Canadian firms to expand into the Korean market.

U.S.-South Korea Free Trade Agreement (KORUS)

KORUS FTA [entered into force](#) in March 2012 and eliminated most tariffs and non-barrier tariffs on goods and services between the two countries. Nearly [two-thirds of U.S. agricultural exports](#) to Korea received duty-free access upon the treaty's enactment. Most other U.S. agricultural goods received tariff-free status [by 2021](#).

Australia

Overview: Korea is Australia's [third largest](#) export market. Australia [ranks 13th](#) in Korea's export destinations and sixth in Korea's list of importers. In 2019, the top exports from Australia to Korea included:

- 1) Iron ores & concentrates
- 2) Coal
- 3) Natural gas
- 4) Beef

Korea is heavily dependent upon imports to supply its energy needs; the country relies on [97% imports](#). Korea was also the [fourth-largest importer of coal](#) in 2019. [35% of its coal](#) is imported from Australia. Although Australian exports to Korea are primarily focused on energy, the Australian Trade and Investment Commission identifies [several additional areas of opportunity](#) for Australian firms: aged care, aviation and aerospace, cosmetics, FinTech, food and beverage (including wine), fund management, ICT, infrastructure global value chain, and sports.

ICT is a key sector in Korea for foreign investors. Australia's Trade and Investment Commission highlights sub-sectors [including:](#) Internet of Things (IoT), virtual and augmented reality, cloud computing, smart cars, next generation cybersecurity, and smart healthcare.

Korea-Australia Free Trade Agreement (KAFTA)

The Korea and Australia Free Trade Agreement (KAFTA) [entered into force](#) on December 12, 2014. The agreement also eliminated tariffs on Australian's liquefied natural gas, automotive parts, and pharmaceutical products. Similar to the CKFTA, the KAFTA makes it easier for Australian investors to do business in Korea and facilitates trade.

European Union

Overview: The European Union is Korea's [third largest](#) export market. Korea is the EU's [eighth largest](#) export destination. As of 2019, the EU is Korea's biggest source of FDI, collectively, with a total value of [\\$122.8 billion USD](#). The top products imported from the EU to Korea [include:](#)

- 1) Automobiles

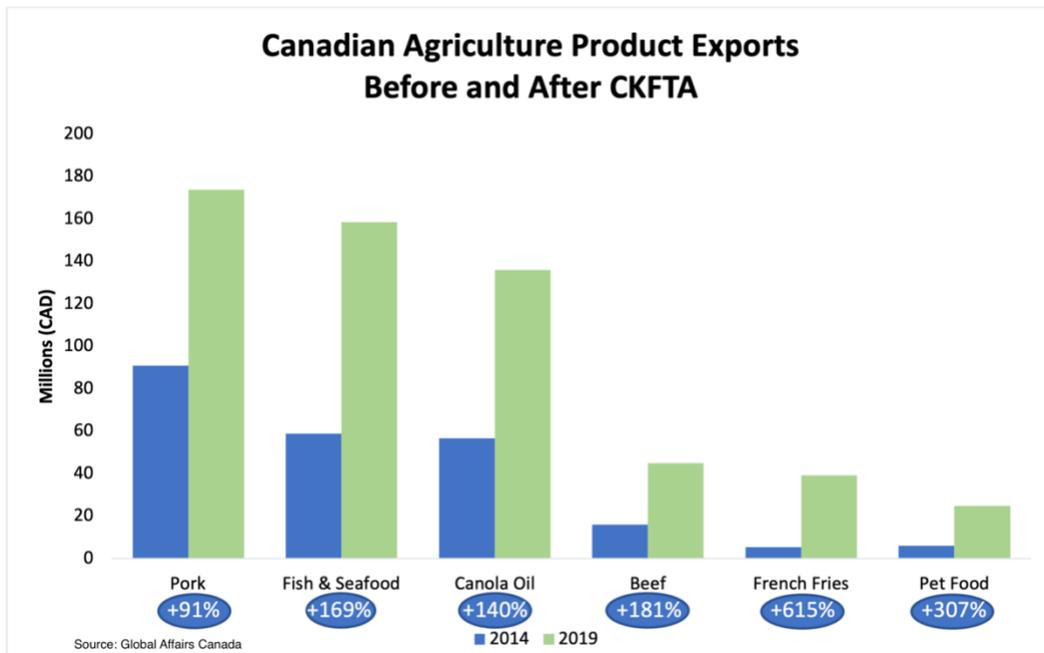
- 2) Materials for semiconductors
- 3) Medicine

Additionally, other imports include [machinery and appliances, transport equipment, and chemical products](#).

Annex 5. Additional Information for Sectors of Opportunity

Agriculture and Processed Foods

Since January 1, 2019, 70% of Canada’s agricultural exports are eligible for duty-free access to Korea. By [2029, 99% of Canadian exports](#) in the agriculture and processed foods sector will be eligible for duty free treatment. Korea’s market for agriculture and agri-foods holds enormous potential for Canadian exporters, especially as Korea’s middle class continues to grow and seek high quality products.



To meet the demand for “convenient and tasty” foods, Korea has [increasingly been importing raw commodities](#) for local food processors, as well as fresh products such as seafood and meat products. Korean consumers that are very health-conscious have also been welcoming superfoods such as specialty grains, hemp seeds and functional foods. Additionally, there is also strong growth in the Korean pet food market. Over the last few years, more Koreans have bought pets as a result of social factors such as rising wealth, single-person households, and an aging population.

Canadian businesses will need to exercise prudence with their organic certifications as Canadian certifications are currently not recognized in Korea. To be labelled as organic, foods must be accredited through the Korean organic regime and be supported by a Korean importer. To aid Canadian ease of business in organic trade, the Canadian government can follow after the United States and European

Union's equivalency agreements for processed organic foods. The 2014 United States' organic foods equivalency agreement [resulted in a 20.7% increase of Korean imports](#).

Opportunities:

Canada's market share in the agricultural sector is still relatively low and there is room for more Canadian suppliers across the board, particularly for meat, wheat and niche products. Canada's advantage lies in Korea's growing market for safe, quality and healthy food products because Koreans perceive Canada as a country with a good environment and quality products. Koreans are [willing to pay](#) for big-name brands and quality Canadian products.

Top Partner Companies:

Korea's top retailers include [Homeplus](#), [Lotte Mart](#), [E-mart](#) and [Costco Korea](#). Currently, the major chains all buy Canadian products, but their different sourcing teams do not always [think of looking to Canada](#) for new supplies.

Innovation and the Automotive Sector

The Korean automotive industry is the fifth largest in the world, led by Hyundai with its brands Kia and Genesis, that has expanded to become the [fourth largest](#) auto manufacturers in the world.

Since 2017, all import duties on Canadian exports have been removed due to the CKFTA. Canada's overall cost advantage of [8.2%](#) compared to the United States and [4.5%](#) over Japan's automotive manufacturing sector ought to attract Korean automotive manufacturers. According to KPMG Competitive Alternatives, auto parts operations based in Canada typically enjoy a [31%](#) labor cost advantage compared to their U.S.-based counterparts.

Opportunities:

For Canadian companies that wish to do business in this sector, the following areas represent commercial opportunities for Canadian suppliers and technology developers:

- Autonomous driving solutions
- Introduction of smart mobility services
- Wireless communication, advanced analytics, Artificial Intelligence (AI)
- Replacement of internal combustion engine (ICE)-powered cars by BEVs, Plug-in Hybrid Electric Vehicle (PHEVs), HFCEVs, etc.
- Key technologies and solutions such as sensors, superchargers and absorber modules
- New infrastructure such as battery charging stations and hydrogen fueling stations
- Adaptation and implementation of smart factory solutions during manufacturing processes

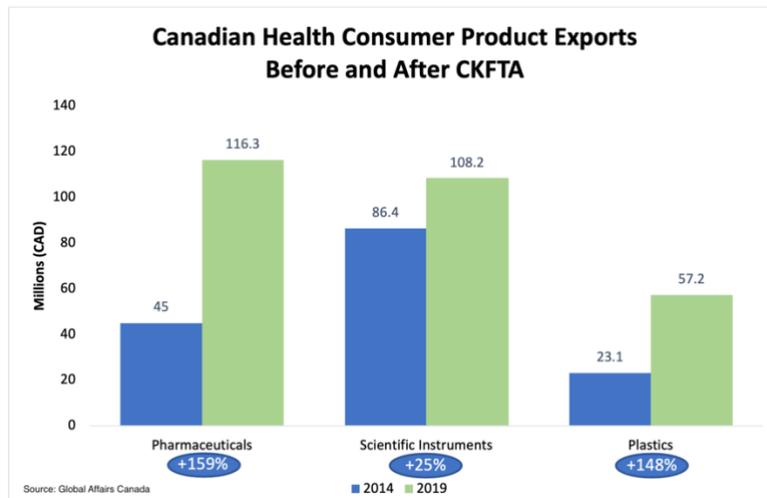
Top Partner Companies:

The top Korean automotive manufacturers are: [Hyundai](#), [GM Korea](#), [Renault Samsung](#), [Ssangyong](#). However, Hyundai Group with its own brand as well as vehicles marketed under the Kia and Genesis brands currently has more 80% market share in Korea.

Consumer Health Products

The Korean life sciences sector demand is driven mainly by Korea's aging demographics. Korea has the world's most rapidly aging population with the average life expectancy of 82.7 years. There is business opportunity here as there are [no duties](#) on the vast majority of Canadian medical devices and all exports of pharmaceuticals. In order to mitigate rapidly increasing medical costs and increased rates of chronic diseases, Korea is increasingly willing to embrace new technologies to tackle these issues.

Opportunities:



There is strong demand for products related to eldercare and chronic diseases such as MRI machines, CT machines, implants, catheters and stents, and for digital health products and services, such as health management systems, AI-based monitoring/diagnostics, and VR/AR-based simulated rehabilitation products and services. Korean spending in this field is expected to [reach over \\$18 billion by 2022](#).

There is keen interest from Korean SMEs in joint R&D with foreign collaborators. The Canadian pharmaceutical industry has grown at a compound annual rate of [5.1%](#). Foreign collaboration can be a great way to develop long-lasting business partnerships and to ensure the suitability of new products for foreign markets.

Top Partner Companies:

- For Medical Devices, the top partner companies are: [Samsung Electronics](#), [Vatech](#), [Osstem Implant](#)
- For Pharmaceuticals, the top partner companies are: [Celltrion](#), [Samsung Bioepis](#), [Samsung BioLogics](#), [Green Cross](#), [Hanmi Pharm](#)

Cleantech and the Green New Deal

Korea is facing a growing need for sustainable technology. In 2019, the country ranked ninth in the world for energy consumption. Among its energy, renewable sources only accounted for 3% of its

energy consumption in 2019. However, air pollution is a cause of concern in Korea. In 2017, it ranked the [worst among all OECD countries](#) for air quality.

The Green New Deal addresses these challenges. Key projects of the Green New Deal include green remodeling, green energy, and eco-friendly mobility of the future. The Green New Deal also includes goals such as green transition of infrastructure, low carbon and decentralized energy, and innovation in green industry. Additionally, the Green New Deal identified the following leading areas: clear air, biomaterial, hydrothermal energy, recycling of resources, and future waste resources.

Current efforts suggest that Canadian energy companies are reaching out to Korean sustainable energy firms. A [virtual energy export business mission](#) operated by the Canadian Trade Commissioner Service and Global Business & Partners, and supported by the Ontario provincial government, encourages Ontario firms working in “renewable energy technology and products, smart grid and energy storage, solutions for energy management and efficiency, [and] nuclear decommissioning” to establish business connections with Korean energy companies. [Korean startups](#) are also investing in sustainable energy and provide Canadian firms with investment and collaboration opportunities.

ICT and the Digital New Deal

In 2019, semiconductors were Korea’s top export and were valued at \$85.2 billion USD. Korea exports a large amount of consumer electronics and, increasingly, exports of digital media. The country also has the highest average internet speed in the world at 24.6 Mbps.

E-Commerce

Domestic online purchases in Korea are currently valued at \$115.4 billion USD—an increase from \$100.8 billion USD in 2018. In 2017, [16% of all sales](#) in Korea occurred online. Canadian firms—particularly those selling consumer goods—should consider the following [demographics](#) on Korea:

- 99.9% of Koreans ages 10 to 59 use the internet
- 88.8% of Koreans ages 60 to 69 use the internet
- 57% of Korean women shop online compared to 50% of Korean men

Canadian firms should be aware that Koreans spend a lot of time “researching and purchasing the best products they can find.” Convenience, simple payment process, price, and fast shipping are important to Korean consumers. Canadian firms should also be able to keep up with a highly competitive market and fast-changing trends.

Annex 6. Korea’s Technical and Regulatory Barriers to Trade

Wood Products

Korea has not yet recognized the North America standard for Oriented Strand Board (OSB). Yet, Korea is Canada’s [5th largest](#) OSB importer, importing 13.1% of all Canada’s OSB exports that do not go to the

United States. To facilitate better trade, Canada should urge Korea to recognize the North American standard for OSB.

Agricultural Biotechnology

The Korean approval process for new biotechnology crop varieties is onerous and protracted due to inefficiencies that include redundant reviews and data requests. For example, approval of agricultural biotechnology products requires review by up to [five different](#) agencies. In order to aid Canadian agricultural exports, the Canadian government can discuss potential regulatory process reforms with the Korean government.

Information and Communication Technology

The Korean Government requires network equipment procured by government agencies to undergo additional government verification in Korea, even if the products received [Common Criteria Recognition Arrangement \(CCRA\)](#) certification abroad. When verifying the network equipment, the Korea's National Intelligence Service (NIS) manages the verification process in a non-transparent fashion. Furthermore, the NIS has broadened the scope of its verification beyond the scope of national security to verifying equipment procured by any government entity, including schools, local governments, libraries, and museums.

Korea also requires network equipment procured by public sector agencies (i.e., government agencies and quasi government agencies) to incorporate encryption functionality certified by [NIS](#). NIS certifies encryption modules based only on the Korean-developed ARIA and SEED encryption algorithms (which in practice are primarily used in Korea), rather than the internationally standardized Advanced Encryption Standard algorithm. Canada should join the United States in urging Korea to open their public sector network standards to complying with international standards.

Automotive Products

The automotive industry has also raised concerns regarding Korean regulations on Emission Related Component modifications and enforcement actions taken against foreign vehicle manufacturers. Under Korea's Clean Air Conservation Act, vehicle manufacturers and importers are required to obtain [Ministry of Environment \(MOE\)](#) modification certifications or prepare modification reports even for insignificant changes. The automobile industry is concerned about ambiguity between certification and reporting. The industry contends both requirements are burdensome because import documentation must reflect all changes made by component suppliers before a vehicle arrives in Korea. The Canadian Government should work with the Korean MOE to eliminate these trade burdens.