

D3.5 International market study for ESCP4i | **Fascinate**

PROJECT> FASCINATE

PROJECT NAME> Sustainable Fashion Alliance For International Markets

GA NUMBER> 951192

DOCUMENT TITLE> D3.5 International market study for ESCP4i

DATE> June 2021 (M10)

AUTHOR> CITEVE / Portuguese Textile Cluster





Table of Content

EXE	XECUTIVE SUMMARY3				
1. A	About Fascinate	3			
	Deliverable Objectives and Methodology				
2.1	Objectives	4			
2.2	Methodology	4			
2.3	Market Study	5			
	Annex (market study)				

EXECUTIVE SUMMARY

This document provides a market study of three international market, Canada, USA and Japan, which include a comprehensive diagnosis through these three possible target markets, regarding sustainable fashion/ clothing revealing strategic challenges linked to trends, ethics, most valued points, ideals uncovering international market opportunities for sector SMEs. Besides the usual information included in market studies (profile of the country, socio-economic trends, sectoral trends, distribution channels, consumers' behaviour, rankings, etc.), this study also identifies some key players / strategic partners in these countries.

1. About Fascinate

The SUSTAINABLE FASHION ALLIANCE FOR INTERNATIONAL MARKETS (Fascinate) is an 18-month project financed by the COSME programme of the European Commission. It aims to support the internationalization of EU textile and fashion SME clusters that are working towards the development of circularity and sustainability in these industries. Besides the textile and fashion industry, this partnership will also seek a cross-sectoral collaboration with the technology (digitalization) and footwear sectors.

The project contributes directly to the overall objective of the COSME programme, by fostering the creation and development of a European Strategic Cluster Partnership – Going International (ESCP-4i) in the textile/fashion sector and related industries (footwear and technology) based on circular economy and sustainability principles, which is oriented towards increased internationalization and strengthened sustainability of European SMEs.

The **Specific Objectives** of the project are:

- To build a European clusters and companies network collaboration (the ESCP-4i), related to the development of circularity and sustainability, in the fashion, textile and footwear industries.
- To promote new European value chains incorporating cross-sectoral cooperation between fashion/textile, footwear, and technology, by means of cooperation, exchange of knowledge and good practices among the members of the project consortium.
- To build a joint internationalization strategy for sustainable fashion brands and companies in Europe, geared towards markets outside of the EU interested in sustainable fashion products (to consolidate shared objectives and define a relevant action plan for the participating clusters and the companies they represented).

2. Deliverable Objectives and Methodology

2.1 Objectives

The main objective of this deliverable is to provide a comprehensive diagnosis through possible target markets (Canada, Japan and USA) regarding sustainable fashion/ clothing sector, considering the previous analysis of the work developed by FASCINATE partnership (results from the survey to European SMEs and partnership SWOT analysis) and identifying, besides the usual information included in market studies (profile of the country, socioeconomic trends, sectoral trends, distribution channels, consumers' behaviour, rankings, etc.), some key players / strategic partners in these countries. This market study is a core element to build a relevant and tailored Joint Internationalization Strategy for the ESCP-4i and its associated members.

2.2 Methodology

The following methodology was implemented to achieve the defined objectives:

1. Lunch a public procurement to select a specialised company with expertise in market studies

All the information about the work to be developed, timeframe, consultancy requirements, evaluation criteria and conditions was detailed in the tender Terms of Reference (ToR) for the market study, which was made public available.

2. Select the market study supplier

The proposals received were assessed by each of the FASCINATE partners, following the predefined scoring procedure (based on the quality of the proposal and the economic analysis). The selection of the proposal was based on the overall results and final scores (average points of all partners). Based on that EDIT Value company was selected to provide the market study.

3. Develop the market study

The market study was developed considering the target markets (Canada, Japan, USA) in terms of sustainable fashion/ clothing, supported from the previous analysis of the work developed by FASCINATE partnership (results from the survey to European SMEs and partnership SWOT analysis). The market study includes (1) a general economic overview of each market; (2) Commercial agreements between EU and addressed markets; (3) Textile sector in the country and market outlook focusing on sustainable fashion; (4) Textile commercial trade agreements; (5) COVID-19 pandemic effect on the country; (6) Trade fairs, relevant stakeholders and other relevant information, (7) Gap value chain analysis; (8) market needs for sustainable and circular textile products; (9) consumers behaviour and expectations (10) legislation and regulation to be considered, IPR, commercial

taxes; (11) strategy and recommendations for market approach. Quantitative market information, export and import information, regulation, customs and other related information to understand and analyse the opportunity on each country for the SMEs was also taken into consideration on the study. Beside this information, the market study includes profile of the country, socio-economic trends, sectoral trends, distribution channels, rankings, etc.), key players / strategic partners in these countries, robust contacts and entry points in those markets (e.g. clusters or business associations, regional or local development agencies, key SMEs or large companies, technological centres, etc.).

2.3 Market Study

The market study supplied by EDIT Value company is presented as an annex of this deliverable.

1 Annex (market study)



Sustainable Fashion Alliance For International Markets

Comprehensive study on International Markets Trends to Canada, Japan and USA, regarding sustainable fashion

















Index

1	A general economic overview		49	91	
2	Commercial agreements between EU and addressed markets	7	51	93	
3	Textile commercial trade agreements	12	56	98	
4	Textile sector in the country and market outlook focusing on sustainable fashion	15	58	99	
5	Covid-19 pandemic effect on the country	28	67	107	
6	Trade fairs and relevant stakeholders	33	71	111	
7	Gap value chain analysis	36	74	114	
8	Market needs for sustainable and circular textile products	39	78	117	
9	Consumers behaviour and expectations	41	79	118	
10	Legislation and regulation to be considered, IPR, commercial taxes	42	80	119	
11	Strategy and recommendations for market approach	47	89	125	
12	Main conclusions	127			
13	Bibliography	129	131	134	
14	Glossary	137		2)

Executive Summary

With the alarm for world sustainability at risk, the international community knows now that we must dramatically step up the pace for the implementation of reinforced environmental measures, as we are entering a decisive period for people and the planet. It is known that the fashion industry (textile, clothing, shoes and accessories) creates a big impact on the environment, with high intensive use of energy and fresh water, use of chemicals and excessive packing materials. But it is also true that the fashion industry was one of the first industries in the world to start looking for environmentally friendly alternatives for mass production, implementing energy consumption best practices and looking for recycling alternatives for the textile products at the end of life. If until now the world was pushed for the mass consumption of all type of articles, namely fashion articles, recently we are experiencing bigger concerns from consumers about the way they make use of their fashion articles, and also about the type of articles that they are buying. It seems that people are willing to pay more for sustainable fashion. This means that the mass consumption door is closing but other potential opportunities to boost sustainable fashion are arising. These opportunities include providing more eco-labelling or LCA information about the carbon footprint of fashion products, encourage designers and trend makers to push for sustainable clothing even if in some cases they can be shapeless, foggy, and drab-coloured. On the recyclability side, big brands and producers along the value chain should also be encouraged to think about alternative ways to give a second life to the fashion articles when they come to the end. More cooperation along the value chain to find new ways of creating a true economy over the raw materials and sub-products circularity it's a must. On the technology side, more research on sustainable technologies that can reduce the level of energy consumption or gas emissions or chemicals used during the production process are in order to achieve the carbon neutrality of the fashion industry. Only a combined effort of all the main actors in the Fashion Industry will be able to ensure a bright future of this Global Industry towards Sustainable Development Goals.

Canada: A general economic overview

Canada is the world's second-largest country by land area and has its 10th-largest economy.

Governance

Canada's system of government implies a federal state, a parliamentary democracy and a constitutional monarchy. Business freedom in Canada is relatively unchanged and remains at a high level. Labour laws vary by jurisdiction. According to the Corruption Perceptions Index, Canada is perceived as one of the least corrupt countries in the world.

Taxes

The top individual income tax rate is 33 percent, and the top corporate tax rate is 15 percent. Other taxes include value-added and property taxes. The overall tax burden equals 33.0 percent of total domestic income. Government spending has amounted to 40.9 percent of total output (GDP) over the past three years, and budget deficits have averaged 0.3 percent of GDP. Public debt is equivalent to 88.6 percent of GDP.

Society:

Canada is known around the world as a strong and free country and often referred to as a *land of immigrants* because, over the past 100 years, millions of newcomers have populated and helped to build the country. Canadian society today stems largely from the English-speaking and French-speaking. There is a shortage of skilled trade professionals. The country experiences a relatively low level of income disparity among the society.

Market

Canada has always been a trading nation and commerce remains the engine of economic growth. Canada has 15 preferential trade agreements in force, namely with USA, where Canada enjoys close relations with the United States and each is the other's largest trading partner. Over three-quarters of Canadian exports are destined for the USA market. Canada exports billions of dollars worth of energy products, industrial goods, machinery, equipment, automotive, agricultural, fishing and forestry products, and consumer goods every year.

Foreign investment in some sectors, including aviation and telecommunications, is capped by the government. The banking sector, dominated by six major banks, remains sound. A wide range of nonbank financial companies operate in a prudent regulatory environment.

QUICK FACTS:

- · Population:
 - 37.6 million
- GDP (PPP):
 - \$1.9 trillion
 - 1.6% growth
 - 1.7% 5-year compound annual growth
 - \$51,342 per capita
- Unemployment:
 - 5.6%
- Inflation (CPI):
 - 1.9%
- FDI Inflow:
 - \$50.3 billion

Canada: A general economic overview

Canada's Economy Includes Three Main Types of Industries

Service industries provide thousands of different jobs in areas like transportation, education, health care, construction, banking, communications, retail services, tourism and government. Canada is one of the **global leaders of the entertainment software** industry. More than 75% of working Canadians now have jobs in service industries.

Manufacturing industries: Manufacturing companies include paper, high technology equipment, aerospace technology, automobiles, machinery, food, clothing and many other goods. As of 2017, **manufacturing accounts for 10% of Canada's GDP** a relative decline of more than 5% of GDP since the latest 10 years.

Natural resources industries include forestry, fishing, agriculture, mining and energy. With the world's longest coastline, Canada has the 8th largest commercial fishing and seafood industry in the world. These industries have played an important part in the country's history and development. Today, the economy of many areas of the country still depends on developing natural resources, and a large percentage of Canada's exports are natural resources commodities. Canada has the world's third largest proven petroleum reserves and is the fourth largest exporter of petroleum. It is also the fourth largest exporter of natural gas.

Top 10 Import Countries: 2019		
Country	Import USD\$	
United States	\$229,985,546,059	
China	\$56,531,338,898	
Mexico	\$27,873,021,799	
Germany	\$14,565,139,143	
Japan	\$12,421,881,563	
South Korea	\$7,161,099,939	
Italy	\$7,137,567,651	
United Kingdom \$6,949,68		
France	\$6,554,115,250	
Vietnam \$5,266,632,48		

Top 10 Export Countries: 2019		
Country	Export USD\$	
United States	\$336,214,851,377	
China	\$17,536,396,323	
United Kingdom	\$14,928,056,269	
Japan	\$9,515,970,981	
Mexico	\$5,518,631,071	
Germany	\$4,577,869,058	
South Korea	\$4,178,012,819	
Netherlands	\$3,904,502,031	
India	\$3,652,462,319	
Hong Kong	\$3,003,859,399	

Commercial agreements between EU and Canada

Canada and the EU have a long track record of economic trades. Comprising the full EU Member States, the EU represents Canada's second largest trading partner in goods and services. According to "Statistique Canada" the EU is also the second largest source of foreign direct investment (FDI) in Canada, and the EU is the destination of approximately 20% of Canadian direct investment abroad. According to Eurostat, the EU identified Canada as its third largest destination and its fourth largest source of FDI over the last decade.

Comprehensive Economic and Trade Agreement (CETA)

CETA is the most relevant trade agreement between the EU and Canada. In short, it cuts/reduces tariffs and makes it easier to export goods and services, benefitting people and businesses in both the EU and Canada.

CETA entered into force in **September 2017**. With CETA it is expected to boost the global trade between the EU and Canada and thus create new jobs, facilitate business operations by abolishing customs duties and goods checks in the customs, regulate investment disputes by creating a new arbitration system and facilitate mutual recognition of education diplomas fostering the exchange of students and workers.



<u>EU-Canada Comprehensive Economic and Trade</u> <u>Agreement (CETA) - Trade - European Commission</u> (europa.eu)

Commercial agreements between EU and Canada

Comprehensive Economic and Trade Agreement (CETA) - Benefits for SMEs

- Eliminates SME's tariffs up to 98% of current exports from Canada to the EU, and vice-versa;
- Guarantees access to Canada's large public procurement market;
- Makes trade more predictable, transparent and accessible by offering a single set of high-standard rules for trade across
 the EU and Canada;
- Enhances market access and provides a comprehensive set of investment protection measures backed by a robust mechanism for resolving investment disputes;
- Lowers the costs of participating in international trade, including digital trade and protect the free flow of data across borders;
- Simplifies procedures for clearing goods through customs, including by making specific commitments to enhance transparency and make information available online for SMEs;
- CETA's provisions can make it easier for highly skilled professionals, such as engineers and senior managers, to work temporarily or fulfil contracts in the EU.

For the Textile and Clothing SME's, now with CETA in place, companies are able to reduced the tariff barriers from 16% to 0%



EU-CANADA





COMPREHENSIVE ECONOMIC AND TRADE AGREEMENT (CETA)

Commercial agreements between EU and Canada (Canada & Portugal)

Canada imports from Portugal

Canada was ranked in 2019 as the 15.º largest exporting partner with Portugal.

Comparing the figures from 2019 and 2020 it is recognizable the abrupt decrease of exports, up to 48%. In 2019, the Portuguese exports to Canada had a total sum of \$600M and in 2020 the exports reached a total of \$312M, meaning less \$288M.

Actually, due to the almost 50% decrease in the exports from 2019 to 2020, Canada disappears in 2020 from the top 15 export countries to be replaced by Sweden, which moves directly to 14th place after overtaking China (15th place in 2020) in the total exports made by Portugal.

In the global list of the top exported items its important to highlight the fact that the trade of textiles and clothing articles with Canada appear in the 5th place with almost \$20M Canadian dollars of sales.



Portugal exports to Canada	Value	Year
Beverages, spirits and vinegar	\$60.05M	2020
Footwear, gaiters and the like,	\$20.38M	2020
Inorganic chemicals, precious metal compound, isotope	\$20.08M	2020
Other made textile articles, sets, worn clothing	\$19.41M	2020
Electrical, electronic equipment	\$18.30M	2020
Plastics	\$16.64M	2020
Machinery, nuclear reactors, boilers	\$16.59M	2020
Furniture, lighting signs, prefabricated buildings	\$12.85M	2020
Rubbers	\$11.53M	2020
Organic chemicals	\$11.34M	2020

<u>Portugal exports to Canada - 1988-2020 Data | 2021 Forecast (tradingeconomics.com)</u>

Commercial agreements between EU and Canada (Canada & Spain)

Canada imports from Spain

The main Spanish exports to Canada include: Machinery, pharmaceutical products, combustibles, oil and minerals, beverages and vehicles.

Comparing the figures from 2019 and 2020 it is identifiable the decrease of exports, from \$2600M in 2019 to \$2350M in 2020. It's not possible to assume that this decrease was only related to the covid-19 pandemic since in 2017 and 2018 the exports were also around the \$2300M, meaning that actually 2019 was a atypical year when it comes to the trade exports from Spain to Canada.

Looking to the most exported items, textile, clothing or even other fashion items, like shoes or leather, those are not included in the top 10 exported items to Canada.



COMTRADE | TRADINGECONOMICS.COM

Canada imports from Spain	Value	Year
Machinery, nuclear reactors, boilers	\$615.68M	2019
Pharmaceutical products	\$270.44M	2019
Mineral fuels, oils, distillation products	\$212.70M	2019
Beverages, spirits and vinegar	\$132.37M	2019
Vehicles other than railway, tramway	\$112.82M	2019
Edible fruits, nuts, peel of citrus fruit, melons	\$94.18M	2019
Iron and steel	\$90.79M	2019
Electrical, electronic equipment	\$85.32M	2019
Organic chemicals	\$85.14M	2019
Rubbers	\$79.19M	2019

Spain exports to Canada - 1989-2020 Data | 2021 Forecast (tradingeconomics.com)

Commercial agreements between EU and Canada (Canada & Denmark)

Canada imports from Denmark

Looking to the last 10 years of exports from Denmark to Canada the main highlight is that there has been a deep decrease in the commercial trade from 2011 to 2016 and the latest 4 years (2016 to 2020) are more stable. Nevertheless the exports never recover to the figures reached in 2011.

Comparing the figures from 2019 and 2020 there was an increase of exports, reaching a total exports slightly over \$550M.

Looking to the most exported items, textile, clothing or even other fashion items, like shoes or leather, those are not included in the top 10 exported items to Canada. Actually textile and clothing goods represent a quite small amount of exports to Canada, around \$5M in the latest years.



COMTRADE | TRADINGECONOMICS.COM

Denmark exports to Canada	Value	Year
Machinery, nuclear reactors, boilers	\$129.07M	2020
Optical, photo, technical, medical apparatus	\$65.72M	2020
Ships, boats, and other floating structures	\$44.93M	2020
Electrical, electronic equipment	\$43.90M	2020
Meat and edible meat offal	\$28.60M	2020
Furniture, lighting signs, prefabricated buildings	\$21.22M	2020
Dairy products, eggs, honey, edible products	\$20.33M	2020
Articles of iron or steel	\$19.59M	2020
Residues, wastes of food industry, animal fodder	\$18.79M	2020
Plastics	\$11.54M	2020

Denmark exports to Canada - 1993-2020 Data | 2021 Forecast (tradingeconomics.com)

Commercial agreements between EU and Canada (Canada & Bulgaria)

Canada imports from Bulgaria

Canada and the Republic of Bulgaria have a modest trade relationship with total trade of just over \$220M in 2020.

Bulgaria main exports to Canada are Mineral products,
Machinery and equipment, Electrical equipment,
Pharma products and Medical apparatus, Clothing and
various Chemical products.

Actually from top 10 list of exported items, there are two types of clothing items (apparel knitted and not knitted) that in total sum a little bit over \$26M of exports.

It should be highlighted the fact that over the last 5 years the level of exports to Canada increased significantly, mainly when comparing the figures from 2019 and 2020, where there was a increase of more than 100% in the exports to Canada.



Canada imports from Bulgaria	Value	Year
Ores slag and ash	\$95.72M	2020
Pharmaceutical products	\$33.23M	2020
Machinery, nuclear reactors, boilers	\$19.98M	2020
Articles of apparel, not knit or crocheted	\$15.37M	2020
Articles of apparel, knit or crocheted	\$11.85M	2020
Electrical, electronic equipment	\$8.78M	2020
Oil seed, oleagic fruits, grain, seed, fruits	\$8.00M	2020
Copper	\$5.80M	2020
Optical, photo, technical, medical apparatus	\$5.72M	2020
Toys, games, sports requisites	\$4.97M	2020

Canada imports from Bulgaria - 1989-2020 Data | 2021 Forecast (tradingeconomics.com)

Textile commercial trade agreements

Comprehensive Economic and Trade Agreement (CETA)

When the EU-Canada Comprehensive Economic and Trade Agreement (CETA) entered into force, Canada eliminated customs duties on all textiles and clothing originating in the European Union. Under the CETA, textiles and clothing that meet the agreement's rules of origin can now be exported from the EU to Canada duty-free (zero tariff). This represents a substantial business opportunity for EU textiles and clothing exporters, as Canada imposes MFN (most-favoured nation) tariffs (without CETA preferences) of up to 18% on certain clothing (mainly Items 61 and 62) and of up to 14% on some fabrics.

To benefit from preferential access to the Canadian market, exporters located in the EU must first and foremost register in the EU REX system. To get a REX number, please consult the <u>DG TAXUD</u> website.

CETA Agreement for Exports of Textiles and Apparel - quota tables for 2021

HS Classification	Product Description	Negotiated Level	Unit
61.04	Women's or girls' suits, ensembles, suit-type jackets, blazers, dresses, skirts, divided skirts, trousers, etc. (no swimwear), knitted or crocheted	535,000	Units
61.14	Garments not elsewhere specified or included, knitted or crocheted	90,000	KG
102.3	Women's or girls' overcoats, car coats, capes, cloaks, anoraks, ski- jackets and similar articles of manmade fibres, knitted or crocheted		Units
62.01	Men's or boys' overcoats car coats, capes, cloaks, anoraks (including ski-jackets), windcheaters, wind-jackets and similar articles, not knitted or crocheted, other than those of heading 6203	104,902	Units

Textile commercial trade agreements

CETA Agreement for Imports of Textiles and Apparel - quota tables for 2021

HS Classification	Product Description	Negotiated Level	Unit
61.06	Women's or girls' blouses, shirts and shirt-blouses, knitted or crocheted (excluding t-shirts and vests)	126,000	Units
61.09	T-shirts, singlets and other vests, knitted or crocheted	722,000	Units
61.1	Jerseys, pullovers, cardigans, waistcoats and similar articles, knitted or crocheted (excluding wadded waistcoats)	537,000	Units
61.14	Other garments not elsewhere specified or included, knitted or crocheted 58,000		KG
61.15	Pantyhose, tights, stockings, socks and other hosiery, including graduated compression hosiery (for example, stockings for varicose veins) and footwear without applied soles, knitted or crocheted (excluding for babies)		Pairs
6105.1	Men's or boys' shirts of cotton, knitted or crocheted (excluding nightshirts, t-shirts, singlets and other vests)		Units
62.04	Women's or girls' suits, ensembles, jackets, blazers, dresses, skirts, divided skirts, trousers, bib and brace overalls, breeches and shorts (excluding knitted or crocheted and swimwear)		Units
62.1	Garments made up of fabrics of heading 56.02, 56.03, 59.03, 59.06 or 59.07 (excluding knitted or crocheted, and babies' garments)	19,000	Units

Textile commercial trade agreements

CETA Agreement for Imports of Textiles and Apparel - quota tables for 2021

HS Classification	Product Description	Negotiated Level	Unit
62.11	Tracksuits, ski suits, swimwear and other garments, not elsewhere specified or included (excluding knitted or crocheted)	85,000	KG
62.12	Brassieres, girdles, corsets, braces, suspenders, garters and similar articles and parts thereof, of all types of textile materials, whether or not elasticated, including knitted or crocheted (excluding belts and corselets made entirely of rubber)	26,000	DZN
6202.93	Women's or girls' anoraks, windcheaters, wind jackets and similar articles, of man-made fibres (not knitted or crocheted)	16,000	Units
6203.12- 6203.49			Units
6205.2	Men's or boys' shirts of cotton, not knitted or crocheted	182,000	Units
6302.21	Bed linen, printed, of cotton, not knitted or crocheted	176,000	KG
6302.31	Bed linen (other than printed) of cotton, not knitted or crocheted	216,000	KG

Canadian Textile Industry

Established over 150 years ago, textile production is one of the oldest manufacturing sectors in Canada. The Canadian textile industry got specialized in the manufacture of yarns and fabrics from natural fibres and started to appear in small urban communities that offered labour supply and rivers capable of generate power and helping eliminating the dyeing/finishing wastewater.

With the evolution of the textile industry all over the world, Canadian manufacturing of commodity textiles, such as for household items like bed linens, towels, and curtain, and textiles used in the manufacture of apparel, has largely moved to lower labour cost countries, however the business case to manufacture these items still exists in cases of niche demand. Over the years the textile activity in Canada started to focus on high value niche markets becoming a technology-intensive and globally competitive industry.

Currently, the Canadian textile industry is located mainly in Quebec and Ontario, is heavily capital-intensive, uses natural, artificial and manmade fibres and filaments, and supplies a wide range of value-added products to over than 150 sectors in Canada and worldwide.

Main areas of Activity

Textile value chain in Canada relies on the production of natural and synthetic fibres that provide raw-materials and products to be applied in traditional textiles like clothing and home textiles, but also in non-traditional application markets, defined as technical textiles, commonly used by the transportation, health, agriculture, civil engineering, packaging, protection and construction sectors.

Fashion Industry profile in Canada

Economic overview

The textile manufacturing industry in Canada exhibited limited growth over the last decade. Further, this moderate growth in the industry has been accompanied by a contraction in the employment and the high growth of textile imports has resulted in a growing trade deficit.

According to the Canadian Encyclopedia, there are about 1085 textile-manufacturing plants in Canada, most of them located in Québec and Ontario. The Canadian clothing or apparel industry, with 2465 plants, is the largest single consumer of textiles, using about 40% of the industry's output (fibre-weight equivalent).

Figures from 2016 showed that in total, 44,500 people are employed in production and administration of manufacturing fashion goods.

Number of people employed in clothing manufacturing: 22,000

Number of people employed in footwear and leather goods manufacturing: 4,000

Number of people employed in textile manufacturing: 18,500

Around 80 percent, 34,500 employees, of these workers is employed in production. The other 10,000 is working in administration of at manufacturers of fashion goods.

The top partner countries from which Canada Imports Textiles and Clothing include China, United States, Bangladesh, Cambodia and Vietnam.

According to OEC (Observatory of Economic Complexity), **Canada** imported approximately \$15.1 billion dollars worth of **textile and clothing** in 2020, increasing the figures from the previous years.

In the same year, Canada exported \$3.23 billion dollars worth of textile and clothing, meaning that there is a huge trade deficit in the purchasing of textile and clothing goods outside the country to satisfy the needs of the consumers.

Fashion Industry profile in Canada

Production Capability Overview

- Textile and clothing industries have seen significant negative employment growth since 1990 as globalization led to increased outsourcing.
- Clothing companies have specialized in innovative, high-end products and special orders or kept high value-added activities, such as design, pattern creation and product line planning (with manufacturing outsourced).
- The textile industry includes more conventional businesses (particularly, carpets and household linen, and other innovative or speciality textiles).
- Some of the biggest textile companies in Canada are relevant players in the international market, operating mainly in the technical textiles market.

Workforce Overview

- The industry has an aging workforce. Nearly a third of workers are over age 55;
- Almost two thirds of businesses have fewer than
 10 employees;
- Less than 10% of workers in this subsector are self-employed;
- The recent employment trend in the clothing manufacturing sector was negative growth;
- In the textile sector, the employment appeared to be stabilizing. New jobs are generated in the innovative fields, which are less labour-intensive.
- The textile and textile products industry had a shortage of skilled workers, and this restricted potential growth potential in a number of companies.

Market Size - Fact Sheet

- The apparel market in Canada grew \$3.39 billion between 2016 and 2019;
- In 2020, there was a small decrease of \$0.84 billion, due to the pandemic, and the **apparel market** amounted to \$27.5 billion;
- The clothing retail sales in Canada grew almost 25 percent between 2016 and 2019. In 2019, the clothing retail sales in Canada amounted to approximately 35.3 billion canadian dollars;
- The fourth quarter of the year is usually the highest in terms of sales because of the holiday season;
- In the third quarter of 2019, sales of women's clothing and accessories amounted to approximately 4.47 billion Canadian dollars;
- In the third quarter of 2020, sales of men's clothing amounted to approximately 2.14 billion Canadian dollars;
- In the first 3 quarters of 2020, sales of children's clothing and accessories amounted to more than 1.81 billion Canadian dollars;
- In 2019, the leading apparel retailers in Canada were Winners, Walmart and The bay;
- The average expenditure on clothing and accessories has remained stabled in the past couple years at around 3,340 canadian dollars annually;
- In 2020, retail sales of clothing and clothing accessories stores amounted to around 25.89 billion Canadian dollars.
- In 2022, apparel e-commerce sales are projected to reach approximately 5.14 billion Canadian dollars.

Change in retail sales of clothing stores in Canada from 2012 to 2020



From the information in the graphic it's understandable the impact that Covid-19 had in the clothing market, namely the physical retail stores that reduced up to 31.8% the sales in 2020. Although figures from 2021 are still not available it will be interesting to see what will be the after Covid-19 sales in clothing stores, namely if consumers find safer to order apparels online rather than going outside to physical stores.

Trends in the Canadian Textile and Clothing Industry

The business climate under which the textile and clothing sector has been operating has evolved particularly in the last decade. Within manufacturing, certain industries have responded better than others to the challenge brought about by advancement in technology and increased globalization.

Most of the companies have undergone some restructuring and or rationalization in response to the changing global environment. Actually, from the last 30 years, the Canada's textile companies shifted their production for a wide variety of technical and niche applications and are completely integrated in supply chains of the many major industries in Canada.

Canadian manufacturing of commodity textiles still exists in high end cases of niche demand (e.g., high quality, or a particular performance characteristic, etc.) but it is almost insignificant nowadays.

In Canada, technical textile is evolving in a business environment supported by academic research and strong industrial knowledge which is conducive to even further growth of this sector. Advances in the global textile industry have resulted in textiles increasingly competing with other materials such as metals, wood, and plastics for applications that have traditionally been held by these other materials. Composites are a prime example of such substitution. Further, novel textiles, such as 'intelligent' textiles or those that conduct electricity, are increasingly seen in applications making it to market.

Over the recent years, further to the restructuring and evolving of the Canadian textile industry towards a more high-tech production, a new paradigm has been raising related to Sustainability. Nowadays, it's quite common to observe Canadian textile and clothing companies tacking part of sustainable fashion actions reaching social, environmental and economic challenges. Not only the companies but also their associations are promoting relevant initiatives to raise the awareness for changing behaviours in the industry but also in the consumers.

Sustainable Fashion in Canada

Textile sector in Canada is a very fragmented sector with about 1100 textile-manufacturing plants, located mostly in Québec and Ontario. The sector is declining in production and exports, due to the significant dependence of imports and the increase of competitiveness.

Canadian companies are becoming more concerned about sustainability issues, whether it be in the production process, like the materials used or industrial waste, or in the worker's conditions. This presupposes a notion of sustainability related with both environmental and social issues.

Some Canadian companies' testimonials indicate that, in the fashion industry, there have been huge improvements with respect to sustainability issues. In this sense, some companies are making efforts to address this issues, namely, increasing the usage of recycled materials, reducing waste to landfill and promoting socially responsible economic development.

At the same time, the Accounting Standards Board that is an independent body with the authority to stablish accounting standards for use by all Canadian entities outside the public sector, is creating ways to help Canadian companies maintaining high quality in their reports, by developing a framework that helps them communicate their values in their financial report.

Beyond that, Canada seems committed in addressing this issues and promoting a sustainable development of its textile industry, by creating conferences like World Ethical Apparel Roundtable (WEAR) and Eco Fashion Week. Moreover, the country also hosts many organizations and initiatives with this purposes, like Fashion Takes Action.

Looking to the case of the **FTA** Best Practices:

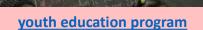
Fashion Takes Action (FTA) is a non-profit organization established in 2007 to advance sustainability in the fashion industry through education, awareness, research and collaboration.



Main Initiatives:









Sustainable Fashion Toolkit



IMPACT

Since 2007 we have made great progress

1,200+
NUMBER OF INDUSTRY STAKEHOLDERS W
HAVE WORKED WITH

34,252kg

THE AMOUNT OF TEXTILE WASTE DIVERTED THROUGH OUR CLOTHING SWAPS 22,000+

NUMBER OF STUDENTS REACHED WITH MY CLOTHES, MY WORLD

Looking to the case of **Duvaltex**:

Duvaltex has honed extensive expertise to become a leading manufacturer of sustainable textiles for over 20 years and has achieved to supply several leading industries helping to promote sustainability in textiles.

Ocean Waste CLEAN IMPACT TEXTILES™ technology

Co-created by Duvaltex and Steelcase, in partnership with SEAQUAL® initiative, the "Ocean Waste CLEAN IMPACT TEXTILES" turns marine plastic waste into recycled products with full traceability. The garments are made with post-consumer recycled polyester that include SEAQUAL® YARN made from plastic ocean waste.

Intersection is the brand for the first Ocean Waste CLEAN IMPACT TEXTILES™ collection. This collection is offered in 17 colours and was released in November 2020. For more information: <u>Steelcase (duvaltex.com)</u>

Duvaltex launches its new Ocean Waste CLEAN IMPACT TEXTILES™ technology in partnership with Steelcase.

Looking to the case of **Berry Global**:

Berry Global is a multinational company that has a hide range of products based on artificial fibres and plastic filaments. It covers products from Composites used in Packaging, Tapes and Adhesives or even Nonwoven fabric solutions that can be applied in several fields like protective equipment, automotive seats or garments for health.

At Berry Global, sustainability is not only the care for the environment, and encompasses the care for employees and community.

It means being a good partner and a corporate agent, focused on leaving the world better. The company highlights a number of sustainable successes stories and on a yearly basis release the "Annual Sustainability Report" with specific data and milestones achieved.

Some of the company targets are related to reducing 2% of water consumption yearly, reduction of 6% of the gas emissions and ensure 165.000W production/consumption of renewable energy. In 2019, the company announced their Sustainability Strategy named Impact 2025. As part of this initiative, some measures were planed to create a positive impact in the environment and society.

For more information: Sustainability (berryglobal.com)



Products:

- Optimize Design
- Sustainable Sourcing
- Expand the use of alternative materials

Performance:

- Reduce greenhouse gas emissions 25% by 2025
- Reduce landfill waste 5% per year
- Reduce energy and water consumption 1% per year
- Prevent resin loss through OCS (Operation Clean Sweep®)

Canadian sustainable clothing brands:

Maggie's Organics	Maggie's has been making sure to treat their workers fairly, and source their materials ethically. They're all made with organic cotton and have GOTS certification, to make sure that the environmental protections and social impact are as great as possible!
Preloved	Toronto based fashion brand, with the slogan "saving the planet one sweater at a time." Preloved collections consist of upcycled designs that are handmade locally, all created with a mix of reclaimed vintage and deadstock fabrics that would otherwise end up in a landfill.
<u>Encircled</u>	Versatile and minimalist clothing. Certified B Corp so the buyer can be certain what it is purchasing. Since 2012 Encirled have been making their modern basics, using Made in Canada sewing studios based Toronto, producing locally.
Kotn	Toronto based sustainable clothing brand with a Certified B Corporation, which means that they are required to consider the impact of their practices on their workers, customers, suppliers, community, and the environment.
Matt & Natt	Sustainable brand from Montreal making a range of bags, accessories, and vegan footwear. The linings in their shoes are made from 100% recycled plastic bottles, and they're starting to use recycled bicycle tires
Frank And Oak	They prioritize reducing their impact by using recycled fabrics, and responsible practices in their supply chain. They have also made big strides towards using more eco-conscious materials and production methods

Canadian sustainable clothing brands:

Peggy Sue Collection	All of their textiles are sourced from a North America based farm. The cotton used in their denim or other clothes are made from organic cotton, or upcycled denim. Their wool is all Canadian. Finally, the clothes are handmade in Toronto, Canada.
Stevie Crowne	The brand, founded by 24-year-old Stevie Crowne makes high-end sustainable clothes and makes all of their collections by recycling high-quality vintage and thrifted clothes.
<u>Iris Denim</u>	They use environmentally conscious production methods, and use biodegradable washing agents in the production process rather than toxic chemicals.
Gaia & Dubos	Clothes and accessories are entirely made with eco-friendly materials and handcrafted in Quebec, Canada under ethical working conditions.
<u>Uniform Handmade</u>	Sustainable slow fashion pieces hand made by the designer in Fraser Valley, BC with natural fibers such as linen and silk.
Norden Project	Outerwear for men and women made with recycled plastics. B corp. Based in Montreal.
Alice + Whittles	Footwear with a focus on boots. Traceable, sustainable and vegan.

Canadian sustainable fashion Retailers:

Victoire Boutique	Online and brick-and-mortar retailer stocking Canadian designers
One of a Few	Vancouver-based retailer stocking many small-batch and locally-made clothing, footwear, and accessories
<u>H Project</u>	Luxury retailer Holt Renfrew's curated collection of socially conscious clothing and products.
<u>Ease</u>	Modern slow fashion; stocks quirky indie designers.
ad hoc	Clothing boutique based in penticton, BC that carries clothing, shoes & accessories created by independent designers & artisans.
ARC Apparel	online retailer based in BC stocking chic conscious fashion brands and accessories.
INLAND	In partnership with Hudson's Bay, Inland's new online shop curates sustainable pieces from Canadian designers.

Covid-19 Impact in Canada

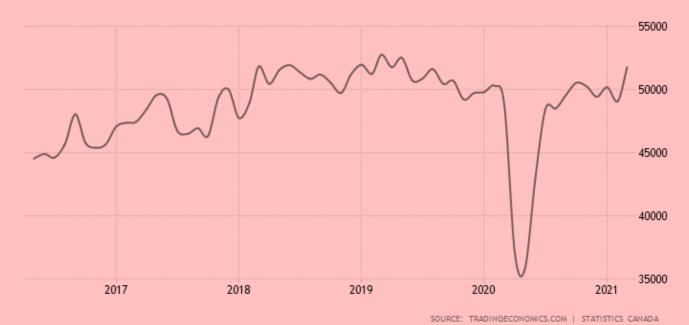
Global Analysis to the Covid-19 Effect in the Canadian Economy

Canada was not the most affected country in the world by COVID-19 pandemic, but it still suffered some economic impacts. First, in 2020, the GDP decreased by 5.4% and the domestic demand went down 4.5%. The unemployment rate grew 3.87% between 2019 and 2020, and it is getting down in 2021, being "Accommodation and food services" the sector with the highest unemployment rate with 18,8%, following "Information, culture and recreation" with 12.9% and "Forestry, fishing, mining, quarrying, oil and gas" with 10.7%.

Moreover, Canada total exports decreased by 12.6% 2019 and 2020, with the highest trade share for USA, following China and United Kingdom. On the other hand, Canada total imports decreased by 10.5% in the same period. This means that, like global trade, Canadian trade felt also a big impact from the pandemic.

After all, despite the negative impacts of COVID-19 in Canada's economy, it is expected that it will grow sufficiently to compensate those impacts. Beyond that, if the vaccine distribution goes on as it is planned, it is likely that Canadian economy will grow at least 4.5% in the year 2022.





Covid-19 Impact in Canada

In order to mitigate part of the economic impact created by COVID-19 in the Canadian economy, according to World Trade Organization (WTO), the G20 countries including Canada have inflicted as many as 59 trade-restrictive measures such as import bans and stricter customs procedures during the COVID-19 crisis.

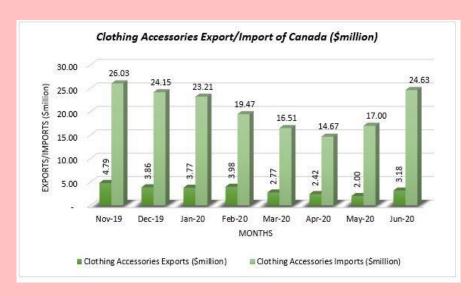
Some of those measure positively affected the fashion industry protecting the imports of goods that the country was able to produce internally.

Fashion Industry and COVID-19 Impact

Canada has imported \$870.24 million worth of apparels in July 2020 and \$565.33 million worth in May 2020. But the country's RMG (Ready made garments) imports dropped by 28.63% to \$4.23 billion on year to date basis. This was mainly due to the covid-19 impact in the economy that dramatically reduced the consumption behaviour.

Looking to the internal market and the impact of Covid-19, clothing companies that were specialized in innovative and technical products were able to maintain their production capability although in some cases there was the need to reset the type of products produced to address the market needs (e.g. TNT products for hospital care).

Concerning textile companies, some of them were able to supply local clothing companies with specialized garments for medical applications, although during the Covid-19 year it was observed a lack of raw materials to feed the production demands.

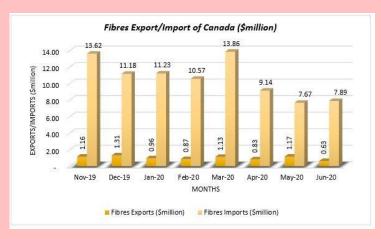


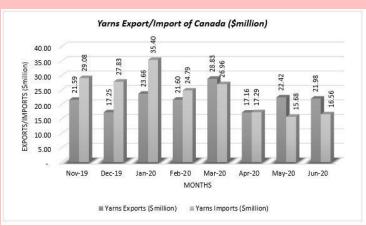
Source: TexPro

Covid-19 Impact in Canada

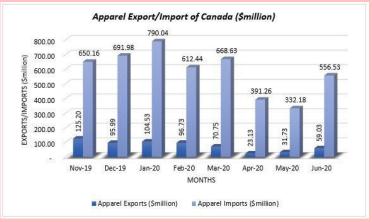
China has reported the RMG (Ready made garments) shipment growth of 93.96% in July 2020 over June 2020. Shipments by India have moved up by 33.87% in July 2020 over June 2020 to \$16.67 million. However, Canada fell by around 50% in its yearly shipment in July '20 and by over 39% in the year to date. In year to date basis, Bangladesh faced approximately 41% loss from 2019 export level and 80.52% rise in July 2020 over June 2020 to \$84.88 million.

But the Canadian imports from Bangladesh declined by 46.63% in April this year as confirmed by the official custom statistics of Canada. Apparel imports of Canada from Bangladesh also showed a drop of 33.17% to \$68.92 million in April 2021 from \$103.12 million in April last year (2020).









Source: TexPro



Impact of lockdown and recovery

As most of the developed countries, when the first cases of COVID-19 started to appear, the Canadian Government decided, on March 2020, to close all the non-essential activities, namely part of the textile and clothing industry.

Employment levels dramatically reduced as a result. According to data from the *Survey of Employment*, Payrolls and Hours (SEPH), employment dropped by 44.2% in April on a year-over-year basis.

Nonetheless, many textile businesses revamped their production to manufacture basic necessities like masks, face shields, scrub tops, chest guards. The manufacturing sector as a whole was able to reopen in May, initially with restrictions, then fully by June 2020. The recovery has been moderate in the textile and clothing industry. Data from July 2020 indicated that employment was 14.3% below the July 2019 level, with a bigger decrease in the clothing industry.

In parallel, textile and clothing Canadian export firms that concentrate on high-end products were faced with lower demand due to global economic distresses.

Nowadays, manufacturers of clothing for the domestic market are facing many challenges because they rely on a largely foreign supply chain and a network of retailers who have their own problems related to the health crisis or even bankruptcy. Businesses associated with more conventional textiles intended for the domestic market are facing also similar problems.

The more high-tech and innovative textile businesses were able to operate almost at full capacity to supply fabric for medical protection gear manufacturers. Some breaks in the supply chain are creating also production problems, something that is preventing the fast recovery of the textile and clothing business in Canada after the biggest shock waves felt by the COVID-19 during March20 and December2020.

Covid-19 Impact in Canada

Medium-term outlook for the Fashion Industry in Canada after Covid-19

Looking for the Canadian Fashion Industry future perspectives, there is still a lot of uncertainties mainly due to the fact that the coronavirus pandemic has had a major impact on fashion brands worldwide reflected also in the consumption of fashion goods in a global scale. Further, this pandemic crisis revealed some fragilities of the Canadian fashion industry. The following topics show a snapshot of the mid term challenges that this industry will face for full recovery:

- The fashion industry was already facing slow growth prospects prior to the covid-19 crisis;
- Some businesses in the textiles and clothing sector, particularly those that were already in a precarious financial position, or those that were heavily impacted by bankruptcies in the retail trade, will probably not recover from the crisis;
- Businesses that invest in productivity enhancement and businesses that innovate are the ones in a better position to navigate the post-covid-19 period;
- The pandemic has revealed the risk of relying on imports to fill demand for basic medical equipment;
- Many businesses have received orders from federal and provincial governments to produce medical protective gear and components, which should enable them to maintain operations over the coming months. These business have made investments that will enable them to manufacture these new products;
- Recruitment challenges are still very much an issue, particularly for sewing-machine operators, which could limit production continuity in the medium term.

Trade Fairs and Relevant Stakeholders

Some of the biggest Textile and Clothing players in Canada

Autoliv Canada

Autoliv is the world's largest automotive safety supplier, with sales to Innotex Protection all major car manufacturers in the world.

Calko Canada

Calko Group is a vertically integrated manufacturer of high quality products that include industrial protective wear, narrow fabrics and trims, and first aid and medical supplies.

Cansew Inc

Canadian vertically-integrated manufacturer and distributor of industrial sewing threads. Was established in 1924, almost with 100 vears it is one of the oldest textile industries from Canada.

E.I. DuPont Canada

This is the example of a multinational company created more than 200 years, that since the yearly years brought science and engineering to the global marketplace through innovative products, materials and services.

Duvaltex is a textile innovation company with four business units: office, hospitality, education, and healthcare markets. All four business units now form the biggest contract textile manufacturer in North America.

Fabrene Inc. - A Barry Global Company

Fabrene provides fabric and film protective solutions for a variety of Health-care, Hygiene and Construction sectors. Fabrene sells globally across multiple industrial end use segments.

FellFab Ltd.

Canadian company that engineers and manufactures innovative products from technical and specialized textiles.

Gildan Activewear Inc

Gildan Activewear Inc. is a Canadian manufacturer of branded clothing, including undecorated blank activewear such as t-shirts, sport shirts and fleeces, which are subsequently decorated by screen printing companies with designs and logos

Hudson's Bay

The Hudson's Bay Company is a Canadian retail business group, that operates retail stores in Canada and the United States.

Textile and clothing producers of firefights garments, with a heavily innovation focus that lead to be chosen by several hundred fire departments in North America, including the military as well.

Lincoln Fabrics

Leading weavers of specialty fabrics for high-performance and life-critical applications. Established in 1955, the company produces fabrics with fire resistant, ballistic and camouflage characteristics for Canadian and U.S. markets.

Monterey Textiles Inc.

Monterey Textiles is a diversified vertical mill whose employees are dedicated to supply quality-finished fabrics to the military and domestic clients.

MIP Inc.

MIP is a global leader in the reusable healthcare textile industry. providing a broad range of products and services to the healthcare industry in North America, Europe and around the world.

Oratex Inc.

Oratex Inc. is a North American specialized fabric manufacturer focused on Circular Knit Stretch fabrics and Fire Retardant fabrics

Peerless Garments

Peerless Garments manufactures leather jackets and cold/wet weather outerwear designed to keep wearers warm, dry and comfortable in the worst conditions.

Stedfast Inc.

Leader in manufacturing value-added laminated and coated textiles to the precise specification requirements of industrial, medical, protective and military applications, resistance to chemical and biological weapons.

Trade Fairs and Relevant Stakeholders

Main Textile Associations, Labs and Research Centers

CTT Group	CTT Group is a technology transfer center specialized in the research, development and testing of technical textiles, advanced textile-based materials and geosynthetics. With more than 35 years of R & D experience, companies rely on CTT Group for innovative ideas, R & D support, product development, reliable testing, expert analysis and sound advice.
<u>Down Association of Canada</u>	Non-profit organization committed to helping consumers buy genuine down products with confidence. Since 1976, the association has been the trusted source for information and the only independent group in Canada serving to educate consumers, support the development of the highest quality standards and promote ethical harvesting practices.
The Canadian Textile Industries Association (CTIA)	Established in 2009, CTIA is a national non-profit association focused on promoting Canada's textile sector. CTIA fosters collaboration, innovation and communication among its members, providing up-to-date, reliable information about issues of interest and concern to the industry.
The Institute of Textile Science	The Institute of Textile Science is a non-profit Canadian organization incorporated in 1956. The organization's major objective is to encourage dissemination and interchange of knowledge concerning textile science through the organization of symposia.
TechniTextile Québec	TechniTextile Québec, is a cluster created in 2017, that brings together industrial, technical, scientific and government stakeholders involved in the value chain of technical textile materials in Québec.
<u>Weave</u>	Textile Portal that allows to find Canadian manufacturing companies and their expertise.
mmode The Metropolitan Fashion Cluster	Non-profit organization that contributes to the growth, the outreach and the competitiveness of Quebec's fashion industry.

34

Trade Fairs and Relevant Stakeholders

Main Fashion Fairs in Canada

Exhibition Name	Related Industries	Venue	Date
THE NATIONAL WOMEN'S SHOW (nationalwomenshow.com)	Fashion; Beauty & Personal Care; Home Decoration, Home & Office Design.	Toronto; Ottawa; Montréal; Québec	October and November
FESTIVAL MODE & DESIGN MONTREAL http://festivalmodedesign.com	Fashion – Clothing; Decoration, Home & Office Design; Furniture; Lighting	Montréal, Place des Festivals	August
MODE ACCESSORIES www.mode-accessories.com	Women's Fashion	The International Centre, Toronto	January and August
LLHA SHOW Home (Ilha.ca)	Leather & Fur Fashion - Clothing	The International Centre, Toronto	April
LE SALON NATIONAL DE LA FEMME (nationalwomenshow.com)	Women's Fashion	Centre de Foires – ExpoCité, Québec	November
VANCOUVER FASHION WEEK Home - VFW (vanfashionweek.com)	Fashion – Clothing	Vancouver - Chinese Cultural Centre	October

Gap Value Chain Analysis

Canadian textile value chain starts with the petrochemical industry, producing raw materials for synthetic fibres, which are a very important activity in the Canadian textile industry. Further, it is possible to find also some natural fibre producers such as cotton and wool.

Then, the next phase of the value chain are the weavers and knitters that produce fabrics to feed the production of the textile products. Next in line, are the textile dyers and finishers of fabrics. To wrap up the manufacturers' value chain, it is possible to find sewing companies that work for several fields of application, not only the traditional clothing but mainly protective equipment manufacturers and automotive textile manufacturers.

In the end, there is the distribution and the commercialization of these products, done by the wholesale distributors and the retailers.

Along the value chain, there is a vast number of business and activities that support and complement the process up to the final product. Among them, we can identify Design companies, Insurance companies, Banks, Marketing specialists, Accountants and Consultants and professionals from other services.

Just like the general textile value chain, despite the efforts conducted by many sustainable fashion brands, from the government, from R&D institutions and many non-governmental organizations, the Canadian textile value chain share the lack of circularity in their products, related to residues generated in the production line or even from garments after the end of life.

This means that the textile value chain follows the conventional structure, where there aren't significant alternatives for channelling the used products to be recycled, reused or properly disposed of.

The creation of a circular value chain is an imperative goal for the industry and can constitute a valuable marketing tool for the Canadian textile industry. Beyond that, a lot of investment must be done. In this sense, it is a priority to incentivize new innovative models that increase textile utilization and reduce consumption, provide education, skills and support for scaling of circular and sustainable business further to change consumers attitudes through marketing campaigns that can raise awareness for the importance of Sustainable Fashion.



Textile Exports (2019) Total: \$3.23B

Non-Retail Synthetic Filament Yarn 7.27%	Non-Knit Men's Suits	Techni Use Textile		Knit Swe	aters		sed loth	ing
Non-Knit Men's Coats	6.02%	5.19	%	4.5	66%	4	.08	8%
6.5%	Non-Knit Active Wear	Knit Women's Suits	Narrov Wover		Light Rubberize Knitted Fa		Tuff Car	ted pets
Non-Knit Women's Coats	3.54%	2.59%		3%	2.37	%	1.9	95%
6.29%	Non-woven Textiles 3.47%	Felt or Coated Fabric Garments 1.66%	Awmings, Tents					Non
Other Cloth Articles	Non-Knit		Packing 0.69%					
6.13%	Women's Suits 3.31%							
Plastic Coated Textile Fabric	Synthetic Filament Yarn Woven Fabric							
6.04%	3.06%							

Textile Imports (2019) Total: \$15.1B

Knit Sweaters 9.79%	Knit Women's Suits 5.05%	Tufted Carpets 3.51%	L	louse inens	Tex	n- ven tiles	Wor	n-Knit men's ts	Other Cloth Articles 2.62%
	Non-Knit Men's Coats	Knit Socks and Hosiery		Other Knit Garments				Knit Bobies'	Knit Men's Shirts
Non-Knit	2.59%	2.15%		1.42%	1.22	2% 1			
Women's Suits 7.87%	Felt or Coated Fabric Garments 2.36%	Other Women's Undergarments 1.96%		Plestic Coated Textile		Window	- Knit Glov 0.96	es Wov Rugs	en I
Non-Knit Men's Suits	Knit Women's Undergarments 2.32%	Knit Men's Suits		Unprocessed. 0.78%					
5.98%	Non-Knit Active Wear	Non-Knik Women's Shir		Blankets 0.78%					
	2.26%								
Knit T-shirts				Knit Active 0.74%					
5.25%	2.23%	Synthetic Filament Yarr	1	Packing Sags 0.71%		+	Ŧ		

As it can be observed from the overall amounts of textile exports and imports, there is a great demand and dependency from the Canadian textile and clothing industry in relation to the external market. Most of the imports are related to manufactured clothes coming from Asian Countries, namely China and Bangladesh. This is a common trend in all the developed countries, where the lack of capability to compete and produce low value fashion items locally allowed Asian countries to become the major world supplier today, producing more than 32 percent of the world's clothing exports.

From the Export side, it can be observed that most of the goods exported from Canada are related to technical textiles, in a vast majority having USA as the landing market. In the Imports side, the main observation is that there is a big diversity of manufactured garments (suits, t-shirts, women suits, sweaters, etc.) and with a small expression in the overall volume, some Home Textiles and raw materials that are used for production of technical textiles.



Footwear Exports (2019) Total: \$324M

Leather Footwear	Waterproof Footwear	Other Headwear
24.3%	12.5%	8.71%
Textile Footwear	Rubber Footwear	Fake Footwear Hair
15.7%	8.52%	
Knitted Hats	Footwear Parts	4.66% 3.65%
12.8%	5.64%	0.83% 0.67% Umbrellas 0.72%

Footwear Imports (2019)
Total: \$3.06B



Following the same trend as the textile and clothing commercial trade, the footwear industry in Canada shows a great demand and dependency from the external market. Most of the imports are related to manufactured footwear coming from Asian Countries. There global stratification of imported items is mainly focused in "Leather footwear" and "Textile footwear" (more than 50%). A special remark for the demand of "Knitted Hats" and "other Headwear" that can be highlighted as an opportunity for some niche markets in Europe, since there is a great tradition in some of the European countries related to the production of high quality Hats. From the Export side, it can be observed that most of the goods exported from Canada are similar to the ones that are imported, with a relevant difference in the "Waterproof Footwear", again, technical footwear with high added value market.

Market Needs for Sustainable and Circular Textile Products

The circular economy is a bold vision for tomorrow — that starts today — empowering leaders across industries and communities to increase resilience, mitigate climate risk and unlock new business opportunities. And there's no denying it: sustainability is becoming increasingly important. More and more people are trying to reduce their impact on the planet and, as a result, a growing number of ethical and sustainable fashion brands are arising to both meet the demand and help change the fashion industry for the better.

Overall, there is a big (and increasing) conscience in the Canadians for the need to promote new ways of recycling, reuse, reduce, repair and repurpose all kinds of goods. And the fashion industry is quite a good example of several ongoing initiatives that are trying to engage with the main stakeholders providing informative programs and creating networking opportunities for those that would like to be practitioners and help to accelerate the circular economy uptake in the fashion industry.

Examples like the FTA (Fashion Takes Action) that was already exposed, but few others like GreenBiz Initiative or MyGreenCloset are the face of a movement that is no longer the wish of some but the need from a majority of society.

"Sustainable fashion that not only makes you look good, but feel good too!"

But what is preventing companies in Canada to adopt a more sustainable and circular approach?

Actually, from the market analysis that was made during this study, **Canadian fashion companies are fairly advance in the adoption** of sustainable practices and promotion of circularity among the value chain.

Several Canadian fashion brands are promoting the use of recycling materials, it is fairly adopted the term "Low Waste Initiative" or the "Give back" to charities or non-profit organizations, and also the creation of networks where companies can "offer" their unused raw materials for others to recycle and reproduce.

In the overall value chain it seems to be missing companies that are fully dedicated to valorise the waste coming from the textile and clothing production processes, namely in terms of fibres recycling. Further, it seems to be missed the important role that R&D activities might have to find alternative approaches to the circularity of textile and clothing products in the end of life.

Market Needs for Sustainable and Circular Textile Products

Several brands and retailers from the Fashion Industry in Canada have accepted the challenge to produce greener, more sustainable and resourceful products, but they lack local certified producers of eco raw materials to produce sustainable garments, meaning that most of the sustainable textile products are coming from external countries. Actually the Canadian textile industry is mainly dedicated to technical textiles and those are quite advance with a fully integrated value chain.

On the Circularity perspective, currently the textiles production system operates in a linear fashion using mostly non-renewable resources that are often used for a short time (fast fashion), after which the materials are mostly sent to landfill or incinerated.

What measures the "new sustainable fashion" framework imply?

From the analysis to the Canadian fashion industry, it seems to be of urgency to create a comprehensive **Circularity Strategy** for all the Canadian fashion industry that can boost textile sorting, re-use and recycling.

This can be pushed by public policies, namely through tax policies and other means, encouraging industrial applications and regulatory measures such as extended producer responsibility.

Nowadays some R&D institutions are attempting to put wastefulness and pollution in the apparel industry out of fashion, right at the source: They are using live organisms to grow pieces of biodegradable textiles, creating environmentally friendly materials in the laboratory—and are even producing some near-complete items without the need for factory assembly. More examples like this are needed. The **research to find alternative ways to promote the valorisation of textiles** will play a key element in the Canadian fashion Industry.

Finally, it would be important to foster product and process certification using international standards for increased transparency. The aim of the standard is to define world-wide recognised requirements that ensure the certified status of textiles. In the Canadian particular case, it is lacking local companies with eco-labels for textiles that can contribute for the global sustainable development of the fashion value chain.

Consumer Behaviour and Expectations

The significant changes which have occurred in the competitive scenario in which fashion companies operate, combined with deep transformation in the lifestyles of final consumers, translate into the need to redefine the fashion business models.

In a framework dominated by a global increase of life age, the fashion industry has the opportunity and also the need to serve both young and old generations at the same time. This reality translates into the need to diversify both business strategies and marketing approaches in order to satisfy the needs of aged consumers and millennial ones.

Further, due to the increase of economic uncertainty, the **level** of spending for fashion products is declining and, at the same time, the demand for customized and personalized fashion, at lower prices, is expected to grow in the future years.

Another important change in the competitive scenario is the growing digitalization of the economy. The fashion industry is more and more interconnected with the digital world. Digital platforms and digital marketing strategies are becoming prevalent in the fashion market and many new brands have emerged with the development of e-commerce.

Sustainability has recently become an important new driver in **consumers' purchasing decisions**. Phenomena such as the global population growth, climate change, and land and water scarcity have intensified in recent years and sustainability pressures related both to product and production processes became more relevant in this industry.

Consumers are expecting transparency more and more across the entire value chain; they want to have more information about both the provenience of goods and the quality of materials used. Brands are responding to these challenges which have arisen from the demand side by trying to be more transparent, in many cases specifying the costs of materials, the mark-up, the costs of labour, transport, duties, and so on.

LCA (Life Cycle Assessment) seems to be a powerful tool to help measuring the impact of a fashion product and this could be a policy to follow over the next years: make the LCA mandatory for all fashion brands! With the help of recent technologies like Artificial Intelligence and Blockchain it would be possible to track all the supply chain of a given product and estimate the carbon footprint providing accurate and relevant data to the consumer. Some initiatives are already in place (e.g. Intertek Instant LCA Textile - Canada/US - Intertek Launches Instant LCA Textile™ Web

Portal).

Legislation and Regulation

Government policy and regulations provide the enabling framework for the circular economy to flourish. However, there is no standardized approach for creating a Canadian Circular Economy in Fashion, instead, there are some regional policies applied in different states and for different sectors.

Recently, during 2015, seven influential Vancouver fashion businesses were engaged to help define the context, barriers, and local policy needs for stimulating the shift to a circular economy in Vancouver's fashion and textiles sector.

In a snapshot the following proposals were made to the local and regional governments in order to catalyse the shift to a circular economy in Vancouver's fashion and textiles sector:

- Implementing an Extended Producer Responsibility (EPR) standard for textiles;
- 2. Implementing a waste ban for textiles;
- Encouraging research and development for textile recycling;
- 4. Manage or facilitate textile collection programs
- Providing and encouraging the uptake of recycling infrastructure

- 6. Building education and awareness about textile waste
- 7. Implementing pilot take-back programs
- 8. Educating fashion designers about the full lifecycle impacts of clothing
- 9. Providing financial incentives and green credits for local businesses that reduce waste and are sustainable
- 10. Enabling local manufacturing and encourage regional material loops

Overall, all those proposals above made by the Vancouver Fashion Companies are quite relevant but most of them don't have the force of law. Actually, public policies should have a combined role in the pressure that they make for companies to adopt more and better sustainable actions: From one side, circular economy public regulations should help to shape companies behaviours, but simultaneously, public authorities should create the context to encourage companies to adopt circular economy actions, by implementing, for instance, tax benefits for the ones that have ecological footprints, implement re-use or recycling measures.

In January 2018, it was launched in Canada the policy "Getting to a Circular Economy: A Primer for Canadian Policymakers". This policy was an introduction to the circular economy concepts and landscape, written for both government and business audiences. The policy brief provides a foundation in the key concepts of the circular economy, including a look at how these fit with the Clean Growth model that is the focus of present Canadian efforts to shift to a more environmentally sustainable economy.



Regulations and Standards Applied for Textile and Clothing

Textile Labelling Act

The TLA (Textile Labelling Act) it's the most relevant regulatory statute requiring that textile articles available in the market have accurate labelling information helping consumers to be informed about their purchasing decisions.

The Labelling Act prohibits the making of false or misleading representations and sets out specifications for mandatory label information such as the generic name of each fibre present and the dealer's full name and postal address or a identification number.

It obligates the description on what percentage (by weight) are each of the fibres used in the article and the fibres should be listed in order showing the highest percentage first. It implies also the identification of the company by or for whom the consumer textile article was manufactured or made available in the market. The country of origin where your product was made needs to also be included on your label.

The Act allows designated inspectors to: enter any place at any reasonable time; examine textile fibre products, open packages, examine and make copies of documents or papers; and seize products, labelling, packaging or advertising material which do not conform with the Act and Regulations.

Main Prohibitions:

- Prohibits a dealer from selling, importing or advertising a prescribed consumer textile article unless the article has applied to a label containing information about the textile fibre content of the article.
- Prohibits the sale, importation or advertisement of a consumer textile article that has a label applied to it that contains any false or misleading representation
- Provides guidance on what types of expressions, words, figures, depictions, descriptions or symbols may be considered to be false or misleading representations.



Regulations and Standards Applied for Textile and Clothing (cont.)

Canada Consumer Product Safety Act (CCPSA)

Textile products manufactured, imported, advertised or sold in Canada are subject to the **Canada Consumer Product Safety Act** (CCPSA).

Under CCPSA, consumer products that are of danger to human health or safety are not allowed to be manufactured, imported into Canada, advertised or sold in Canada.

The CCPSA defines the concept of "danger to human health or safety." Here the key elements are:

- 1. Unreasonable hazard, whether existing or potential;
- 2. The hazards are posed in, or as a result of, the products' normal or foreseeable use; and
- 3. The hazard may reasonably be expected to have an acute or chronic adverse effect on health, either immediately or longer-term, and includes injury and death

To have a better idea which chemical substances that may pose hazards, you should ensure your products do not have any chemical substances that are banned according to the <u>Prohibition of Certain Toxic Substances Regulations</u>, which is regulated under the Canadian Environmental Protection Act, 1999 (CEPA).

Although lab testing is not always mandatory, Health Canada has the authority under CCPSA to order manufacturers and importers at any time to conduct a test on the product to verify compliance with the Act or regulations.

Regulations and Standards Applied for Textile and Clothing (cont.)

Textile Flammability Regulations (under CCPSA)

When importing textile products to Canada, the textile flammability regulations must be followed.

This regulation is made under CCPSA, which specifies the flammability requirement for general textile products such as:

- Fabric
- Drapery
- Outerwear
- Daywear

These products, when tested in accordance with the Canadian General Standards Board (CGSB) standard CAN/CGSB 4.2 No. 27.5 must have a flame spread time of one of the following:

- Greater than 3.5 seconds where the products do not have a raised fibre surface; or
- Greater than 4 seconds or less, where the products have a raised fibre surface and exhibit ignition or fusion of their base fibre

Separate flammability requirement applies to children's sleepwear covered under the Children Sleepwear Regulation

Legislation and Regulation

If we want business to comply with the relevant social and environmental issues, its important to create **Standards & Legislation**, which will benefit the global society.

Looking to the International standards used by the Canadian fashion industry, we have the following data:

OEKO-TEX Standards	Number of Canadian Companies certified
STANDARD 100 by OEKO-TEX	17
LEATHER STANDARD by OEKO-TEX	0
STeP by OEKO-TEX	0
ECOPASSPORT by OEKO-TEX	0
MADE IN GREEN by OEKO-TEX	1
DETOX TO ZERO by OEKO-TEX	0

GLOBAL ORGANIC TEXTILE	Number of Canadian
STANDARD (GOTS)	Companies certified
Certified Suppliers	12

Textile Exchange certifications	Number of Canadian Companies certified
GRS Certified	2
OCS Certified	0
RCS Certified	1
RDS Certified	12
RWS/RMS Certified	0

The main conclusion from the data in the charts is that there is a quite low number of Canadian companies with eco-labels (45 labels out of 3540 T&C companies), what **can lead to assume** that most of the eco-certified products (garments or clothes) that are sold in Canada are provided by external companies, since there are a huge amount of eco-certified products and brands in the market.

Further, its possible to find several other smaller Sustainable certification initiatives and Eco Labels applied in Fashion:



SMART Certified Constitute.

www.mts.sustainablep roducts.com The bluesign® standard brings together the entire textile manufacturing chain to jointly reduce the ecological footprint of a responsibly acting textile industry. Instead of focusing on finished product testing, the bluesign® standard analyzes all input streams – from raw materials to chemical components, to resources – with a sophisticated "Input Stream Management" process.

Sustainable Materials Rating Technology or SMaRT, is the consensus sustainable products standard and label for building products, fabric, apparel, textile & flooring, covering over 80% of the world's products with environmental, social, & economic criteria

Check all EcoLabels (generic) approved in Canada: All ecolabels in Canada | Ecolabel Index

Strategy and recommendations for market approach

From the greenwashing of fashion products to the lack of consumer awareness, and to the challenges smaller brands face trying to get eco-certified, sustainable fashion has a lot of bumps on the road to becoming the norm.

Certification:

Consumers are being told to look for trusted eco-logos on labels such as <u>GOTS</u> and <u>Fair Trade Certified (please find in this link the clothing brands with FTC label).</u>

Nevertheless, it tends to be the bigger brands that carry these certifications. So the issue here is not whether or not these are legitimate claims, but rather that these are the same brands that also mass-produce "fast fashion" and disposable clothing.

Therefore, the public policies should help those smaller brands to get access to certified eco-friendly labels, creating a fully adoption of green certification used by smaller businesses and independent designers.

Fast Fashion:

Fast fashion brands must be equally transparent about what they are doing and be the first ones to find alternative measures to promote circularity along the fashion value chain. Big brands need to be clear in how they are communicating their initiatives. Big brands should be the first ones to donate part of their profits to research and develop new and alternative ways to recycle fashion products in the end of life. Further, big international brands can be the engine to kick-off the awareness for sustainable fashion globally.

Consumer habits and awareness:

Consumer awareness is growing, yet only a small percentage of shoppers truly understand the benefits of sustainable fashion enough to change the way they purchase their clothes. Consumer demand is the driving force behind the methods industries practice in order to satisfy our requirements — Consumers should demand that sustainable fashion is a priority and the industry will follow.

Strategy and recommendations for market approach

From the analysis made to the Canadian market, it is clear the relevant number of initiatives that promote sustainable fashion and circularity. Nevertheless, in the light of the complex fashion value chain, it's important to have a comprehensive strategy for all the fashion (textile, clothing and footwear) industry and other relevant stakeholders (that might be involved in the process or might even reuse the waste generated) to respond to this major challenge that is the circularity.

What could be the opportunities for external partners concerning the "sustainable fashion" framework in Canada?

The main imports from the fashion Industry in Canada come from low added value products, and European companies wouldn't like to battle in that arena. Even so, although there is a huge social conscience for the sustainable fashion, there is a lack of certified products and knowledge from the local industry on how to promote circularity. These two aspects might be the biggest opportunities for the external entities to enter in the Canadian market.

From the Fashion industry side:

- Provide consultancy about eco-design measures to ensure that textile products are fit for circularity;
- Ensure the uptake of secondary raw materials generated by the local industry (this would need to be local investment in Canadian ground);
- Supply Mono-Materials (single fibres);
- Supply textile raw materials with certified eco-labels.

From the Fashion Associations and Research Organizations:

- Create cooperation agreements with local fashion associations to raise awareness in the retail and private consumers to choose sustainable fashion, providing best practices used by EU companies;
- Create cooperation agreements to implement a comprehensive Circularity Strategy for all the fashion industry and promote Extended Producer Responsibility;
- Research and Develop alternative solutions for recycling different accessories, colours and fibres from post-consumer textile waste.



USA is the world's fourth-largest country by land area and is the world's top economy, representing 24,1% of the world's GDP.

Governance

The USA is a federal constitutional democratic republic, composed by 48 states and 2 federal districts. Has a presidential government system and the legislative power is assigned to Congress, consisting in two chambers: The House of the Representatives and the Senate. Has one of the highest economic freedom index of the world. Labour laws vary by jurisdiction. USA is perceived as one of the least corrupt countries in the world.

Taxes

The top individual income tax rate is 37 percent, and the top corporate tax rate is 21 percent. Other taxes include property, capital gains, dividends, imports, estates and gifts taxes. The overall tax burden equals 29.8 percent of total domestic income. Government spending has amounted to 44 percent of total output (GDP) in the last year, and budget deficits have averaged 3.6 percent of GDP, with an increase to 17,9 percent because of COVID-19 impact. Public debt is equivalent to 129 percent of GDP.

Society

The United States are known as the most powerful country in the world. Has the largest immigrant community, with more than 40 million people, representing 13,7% of the US population. The national language is the American English, but more than 13 percent of the population also speaks Spanish. The country has one of the highest income inequality index and an average crime rate.

Market

The US is one of the most important trading nation, with it's economy relying largely in the commerce of goods and services. US has Free Trade Agreements with 20 countries and 3 Trade Preference Programs with countries all-over the world. US main trading partners are Canada and Mexico, but US exports to more than 200 countries, standing out China, Japan and Germany,. US exports are mostly related with electronic products, chemicals, energy and related products, agricultural products, metals and minerals, machinery and textile products. US is one of the biggest investors in the world and the main investments are in Europe, Asia and Pacific, Canada and Latin America, investing in sectors like Agriculture, Mining, Manufacturing, Energy, Finance and Insurance, among others. The US have a complex system of baking and financial services, regulated at both federal and state level.

QUICK FACTS:

- Population:
 - 328.2 million
- GDP (PPP):
 - \$21.4 trillion
 - 2.3% growth
 - 2.4% 5-year compound annual growth
 - \$65,118 per capita
- Unemployment:
 - 3.7%
- Inflation (CPI):
 - 2.8%
- FDI Inflow:
 - \$246.22 billion

QuickFacts United States (www.census.gov)
United States Quick Facts (www.heritage.org)

USA: A general economic overview

USA's Economy Is Divided Into Three Broad Categories

- **Service industry** is the largest contributor to GDP, with Finance, Insurance, Real Estate, Rental and Leasing accounting for 22.3 percent of the GDP. There was also a significant growth in information industry, healthcare, educational services and social assistance. Furthermore, the majority of the American workers are employed in the sector.
- Manufacturing industry: US manufacturing is the mechanical, physical or chemical transformation of raw materials into new
 products, including plants, factories and mills, and also including small businesses like bakeries, candy stores and custom tailors.
 Manufacturing accounts for 11 percent of the GDP and manufactured goods accounted for 82 percent of exported merchandise.
 This sector employs more than 11 million workers.

Agriculture industry covers a variety of segments, like farm business, food manufacturing and food services, and broader activities such as mining, utilities and construction, accounting for more than 8 percent of the GDP. Moreover, Agriculture and its related industries are the base for 21 million full-time and part-time jobs, which means this sector provide 10.9 percent of US

employment.

Top 10 Import Countries: 2020			
Country	Import USD\$		
Canada	255 billion US\$		
Mexico	212 billion US\$		
China	124 billion US\$		
Japan	64 billion US\$		
United Kingdom	58 billion US\$		
Germany	57 billion US\$		
Korea	51 billion US\$		
Netherlands	45 billion US\$		
Brazil	35 billion US\$		
Other, Asia	30 billion US\$		

Top 10 Export Countries: 2020				
Country Import USD\$				
China	457 billion US\$			
Mexico	328 billion US\$			
Canada	276 billion US\$			
Japan	122 billion US\$			
Germany	117 billion US\$			
Vietnam	83 billion US\$			
Korea	78 billion US\$			
Switzerland	75 billion US\$			
Ireland	65 billion US\$			
Other, Asia	62 billion US\$			

Commercial agreements between EU and USA

The US and the European Union share an old and mature political and commercial relation, that has been consolidated during the last decades.

Currently, there is no trade agreements between them, but they enjoy the largest commercial and investment bilateral relation, and the most integrated economic relation. In this sense, the US investment in EU territory is three times superior than US investment in all Asia.

On the other hand, the EU investment in US territory is eight times the european investment in India and China together.

The United States and the European Union are bounded in the trade afairs under **World Trade Organization most-favored-nation terms**. The simple average applied tariff is 3.5 percent for the US and 5.2 percent for EU, but the tariffs are high on some sensitive products. Some of the trading costs derive from the nontariff barries, as security and consumer protection and labelling.

EU-US	Trade in goods	2018-2020 (€ k	oillions)
Year	EU imports	EU exports	Balance
2018	214.7	351.2	136.5
2019	232.6	384.4	151.8
2020	202.6	352.9	150.3

EU-US T	rade in services	s 2018-2020 (€	billions)
Year	EU imports	EU exports	Balance
2018	193.1	174.1	-19.0
2019	199.0	184.8	-14.2
2020	221.5	205.0	-16.5

Foreign direct investment 2019 (€ billions)				
Year	Inward stocks	Outward stocks	Balance	
2019	2003.1	2161.5	158.3	

European Union, Trade in goods with USA (www.webgate.ec.europa.eu)

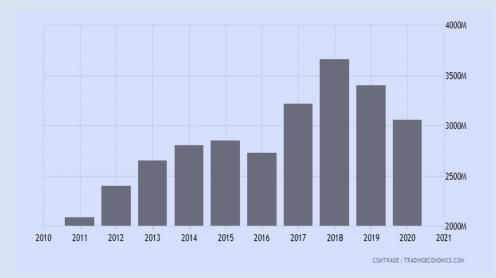
Commercial agreements between EU and USA (USA & Portugal)

USA imports from Portugal

USA was ranked in 2020 as the 5.º largest importing partner with Portugal. Comparing the figures from 2019 and 2020 it is recognizable the abrupt decrease of exports, up to 14.8%. In 2019, the Portuguese exports to USA had a total sum of \$3.58B and in 2020 the exports reached a total of \$3.05B, meaning less \$0.53B.

Today, USA remains one of the Portugal's most important importing partners.

In the global list of the top exported items its important to highlight the fact that the trade of textiles and clothing articles with USA appear in the 6th place with almost \$138M of sales.



Portugal exports to United States	Value	Year
Mineral fuels, oils, distillation products	\$508.29M	2020
Cork and articles of cork	\$224.22M	2020
Electrical, electronic equipment	\$187.46M	2020
Rubbers	\$180.96M	2020
Pharmaceutical products	\$165.92M	2020
Other made textile articles, sets, worn clothing	\$137.70M	2020
Optical, photo, technical, medical apparatus	\$115.81M	2020
Beverages, spirits and vinegar	\$112.38M	2020
Machinery, nuclear reactors, boilers	\$110.41M	2020
Paper and paperboard, articles of pulp, paper and board	\$108.68M	2020

Portugal exports to United States (www.tradingeconomics.com)

Commercial agreements between EU and USA (USA & Spain)

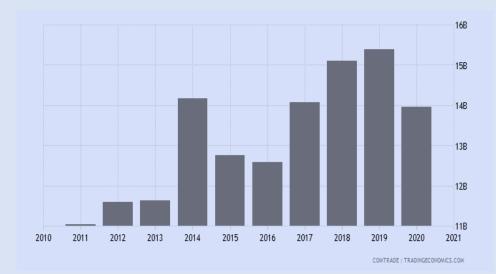
USA imports from Spain

USA was ranked in 2020 as the 6th largest importing partner with Spain. Comparing the figures from 2019 and 2020 it is recognizable the significant decrease of exports from Spain to USA, up to 16.41%. In 2019, the Spanish exports to USA had a total sum of \$16.7B and in 2020 the exports reached a total of \$13.96B, meaning less \$2.74B.

Actually, USA remains one of the Spains's most important importing partners.

In the global list of the top exported items its important to highlight the fact that the trade of textiles and clothing articles with USA appear in the 19th place with almost \$200M of sales.

This means that the export of textile and clothing items is not under the top 10 most exported items to USA, nevertheless the global amount of textile and clothing item sold to USA is still quite high.



Spain exports to United States	Value	Year
Machinery, nuclear reactors, boilers	\$2.16B	2020
Electrical, electronic equipment	\$1.30B	2020
Vehicles other than railway, tramway	\$936.21M	2020
Mineral fuels, oils, distillation products	\$824.49M	2020
Pharmaceutical products	\$691.00M	2020
Animal, vegetable fats and oils, cleavage products	\$633.10M	2020
Ceramic products	\$465.46M	2020
Articles of iron or steel	\$430.30M	2020
Stone, plaster, cement, asbestos, mica or similar materials	\$375.52M	2020
Beverages, spirits and vinegar	\$360.70M	2020

Spain exports to United States (<u>www.tradingeconomics.com</u>)

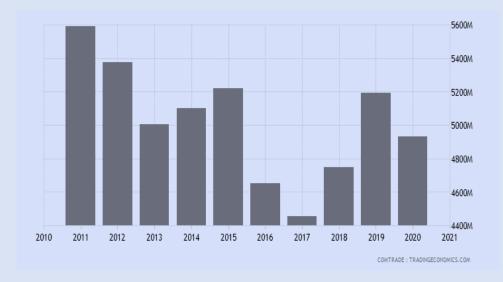
Commercial agreements between EU and USA (USA & Denmark)

USA imports from Demark

USA was ranked in 2020 as the 6th largest importing partner with Denmark. Comparing the figures from 2019 and 2020 it is recognizable a relevant decrease of exports, up to 5.01%. In 2019, the Danish exports to USA had a total sum of \$5.19B and in 2020 the exports reached a total of \$4.93B, meaning less \$0.26B.

Despite the decrease of the export figures to the US market, today, USA remains one of the Denmark's most important importing partners.

In the global list of the top exported items its important to highlight the fact that the trade of textiles and clothing articles with USA appear in the 17th place with almost \$49.29M of sales.



Denmark exports to United States	Value	Year
Machinery, nuclear reactors, boilers	\$1.35B	2020
Electrical, electronic equipment	\$698.06M	2020
Optical, photo, technical, medical apparatus	\$657.01M	2020
Pharmaceutical products	\$279.71M	2020
Albuminoids, modified starches, glues, enzymes	\$204.00M	2020
Furniture, lighting signs, prefabricated buildings	\$140.74M	2020
Plastics	\$128.74M	2020
Miscellaneous edible preparations	\$121.68M	2020
Miscellaneous chemical products	\$121.39M	2020
Aircraft, spacecraft	\$112.86M	2020

Denmark exports to United States (www.tradingeconomics.com)

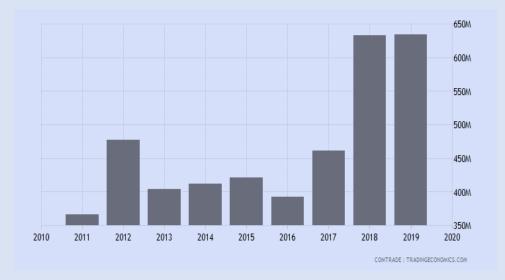
Commercial agreements between EU and USA (USA & Bulgaria)

USA imports from Bulgaria

USA was ranked in 2020 as the 15th largest importing partner with Bulgaria. Comparing the figures from 2019 and 2020 it is recognizable the modest decrease of exports, up to 3.17%. In 2019, the Bulgarian exports to USA had a total sum of \$634.32M and in 2020 the exports reached a total of \$614.19M, meaning less \$20.13M.

Actually, USA is not a major importer from Bulgaria, representing only 1.9% of the total imports in this country.

In the global list of the top exported items its important to highlight the fact that the trade of textiles and clothing articles with USA appear in the 23rd place with almost \$5.91M of sales.



Bulgaria exports to United States	Value	Year
Electrical, electronic equipment	\$111.49M	2019
Optical, photo, technical, medical apparatus	\$87.78M	2019
Machinery, nuclear reactors, boilers	\$77.59M	2019
Essential oils, perfumes, cosmetics, toileteries	\$42.08M	2019
Oil seed, oleagic fruits, grain, seed, fruits	\$41.96M	2019
Tobacco and manufactures tobacco substitutes	\$20.37M	2019
Copper	\$19.47M	2019
Iron and steel	\$18.72M	2019
Albuminoids, modified starches, glues, enzymes	\$16.62M	2019
Residues, wastes of food industry, animal fodder	\$15.77M	2019

Denmark exports to United States (<u>www.tradingeconomics.com</u>)

Textile commercial trade agreements

Commodities Subject to Import Quotas

- **Absolute Quotas** Strictly limit the quantity of goods that can be imported for a specific period.
- Tariff-rate Quotas Permit a specified quantity of imported merchandise at a reduced rate of duty during the quota period, after the limit there is a higher rate of duty.
- Trade Preference Levels Stablish trade preference levels that Custom and Border Protection Areas need to follow.

Currently there are no commodities subject to absolute quotas and/or associated visa requirements, but there are still some limitations as follows in the tables below.

Heading	Worsted Wool Fabric	Quantity	Unit	Must be certified by the importer as suitable	
9902.51.11	> 18.5 Microns	5.500.000	m²	for use in making men's and boys' suits, suit type jackets or trousers, and must be	
				imported for the benefit of persons who	
9902.51.15	≤ 18.5 Microns	5.000.000	m²	weave in the United States worsted wool fabric suitable for use in such clothing.	
				Only importers having license issued by the	
9902.51.16	≤ 18.5 Microns	2.000.000	m²	Department of Commerce or written authorization to use another importer's license may import worsted wool fabrics	
				under these provisions.	

Textile commercial trade agreements

Commodities Subject to Import Quotas

Heading	Cotton Shirting Fabric	Only importers having license
9902.52.31	Limited to 85 percent of the total square meter	issued by the Department of
	equivalents of all imported woven fabrics of cotton	Commerce or written
		authorization to use another
	containing 85 percent or more by weight of cotton.	importer's license may import
		worsted wool fabrics under
		these provisions.

USA Textile Industry

The beginning of the Textile Industry, in the USA, goes back to the end of the XVIII century, when England was leading the sector pushed by the Industrial Revolution, and the US were trying to compete and improve their own methods. Currently, the US is one of the largest textile exporting countries in the world. The US textile industry is a very important component of the US economy and it is spread all over the country, providing important jobs in rural areas. It is also a very important contributor to the national defence, providing clothes, textiles and individual equipment items for the Fire Fighters, Police and Military Services. The technical textile are today one of the most prominent sub-sectors in the textile business, going from automotive applications to protective clothing or agriculture and construction applications.

Main areas of Activity

The US textile Industry incorporates every single component of the industry supply chain, namely, cotton growers, ginners, warehousing, and cotton shipping, fiber producers, yarn spinners and extruders, knitters and weavers, dyeing and finishing, fabric, apparel and furniture designers, cutting and sewing. Moreover, textile industry promotes jobs in the chemical, shipping, rail, banking, water and energy production sectors.

The U.S. textile and apparel manufacturing is changing in nature. Textiles and apparel "Made in the USA" are growing particularly fast in some product categories that are high-tech driven, such as medical textiles, protective clothing, specialty and industrial fabrics, and non-woven. These products are also becoming the new growth engine of U.S. textile exports.

Economic overview

The textile industry shipments totalled 64.4 billion dollars, in 2020, a decrease of 15.04 percent in relation to the last year.

Since 2000, the productivity of American textile factories has increased by 69 percent and, in the last decade, there has been an investment of almost 20 billion dollars in order do promote the construction of new factories and the acquisition of new equipment. New facilities were opened throughout the textile production chain, including recycling facilities for converting textile waste in new textile uses and resins. Currently, there are more than 13 500 businesses in the US Textile Industry.

The sector employs more than 520 000 workers and the government believes that one textile job supports three additional jobs in the community, because of the inputs it depends on.

Trends in the industry

The US are at the forefront of R&D in the textile industry, with innovative designs in cutting-edge textile materials, such as conductive fabric with antistatic properties, electronic textiles that can monitor vital signs, antimicrobial fibers and fabrics that can adapt to the climate.

The US is one of the largest markets for technical textiles industry. It is expected that the non-woven textiles will drive the textile market for the following years, because of their lighter, more efficient and cheaper features. In parallel, they are being introduced in many fields, such as packaging and automobile industry.

Currently, fabric production is a growing business in the USA, because of its use in many fields, like construction, erosion control and spoil containment in landfields. Moreover, the automotive and medical textiles are two important, expanding and growing areas in the technical textiles industry.

Market Size – Fact Sheet

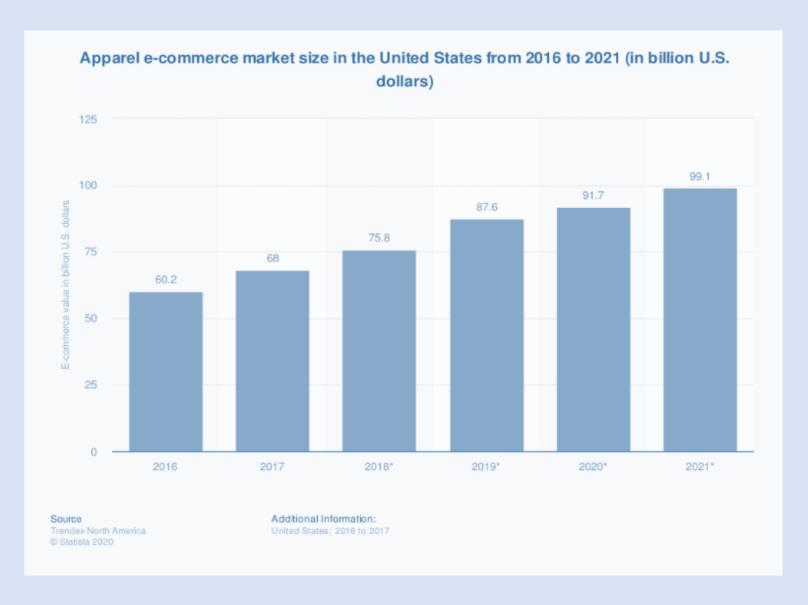
- The United States are the largest apparel market in the world;
- In 2019, the United States apparel market ammounted to approximately \$368 billiion;
- In 2019, retail **e-commerce revenues from apparel and accessories sales** amounted to \$102.5 billion;
- Store-based retailing was value at over \$268 billion (72.8 percent), while e-commerce was valued at over \$100 billion (27.2 percent);
- In 2019, clothing store sales reached about \$195.85 billion;
- In 2019, family clothing store sales reached about \$112.91 billion;
- In 2019, men's clothing store sales reached about \$9.11 biliion;
- In 2019, retail sales from women's clothing stores reached approximately \$39 billion and men's clothing stores dropped to \$9.1 billion;
- In april 2020, US montly clothing store sales dropped to \$2.9 billion due to COVID-19;
- The leading american brands are TJX companies, Nike and the Gap.

Clothing and clothing accessories store sales in the United States

(in billion U.S. dollars)



© Statista 2021 🎮



Although there was a stockpiling effect of apparel from physical retail store shelves in 2020 due to Covid-19, the online ordering continued to go up in 2020 and it is also projected to increase during 2021.

SUSTAINABLE FASHION IN USA

In the words of the United States Fashion Industry Association, US fashion brands and retailers are moving forward in questions such as, factory safety and compliance, environmental sustainability, and stewardship, global worker wellbeing and human rights, elimination of forced and child labor, conflict minerals compliance and chemical management.

This indicates that sustainability is becoming a trendy issue. In this sense, there is a growing number of ethical and sustainable fashion brands and retailers, that are helping to improve textile and apparel industry in environmental and social aspects.

With the growing trend of online shopping, in part, due to COVID-19 and business closure, it became easier for fashion brands, even the small ones, to promote their products on the internet, where everyone that has internet access can see them. As the sustainability becomes a trendy issue, it can be used as a powerful marketing tool to impulse sales and to promote brand's image, namely smaller brands that have the "sustainability" as a selling point of their products.

As it is known, in textile and apparel industry, specially in high-end fashion industry, the brand's power is a key factor to achieve success and competitiveness. The recognition of the brand is no longer being made from the Quality and Design characteristics but mostly from the environmental and societal statements, where the "sustainability label" is becoming quite powerful to US consumers. While sustainable brands are getting people's acceptance and, perhaps, people's preference, the global US textile and apparel industry is also changing towards sustainability.

The goal now seems to be to achieve sustainable textile and apparels with a competitive price with design appealingness.

Looking to the case of the **Remake Our World:**

Remake Our World (ROW) is no organization built by millennial and gen Z activists looking to put ad end to fast fashion and all the harmful issues associated with this.



Some of the initiatives:







OUR CLOTHES SHOULDN'T COST HUMAN LIVES.

Sign the Petition to hold brands accountable and build a fair future for garment workers in 7 Actions.

PAY UP PETITION

14122 Signatures so far!

Let's get to 15,000!

Looking to the case of the **Patagonia**:

Patagonia is an american company based in California, that comercialize adult and children's outdoor apparel, swimwear and activewear. Is one of the earliest defenders of environmental ethics in the activewear fashion industry and one of the first adopters of using recycled materials and switching to organic cotton.

patagonia

64% of our fabrics this season are made with recycled materials.





Materials Used:

Pilot Cotton

Recycled Fishing Nets

Recycled Cotton

Recycled Spandex Organic Cotton

Recycled Polyester Recycled Nylon

Looking to the case of the **EILEEN FISHER**:

ethical and sustainable fashion. The company believes social and environmental injustices are a reason to do business differently. The brand wants to be leader in circular systems, taking back old pieces of apparel and making new ones whenever possible.





Core Objectives:

- Empower Women
- Support Human Rights
- Protect Natural Resources
- Fight Climate Change
- Shift Fashion Industry (Circular System)
- Respect Differences

Global Analysis to the Covid-19 Effect in the USA's Economy

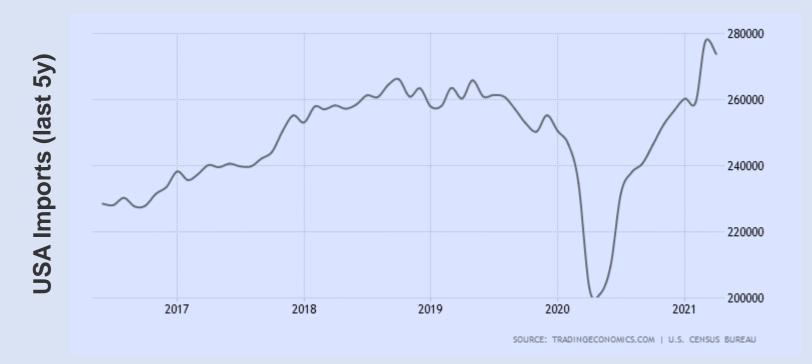
COVID-19 has caused both a public health and an economic crisis in the US. The pandemic caused a record economic shrunk of 31.4 percent and, beyond that, the unemployment has increased 4.4 percent between 2019 and 2020.

In the fourth month of 2020, 43 percent of businesses had temporarily closed and the worst impact was felt by retail, entertainment, bars and restaurants.

The pandemic caused a severe impact on world trade and, the US were no exception. Between 2019 and 2020 US exports fell by 13 percent and the imports fell 6.48 percent.

There was also a huge impact on employment. In April 2020, the unemployment rate reached 14.8 percent, the highest historical rate observed, and the labour force participation rate declined to 60.2 percent.

However, now that the world is recovering from COVID-19, the US GDP is expected to grow 6.5 percent in 2021.

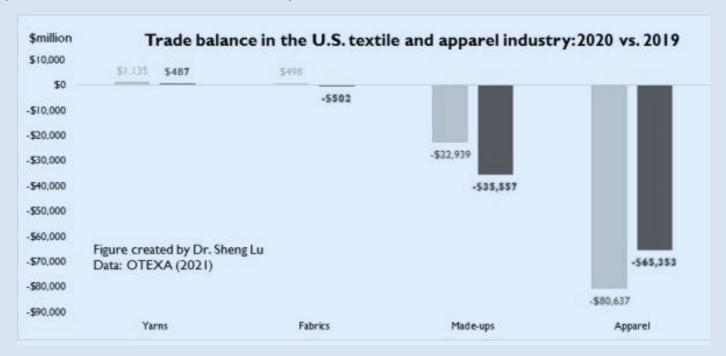


Covid-19 Impact in USA

Like many other developed economies whose textile and apparel industries had reached the stage of post-maturity, the United States today is a net textile exporter and net apparel importer. COVID-19 has affected U.S. textile and apparel trade in several important ways:

Fashion Industry and COVID-19 Impact

Before the pandemic, U.S. was a net exporter of fabrics. However, as the import demand for non-woven fabrics (for making PPE purposes) surged during the pandemic, U.S. ran a trade deficit of \$502 million for fabrics in 2020. Meanwhile, as retail sales slowed and imports dropped during the pandemic, the U.S. trade deficit in apparel shrank by 19% in 2020 compared with 2019. However, the shrinkage of the trade deficit did not boost clothing "Made in the USA" in 2020, reminding us that the trade balance often is not an adequate indicator to measure the economic impact of trade.





Impact of lockdown and recovery

The COVID-19 pandemic has exposed the economy to immense distress, ruptured multiple systems and left the US economy out of breath.

The fashion industry was no exception and the main observation was that the US import of textile goods coming from countries like China, Pakistan and Bangladesh suffered hard breaks.

Employment in the U.S. textile industry (NAICS 313 and 314) and apparel industry (NAICS 315) fell to the bottom in April-May 2020 due to COVID-19 but started to recover steadily since June 2020.

Now, in 2021, USA's retailers are importing merchandise faster, in order to capitalize on higher consumer spending. In this sense, three of US's largest suppliers increased their shipments volume, namely, China, Pakistan and Bangladesh.

China, the largest supplier of textiles and clothing, increased the exports in almost 24 percent, Pakistan in more than 25 percent and Bangladesh in 2.29 percent.

On the other hand, Vietnam, Indonesia, India, El Salvador and Mexico saw their shipments fall 0.4, 20.9, 14.76, 14.42 and 2.66 percent, respectively.

Finally, combined textile and apparel imports from all sources rised 21.47 percent in volume, but dropped 2.3 percent in value terms. Among that, textiles from all sources climbed 34.7 percent in volume and increased 18 percent in value terms.



Medium-term outlook for the Fashion Industry in USA after Covid-19

The pandemic COVID-19 accelerated the already existing technology-driven market trends, namely, the changes in the way brands deliver goods to market and the market openness to new players.

Online shopping was already an emerging trend that bypassed the pandemic restrictions, what was not possible for traditional apparel stores. Consequently, legacy apparel companies became less competitive in relation to new players that offer online shopping options.

The traditional apparel sales may take some time to recover, while shopping online continues to increase. In this sense, improving digital profitability should be the companies' focus, they need to create the right channel mix to meet consumers, in other words, apparel and textiles companies should amplify their digital presence, even that today the businesses are already reopening, namely in US, where the classical way to doing businesses will no longer be perceived as the main business channel.

It is also important to highlight some key market trends in textile industry. In first place, there is an increasing demand for natural fibers because they are greener, lighter and have a lot of applications such as, automotive industry, apparel, construction materials, medical dressings and many others. In second place, there is a focus toward non-woven fabrics due to the growing demand for hygiene products and its application in road construction in the form of geotextiles.

In parallel, there are several growing environmental issues associated to the textile industry, specifically, related to water waste and contamination, air pollution, textile waste, among others. For that reason, there is a focus in minimizing the use of resources like water and energy, reducing chemical consumption, avoid pollution and eliminate harmful toxic chemicals, through the use of new technologies. This conscience could become a competitive factor when consumers choose where and what to buy, and which are the brands that share this environmental and social concerns.

Trade Fairs and Relevant Stakeholders

Some of the biggest textile players in USA

Saint Gobain Tape Solutions

Founded in 1665, manufactures textiles such as standard and custom cut-resistant PTFE fiberglass fabric, serving the aircraft, petrochemical, composite bonding, communications, construction, electrical, electronics, food processing, construction, and general plastic processing industries. Headquarter: Hoosick Falls, New York.

Trelleborg Engineered Coated Fabrics

Founded in 1905, manufactures textiles such as engineered coated fabrics (acrylic, ethylene acrylic, urethane, polyethylene, chloroprene and ethylene-propylene terpolymer). Headquarter: Rutherfordton, North Carolina.

Albany International Corp

Founded in 1895, is a global advanced textiles and material processing company that make machine clothing, paper machine clothing and engineered fabrics. Headquarter: Rochester, New Hampshire.

Unifi, Inc

Founded in 1971, manufactures textiles such as multifilament polyester and nylon yarns and allied raw materials. Headquarter: Yadkinville, North Carolina.

InPro Corporation

Founded in 1982, is a manufacturer and distributor of textiles such as woven fabrics. Headquarter: Muskego, Wisconson.

Dunmore Corp

Founded in 1970, manufactures textiles such as standard and custom fabric, serving the aerospace, automotive, aircraft, medical, lighting and isolation industries. Headquarter: Bristol, Pennsylvania.

Fabrico

Founded in 1977, manufactures textiles for the medical market, such as cotton, aramid mat, and silicone-coated fabrics. Headquarter: Rochester, New York.

Tex Tech Industries

Founded in 1904, manufactures engineered products such as fireblocking and technical textiles for industrial applications. Headquarter: North Monmouth, Maine.

Bally Ribbon Mills

Founded in 1923, manufactures textiles such as woven narrow fabrics, specializing in broadcloth and woven structures for different industries, including medical. Headquarter: Bally, Pennsylvania.

Aurora Specialty Textiles Group, Inc.

Founded in 1883, manufactures and distributes printable textile cloth and fabrics. Headquarter: Yorkville, Illinois.

Trade Fairs and Relevant Stakeholders

Main Textile Associations, Labs and Research Centers

American Apparel & Footwear Association (AAFA)	AAFA was founded in 2000, and is the national trade association representing apparel, footwear and other sewn products companies, and their suppliers, which compete in the global market. Provides exclusive expertise in trade, brand protection, and supply chain & manufacturing to help the member navigate in the complex regulatory environment and lower costs.
Americas Apparel Producers' Network (AAPN)	AAPN was founded in 1981, and is a private sector, non-profit industry business network of over 600 company owners and senior executives from almost 200 organizations across the supply chain.
National Council of Textile Organizations (NCTO)	NCTO is an association that represents the entire spectrum of the textile sector. NCTO's mission is the creation of a powerful national and international alliances to advance the interests of the US textile sector.
United States Fashion Industry Association (USFIA)	USFIA was founded in 1989, and represents brands, retailers, importers, and wholesalers based in the US. Works to eliminate tariff and non-tariff barriers in the fashion industry's trade and create jobs.
Intertek - North America Softline Testing Laboratory	Intertek is a company with more than 1000 that works in the field of assurance, testing, inspection and certification field. Works with US and Canada textiles and apparel manufacturers, assuring product quality, performance and safety through testing, analysing and inspection of their clothing, footwear, home textiles and outdoor fabrics.
American Association of Textile Chemists and Colorists (AATCC)	AATCC was founded in 1921 and develops the test methods the textile industry uses to ensure product quality.
Textile Protection and Comfort Center (TPACC)	TPACC is located in the North Carolina State University Wilson College of Textiles, and is devoted to analysis of heat and flame protection, chemical resistance and comfort performance.

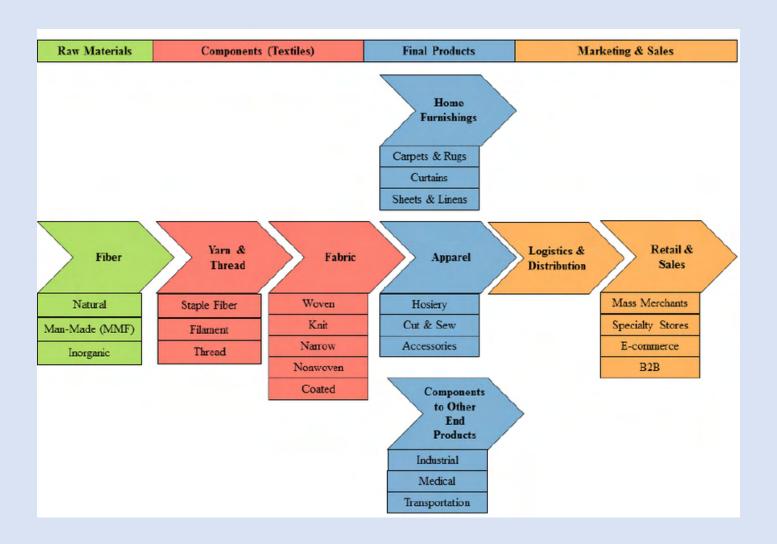
Trade Fairs and Relevant Stakeholders

Main Textile Commercial Fairs

Texworld USA	Texworld USA is an international textile show held twice a year that brings together suppliers, buyers and designers of the textile industry. The event offers visitors a wide range of highly innovative and creative fabrics with an excellent price-performance ratio. It is focused on clothing, fabrics and materials, and impresses with innovative structures, material mixes and various color palettes from manufacturers all-over the world.
Apparelsourcing USA	Apparel Sourcing USA is an international trade fair of clothing and fashion accessories. It offers the visitors information about the latest developments, trends, products and services in various fields.
<u>Stylemax</u>	Stylemax Chicago is a quarterly trade show for women's apparel.
Techtextil Noth America Raleigh	Techtextil North America assembles all vertical aspects of the technical textile industry: from research and development, through raw materials and production processes and finally ending in conversion, further treatment, and recycling.
IFAI Expo	The IFAI Expo is one of the largest trade fairs for technical textiles in the US, where exhibitors from more than 60 countries meet with their potential costumers. The fait main objective is to stablish new business contacts and attract new customers. It also offers special show, workshops and presentations.
Première Vision	Prèmiere Vision is a fair that allows north American design experts to meet around 250 exhibitors, chose from among the world's top weavers, cowhide makers, adornments organizations, plans studios and producers.

Gap Value Chain Analysis

US Textile and Apparel Value Chain



Bair, Jennifer & Frederick, Stacey & Gereffi, Gary. (2016). Bahrain's Position in the Global Apparel Value Chain: How the U.S.-Bahrain FTA and TPLs Shape Future Development Options. 10.13140/RG.2.1.3097.0963.

Gap Value Chain Analysis

The USA textile and apparel value chain can be segmented into 5 main stages, namely, Raw Material Production, Fabrics Production, Textile Products Products Products Distribution and Textile Products Commercialization.

Furthermore, each stage can be divided into many other sub-segments. For example, the **raw material production** can be divided according to the material, in other words, cotton, jute, silk, synthetic fibres, wool, among others.

The **fabric production** can be also divided according to the materials used or according to the fabric's application, it is, fashion&industry, industrial/technical or household.

The **textile products production** can be segmented according to many factors, namely, stage of production, materials used, type of product, specialization or diversification, among others.

Textile product distribution can be segmented according to its destiny or according to the distribution channel. Finally, **Textile Products Commercialization** can be segmented according to many criteria, namely, type of product, market segment, type of purchasing place, among others. It is important to alert that in each main stage there is a set of sub-stages, segments and activities going on.

The main gap in the US textile industry value chain is in the circularity. There is an effective lack of procedures that allow the channelling of used products so that they can be reused, recycled or remanufactured. The second hand market is already a common approach with several retail stores specific dedicated for that purpose.

In this sense, it is a priority to incentivize new innovative models that increase textile utilization and reduce consumption, provide education, skills and support for scaling of circular and sustainable business and change consumer attitudes through campaigns.



Textile Exports (2019) Total: \$24.8B

Raw Cotton	Non-Retail Pure Cotton Yarn	Used Clothing 2.9%	Artificial Filament Tow 2.37%	Heavy Pure Woven Cotton 1.49%
		Light Rubberized Knitted Fabric 2.81%	Non-Retail Synthetic Staple Fibers Yarn	Synthetic 0.91%
	Plastic Coated Textile Fabric		2.27%	Non-Knit 0.85%
	3.69%	Tufted Carpets 2.72%	Synthetic Filament Yarn Woven Fabric	Knit Women's 0.82%
24.7%	Non-Retail Synthetic Filament Yarn	Knit T-shirts	1.9%	
	3.57%	2.66%	Suits 1.88%	
Non-woven Textiles	Other Cloth Articles	Technical Use Textiles	Knit Sweaters	
7.22%	3.08%	2.43%	1.59%	

Textile Imports (2019) Total: \$119B

Knit	Non-Knit Men's Suits	House Linens	Non-Knit Active Wear 2.42%	Non-Knit Women's Shirts
Sweaters	7.31%	4.17% Other Cloth	Knit Socks and Hosiery	Blankets 1.25%
11.8%	Knit T-shirts	Articles 4.11%	Non-Knit Women's Coats	Other Knit 1.24%
Non-Knit	6.37%	Non-Knit Men's Shirts	Other Women's Undergarments	Non-woven 1.23%
Women's Suits	Knit Women's Suits	2.87%	Knit Men's Suits 1.99%	Window Dressings
9.22%	5.25%	Knit Women's Undergarments 2.76%	Non-Knit Men's Coats	Hand-Woven Rugs

As it can be observed from the overall amounts of textile exports and imports, there is a great demand and dependency from the USA textile and clothing industry in relation to the external market. Most of the imports are related to manufactured clothes coming from China, which can be explained by its competitiveness and producing capability, and from Mexico and Canada, USA's NAFTA partners.

From the Export side, it can be observed that most of the goods exported from USA are related to Raw Cotton and technical textiles, in a vast majority having Canada and Mexico as the landing market. In the Imports side, the main observation is that there is a big diversity of manufactured garments (suits, t-shirts, women suits, sweaters, etc.) and with a small expression in the overall volume, some Home Textiles and raw materials that are used for production of technical textiles.

Textile Exports (2019)
Total: \$1.93B

Footwear Parts	Textile Footwear	Rubber Footwear	Other	
		7.03%	6.5	%
25.5%	17.4%	Knitted Hats	Waterproof Footwear	Umbrellas
Leather Footwear		4.24%	1.47%	1.4%
	Other Headwear	Fake Hair	Linings 1.36%	
18.3%	9.49%	4.05%	Artificial Vegetation 1.27%	

Textile Imports (2019)
Total: \$31.6B

Leather Footwear	Textile Footwear	Knitted Hats	Fake Hair
		5.11%	5.04%
	27.9%	Artificial Vegetation	Umbrellas
	Rubber Footwear	3.98%	
			1.04%
32.4%	17.6%		

Following the same trend as the textile and clothing commercial trade, the footwear industry in USA shows a great demand and dependency from the external market. Most of the imports are related to manufactured footwear coming from Asian Countries.

The global stratification of imported items is mainly focused in "Leather footwear" and "Textile footwear" (more than 50%). A special remark for the demand of "Knitted Hats" that can be highlighted as an opportunity for some niche markets in Europe. From the Export side, it can be observed that most of the goods exported are related to Footwear Parts, Leather Footwear, Textile Footwear and Other Headwear.

Market Needs for Sustainable and Circular Textile Products

As long as Sustainability is becoming increasingly important, there is a growing number of ethical and sustainable fashion brands emerging to address the demand in the USA.

An Ethical Brand is concerned about socio-economic and environmental issues. In this sense, ensures its workers are treated fairly across the supply chain, tries to reduce carbon emissions and reduce its footprint.

Currently, there are already many Sustainable and Ethical Brands operating in the US textile market, such as Harvest & Mill, Miakoda, Yes And, MATE the label, The Classic T-Shirt Company, milo + nicki, among others. Those brands applied many policies to decrease their environmental impact by using organic raw materials, avoid chemicals and changing production processes.

In a careful look at the American market for sustainable fashion products, it can be understood that some features are still in a embryonic state. For instance, there is still a **reduced offer of sustainable footwear raw materials and accessories**, which can denounce the difficulty in finding substitute materials for footwear final products, and the difficulty of new brands to produce "sustainable" products.

Secondly, there is an eminent **predominance of women's "sustainable" clothing**, which can provide a market opportunity for men and children's clothing market. In third place, the **cloth designs are still quite simple and focused on comfort. There is no real uptake of growing concepts like "sustainable by design".** Finally, Sustainable Fashion Brands in the USA are mainly **focused on eCommerce**.

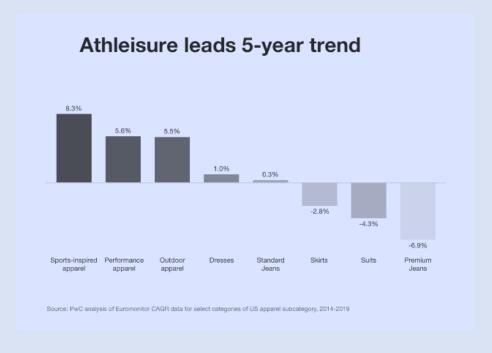
Consumer Behaviour and Expectations

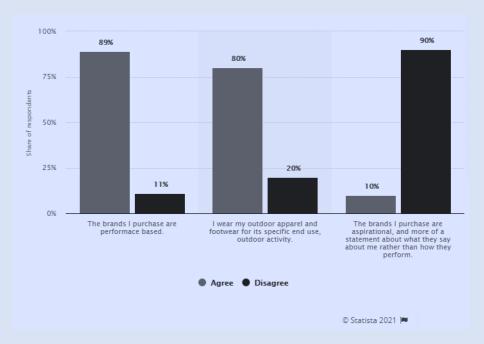
Online apparel shopping has grown steadily in the last decade in the USA. The pandemic COVID-19 and the inherent lockdowns have contributed even more to promote this trend, since they made it impossible to access the physical stores.

As result, the demand for comfortable work-fromhome clothing increased and, this shift toward casual wear, is expected to remain in US.

A study about Consumers' reasons for purchasing outdoor apparel and footwear in the US shows that americans choose what to buy considering the performance of the product and its specific end use.

Moreover, there is a growing trend towards the acquisition of highers quality products because of their durability.





Legislation and Regulation

The United States are a big country divided into several states where state rules are individually applied. In this sense, the legislation and regulations can change significantly between states and not always a common legislation in specific matters like product certification or commercial regulations is shared among the overall states. Following the analysis of this huge and dissimilar market, the following examples were found:

California Proposition 65

Business with 10 or more employees have to provide warning signes on their products if the product contains any chemical that can cause cancer or reproductive harm/toxicity. Fail to comply with "California Proposition 65" warning labeling rules can result in up to \$2500 per day per violation. The lab testing is not mandatory.

List of Chemicals Known to the State to Cause Cancer or Reproductive Toxicity (ckeck the list here)

Flammable Fabrics Act

The Flammable Fabrics Act imposes mandatory flammability standards for apparel and textile products, with the exception of:

- Hats;
- Gloves;
- Footwear;
- Interlining Fabrics;
- Plain Surface fabrics regardless of fiber content, weighing 2.6 ounces per square yard or more;
- All fabrics, both plain surface and raised-fiber surface textiles, regardless of weight, made entirely from any
 of the following fibers or entirely from combination of the following fibers: acrylic, modacrylic, nylon, olefin,
 polyester, wool.

Table 1 to	Table 1 to § 1610.4—Summary of Test Criteria for Specimen Classification [see § 1610.7]			
Class	Plain surface textile fabric	Raised surface textile fabric		
1	Burn time is 3.5 seconds or more ACCEPTABLE (3.5 sec is a pass)	(1) Burn time is greater than 7.0 seconds; or(2) Burn time is 0-7 seconds with no base burns (SFBB). Exhibits rapid surface flash only. ACCEPTABLE.		
2	Class 2 is not applicable to plain surface textile fabrics Burn time is 4-7 seconds (inclusive) with base burn (SFBB).ACCEPTABLE.			
3	Burn time is less than 3.5 seconds. NOT ACCEPTABLE	Burn time is less than 4.0 seconds with base burn (SFBB).NOT ACCEPTABLE.		

https://www.govinfo.gov/content/pkg/CFR-2012-title16-vol2/xml/CFR-2012-title16-vol2-chapII-subchapD.xml

Federal Hazardous Substances Act

Regulates household products that contain potencial hazards such as corrosive, reactives and toxic substances. Imposes the obligation of labeling to alert the consumers about the potencial hazards and protection measures. Also covers flammable chemicals and retardants commonly used in the textile industry, such as Formaldehyde.

The label must contain te following information in English:

- The name and business adress of the manufacturer, packer, distributor or seller;
- The chemical name of each hazardous ingrediente;
- The signal word "Danger" for products that are corrosive, extremely flammable, or highly toxic;
- The signal word "Caution" or "Warning" for all other hazardous products;
- An affirmative statement of the principal hazard or hazards that the product presents, for example, "Flammable", "Harmful if Swallowed", "Causes Burns", "Vapor Harmful";
- Precautionary statements telling users what they must do or what actions they must avoid to protect themselves;
- Where it is appropriate, instructions for first aid treatment to perform in the event that the product injures someone;
- The word "Poison" for a product that is highly toxic, in addition to the signal word "Danger";
- If a product requires special care in handling or storage, instructions for consumers to follow to protect themselves;
- The statement "Keep out of the reach of children".

If a hazardous product such as a plant does not have a package, it still must have a hang tag that contains the required precautionary information. That information must also be printed in any literature that accompanies the product and that contains instructions for use.

Consumer Product Safety Improvement Act

Focuses only in Childer's Products (until 12 years old), and requires that every children textiles:

- Comply with all applicable Children Product safety rules;
- Be tested for compliance by an accredited Lab;
- Have a written Children's Product Certificate;
- Have a permanent tracking information in the products or in its packaging when applicable;

Moreover, also requires domestic manufacturers or importers of non-children's products to request/issue a General Certificate of Conformity.

This tracking label includes:

- The manufacturer or private labeler name;
- Location and date of production;
- Detailed information on the manufacturing process;
- Relevant information about the source of the product.



ASTM Clothing Standards

ASTM's textile standars provide the specifications and test methods for the textiles, fabrics, clothes, natural and artificial fibers that constitute them.

ASTM Standards can be found at https://www.astm.org/Standards/textile-standards.html

These textile standards help fabric and cloth designers and manufacturers in testing textiles to ensure acceptable characteristics towards proper end-use.

ASTM standards are voluntary unless the standard is incorporated by reference.

In the case of USA, the standards that were incorporated into the law were:

- Children's upper outerwear must be in conformance with ASTM F1816-97;
- Standard Guide for care symbols for care instructions on Textile Products ASTM D5489.

US Textiles Labeling Rules are applied to the following products:

Covered Products:

- Clothing except for hats and shoes;
- Curtains and casements;
- Rugs, carpets, and mats;
- All fibers, yarns, and fabrics;
- Cushions.

Label required Information:

- The fiber content;
- The country of origin;
- The manufacturer or dealer identity;
- The care instructions.

Not Covered Products:

- Secondhand household textile items;
- Textile products manufactured exclusively for their own employees;
- Any textile product that contains any amount of wool;
- Bags;
- Belts, Diaper liners, Shoelaces that without any Fiber.

Wool Products Labeling Act

The requirements of the Wool Products Labeling Act are similar to the general textiles labeling regulations, but it explains how it is supposed to calculate the percentage of wool present in the product and to label that information.

Products not covered:

- Carpets, rugs or mats, which are covered by the Textile Act and Rules
- Upholsteries
- Wool products made for export

Fur Products Labeling Act

Imposes aditional and specific labeling requirements for Fur Products:

- The animal name in accordance with the Fur Products Name Guide;
- The name or Registered Identification Number (RN) of the manufacturer, importer or seller;
- The country of origin for imported fur products;
- If the fur is used or damaged.



Important Textile and Clothing Certifications used in the US market

















Legislation and Regulation

Looking to the main standards used by the United States fashion industry, we have the following data:

Oeko-Tex Standards	Number of US Companies certified
STANDARD 100 by OEKO-TEX	191
LEATHER STANDARD by OEKO-TEX	2
STeP by OEKO-TEX	1
ECOPASSPORT by OEKO-TEX	19
MADE IN GREEN by OEKO-TEX	10
DETOX TO ZERO by OEKO-TEX	0

Textile Exchange certifications	Number of US Companies certified
GRS Certified	26
OCS Certified	23
RCS Certified	9
RDS Certified	34
RWS/RMS Certified	2

GLOBAL ORGANIC TEXTILE STANDARD (GOTS)	Number of US Companies certified
Certified Suppliers	125

The main conclusion from the data in the charts is that there is quite a bigger number of American companies with eco-labels when compared, for instance, with the Canadian T&C industry. Nevertheless, taking in mind the higher number of T&C companies in USA, this leads to assuming that most of the eco-certified products that are sold in USA are provided by the external market. Nonetheless, this assumption might not be absolutely correct, since the size of the companies in the US tend to be quite large with great volumes of production, meaning that one single US company with eco-label certification might be able to provide a relevant amount/volume of certified products in the market. Further, this can also represent that there is a relevant number of American retail companies that request these certifications as mandatory from their suppliers, and therefore, this can be one of the reasons why there is a relevant number of companies with international eco-labels and standards.

Strategy and Recommendations for Market Approach

The US fashion market, reveals that the level of competitiveness is really intense. Many global players are operating in the US leaving little space for new players. However, with the emergence of social media, this trend is inverting and social networks are serving as support platforms for new small businesses with new ideas to flourish. In this sense, sustainable fashion has found a new space in the market to explore, which led to the emergence of some new sustainable fashion brands that are already operating in the market using retailers and online channels to reach their targeted clients. Nonetheless, USA is a country of great asymmetries and it's not possible to conclude that Sustainable Fashion is today a trend all-over US and accessible to the several levels of society. Therefore, the uptake of US society for the sustainable fashion (textile, clothing and footwear) needs to decrease the cost of goods allowing that the majority can help to create a truly circular and sustainable system in the fashion industry.

What could be the opportunities for external partner concerning the "sustainable fashion" framework in USA?

Looking to the high number of companies working in the fashion industry already with certified labels for sustainability and ecofriendly practices in their processes, it seems that there is not so much room for other external parties to enter this market. A key element for a successful approach in the US market is the brand's digital presence. A recent research suggests 56% of 18-24 year olds (Generation Z) want the fashion industry to be more sustainable, 51% of 25-34 year olds (Millennials) and roughly half in the other age groups, including 55% of 35-44 year olds, 47% of 45-54 year olds and 50% of those over 64.

Further, "Influencers" should be used to spread the brand name and make a product/brand trendy. The brand that would like to enter US market should seek to be present at dedicated ecological events, like for instance, music festivals to promote the brand, as there are important forums where there is a spill over effect that can help a brand to be known in the market. In short, customers must want the products for their ecological statement, and therefore it is mandatory to create the awareness that sustainable fashion is not only a viable option, as it is the right one to adopt.

Strategy and Recommendations for Market Approach

From the Fashion industry side:

- Provide textile raw materials with certified eco-labels and phasing out materials with high volume of chemicals used in the production phase;
- Promote conscious and sustainable brands from EU in the US market, namely through the online channels, focused on the generation Z and Millennials, with affordable prices allowing to reach a large majority of the potential buyers;
- Further to the "sustainable fashion" label, EU brands and fashion companies should invest in the
 promotion of "ethical fashion" since this is also a trendy topic in US, adding the designing and
 manufacturing conscious of clothes while caring for the people and communities involved in the
 process.

From the Fashion Associations and Research Organizations:

- Promote Europe (or some countries in EU) as the sustainable fashion spots of the world;
- Create cooperation agreements to implement a comprehensive Circularity Strategy for all the fashion industry and promote Extended Producer Responsibility;
- Promote cooperation agreements between EU and US research organizations to develop
 alternative solutions for recycling different accessories, colours and fibres from post-consumer
 textile waste.

Japan: A general economic overview

Japan is an island country that spans an archipelago of 5 main islands and over 6000 smaller islands. Currently, Japan is the third largest economy of the world.

Governance

Japanese political system implies a bicameral parliamentary democracy and a constitutional monarchy. The Emperor is the Head of State, the Prime Minister is the Head of Government and the Parliament – National Diet – is composed by the House of Representatives and the House of Councillors. Business Freedom in Japan is in a relatively high level and it is following a positive trend. Labour Laws are defined in the Japan Civil Code. According to the Corruption Perception Index, Japan is perceived as one of the least corrupt countries in the world.

Taxes

Japan has a relatively complex tax system with distinction between the type of residence and between the category of income. The top individual income tax rate is 45 percent and the top corporate tax rate is 33.8 percent. Other taxes include property, consumption and vehicle related taxes. The overall tax burden equals 32 percent of total domestic income. Government spending has amounted to 38.9 percent of total income (GDP) in the last data , and budget deficits have averaged 3.24 percent of GDP, with an increase to 12.62 percent because of COVID-19 impact. Public debt is equivalent to 256.22 percent of GDP.

Society

Japan is called the "Land of the Rising Sun". Despite the country is extremely tied to the technological development, Japan still has a very intense traditional culture. Japan has a small immigrant community. In 2019, almost 3 million people were outsiders, what represents no more than 2.3 percent of the population. The official language is the Japanese and the country has one of the lowest income inequality and crime indexes of the world.

Market

The external trade is one of the most outstanding features of the Japanese economic development. Japan has 20 Economic Partnership Agreements in force, namely with European Union, and a Trade Agreement with USA. The three main Japanese commercial partners are China with 22.1 percent of Japanese exports, the USA with 18.5 percent and South Korea with 7 percent. Japan main exporting products are vehicles, machinery including computers, electrical machinery, medical apparatus, plastics, iron and steel, organic chemicals, gems and precious metals, other chemical goods, ships and boats.

QUICK FACTS:

- Population:
 - 126.138 million
- GDP (PPP):
 - \$5.7 trillion
 - 0.7% growth
 - 1.0% 5-year compound annual growth
 - \$43.236 per capita
- Unemployment:
 - 2.3%
- Inflation (CPI):
 - 0.5%
- · FDI Inflow:
 - \$14.6 billion

Japan Quick Facts (www.heritage.org)

Japan: A general economic overview

Japan's Economy Includes Three Main Types of Industries:

- Services Industry: Main Japanese services industries are Banking, Insurance, Retailing,
 Transportation and Telecommunications, which are responsible for 69.31 percent of GDP, and
 72.57 percent of the workforce.
- Manufacturing Industry: Japan is the world's third-largest automobile manufacturing country
 and has the largest electronics equipment industry. The new developing industries in Japan are
 high-tech and precision goods, such as optical instruments, hybrid vehicles and robotics.
 Manufacturing industries are responsible for 29.07 percent of the Japanese GDP and for 24.07
 percent of the work force.
- Agriculture Industry: Agriculture, forestry and fishing are important elements of Japan's
 economy and society, and are responsible for 1.24 percent of the GDP and for 3.36 percent of
 the workforce. However, this is a declining sector because of the shortage of farmland in the
 country.

Commercial agreements between EU and Japan

Japan and the European Union have an Economic Partnership Agreement that entered into force on 1st February 2019.

In the first year of the agreement, EU exports to Japan grew 6.6 percent, and Japan exports to Europe grew by 6.3 percent, compared to the same period the year before.

Leather articles exports grew 14 percent and apparel exports grew 9.5 percent.

The Economic Partnership Agreement in a snapshot:

- Removes tariffs and other trade barriers and creates a platform to cooperate in order to prevent obstacles on trade;
- Creates new opportunities for European farmers and food producers;
- Gives EU better access to public contracts in Japan;
- Offers better conditions for services suppliers, greater mobility for company employees, and a framework to enable the mutual recognition of professional qualifications;
- Sets ambitious standards on sustainable development.

Commercial agreements between EU and Japan (Japan & Portugal)

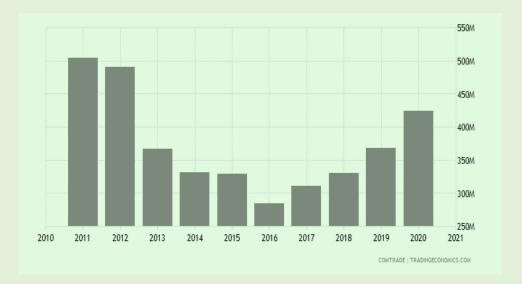
Japan imports from Portugal

Japan was ranked in 2019 as the 29.º largest exporting partner with Portugal. In 2020, Japan imports from Portugal were a little over \$400M.

Portugal main exports to Japan were Vehicles, Articles of Apparel, knit or crocheted, Vegetable, fruit, nut food preparations and Electrical, electronic equipment.

The exports of Articles of apparel, knot or crocheted, in 2020, were about \$72.17M and the exports of Footwear were about \$22.26M, showing that there is already a strong engagement with this market when the fashion industry is concerned.

It should be highlighted the fact that over the last 5 years the level of exports to Japan increased consistently.



Japan imports from Portugal	Value	Year
Vehicles other than railway, tramway	\$130.50M	2020
Articles of apparel, knit or crocheted	\$54.44M	2020
Vegetable, fruit, nut food preparations	\$39.34M	2020
Electrical, electronic equipment	\$27.93M	2020
Organic chemicals	\$22.46M	2020
Footwear, gaiters and the like,	\$22.26M	2020
Articles of apparel, not knit or crocheted	\$17.73M	2020
Machinery, nuclear reactors, boilers	\$12.24M	2020
Cork and articles of cork	\$7.69M	2020
Beverages, spirits and vinegar	\$7.59M	2020

Commercial agreements between EU and Japan (Japan & Spain)

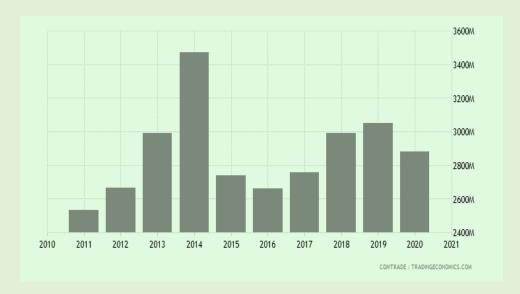
Japan imports from Spain

Japan and Spain have a close trade relationship with total trade of just over \$2.88B in 2020.

Spain main exports to Japan were Meat and edible meat offal, Vehicles and Pharmaceutical products.

Actually from top 10 list of exported items, there are two types of clothing items (apparel knitted and not knitted) that in total sum 108.25M of exports.

It should be highlighted the fact that in 2014 there was a huge growing of the exports to Japan, followed by a relevant decrease between 2015 and 2016. Only in 2017 and over the last 5 years the level of exports to Japan increased, except in 2020, most likely related to covid-19 pandemic effects on the economy.



Spain exports to Japan	Value	Year
Meat and edible meat offal	\$522.14M	2020
Vehicles other than railway, tramway	\$451.17M	2020
Pharmaceutical products	\$325.41M	2020
Animal, vegetable fats and oils, cleavage products	\$161.86M	2020
Organic chemicals	\$126.12M	2020
Beverages, spirits and vinegar	\$116.88M	2020
Articles of apparel, not knit or crocheted	\$108.25M	2020
Ores slag and ash	\$100.80M	2020
Fish, crustaceans, molluscs, aquatics invertebrates	\$89.16M	2020
Articles of apparel, knit or crocheted	\$75.98M	2020

Commercial agreements between EU and Japan (Japan & Denmark)

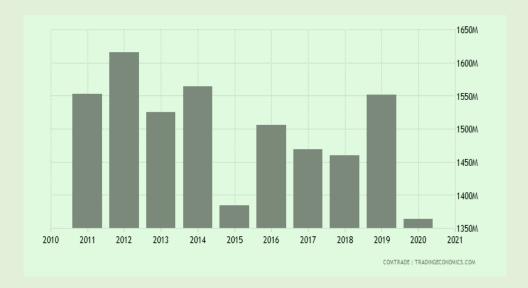
Japan imports from Denmark

Japan and Denmark have a significant trade relationship with total trade of just over \$1.36B in 2020.

Denmark main exports to Japan were Meat and edible meat offal, Optical, photo, technical, medical apparatus, Machinery, nuclear reactors, boilers and Pharmaceutical products.

The exports of Articles of apparel, not knit or crocheted and other textile articles are not significant with only \$6.93M of turnover trade.

It should be highlighted the fact that, in 2020, there was a significant decrease of the trade between the two countries, that can be explained in part due to the pandemic situation, nevertheless, the decrease was so abrupt that other circumstances might help to explain the huge decrease observed between 2019 and 2020.



Denmark exports to Japan	Value	Year
Meat and edible meat offal	\$403.99M	2020
Optical, photo, technical, medical apparatus	\$165.36M	2020
Machinery, nuclear reactors, boilers	\$159.22M	2020
Pharmaceutical products	\$98.50M	2020
Dairy products, eggs, honey, edible products	\$90.58M	2020
Electrical, electronic equipment	\$69.38M	2020
Miscellaneous chemical products	\$58.54M	2020
Furniture, lighting signs, prefabricated buildings	\$49.49M	2020
Albuminoids, modified starches, glues, enzymes	\$41.93M	2020
Meat, fish and seafood preparations	\$36.67M	2020

Denmark exports to Japan (www.tradingeconomics.com)

Commercial agreements between EU and Japan (Japan & Bulgaria)

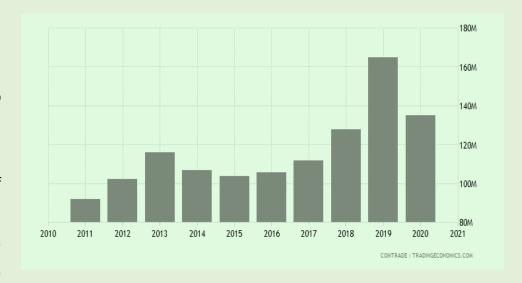
Japan imports from Bulgaria

Japan and Bulgaria have a modest trade relationship with total trade of just over \$134.96M in 2020.

Bulgaria main exports to Japan were articles of apparel, optical, photo, technical, medical apparatus, electrical and electronic equipment, articles of leather, animal gut, harness, travel good, machinery, nuclear reactors and boilers.

The exports of Articles of apparel, knit and not knit are the main exports from Bulgaria to Japan with a total of \$42.37M of exports.

It should be highlighted the fact that, in 2020, there was a significant decrease of the trade between the two countries.



Japan imports from Bulgaria	Value	Year
Articles of apparel, not knit or crocheted	\$26.09M	2020
Articles of apparel, knit or crocheted	\$16.28M	2020
Optical, photo, technical, medical apparatus	\$14.29M	2020
Electrical, electronic equipment	\$12.04M	2020
Articles of leather, animal gut, harness, travel good	\$10.67M	2020
Machinery, nuclear reactors, boilers	\$10.36M	2020
Pharmaceutical products	\$7.42M	2020
Products of animal origin	\$4.06M	2020
Meat, fish and seafood preparations	\$3.29M	2020
Essential oils, perfumes, cosmetics, toileteries	\$2.64M	2020

Textile commercial trade agreements

Economic Partnership Agreement

The EU-Japan Economic Partnership Agreement (EPA) is effective since February 1, 2019. It provides for immediate customs duties removal for more than 90% of EU and Japanese originating products. Tariffs applied on other products will gradually be eliminated over a period of up to 20 years for Japan and 16 years for the EU.



Textile and Clothing

Concerning the EU-Japan Economic Partnership Agreement, a large majority of all tariff lines related to textile products has been liberalised as from the entry into force of the Agreement, or already had a zero MFN base rate before the entry into force of the Agreement. To benefit from EPA preferential tariff rates, the product needs to be originating in Japan or the EU.

Japan Textile Industry

Japan is known because of its long silk production tradition and its silk's stunning beauty. However, the country has a long past of textile production.

In the last years, internal textile production has been decreasing and Japan imports the majority of apparel products from China, USA and from the EU. On the other hand, Japanese textile products exports main destinies are China, USA and South Korea.

In Japan there are more than 11500 textile mill product manufacturers and, in order to survive the foreign competition, the textile industry in Japan is getting specialised in technical and smart textiles, being one of the largest technical textiles producers in the world.

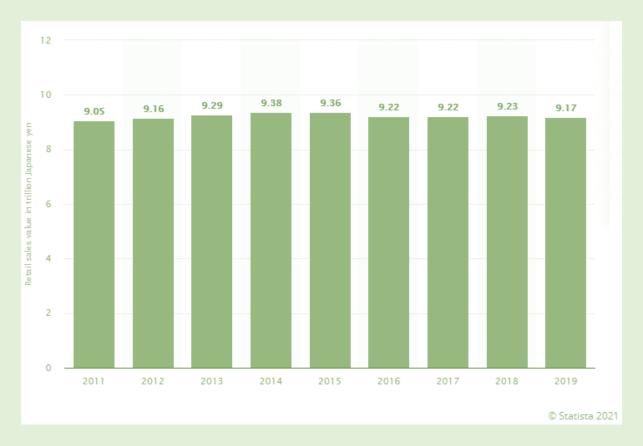
Main areas of Activity

Textile value chain in Japan starts with the production of natural fibers such as, silk, wool and cotton, and with the production of synthetic fibers. This raw-materials feed the production of different fabrics, used in the confection of traditional clothing, fashionable clothing, luxurious clothing and other textile and apparel products.

Market Size - Fact Sheet

- The Japanese apparel market is one of the largest in the world;
- In 2019, the retail sales value of the apparel industry in Japan amounted to around 9.2 trillion japanese yen;
- The **fashion market** in Japan have a predominance of the **women's fashion segment** with around half of the sales;
- In 2019, the value of the **Japanese fashion reuse market** amounted to approximately 720 billion Japanese yen and is growing;
- In 2019, the sales value of **clothing sold at department stores** amounted to around 2.78 trillion Japanese yen. This value has been decreasing since 2015.
- In 2019, the sales value of **clothing at supermarkets** amounted to around 1.1 trillion Japanese yen. This value has been decreasing in the last decade.
- In 2019, the **apparel e-commerce market** in Japan amounted to around 2 trillion Japanese yen. This value is growing steadily since 2014, with major apparel manufacturers adding online stores to their distribution strategies.
- In 2020, the sales value of **fashion goods at chain stores** amounted to around 750 billion Japanese yen. This value has been decreasing since 2012;
- In 2020, the leading domestic fashion company in Japan was Fast Retailing Co. Ltd. With a sales value of over 2 trillion Japanese yen.

Retail sales value of the apparel industry in Japan from 2011 to 2019 (in trillion Japanese yen)



In 2019, the retail sales value of the apparel industry in Japan amounted to around 9.2 trillion Japanese yen. The fashion market in Japan is characterized by the predominance of the women's fashion segment, which made up around half of retail sales (Statista 2021).

According to a report by the Ecommerce Foundation, as of 2015, 91% of the Japanese population is using the internet and 70% of Japanese adults are shopping from online stores, while clothing is the most popular items shopped online.

Economic overview

The textile industry exports totalled 7.05 billion dollars, in 2019, a decrease of 10.02 percent in relation to the year 2015. On the other hand, Japan's apparel imports grew 2.7 percent. Despite China remains the main supplier, Japan is diversifying its sources, increasingly sourcing from Asia. In 2018, textile industry in Japan employed 251 900 workers, a decrease of 19 percent, since 2009.

Trends in the industry

Japan textile industry stands out for its diversified ventures and global network, seeking a more environmentally-conscious society, the industry asserts itself through a consistent modernization. Japanese textile products are known for their quality, design and intricate patters. Yet, one of its main features is the commitment to engage in recycling activities and textile waste reduction. One more important feature is the innovation in the industry, with its state-of-the-art textile technology such as synthetic spider silk and wearable health monitors to encourage people to become more active, fit and healthy.

Sustainable Fashion in Japan

Japan's textile and apparel market is one of the biggest textile markets in the world. Even though the Japanese textile and apparel industry is changing and following western fashion trends, traditional clothing remains a valuable part of Japanese culture.

The national consumption is also shifting. Traditional clothing is mostly worn at special events and traditional celebrations. This shift is happening, in part, due to the apparel manufacturers and retailers that, knowing the potential of the western clothing market, are trying to address it.

One important feature of Japanese fashion market is that it is characterized by the predominance of the women's fashion segments.

Retail sales value of the apparel industry in Japan have been stable during the period between 2011 and 2019 and averaged 9.23 trillion Japanese yen, with a huge decrease in 2020 due to the COVID-19 pandemic and consequent business closures. Yet, after June 2020, the data shows positive results and the beginning of a post-pandemic phase in the industry. Sales kept growing but they were still far from the previous year's levels. Among that, in 2020, Fast Retailing Co. Ltd. was the Japanese sales leader and amounted 3 trillion Japanese yen.

The retail value of the secondhand Fashion Market in Japan amounted almost 720 billion Japanese yen in 2019, showing a growth in the past years. It is also expected that this market will expand further as C2C sales increase, as well as the diversity of products in the market.

A study shows that, for Japanese consumers, the most popular material for fashion purchases was organic cotton, but they are not attracted by the clothes made from food waste fibres.

Looking to the case of **Maito Design Works**

Established in 2010, this brand wants to protect the traditional techniques of Japanese weaving and natural dyeing. **Maito Design Works** offers plant-dyed goods, bags, socks, yarns, towels and plat-dyed buttons.













No.1	桜染 さくらぞめ Sakura dyc	No.7	紅花染 べにはなぞめ safflower dyc	No.13	紫鉱染 l zòそめ Lac dye
N o . 2	檳榔子染 ぴんろうじゃめ Betel nut dye	No.8	五倍子染 ふしそめ Sumac dyc	N o . 1 4	コチニール染 こちに-るその Cochineal dyc
No. 3	蘇芳染 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	No. 9	蓬染 steet の Mugwort dyc	No.15	屋久杉染 estete Yakucedar dye
N o . 4	柘榴染 さくろぞめ Pomegranate dyc	No.10	ログウッド 染 ろぐろっとぞめ Logwood dyc	No.16	栗染(りその Chestnut dye
No.5	矢車附子染 やしゃぶしぞき Greenalder dye	No.11	正藍染[蓼藍] Lað Bluð o Japanese indigo dye	No.17	槐樹染 えんじゅぞめ Pagodatrec dye
No.6	茜染 あかねその Madder dye	No.12	紫根染 しこんぞめ Murasaki dyc	No.18	玉葱染 たまねぎそめ Onion dyc

More than 30 Natural Colors

Looking to the case of Re:nne:



Established in 2021, **Re:nne** is a recently established brand that comercialize chemical-free vegan leather wallets, partly biodegadable and indistinguishable from genuine leather.

The leather is made of a type of cacti named Nopale, which won the Green Product Award 2020 and LVMH Innovation Award.



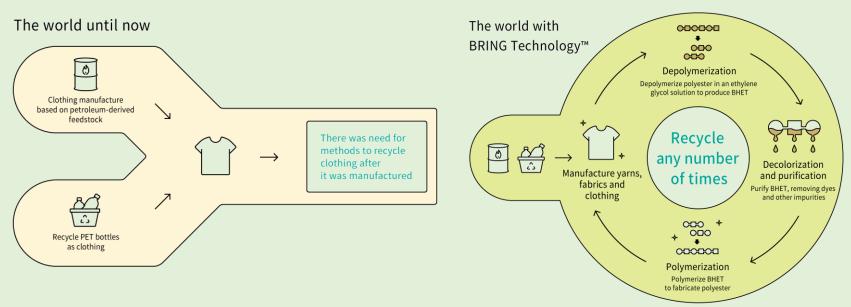




Looking to the case of **JEPLAN**:



Jeplan, a Japanese recycling company whose name is short for Japan Environment Planning, is pioneering a method that allowing manufactured products to be put back into circulation rather than thrown away. Using their BRING Technology™ clothing can be recycled any number of times, making polyester a sustainable resource rather than an environmental burden.



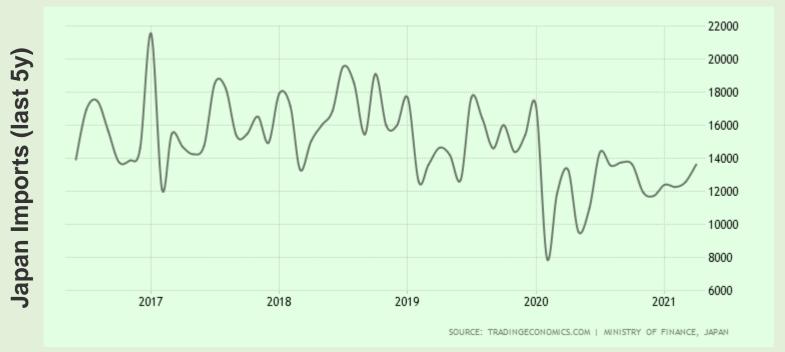
Clothing as fuel

Jeplan is currently working with Japan Airlines and Tokyo's Green Earth Institute in order to use their process to make fuel for Japan Airlines' plane. This pioneering method will allow cotton fibre to be extracted from used clothing and textiles during a fermentation process and then converted to fuel. According to Jeplan, one ton of used clothing can generate approximately 700 liters of bioethanol.

Global Analysis to the Covid-19 Effect in the Japan's Economy

Japan has seen its first contraction since 2009, however, the pandemic has caused an unprecedented decrease in sales among companies in Japan, mainly, because private consumption declined 20 percent from the last year. Moreover, Japan's exports to China have declined 8.7 percent, affecting the textile and apparel industry. Japanese shipments to Asia declined 9.4 percent, and exports to EU fell by 11.1 percent. Japan total exports fell 23 percent and the imports fell by 7 percent.

However, in the second half of the year, consumption and exports increased, and Japan's economic growth suggests that Japan could have a strong and rapid recovery.



Fashion Industry and COVID-19 Impact

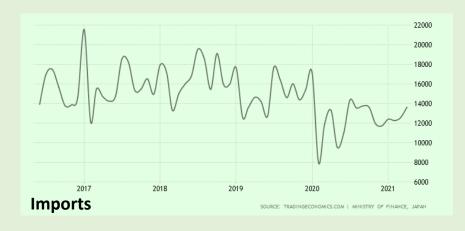
Recent figures from 2021, show that Japan's garment imports have been steadily dropping since April 2021, both in terms of weight and value.

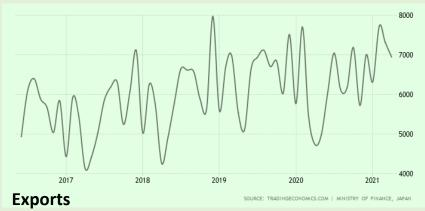
In January-April of this year (2021), the country imported clothing worth 853.70 billion yen (US \$ 7.73 billion), a 5.52 percent decrease from the same period in the previous year. The drop has been caused by a decrease in demand for woven clothes in the Japanese apparel market.

Low unit pricing in 2021 have put exporters to Japan under enormous strain, with per kilogramme clothes imported by Japan valued at only 410 yen (US \$ 3.71) in the first four months of 2021, down from 440 yen a year earlier. The decline in the Japanese garment market is cause for great concern, as 2020 was a year when the country saw the full impact of COVID-19 across all industries.

The government has been promoting the use of e-commerce and online sales, but from reports it seems that results have not been good. The continued fall in 2021 is not encouraging, and exporters must wait to see when the Japanese textile market recovers.

Japan Imports and Exports of Clothing & Clothing Accessories





Impact of lockdown and recovery

After the economic impact of COVID-19, the Japanese economy grew 12.7 percent between October and December 2020. There was a growth in consumption, government spending and exports, for the final quarter of 2020, concerning the previous quarter. Nevertheless, Japan's economy shrank again in the first quarter of 2021 due to the resurgence of COVID-19 infection, but it is expected to start growing again with the support of manufacturing exports.

In January 2020, the Japan Textile Federation has announced its "New Design 2030" declaration of the to-be form of the textile industry in 2030. The goals are to take the size of Japan's apparel market in 2030, including Asian markets, to JPY14 trillion (from JPY10 trillion now, and the value of domestic apparel shipments to JPY2 trillion (now JPY1 trillion).

Due to the Covid-19 retraction in the Japanese fashion industry, the Japan Textile Federation announced that will be necessary to reconsider the goal of doubling the value of domestic apparel shipments to JPY2 trillion within 10 years.

Medium-term outlook for the Fashion Industry in Japan after Covid-19

Japan has an high purchasing power and a growing demand for garments and craze for fashion. The country has also a good balance between traditional textiles and modern western fashion.

The revenue in Fashion segment is projected to reach \$25.082M in 2021 and is expected to show an annual growth rate of 3.88 percent. The market's largest segment is Apparel with a projected market volume of \$14.858M in 2021 and, in the Fashion segment, 17 percent of total market revenue is expected to be generated through online sales by 2023.

One of the leading trends is the direct integration of shopping functionality into the content display on social media, promoting the speed. The audience is increasingly shifting from desktop to mobile, and improving the mobile browsing.

The Japanese fashion industry main concerns are related to the environmental issues, which they are trying to address. However, as domestic consumption greatly depends on imports from other countries, Japan's fashion industry relies on its environmental burden falling on other countries. In this sense, Japan knows that the path to change is to create a system to jointly collect used clothing to promote reuse and recycling.

Finally, it is important to highlight that Japanese Textile market is very large and very competitive, and other nation's apparel brands have significant market shares. One reason why it is so large is that the country loves fast fashion and trendy clothing is affordable. Moreover, Athleisure is one of the fastest-growing niches in the apparel sector, which is known as "casual clothing designed to be worn both for exercising and for general use."

Trade Fairs and Relevant Stakeholders

Some of the biggest textile players in Japan

Fast Retailing CO., Ltd.

Founded in 1963, is the largest clothing company in Japan. The company owns other brands such as Uniqlo, J Brand, Comptoir des Cotonniers, among others. The company manufactures and retails clothing for men, women, children and babies.

Shimamura Co., Ltd.

Founded in 1953, is the 2nd largest clothing company in Japan. The company owns seven brands of stores, and operates nationwide chain stores in Japan, Taiwan and China.

Aoyama Trading Co. Ltd.

Founded in 1964, the company is a famous manufacturer and retailer of formal and classic clothing. Moreover, the company operates in other business sectors.

Numajiri Textile Laboratory

Founded in 1903, is a Japanese textile company specializing in the development of original high-quality knits and T-cloth.

Sato Seni CO., Ltd.

Founded in 1932, is a Japanese yarn and clothing manufacturer.

Maeda Co., Ltd.

Founded in 1958, started in 1930 as a silk fabric wholesaler. The company is a specialist making and selling silk, polyester and nylon fabrics, and is also good working with cotton, wool, rayon and nature man-made mixture fabrics.

Maruyasu Corporation

Founded in 1973, is one of Tokyo's only yarn companies. The company manufactures and sells socks, underwear and other clothing products.

Toray Industries, Inc.

Founded in 1926, Toray is a Japanese multinational that manufactures, processes and sales fibers and textiles, and works with performance chemicals, carbon fiber composite materials, environmental and engineering, and life science.

Asahi Kasei Corporation

Founded in 1931, Asahi Kasei works with chemical products, automobiles, electronic and IT equipment, energy fibers, consumables, agriculture, Robots, construction, civil engineering and health care.

Nisshinbo Holdings Inc.

Founded in 1907, the company has a diversified business portfolio with business such as, electronic equipment, automotive, chemicals, construction, paper and textile.

Teijin Limited

Founded in 1918, is a Japanese chemical, pharmaceutical and information technology company that works with advanced fibers such as aramid fibers, high-performance polyethylene, high-performance polyester fibers, PEN fibers, artificial leather and flame-resistant fibers.

Trade Fairs and Relevant Stakeholders

Main Textile Associations, Labs and Research Centers

Japan Textile Federation	Japan Textile Federation (JTF) was established in 1970 in the wake of the need for the Japanese textile industry as a whole to respond to the growing demand from the United States that required the control of the imported wool, chemical fibre, and synthetic fibre products, in addition to cotton products.
Japan Association of Specialists in Textiles and Apparel (JASTA)	Founded in 1971, became an incorporated body under the jurisdiction of Textiles Products Inspection Administration of the Consumer Goods Industries Bureau, Ministry of Economy, Trade and Industry. The Association acknowledges certification for industry's professionals and recognizes fulfilment on the necessary courses taken at the accredited universities and colleges.
Japan Chemical Fibers Association (JCFA)	Founded in 1948, the Japanese Chemical Fibers Association works in the implementation of research and countermeasures that contribute to an improvement in the management of the fiber industry. The association also promotes the relations of the industry and the cooperation among its members.
Japan Wool Industry Association (JWIA)	Founded in 1948, the association promotes the prosperity and development of the wool industry, promoting friendship and cooperation between members and with related industries.
Japan Silk & Synthetic Fabric Industrial Federation (JSSFIF)	This association is a national organization that produces fabrics made from natural silk fibers, recycled fibers, such as rayon and acetate, and synthetic fibers, such as nylon and polyester. The association also collaborates with associations of textile production centers across the country to promote and develop the industry.
Japan Worsted & Woollen Weavers Association (JWWA)	Founded in 1954, JWWA is a national federation that provides information about the industry to its members, do research about the industry, promotes the management and technical improvement, and promote demand and human resources development.
Japan Textile Finishers' Association (JTFA)	Founded in 1969, the association is dedicated to research and guidance on dyeing and business reorganization, collection and provision of information, improving business relationships and rationalizing dyeing management and business reorganization, and environment and security of dyeing.

Trade Fairs and Relevant Stakeholders

Main Textile Commercial Fairs

Tokyo Leather Fair	Tokyo Leather Fair is an exhibition designed to display new trends and ideas using fresh material. To inspire creators, facilitate innovation, and maximize the demand for leather and lead to new advances in the industry, we present to you Japan largest biannual material exhibition. It reaches out to cross-industry groups, small retailers, and consumers alike in representing the ever-growing beauty, flexibility, and possibilities contained in leather.
International Baby & Kids Expo	International Baby & Kids Expo is Japan's largest business talk show with educational toys, teaching materials, strollers, baby and children's clothes, dad and mom goods from around the world.
PROJECT TOKYO	PROJECT TOKYO is a biannual fashion, from contemporary, leading to emerging designer brands which the fashion industry seeks and connects with both Japanese and international leading buyers.
Fashion World Tokyo	Fashion World Tokyo is the largest fashion trade show event which features a display of products like womenswear, menswear, bags, shoes, fashion accessories and jewelry, textiles, and much more. The event has Lectures on case-based strategy and marketing know-how that the leaders of the fashion industry will provide to visitors.
Textile Tokyo	TEXTILE TOKYO is a trade show specialized in all kinds of textiles/fabrics and materials for fashion items. Textile, Garments from all over the world gather at once. TEXTILE TOKYO features a display of textiles, fabrics, and materials such as Cotton, Silk, Wool, Linen, Knit, Ramie, Piles, Leather, Fur, Fiber, Yarn, Garment accessories, Lace, Button, Zipper, Embroidery, Lining, and much more.
Sustainable Fashion Expo	Sustainable Fashion Expo is the first specialized show focused on Sustainable Fashion, that brings out Ethical, Recycle and Eco-Friendly from around the world. The show is organised by the Reed Exhibitions Japan Ltd. In Tokyo.

Gap Value Chain Analysis

Even though the Japanese apparel production is decreasing, apparel imports and consumption have been increasing for the last years, with exception of 2020.

Due to land scarcity, Japan has a lack of textile raw materials concerning consumption, and that's the reason why the country imports significant amounts of these goods.

Japan's biggest textile supplier is China, however, Japan is increasingly importing from other countries, such as Vietnam, Bangladesh and Indonesia.

As Japan has high labour costs, much of Japan's textile industry players have moved towards cheaper countries, because it is hard to manufacture in Japan and still be competitive. On the other hand, the country is full of opportunities for fashion brands and retailers, because it has one of the biggest apparel markets in the world.

We can say that Japan has some gaps in the earlier stages of textile production, namely, raw-materials production, fabric and yarn production, and in the sewing of textile articles. However, Japan is really strong in retailing.

Beyond that, we can say that Japan has made good efforts in trying to create circularity in the sector, but the country is still far from achieving its maximum sustainable and circularity potential.

In this sense, there still is a big gap in the latest stages of the textile value chain. There still are good opportunities in the creation of a circular value chain. In other words, the creation of channels to reutilize used products and industrial waste can be a good business opportunity, while addresses the environmental issues.

Actually, in document "New Design 2030", out of the 6 main strategic points for the development of the sector, one is fully dedicated to the need to handle sustainability issues, namely:

• Global warming • Achieve a sustainable textile industry (achieve a circular economy) • Handle sustainability in the supply chain (due diligence, chemical substances, etc.) • Microplastics issues.

Gap Value Chain Analysis

Textile Exports (2019) Total: \$8.71B

Synthetic	Non-Retail Synthetic Filament Yarn	Unprocessed Synthetic Staple Fibers	Artificial Filament Yarn Woven Fabric 2.05%	Light Pure Woven Cotton
Filament Yarn		4.93%	Other Synthetic Fabrics	1.59%
Woven Fabric	7.61%	Artificial Filament Tow	1.94%	Non-Knit 1.08%
12.3%	Light Rubberized Knitted Fabric	4.6%	Heavy Pure Woven Cotton 1.91%	Netting 0.93%
Non-woven	6.6%	Technical Use Textiles	Non-Retail Artificial Filament Yarn 1.77%	Heavy Synthetic 0.88%
Textiles	Plastic Coated Textile Fabric	4.23%	Wadding	0.86%
		Synthetic Filament Tow	1.76%	Knit Sweeters 0.86%
8.94%	5.66%	3.7%	Other Cloth Articles	Light Synthetic 0.85%

Textile Imports (2019) Total: \$36B

Knit	Knit T-shirts	Non-Knit Women's Coats 3.78%	Other Cloth Articles 3.09%	Knit Women's Undergerments
Sweaters	7.28%	Non-Knit Active Wear	Knit Socks and Hosiery	Packing Bags
11.7%	Non-Knit Men's Suits	3.64%	Non-Knit Men's Shirts	Knit Men's Undergerments 1.2%
Non-Knit Women's Suits	7.13%	Non-Knit Men's Coats 3.31%	2.39% Non-woven Textiles 2.35%	Knit Gloves
9.98%	Knit Women's Suits	House Linens 3.31%	Non-Knit Women's Shirts 2.33%	1.12% Knit Women's_ 0.8996

As it can be observed from the overall amounts of textile exports and imports, there is a great demand and dependency from the Japan textile and clothing industry in relation to the external market. Most of the imports are related to manufactured clothes coming specially from China, but Japan also import textiles from USA and European Union.

From the Export side, it can be observed that most of the goods exported from Japan are related to technical textiles, in a vast majority having China and USA as the landing market. In the Imports side, the main observation is that there is a big diversity of manufactured garments (suits, t-shirts, women suits, sweaters, etc.).

Gap Value Chain Analysis

Footwear Exports (2019) Total: \$262M

Textile Footwear Rootwear Parts

8.04%

Leather Footwear 7.69%

Rubber Footwear 7.31%

Textile Footwear Parts

8.04%

5.69%

3.08%

Footwear Parts

7.69%

1.39%

1.39%

1.39%

1.39%

1.39%

1.39%

1.39%

1.39%

1.39%

1.39%

1.39%

1.39%

1.39%

1.39%

1.39%

1.39%

1.39%

1.39%

1.39%

1.39%

1.39%

Footwear Imports (2019) Total: \$5.97B

Textile Footwear	Rubber Footwear	Knitted Hats	Umbrellas
TOOLWCai		5.75%	4.39%
	23.5%	Footwear Parts	Fake other
	Leather Footwear	3.34%	2.16% 1.68%
		Other Footwear 2.8%	2.16% 1.68% Artificial Vegetation
31%	20.2%	Waterproof Footwear 2.18%	1.47%

Following the same trend as the textile and clothing commercial trade, the footwear industry in Japan shows a great demand and dependency from the external market. Most of the imports are related to manufactured footwear coming from China, European Union, USA and Australia. There global stratification of imported items is mainly focused in ""Textile footwear" and "Rubber Footwear" (more than 50%). A special remark for the demand of "Knitted Hats" that can be highlighted as an opportunity for some niche markets in Europe, since there is a great tradition in some of the European countries related to the production of high quality Hats. From the Export side, it can be observed that most of the goods exported from Japan are related to "Other Headwear", "Textile Footwear" and "Leather Footwear".

Market Needs for Sustainable and Circular Textile Products

Sustainable Fashion in Japan

In Japan, as there is already a widespread awareness that it is necessary to change the textile industry in a more Eco-Friendly sense, the Japanese sustainable fashion industry shows signs of higher maturity when compared to other countries' industry.

As a consequence of this, there are already several sustainable fashion brands that cover various market segments, namely, Studio Membrane, Ten-i muhou, Newsed, Ashuhari, Casa Fline, among others.

A closer look at the sustainable fashion market in Japan reveals some important characteristics. In the first place, there is a great diversity of colours obtained through eco-friendly processes, which contributes to a more diversified offer in terms of clothing. In the second place, there are already some accessories but still with very rustic designs. In third place, clothing designs are bolder and show signs of irreverence, which can be explained by the intensity of competition in the textile market and by the supremacy of fashion matters in Japan. In fourth place, there is a larger offer of footwear, hygiene textile products and baby clothing. In fifth place, like the industry in other countries, there is a predominance of women's clothing. And finally, Japanese sustainable fashion brands have a strong digital presence.

Moreover, Japanese consumers have a special taste for the usefulness of clothing, in this sense, there has been an increased demand for Athleisure, which is casual clothing designed to be worn both for exercising and for general use.

Consumer Behaviour and Expectations

Over the lastest years, Japan suffered a significant shift in consumer behaviour, mainly in the new generations. There was a shift from simple consumption of material goods towards consumption of highly developed services. In this sense, consumption is becoming a meaning for the creation of a consumer-retailer bound.

The new generations of consumers attach great importance to ecology and attach great value to higher durability products, in particular, textile products.

Some studies have shown that consumers prefer simple products with excellent functionality and performance. A study also pointed that the distinctive culture of Japan is becoming increasingly important in consumer demand and will, perhaps, be a key element to product development in the future.

Moreover, the market's largest segment is Women's Apparel with a market volume of \$42.877M in 2021. In the Apparel market, volume is expected to amount to 4.814M pieces by 2025 and is expected to grow 0.3 percent in 2022. In 2021, 92 percent of sales will be attributable to Non-luxury goods.

Finally, we can also highlight the growing trend in the eCommerce, the increasing demand for Athleisure and the growth of the second-hand market.

Certification of Compliance

Imported products are subject to product testing and cannot be sold in Japan without a Certification of Compliance with prescribed standards. There are three standards, namely, JISL, P/L and product quality standards judge.

- JISL Specifies all the textile test standards and detailed safety and function standards;
- P/L Specifies that the loss of life and property caused by a product is the manufacture's responsibility;
- **Judge of product quality standards** test the physical property, dye colour fastness, products specification, safety, appearance, sewing and other product's features.

Flame Retardant Regulations

Some textile products such as carpeting and curtains installed in most commercial building must comply with flame retardant regulations. Products conforming to the standards must have a flame-retardant label.

The quality of flameproof articles is ensured by the following methods:

- The manufacturing of flameproof articles must be carried out under the guidance and supervision of a professional engineer with a certain qualification.
- Among the specialized engineers, those who have completed the flame proofing specialist training course sponsored by the Japan Fire Retardant Association are specialized in flame proofing in order to maintain and improve their knowledge and skills related to flame proofing and are obliged to take re-training.
- When manufacturing, treating, and importing and selling flame-retardant articles, each manufacturer, flame-retardant treatment company, and importer / distributor shall have the flame-retardant performance of the article as stipulated by the Fire Defense Law. It is supposed to carry out a flameproof performance test to confirm.
- The Japan Fire Retardant Association conducts unannounced trial purchases of flameproof articles, conducts flameproof performance tests in order to confirm that the flameproof articles have the flameproof performance stipulated by firefighting laws and regulations.

Cords and Downstrings on Children's Clothing

Requires suppliers to meet the standards for clothing with cords or drawstrings designed for children under 13 years old.

Does not apply:

- child use and care articles, for example bibs, nappies, soother holders and underwear;
- shoes, boots and similar footwear;
- gloves, hats, bonnets, scarves and socks;
- neckties designed to be worn with a shirt or blouse;
- belts, suspenders and armbands;
- celebratory clothing such as that worn at civil or religious ceremonies, national or regional festivals;
- specialty sportswear and activity wear worn for limited periods and under supervision except where those garments are commonly worn as day wear or night wear;
- theatrical costumes used for theatrical performances;
- aprons intended to be worn over day wear, for limited periods and under supervision, to protect clothing from soiling during activities such as painting, cooking, or during meal times;
- traditional clothing (e.g., newborn onesies, jinbei, or yukata).



Act on Control of Household Products Containing Harmful Substances

Recommended Test Method:

JIS L 1940-1:2014 (ISO 24362-1:2014) – Textiles – Methods for determination of certain aromatic amines derived from azo colorants – Part 1: Detection of the use of certain azo colorants accessible with and without extracting the fibers

JIS L 1940-3:2014 (ISO 24362-3:2014) — Textiles — Methods for determination of certain aromatic amines derived from azo colorants — Part 3: Detection of the use of certain azo colorants, which may release 4-aminoazobenzene

The Act bans various substances for use in textile products, including:

No.	Substance Name
1	4-aminoazobenzene
2	2-amino-4-nitrotoluene
3	4-aminobiphenyl
4	4,4'-oxydianiline
5	o-anisidine
6	o-aminoazotoluene
7	o-toluidine
8	2,4- xylidine
9	2,6-xylidine
10	4-chloro- <i>o</i> -toluidine
11	2,4-diaminoanisole
12	4,4'-diaminodiphenylmethane
13	3,3′-dichlorobenzidine
14	3,3′-dimethyl-4,4′-diaminodiphenylmethane
15	3,3'-dimethylbenzidine
16	3,3′-dimethoxybenzidine
17	4,4'-thiodianiline
18	2,4,5-Trimethylaniline
19	2,4-toluylendiamine
20	2-naphtylamine
21	<i>p</i> -cresidine
22	p-chloroaniline
23	benzidine
24	4,4'-methylene-bis-(2-chloro-aniline)

Labelling Rules

Requirements:

- Type of fabric and textile yarn content, with percentage figures for lining, thread and material;
- Care and washing instructions;
- Name of manufacturer/supplier or officially registered number.

JIS L0001 (2014) - Care Labelling Code Using Symbols requires the use of the ISO international care labelling system (ISO 3758:2012).

All topcoats, overcoats, and raincoats, etc., must be labelled in Japanese to show whether they are water repellant, coats without the label cannot be designated as raincoats.

Labelling requirements for apparel, footwear, and travel goods made of leather or synthetic leather are covered under the Miscellaneous Manufactured Goods Quality Labelling Regulations and must be labeled showing the type of material/leather, handling instructions, and name and contact information of the entity responsible for labeling.

The name of the country of origin is required on all domestic and imported textile and apparel products.

Looking to main eco-friendly standards used by Japanese fashion industry, we have the following data:

OEKO-TEX Standards	Number of US Companies certified
STANDARD 100 by OEKO-TEX	295
LEATHER STANDARD by OEKO-TEX	1
STeP by OEKO-TEX	0
ECOPASSPORT by OEKO-TEX	18
MADE IN GREEN by OEKO-TEX	2
DETOX TO ZERO by OEKO-TEX	0

Textile Exchange certifications	Number of US Companies certified
GRS Certified	50
OCS Certified	43
RCS Certified	8
RDS Certified	5
RWS/RMS Certified	6

GLOBAL ORGANIC TEXTILE STANDARD (GOTS)	Number of US Companies certified
Certified Suppliers	31

The main conclusion from the data in the charts is that there is a relevant number of Japanese companies with eco-labels, nevertheless, when comparing to the total number of T&C companies in Japan this figure is still insignificant. Nevertheless, out of the three markets under analysis (Canada, USA, Japan), Japanese companies are actually the ones with higher number of labels and Standards, what can lead to assume that Japan has high concerns with the sustainability in the fashion industry and promotes the use of relevant international standards to certify that a given product of process is actually given the correct claims to the market.

Other Eco Labels and Standards <u>approved</u> in the Textile Japanese Market:



With nearly 30 years of experience for audit and certification of organic products in more than 130 countries, **Ecocert** is one of the world's leading specialist in the certification of sustainable practices.



BLUESIGN is a system that certifies safer sustainable manufacturing of textile consumer products. BLUESIGN traces each textile's path along the manufacturing process, making improvements at every stage from factory floor to finished product.

Strategy and Recommendations for Market Approach

From the analysis made to the Japanese market, it is astonishing the relevant number of initiatives that promote sustainable fashion and circularity, including, Japan's government efforts to reduce the environmental burdens of its fashion industry. Japan gathers many essential conditions to become a pioneer in building a sustainable and circular system in the textile industry. In this sense, the strategy should incorporate some aspects that already exist in the value chain of the Japanese textile industry and work towards its development.

What could be the opportunities for external partners concerning the "sustainable fashion" framework in Japan?

The main imports from the fashion industry in Japan are manufactured clothes, especially from China, however, the fashion market in Japan is very broad and it is relatively easy for the new players to achieve a comfortable market share. There is also a growing demand for sustainable fashion products, due to the increasing ecological awareness and evidenced by the emergence of new sustainable fashion brands. Furthermore, the main sustainable fashion needs are related to raw materials, men's clothing, footwear and accessories. Due to land scarcity, Japan cannot produce the organic fibres it needs to feed the fashion industry. This can provide an opportunity for European companies to supply organic and ecological raw materials, and in this way, try to shape Japanese demand for raw materials, since there is a common interest in converging towards a sustainable industry. European companies should also try to address the lack of sustainable footwear and accessories, by developing new products and raw materials, to increase the offer in that industry segment. Moreover, as there has been an increasing demand for athleisure and the Japanese place great importance on the usefulness, quality and durability of textile products, an effort must be done in order to manufacture products that fulfil those requirements. Lastly, there is a growing demand for traditional clothing that can be embraced by the European sustainable fashion industry.

Japan has faced a significant shift in consumption behaviour in the past decade, particularly among the younger generation. The digital presence is also a key element for a successful approach because in Japan, the society is very technology-driven and the existing sustainable brands have already a strong presence in the social networks.

Strategy and Recommendations for Market Approach

From the Fashion industry side:

- The rising trends for regionalism and rural lifestyles have seen Japanese consumers re-evaluating local products and traditional crafts. This can be an opportunity for EU companies, taking advantage of the demand for traditional clothing that can be embraced by the European sustainable fashion industry;
- Japanese consumers are looking for quality and long-lasting simple products, that can add excellent functionality and performance;
- Since the home textiles have already a quite interesting commercial cooperation between EU and Japan, it would be interesting to promote sustainable home textile fabrics from EU and export them to Japan;
- Increase the market uptake from EU companies willing to sell recycled textile raw materials generated by the EU industry and supply textile raw materials with certified eco-labels;
- Woman clothing is one of the main imports from Japan textile and clothing trades, namely fashion and high-end brands. This can be an opportunity to promote posh & fresh fashion related EU brands in Japan.

From the Fashion Associations and Research Organizations:

- Create cooperation agreements with local fashion associations to build sustainable apparel value chains (circular business models focusing on circular textile design, sharing, recycling and reuse of textiles);
- Set science-based targets that allow achieving net-zero emissions (or close to it) in the textile & clothing business;
- Consultancy about eco-design measures to ensure that textile products are fit for circularity.

Main Conclusions

Textile pollution is a serious problem around the world. According to some estimates, the textile industry is the third-largest polluter next to oil and food industry. Worldwide, consumers are buying and disposing million tons of clothing that ends up in landfills every year. But the environmental awareness from the population and policy makers is changing and there are more and more new and innovative textile recycling methods and ways to reduce textile waste that are gaining prominence around the globe and providing a great benefit to our planet.

After a deeper analysis of these three major markets, it is possible to speculate about the outcome of entering these markets, using "Sustainable Fashion" as the driver.

The Canadian market is highly dependent on external apparel production. The growing awareness of the need to transform the textile industry into a more sustainable industry and the CETA agreement between the EU and Canada constitutes a good opportunity for the European sustainable fashion companies. In other words, it is expected that the entrance into the Canadian market won't be a process with great resistance. Furthermore, cooperation to increase the usage of textile eco-labels in Canada might be the cornerstone to promote new businesses opportunities, allowing to reinforce the added value of the European fashion market comparing to the actual leading importers like China or Bangladesh, that offer clothes at a cheaper price without relevant concerns about sustainability issues.

Main Conclusions

US market is the largest textile market in the world. However, American generic consumers do not have a very solid awareness of environmental issues, and the motivation for purchasing fashion products is essentially based on the product technical qualities and the strength/power of the brand. In this sense, the entrance into the US market is expected to be difficult, and the strategy should be mainly oriented towards the promotion of the brand, namely using online marketplaces or online retail stores.

Finally, the Japanese market can be considered as a mix of the USA and Canadian markets. From one side the Japan and the USA similarities are mainly related to fast fashion and the intense level of fashion consumption products using online channels, where the e-commerce habits are well established. On the similarities with the Canadian market, there is a great awareness of environmental issues as Japan has been one of the world's leaders in innovative textile recycling and textile waste reduction. Overall, the entrance into the Japanese market from European fashion companies is expected to be of great potential acceptance, and the high-end European fashion brands might help to pave the way to open new business channels, as these high-end brands have a great reputation in the Japanese market.

One common factor among these three markets is the fact that young people are shaping the future of sustainable fashion. This means that they are the future of fashion consumption and they are the target audience to be inspired by EU sustainable fashion industry.

From a public policy stand point, more cooperation across industries for research and development of sustainable practices, upstream and downstream cooperation to implement these practices, and more information and education available to orient consumers is needed to promote sustainability in the Fashion industry.

Bibliography - Canada

- 120+ ETHICAL CANADIAN FASHION BRADS (www.terumah.com)
- 15 Eco-conscious Canadian Clothing Brands (www.bcliving.ca)
- 2021 economic Outlook: Playing Catch-Up (www.bdc.ca)
- Accouting Standards Board (www.frascanada.ca)
- Apparel industry profile (www.ic.gc.ca)
- Apparel Market Research & Business Solutions (www.npdgroup.ca)
- Canada (CAN) Exports, Imports, and Trade Partners | OEC The Observatory of Economic Complexity
- Canada abandoned its fashion industry. Covid-19 reveals that may have been a deadly choice (www.sabrinamaddeaux.com)
- Canada imports from Bulgaria 1989-2020 Data | 2021
 Forecast (tradingeconomics.com)
- Canada wrapping the world in style (www.fibre2fashion.com)
- Canada | Imports and Exports | World | All Commodities
 | Value and Value Growth 2009-2020 (www.trendeconomy)
- Canada's Top Trading Partners 2020 (worldstopexports.com)
- Canada: Trade Statistics >> globalEDGE: Your source for Global Business Knowledge (msu.edu)
- Canada: Unemployment rate from 2016 to 2026 (www.statista.com)
- Canadian apparel federation (www.apparel.ca)

- Canadian apparel market statistics & facts (www.statista.com)
- Canadian fashion industry acting to reduce its impact on the planet: expert (www.cpacanada.ca)
- Canadian Fashion Statistics (www.fashionunited.ca)
- Canadian Textile industry (www.study.com)
- Canadian Textile industry association (www.canadiantextiles.ca)
- Canadian textiles industry (ic.gc.ca)
- CETA origin quota utilization tables 2021 (international.gc.ca)
- Clothing industries (www.thecanadianencyclopedia.ca)
- Covid-19 challenge: How is Canada's Textile Industry faring? - Fibre2Fashion
- Denmark exports to Canada 1993-2020 Data | 2021
 Forecast (tradingeconomics.com)
- Economic Impacts of COVID-19 in Quebec: Textiles and Clothing - Job Bank
- Fashion Statistics Canada (fashionunited.ca)
- Fashion/Apparel (www.toronto.ca)
- Garment manufacturing systems (www.etonsystems.com)
- Gross domestic product, income and expenditure, fourth quarter 2020 (www150.statcan.gc.ca)
- Green Policy Platform www.greengrowthknowledge.org/research/getting-circular economy-primer-canadian-policymakers

Bibliography - Canada

- Intertek LCA www.intertek.com/consumer/news/v108intertek-launches-lca-textile-portal/Labour
- Market Analysis Directorate, Service Canada, Quebec (Economic Impacts of COVID-19 in Quebec: Textiles and Clothing - Job Bank)
- Montréal's fashion industry: where know-how and technology meet to inspire style and creativity (www.montrealinternational.com)
- New Report Launched Sustainability and Circularity in the Textile Value of Chain (www.oneplanetnetwork.org)
- OEC The Observatory of Economic Complexity
- OEKO-TEX® Buying Guide
- Portugal exports to Canada 1988-2020 Data | 2021
 Forecast (tradingeconomics.com)
- Rate of unemployment in Canada in 2020, by industry Spain exports to Canada - 1989-2020 Data | 2021 Forecast (tradingeconomics.com)
- Portugal exports to Canada 1988-2020 Data | 2021
 Forecast (tradingeconomics.com)
- Summary Canadian Industry Statistics (www.ic.gc.ca)
- Textile Industry (www.thecanadianencyclopedia.ca)
- Textile Industry (www.thecanadianencyclopedia.ca)
- Textile Mill Canada Companies List (www.textileinfomedia.com)
- Textile Mills & Textile Product Mills MFG: Ontario 2017-2019
 (www.jobbank.gc.ca)

- Textile mills, Canadian companies (www.companylisting.ca)
- Textiles Industry Profile (www.ic.gc.ca)
- Textiles Mills in Canada Market Research Report (www.ibisworld.com)
- The Canadian Fashion Industry Is Slowing Down Fast Fashion (www.faze.ca)
- The Canadian Encyclopedia www.thecanadianencyclopedia.ca/en/article/textileindustry
- The Canadian Fashion Industry Is Slowing Down Fast Fashion (www.faze.com)
- Untangling the knot: A brief history of the Canadian textile industry (www.ingeniumcanada.org)
- Value of the apparel market in Canada from 2010 to 2020 (www.statista.com)
- What is sustainable fashion? (www.eco.ca)
- What is sustainable fashion? | ECO Canada
- Where To Find Affordable Ethical Clothing On A Budget (www.threecohub.ca)

Bibliography - USA

- 10 Sustainable Fashion Organizations You Can Support (www.attiremedia.com)
- 2020-2021 federal income tax brackets and rates (www.bankrate.com)
- Agriculture Industry in the United States: 10 key facts and Figures (www.blog.bizvibe.com)
- Apparel and Textiles: Trade Statistics (www.globaledge.msu.edu)
- Bair, Jennifer & Frederick, Stacey & Gereffi, Gary. (2016).
 Bahrain's Position in the Global Apparel Value Chain: How the
 U.S.-Bahrain FTA and TPLs Shape Future Development
 Options. 10.13140/RG.2.1.3097.0963.
- Banking in the United States (en.wikipedia.org)
- Bulgaria exports to United States (www.tradingeconomics.com)
- Bulgaria's Top Trading Partners (www.worldstopexports.com)
- Clothing and Textiles Regulations in the United States: A
 Complete Guide (www.compliancegate.com)
- Commodities Subject to Import Quotas (www.cbo.gov)
- Commodities Subject to Import Quotas (www.cbp.gov)
- Crime Index by Country 2021 (www.numbeo.com)
- Denmark Exports By Country (www.tradingeconomics.com)
- Denmark exports to United States (www.tradingeconomics.com)
- Denmark: Trade Statistics (www.globaledge.msu.edu)
- EU and United States (www.ec.europa.eu)

- EUA (www.oec.world)
- European Union, Trade in goods with USA (www.webgate.ec.europa.eu)
- Fabrics Clothing Textiles Trade Shows in America 2021-2022 (www.eventseye.com)
- Fed Ups 2021 Economic Forecast Significantly, Leaves
 Interest Rates Unchanged (www.usnews.com)
- Federal Hazardous Substances Act (www.cpsc.gov)
- How Covid-19 Has Affected the U.S. Economy (www.thebalance.com)
- https://maitokomuro.com/
- https://rennetokyo.thebase.in/
- Immigration to the United States (en.wikipedia.org)
- Key Elements of the U.S. Tax System (www.taxpolicycenter.org)
- M&A opportunities for the apparel industry after COVID-19 (www.pwc.com)
- Market Overview (www.trade.gov)
- Market Reports Textiles, Apparel, Footwear and Travel
 Goods (www.otexa.trade.gov)
- Mothly U.S. International Trade in goods and services, december 2020 (www.census.gov)
- New Report Launched Sustainability and Circularity in the Textile Value of Chain (www.oneplanetnetwork.org)
- NORTH AMERICA TEXTILE INDUSTRY GROWTH, TRENDS,
 COVID-19 IMPACT, AND FORECASTS (2021 2026)
 (www.mordorintelligence.com)

Bibliography - USA

- Number of employees in the U.S. apparel manufacturing industry from 1990 to 2020 (www.statista.com)
- Perspectives for North America's fashion industry in a time of crisis (www.mckinsey.com)
- Politics of the United States (en.wikipedia.org)
- Portugal exports to United States (www.tradingeconomics.com)
- Portugal's Top Trading Partners (www.worldstopexports.com)
- Projected GDP (Nominal) Ranking 2021 (www.statistictimes.com)
- QuickFacts United States (www.census.gov)
- Social Compliance and Sustainability (www.usfashionindustry.com)
- Spain exports to United States (www.tradingeconomics.com)
- State of the U.S. Textile and Apparel Industry: Output,
 Employment, and Trade (Updated October 2020)
 (www.shenglufashion.com)
- State of U.S. Textile and Apparel Manufacturing: Output, Employment, and Trade (Updated March 2021)
 (www.shenlufashion.com)
- Ten facts about COVID-19 and the U.S. economy (www.brookings.edu)
- Textile Mills in US (www.ibisworld.com)
- The 38 Most Ethical and Sustainable Clothing Brands from USA and Canada (www.goodonyou.eco)
- The 39 Most Ethical and Sustainable Clothing Brands from the USA and Canada (www.goodonyou.eco)

- The Consumer Product Safety Improvement Act (www.cpsc.gov)
- The evolution of American Textiles (www.mixerdirect.com)
- The Top 5 Manufacturing Certifications in The Textiles
 Industry (www.synzenbe.com)
- The U.S. Tax Burden on Labor (www.taxfoundation.org)
- Top Textile Manufacturing Companies in the USA (www.thomasnet.com)
- Total value of U.S. trade in goods (export and import)
 worldwide from 2004 to 2020 (www.statista.com)
- Trade Agreements (www.ustr.gov)
- U.S. Textiles: COVID-19 Impact (www.textileworld.com)
- Unemployment rate in the United States from 1990 to 2020 (www.statista.com)
- Unemployment Rates During the COVID-19 Pandemic (www.fas.org)
- United States Government Spending To GDP (www.tradingeconomics.com)
- United States Indicators (www.prb.org)
- US apparel imports continued to recover in February (www.just-style.com)
- US Budget Deficit by Year Compared to GDP, Debt Increase, and Events (www.thebalance.com)
- US Manufacturing Statistics and Outlook (www.thebalance.com)
- US Textile Industry (www.ncto.org)

Bibliography - USA

- USA Imports and Exports
- www.trendeconomy.com
- USA | Imports and Exports | World | Articles of apparel and clothing accessories, of leather or of composition leather |
 Value (US\$) and Value Growth, YoY (%) | 2009 2020 (www.trendeconomy.com)
- USA Gross domestic product based on purchashing power parity in current prices (www.knoema.com)
- U.S apparel market statistics & facts (www.statista.com)
- Value added to the Gross Domestic Product (GDP) of the United States of America in 2020, by industry (www.statista.com)
- Worldwide Industry for Textiles to 2026 by Material and Application (www.globenewswire.com)
- www.aafaglobal.org
- www.aapnetwork.net
- www.aatcc.org
- www.eileenfisher.com
- www.intertek.com
- www.ncto.org
- www.patagonia.com
- www.remake.world
- www.textiles.ncsu.edu
- www.usfashionindustry.com

Bibliography - Japan

- About Textiles (www.eubusinessinjapan.eu)
- Agricultural sector in Japan statistics & facts (www.statista.com)
- All about Textile industry jobs in Japan (www.we-xpats.com)
- Apparel market in Japan statistic & facts (www.statista.com)
- Athleisure: o que é? (www.kicks.pt)
- Baby & Kids Expo Tokyo (www.lifestyle-expo.lp)
- Bulgaria Exports By Country (www.tradingeconomics.com)
- Consumer Markets Apparel Japan (www.statista.com)
- Crime Index by Country 2021 (www.numbeo.com)
- Denmark exports to Japan (www.tradingeconomics.com)
- Digital Markets eCommerce Fashion Japan (www.statista.com)
- Eco-Friendly fashion brands you must visit in Japan (www.zenbird.media)
- Economic effects of COVID-19 on Japan: World's 3rd largest economy (www.fibre2fashion.com)
- Economic Partnership Agreement (www.eubusinessinjapan.eu)
- Emerging trends in textile processing (www.fibre2fashion.com)
- Ensuring the quality of flameproof articles (www.jfra.or.jp)
- EU-Japan Economic Partnership Agreement (www.ec.europa.eu)
- EU-Japan EPA Factsheet (www.eu-japan.eu)
- Exploring The Beauty of Traditional Japanese Textiles (www.medium.com)
- Fashion World Tokyo (www.fashion-tokyo.jp)

- First year of EU-Japan Economic Partnership Agreement shows growth in EU exports (www.trade.ec.europa.eu)
- Geograpgy of Japan (en.wikipedia.org)
- Half-Yearly Report: Japanese apparel retail sales fall 40% in 2020; monthly rebound can be seen post-pandemic (www.apparelresources.com)
- Haruhiko Kuroda: The impact of COVID-19 on the Japanese economy and the Bank of Japan's response (www.bis.org)
- Immigration to Japan (www.en.wikipedia.org)
- Japan Approves to Designate List of 24 Aromatic Amines as Harmful Substances in Household Products (www.intertek.com)
- Japan Exports of CLothing Accessories & Apparel (www.tradingeconomics.com)
- Japan Government Bidget (www.tradingeconomics.com)
- Japan Government Spending To GDP (www.tradingeconomics.com)
- Japan Imports and Exports Other footwear with outer soles and uppers of rubber or plastics (www.trendeconomy.com)
- Japan imports from Bulgaria (www.tradingeconomics.com)
- Japan imports from Portugal (www.tradingeconomics.com)
- Japan Imports of Clothing Accessories & Apparel (www.fxempire.com)
- Japan Imports of CLothing Accessories & Apparel (www.tradingeconomics.com)

Bibliography - Japan

- Japan Trade Agreements (www.export.gov)
- Japan's economy shrinks 4.8% in 2020 due to Covid (www.bbc.com)
- Japan: Distribution of gross domestic product (GDP) across economic sectors from 2008 to 2018 (www.statista.com)
- Japan: Distribution of the workforce across economic sectors from 2010 to 2020 (www.statista.com)
- Japan: National debt from 2016 to 2026 in relation to gross domestic product (www.statista.com)
- Japanese economy sees recovery at 12.7% from coronavirus pandemic slump (www.business-standard.com)
- Japanese Textiles (www.fashion-history.lovetoknow.com)
- Japan's apparel market Key selling and sourcing trends (www.just-style.com)
- Japan's Apparel Sourcing Patterns (www.shenglufashion.com)
- Japan's Apparel Sourcing Patterns (www.shenglufashion.com)
- Japan's Tariff Schedule as of April 1 2021 (www.customs.go.jp)
- Key elements of the EU-Japan Economic Partnership Agreement (www.ec.europa.eu)
- Key Market Trends In the Global Textile Industry (www.fashionabc.org)
- Leading domestic fashion companies in Japan as of 2020, by sales value (www.statista.com)
- List of Main Textile Organizations (www.jtf-net.com)
- Manufacturing and Machinery Industry in Japan (www.allianceexperts.com)

- Most popular sustainable materials for fashion purchases in Japan as of August 2020 (www.statista.com)
- Populin, Alice 2018 "Perspectives on Sustainable Fashion in the Japanese Apparel Market"
- Portugal exports by country (www.tradingeconomics.com)
- Project Tokyo (www.project-tokyo.com)
- Quantifying the impact of the COVID-19 pandemic on firms' default probability in Japan (www.voxeu.org)
- Retail sales value of the apparel industry in Japan from 2011 to 2019 (www.statista.com)
- Retail Value of the secondhand fashion market in Japan from 2016 to 2019 with a forecast until 2022 (www.statista.com)
- Revenue Statistics 2020 Japan (www.oecd.org)
- Spain exports to Japan (www.tradingeconomics.com)
- Statistics of Japanese Textile Industry (www.jcfa.gr.jp)
- Sustainable Fashion Expo (www.fashion-tokyo.jp)
- Sustainable Japanese Fashion Brands You Need to Know (www.tokyoweekender.com)
- Taxes in Japan Overview of individual tax system (www.jetro.go.jp)
- Textile Companies from the Old School (www.allaboutjapan.com)
- Textile Tokyo (www.fashion-tokyo.jp)
- Textiles (www.eubusinessinjapan.eu)

Bibliography - Japan

- Top 10 Textiles & Apparel manufacturing companies in Japan by number of employees for May 2021 (www.zoominfo.com)
- Trade Fairs in Tokyo (www.fibre2fashion.com)
- Trade of Japan (www.britannica.com)
- What are The Japanese textile Standards (www.fireproofworkwear.com)
- What are the types of taxes in Japan? (www.guidable.co)
- Why the Textiles Market is Flourishing in Japan Right Now (www.asiatoday.com)
- World's Top Exports Japan's Top 10 Exports (www.worldstopexports.com)
- www.jasta1.or.jp
- www.jcfa.gr.jp
- www.jwwa.net
- www.kinujinsen.com
- www.nissenkyo.or.jp
- www.toray.com
- www.yosankyo.jp

Glossary

CETA Comprehensive Economic Trade Agreement

CCPSA Canada Consumer Product Safety Act

CPI Consumer Price Index

EPA Economic Partnership Agreement

EPR Extended Producer Responsibility

EU European Union

FDI Foreign Direct Investment

GDP Gross domestic product

GOTS Global Organic Textile Standard

LCA Life Cycle Assessment

MFN Most-favoured Nation

PPP Purchasing Power Parity

REX Registered Exporter system

RMG Ready made garments

T&C Textile & Clothing

TLA Textile Labelling Act

US United States

USA United States of America

WEAR World Ethical Apparel Roundtable

WTA World Trade Organization



Sustainable Fashion Alliance For International Markets

This study was funded by the European Union's COSME Programme.

The content of this study represents the views of the author only and is his/her sole responsibility; it cannot be considered to reflect the views of the European Commission and/or the Executive Agency for Small and Medium-sized Enterprises (EASME) or any other body of the European Union. The European Commission and the Agency do not accept any responsibility for use that may be made of the information it contains.













