

**MARKET RESEARCH REPORT**  
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**TPSA** | CANADA-INDONESIA TRADE AND  
PRIVATE SECTOR ASSISTANCE PROJECT



# Apparel

**Canada**

Program undertaken with the financial  
support of the Government of Canada  
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countries

## **Market Research Report: Apparel**

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### **About the TPSA Project**

TPSA is a five-year C\$12-million project funded by the Government of Canada through Global Affairs Canada. The project is executed by The Conference Board of Canada, and the primary implementation partner is the Directorate General for National Export Development, Ministry of Trade.

TPSA is designed to provide training, research, and technical assistance to Indonesian government agencies, the private sector—particularly small and medium-sized enterprises (SMEs)—academics, and civil society organizations on trade-related information, trade policy analysis, regulatory reforms, and trade and investment promotion by Canadian, Indonesian, and other experts from public and private organizations.

The overall objective of TPSA is to support higher sustainable economic growth and reduce poverty in Indonesia through increased trade and trade-enabling investment between Indonesia and Canada. TPSA is intended to increase sustainable and gender-responsive trade and investment opportunities, particularly for Indonesian SMEs, and to increase the use of trade and investment analysis by Indonesian stakeholders for expanded trade and investment partnerships between Indonesia and Canada.

## Table of Contents

<b>Introduction.....</b>	<b>4</b>
<b>Global DSST Apparel Market .....</b>	<b>6</b>
<b>Canadian DSST Apparel Market .....</b>	<b>7</b>
Canadian Apparel Industry.....	11
Regulations.....	12
<b>Export Considerations: Indonesian Context .....</b>	<b>13</b>
Location.....	13
General Sector Characteristics .....	14
Export Performance.....	15
Growth Opportunities in Canada.....	16
Value Chain.....	17
Government Policies in Support of the Apparel Industry .....	18
Employment in the Apparel Sector .....	18
<b>Gender Considerations in Textile Production.....</b>	<b>19</b>
Legislation, Policy, and Regulatory Frameworks .....	19
Women in the Sector .....	20
<b>Environmental Regulations.....</b>	<b>21</b>
<b>Sector Voluntary Frameworks .....</b>	<b>21</b>
Labour .....	21
Environment.....	22
Sustainable Fibre Production.....	22
Sustainable Manufacturing .....	22
Voluntary Environmental Labelling.....	22
Sustainable Textiles in Indonesia .....	23
Certification in Canada.....	23
<b>Conclusions.....</b>	<b>23</b>
<b>References.....</b>	<b>24</b>
<b>Appendix A: Standards for Indonesian Textiles Exports to Canada .....</b>	<b>28</b>

## Introduction

This report provides an overview of the trade between Canada and Indonesia in the apparel segment comprising dresses, shirts, shorts, and trousers (DSST). (See box “Apparel Sub-Segments Included in Report.”) The report describes the research methodology and data that inform it, then provides a brief overview of the global market, followed by an analysis of the Canadian market for Indonesian apparel, including historical trends and growth potential going forward. (See box “Methodology and Data Sources” for details on the approach and data used.) It also outlines the key regulations Indonesian exporters will need to consider for the Canadian market. An analysis of the Indonesian context follows. The report ends with a discussion of the role of voluntary frameworks and standards, and a summary of key factors in the market for apparel exports.

### ***Apparel Sub-Segments Included in Report***

The report focuses on one apparel segment—dresses, shirts, shorts, and trousers—with 13 detailed sub-segments. The sub-segments are defined using six-digit codes from the Harmonized Commodity Description and Coding System (HS). The HS is an international system used to classify traded products using standardized names and numbers.

#### Dresses, Shirts, Shorts, and Trousers (DSST) [L1]

610442:	Womens/girls dresses (knitted of cotton)
610443:	Womens/girls dresses (knitted of synthetic fibres)
610444:	Womens/girls dresses (knitted of artificial fibres)
610462:	Womens/girls trousers, overalls, and shorts (knitted of cotton)
610463:	Womens/girls trousers, overalls, and shorts (knitted of synthetic fibres)
610520:	Mens/boys shirts (knitted of man-made fibres)
610620:	Womens/girls blouses and shirts (knitted of man-made fibres)
610990:	T-shirt, singlet, or vest (knitted of other textile material)
620442:	Womens/girls dresses (woven of cotton)
620443:	Womens/girls dresses (woven of synthetic fibres)
620444:	Womens/girls dresses (woven of artificial fibres)
620520:	Mens/boys shirts (woven of cotton)
620640:	Womens/girls blouses and shirts (woven of man-made fibres)

### ***Methodology and Data Sources***

Analysis at the global level was conducted using the United Nations Comtrade database on both an import and export basis. These data allow for analysis of overall global value and volume trends, global and Indonesian implied price trends, market shares, and rankings.

Comtrade database: <https://comtrade.un.org/>

Additional historical data on Indonesian exports came from the International Trade Centre (ITC) trade statistics database.

ITC database: <http://www.intracen.org/itc/market-info-tools/statistics-export-product-country/>

At the Canadian level, the apparel market was analyzed at the HS-6 level using the Canadian International Merchandise Trade (CIMT) database produced by Statistics Canada. This information was used to examine value and volume trends of Canadian apparel imports, projected growth in the Canadian market, implied Canadian apparel price trend, market shares, and rankings.

CIMT database: [www5.statcan.gc.ca/olc-cel/olc.action?objId=65F0013X&objType=2&lang=en&limit=0](http://www5.statcan.gc.ca/olc-cel/olc.action?objId=65F0013X&objType=2&lang=en&limit=0)

In addition, concordance matching was done to connect the HS codes to North American Industry Classification System (NAICS) codes so that official (such as Canadian Industry Statistics database) and private databases (such as IBISWorld Canada) could be used.

In addition to these quantitative sources, the examination of the Canadian market includes an analysis of relevant legislation, regulations, and policies for apparel. This includes information from Environment and Climate Change Canada; the Canadian Border Services Agency; Innovation, Science, and Economic Development Canada; and the Department of Justice Canada. These sources provided information on tariff rates and sector regulations, including for product standards and labelling.

The analysis of sector dynamics in Indonesia is grounded in a literature review. Primary resources came from mainstream and grey literature, as well as technical reports and websites of relevant organizations, including from the Government of Indonesia (Ministry of Trade, Ministry of Co-operatives and SMEs [small and medium-sized enterprises], State Statistics Office), private companies and industry associations, intergovernmental organizations,<sup>3</sup> regional and national associations and research centres,<sup>4</sup> news sources (including official press releases), academic research papers, and studies by non-governmental organizations.

There are a number of limitations to the methodological approach outlined above. The report is largely the product of a desk-based review and there is little information on specific sub-segments of the apparel market. For example, much of the literature focuses on textiles and textile products or apparel generally. Nevertheless, the range of academic and policy literature available, as well as support from interview data, ensures that the report is relevant and timely.

Multiple codes made querying and analyzing certain data difficult or impossible. For example, import concentration rates are specific to codes and cannot be added up or averaged. In the case of tariffs, the number of tariff schedules is significant, and resource constraints in preparing this report made it impossible to showcase the schedules in their specificity. Price analysis, both for the global and Canadian markets, was constrained by data limitations in terms of availability and specification (differences in unit of measurement, lack of coverage, or inconsistent coverage).

The multi-code analysis was further complicated by a number of factors:

- There is significant variation across the apparel sub-segments analyzed in this report.
- Growth trends across sub-segments are very different and likely bear no resemblance to the calculated DSST average. For example, Canadian imports of womens/girls dresses woven of cotton grew at an annual rate of 10 per cent between 2005 and 2015, while

womens/girls dresses woven of artificial fibres grew at 23 per cent per year over the same period.

- Price dynamics are different—some sub-segments are higher-value, higher-margin products, others are low-margin and low-value. For example, the average import price in womens/girls dresses woven of synthetic fibres was C\$21.49 in 2015, while the average import price of T-shirts, singlets, and vests knitted of other textile material was C\$5.38.

**Footnotes:**

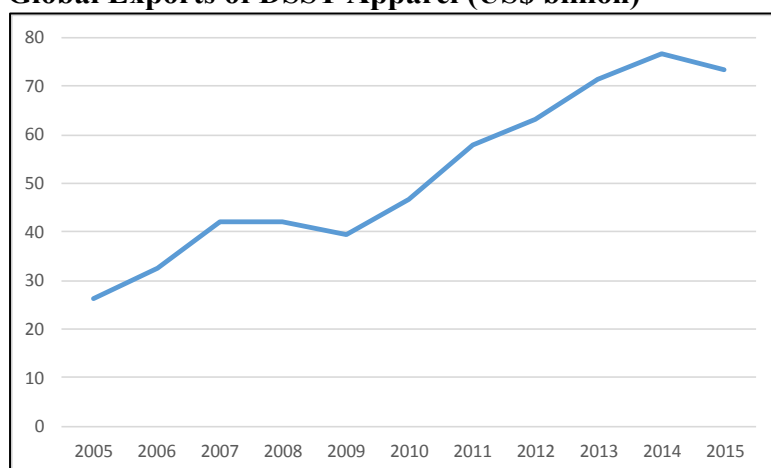
1. Trend analysis was done using the compound annual growth rate (CAGR), which calculates the constant rate of growth over a specific period.
2. The implied price was calculated as value (US\$)/volume unit (kg). It is a nominal figure, meaning it has not been adjusted for inflation.
3. The World Bank, International Monetary Fund, Asian Development Bank, World Trade Organization, International Labour Organization, UN Industrial Development Organization, UN Women, UN Conference on Trade and Development, United Nations Environment Programme, United Nations Development Programme.
4. Economic Research Institute for ASEAN and East Asia, National Bureau of Asian Research, Indonesian National Institute of Sciences (INIS), Centre for Strategic and International Studies, and SMERU Research Institute.

## Global DSST Apparel Market

The total global export market for DSST apparel stood at US\$73.6 billion in 2015. (See Chart 1.) The market grew from US\$26.3 billion in 2005, at an annual growth rate (CAGR) of 10.9 per cent.

### Chart 1

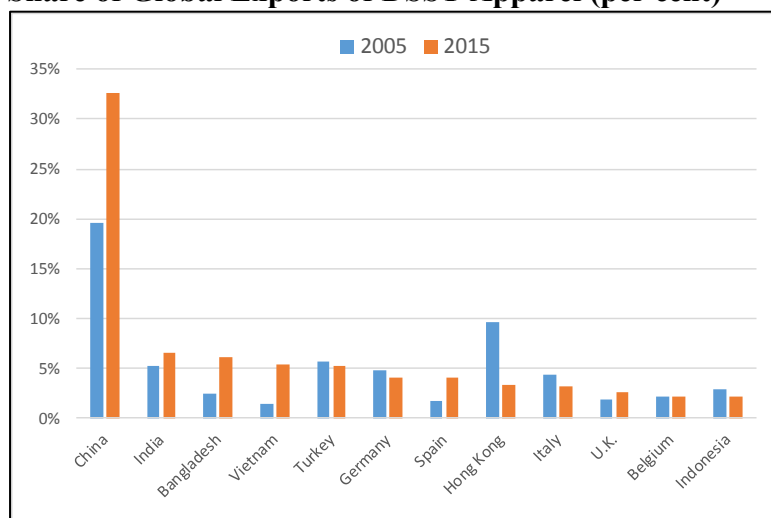
#### Global Exports of DSST Apparel (US\$ billion)



Source: International Trade Centre.

China is by far the largest exporter in the DSST apparel market. (See Chart 2.) China accounts for 33 per cent of global exports. The other top-10 players range between 2 and 7 per cent. Indonesia is the 12th-largest exporter, with a market share of about 2.1 per cent in the DSST apparel market.

**Chart 2**  
**Share of Global Exports of DSST Apparel (per cent)**



Source: International Trade Centre.

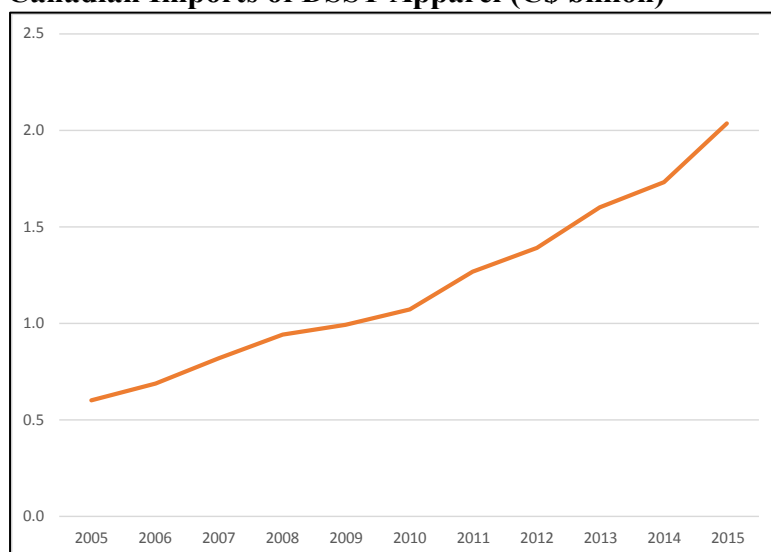
The U.S. is the largest import market (or export destination), accounting for 23 per cent of DSST imports. Other major import markets include the U.K., Germany, Japan, and France. Canada is the 11th-largest import market and accounts for 2.3 per cent of global imports.

### Canadian DSST Apparel Market

Canada imported C\$2.04 billion of DSST apparel in 2015, up from C\$600 million in 2005. This represents an annual growth rate (CAGR) of 13 per cent. (See Chart 3.)

A more relevant period to use to estimate future growth is the last five years, 2010–2015. During this time frame the Canadian import market for DSST apparel grew at an annual rate (CAGR) of 13.7 per cent. Assuming this rate forward, the Canadian DSST import market would be worth C\$3.9 billion by 2020.

**Chart 3**  
**Canadian Imports of DSST Apparel (C\$ billion)**



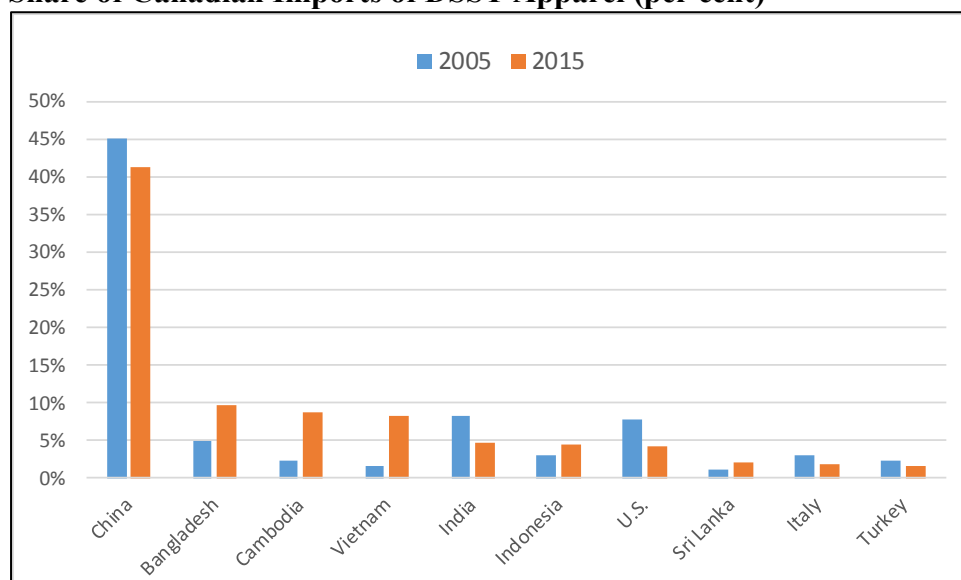
Source: Statistics Canada.

The Canadian DSST import market shows characteristics similar to the global DSST export market. (See Chart 4.) China is the top exporter to Canada, just as it was the top exporter in the global market. Five of the other top 10 players in the global DSST market also make the list of top 10 countries that Canada imports DSST apparel from—Bangladesh, Vietnam, India, Italy, and Turkey. However, several significant differences are evident:

- Indonesia makes the list of top 10 exporters of DSST apparel to Canada (ranking 6th) but not in global exports (ranking 12th).
- Indonesia's share of global DSST apparel declined between 2005 and 2015, but its share of Canadian DSST imports rose over the same period.
- China's global share of DSST increased between 2005 and 2015, but its share in Canadian imports fell over the same period.
- Bangladesh and Vietnam each have a larger share of Canada's DSST apparel imports than they do in global DSST exports.

**Chart 4**

**Share of Canadian Imports of DSST Apparel (per cent)**

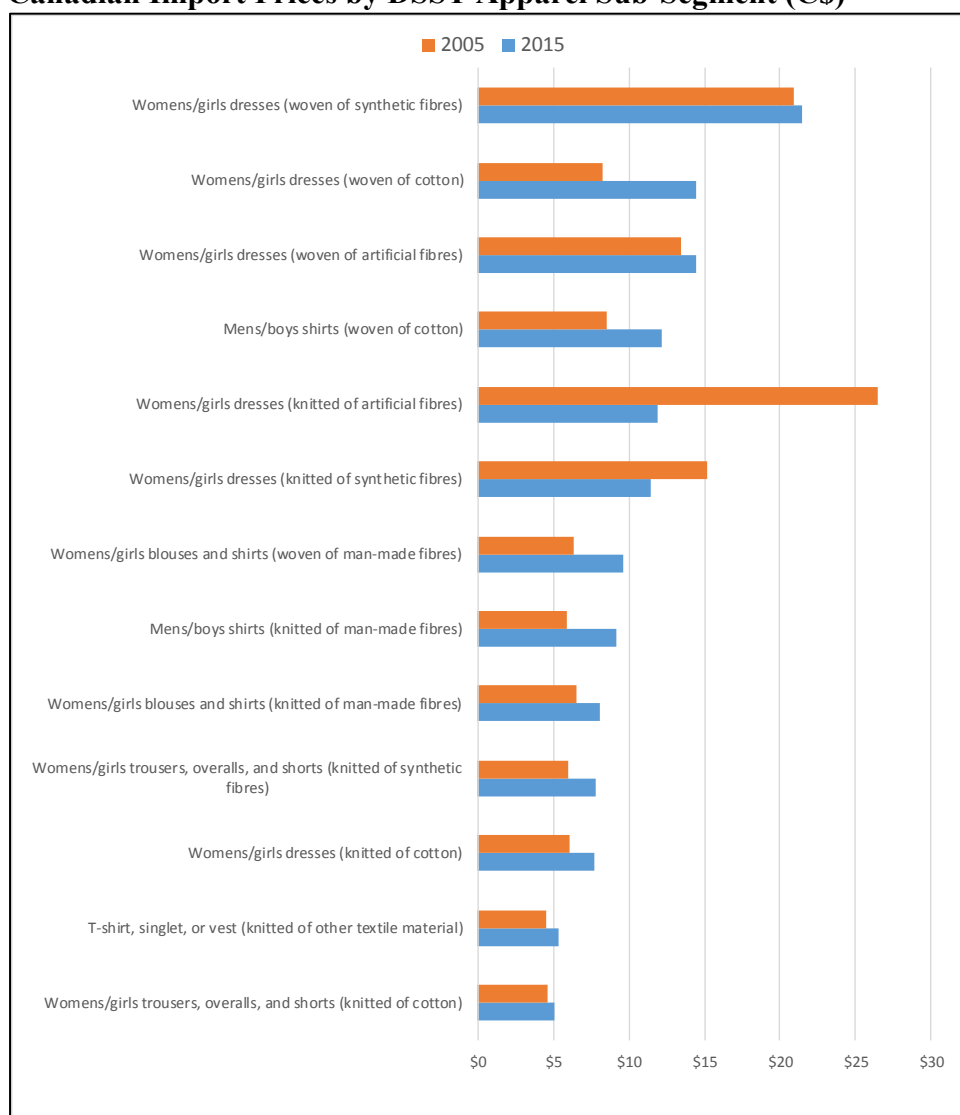


Source: Statistics Canada.

Import prices in the Canadian market for DSST apparel sub-segments have generally increased, with two notable exceptions: womens/girls dresses (knitted of synthetic fibres) and womens/girls dresses (knitted of artificial fibres). (See Chart 5.)



**Chart 5**  
**Canadian Import Prices by DSST Apparel Sub-Segment (C\$)**



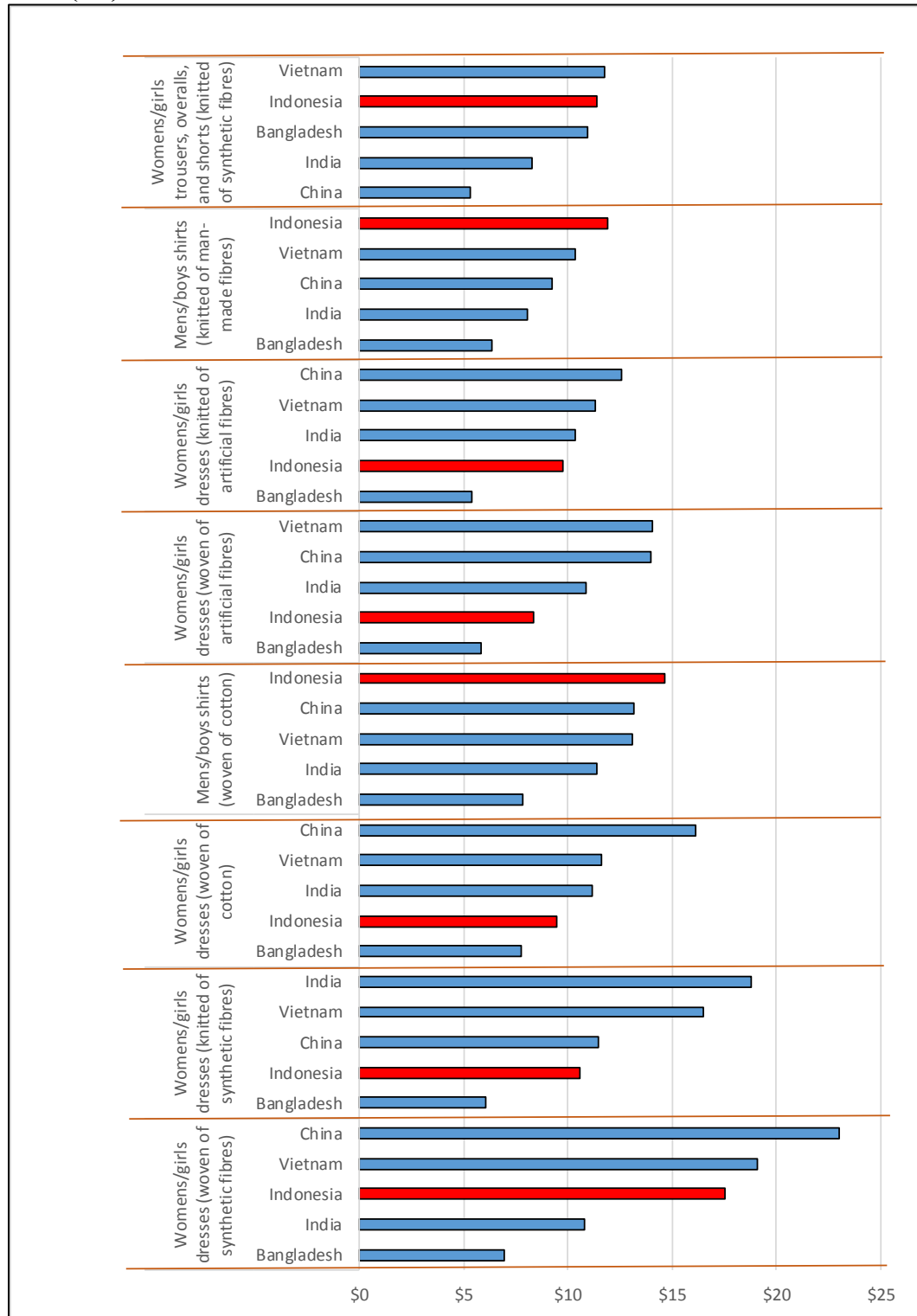
Source: Statistics Canada.

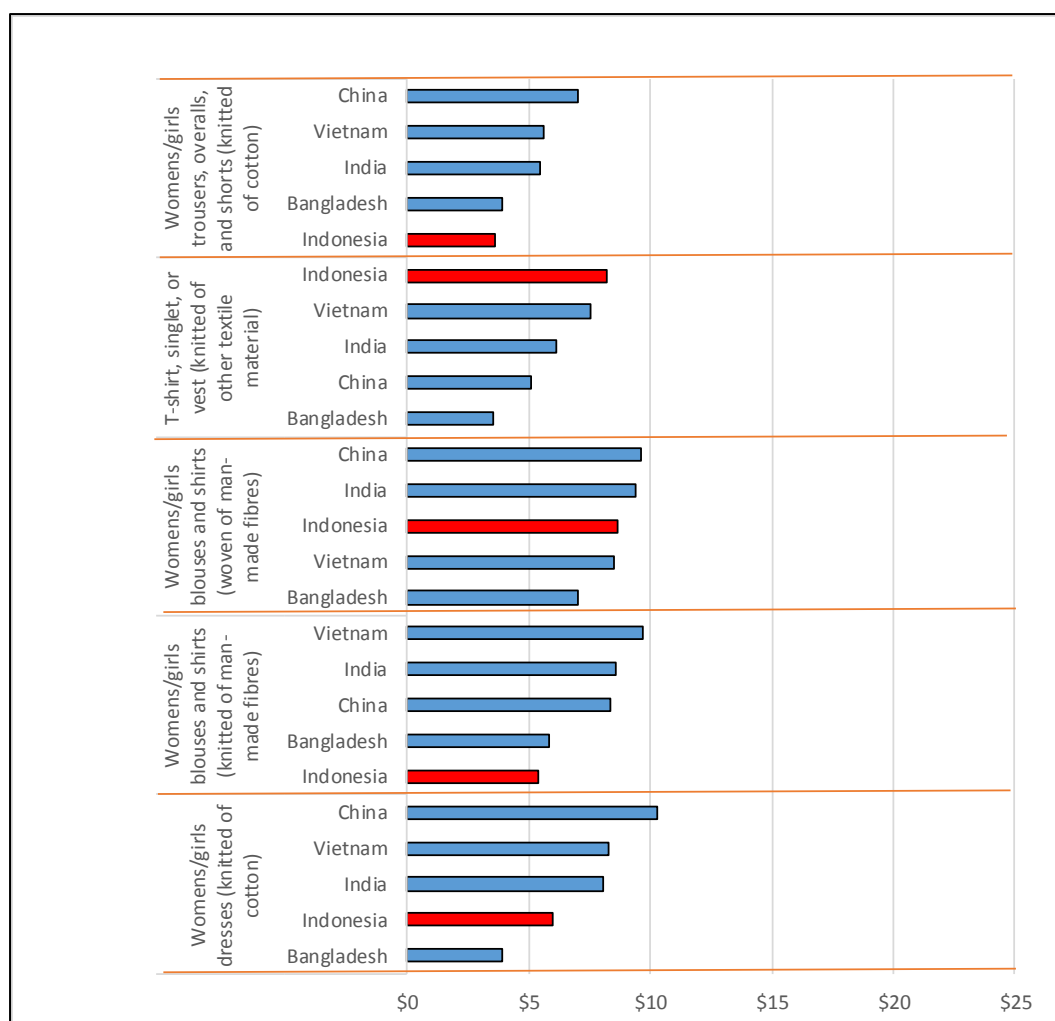
Prices commanded by major competitors vary in the Canadian import market for DSST apparel sub-segments. (See Chart 6.) Differences across competitors may be due to various factors, which would require in-depth analysis of each sub-segment.<sup>1</sup> Indonesian import prices in most DSST apparel sub-segments in the Canadian market are close to or higher than the prices of close competitors.

<sup>1</sup> Outliers should be interpreted with caution as they may have more to do with the quality of underlying data reporting than actual trends. Further analysis and research would be needed to ascertain the reasons behind price differences across competitors.

**Chart 6**

**Canadian Import Prices by DSST Apparel Sub-Segment and Major Source Country, 2015 (C\$)**





Source: Statistics Canada.

## Canadian Apparel Industry

Over the past decade, the Canadian apparel manufacturing sector has undergone significant changes mainly due to trade liberalization and restructuring of the retail industry (ISED 2017). A growing share of production is offshored to low-labour-cost countries, such as China, Bangladesh, Cambodia, Vietnam, and India.

Canadian apparel manufacturing's gross domestic product (GDP) was C\$1.1 billion in 2015, a contraction from 2011 when GDP was \$1.3 billion (ISED 2017). Since the removal of apparel import tariffs on less-developed nations in 2003, the domestic Canadian industry has been in decline (IBISWorld 2015, 2016). The increase in imports in this industry is displacing demand for domestically manufactured goods, as imports are considerably cheaper due to lower labour costs in developing countries exporting textile products. At the industry level, apparel imports are expected to make up 88.7 per cent of domestic demand. According to data for several more granular segments, the levels may be higher.

However, this trend will be somewhat mitigated by expected export demand for some Canadian-made articles that could give industry revenues a boost. For example, by 2020, exports in the womens/girls apparel segment are expected to account for 80 per cent of

revenue, driven largely by sales in the Canada Goose brand down-filled parkas (IBISWorld 2015).

The market in the womens/girls apparel manufacturing industry (2015) is segmented into dresses (28.2 per cent); lingerie, loungewear, and nightwear (11.5 per cent); blouses and shirts (6.6 per cent); and pants, shorts, and slacks (4.1 per cent)—accounting for 50.4 per cent of all female apparel industry revenue in the Canadian market (IBISWorld 2015). The market in the mens/boys apparel manufacturing industry is segmented into pants, trousers, slacks, and jeans (14.7 per cent); shirts and sweaters (11.4 per cent); and underwear and nightwear (1.2 per cent)—accounting for 27.3 per cent of male apparel industry revenue in the Canadian market (IBISWorld 2016).

Imports are expected to satisfy 99 per cent of industry demand for womens/girls apparel (IBISWorld 2015) and 96.8 per cent of the demand for mens/boys apparel (IBISWorld 2016). Between 2010 and 2015, imports of women's apparel into Canada have increased at an average of 4 per cent per year to reach C\$4.5 billion in 2015 (IBISWorld 2015). The total value of womens/girls apparel imports to Canada is anticipated to increase 2.1 per cent per year to \$5.0 billion in 2020.

The bulk of revenue for the mens and boys apparel manufacturing industry in Canada comes from suits, coats, and overcoats, making up an estimated 42.7 per cent of the revenue in 2016 (IBISWorld 2016), whereas this market segment only made up 17.3 per cent of revenue in the womens/girls apparel manufacturing industry (IBISWorld 2015). Since coats and jackets carry a higher retail price point than most other clothing items, they are a discretionary purchase for consumers (IBISWorld 2016). Therefore, this segment of apparel manufacturing is also more responsive to changing prices and the amount of disposable income consumers have to spend.

Industry participants include clothing jobbers, who perform entrepreneurial functions involved in manufacturing clothing such as purchasing materials, preparing samples, arranging materials for clothing to be made from, and marketing the finished product (CIS 2016). In Canada, wholesalers minimize risk for industry operators by buying large quantities and supplying industry items to downstream retailers, taking on the responsibility of storage and transportation across the country (IBISWorld 2016). In recent years, most large, low-end apparel manufacturers have also been able to achieve economies of scale and bypass wholesalers to sell their merchandise directly to retailers through large-scale contracts.

## Regulations

The clothing and textile industry in Canada is regulated under the [\*Canada Consumer Product Safety Act \(CCPSA\)\*](#) and [\*Hazardous Products Act \(HPA\)\*](#). Textile products manufactured, imported, advertised, or sold in Canada are subject to the CCPSA and must meet the flammability requirements set out in the [\*Textile Flammability Regulations\*](#). The *Test Method for the Flammability of Textiles* is available from Health Canada ([cps-spc@hc-sc.gc.ca](mailto:cps-spc@hc-sc.gc.ca)).

Companies are also subject to global initiatives such as the [\*Business Social Compliance Initiative\*](#), the [\*United Nations Global Compact Framework\*](#), and the [\*Fair Factories Clearinghouse\*](#), which all aim to set universal standards for factory and labour conditions, as well as compliance with environmental laws within the apparel sector.

All consumer apparel is labelled in accordance with the [\*Consumer Packaging and Labelling Act\*](#). More specifically, the Canadian [\*Government Guide to the Textile Labelling Act and the Textile Labelling and Advertising Regulations\*](#) lays out the details of how to label different kinds of fabric and clothing items. For DSST apparel, Schedule I of the Textile Labelling and Advertising Regulations establishes that these labels should be permanent, able to withstand 10 cleanings. The Canadian Border Services Agency largely oversees country-of-origin labelling, and specifically processes [\*certificates of origin related to textile and apparel goods originating in a least developed country\*](#) (CBSA 2015).

## **Export Considerations: Indonesian Context**

Indonesia's garment industry is vast, with significant export capacity in knitted and non-knitted apparel of synthetic or natural fibre, producing jackets, pants and trousers, shirts, blouses, underwear, coats, fashion garments, and accessories for men, women, boys, girls, and children. These products go to major textile export destinations such as the U.S., Japan, Germany, Turkey, Korea, China, United Arab Emirates, the U.K., Brazil, and Malaysia. The garment industry is one of the biggest contributors to the Indonesian trade balance thanks to its export gains, making the country an important player in this industry worldwide (TPSA, unpublished). According to Kuncoro, this accomplishment reflects a high rate of competitiveness for the Indonesian clothing industry in the world (Kuncoro 2013).<sup>2</sup> Nonetheless, from a purely trade perspective, Indonesia's garment sector is highly dependent on the import of materials such as yarn and fabric for rayon and cotton, as well as silk (GBG 2015).

The most relevant aspect of the apparel industry for Indonesia is the employment created. Garment production employs around 1.1 million people (GBG 2014), and most workers are young women (Mather 2004; Kuncoro 2013).<sup>3</sup> From a historical perspective, during the 1990–2003 period, garments made the largest sectoral contribution to exports in Indonesia (Kuncoro 2013). Textile and textile product (abbreviated as TPT industry in Indonesian sources—*Tekstil dan Produk Tekstil*) exports suffered a significant decline in 2003, but the industry has recovered both volume and value of exports since 2004. This recovery has continued, with the World Trade Organization ranking Indonesia among the top 10 textile and clothing suppliers in the world in 2011, contributing 1.8 per cent toward global textile and clothing demand and 1.1 per cent of the EU's demand.

## **Location**

The geographical distribution of the textile and garment industry is almost 90 per cent concentrated in Java, and more than 50 per cent in West Java alone (Kuncoro 2013, Figure 6). There has been a slight decentralization compared with 10 years earlier, where almost 95 per cent of the Indonesia's textile industry was located in Java. The highest concentration is found in West Java, followed by Central Java and Jakarta.

Table 1, compiled by Kuncoro using data from the Indonesian Bureau of Statistics (2002, 2008), shows the TPT industrial clusters in the five provinces of DKI Jakarta, West Java,

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<sup>2</sup> According to Kuncoro (2013), the textile and apparel industry has grown overall mainly due to clothing.

<sup>3</sup> Mather (2004) states over half the world's clothing is made in Asia (China, India, Bangladesh, Indonesia, the Philippines, etc.). About three quarters of garment workers worldwide are women.

Central Java, Yogyakarta, and Banten in 2001–07. West Java has the highest concentration of employment, value-added, and number of largest companies.

**Table 1**  
**TPT Industrial Clusters in Indonesia**

Provinces	Employment (% of total)		Value-added (% of total)		Number of firms (% of total)	
	2001	2007	2001	2007	2001	2007
DKI Jakarta	22.8	20.2	24.4	25.9	28.6	25.5
West Java	39.5	42.5	36.8	35.7	23.5	25.1
Central Java	16.2	16.7	15.9	9.7	17.2	27.8
DIY	0.9	2.0	0.7	1.6	1.6	1.1
Banten	9.4	8.8	11.5	21.3	3.5	3.4
Total five provinces	88.8	90.3	89.3	94.2	74.4	82.9
Others	11.2	9.7	10.7	5.8	25.6	17.1
Jabodetabek	49.5	46.0	53.0	65.0	39.8	34.7
Indonesia	100.0	100.0	100.0	100.0	100.0	100.0

Source: Kuncoro 2013.

The most important locations for the TPT industry include Jakarta (extending to its metropolitan regions of Bogor, Tangerang, Bekasi, and Sukabumi) and in the Bandung extended metropolitan regions, Semarang-Ungaran corridor, and Pekalongan (Kuncoro 2013). West Java, Jakarta, and Banten industry complexes are composed mainly from medium to large enterprises, while SMEs are more common in regions such as Yogyakarta and Bali. However, the export sector is dominated by large producers, and SMEs are not proportionally significant (Tambunan n.d.). Additionally, batik production can be found in Solo, Yogyakarta, Bandung, Cirebon, Pekalongan, Surakarta, Banjarnegara, Madura, and Jakarta (Fibre2Fashion 2014).

### General Sector Characteristics

According to 2010 data, there are at least 2,869 companies in Indonesia's TPT industry contributing to a total of Rp150.5 trillion of investment (Kuncoro 2013). (See Table 2.) The number of companies in the TPT industry increased about 8 per cent between 2005 and 2010. During that same period, investment increased by 13.7 per cent and the number of workers by 19.0 per cent.

**Table 2**  
**Highlights of Indonesia's TPT Sector**

Description	2005	2006	2007	2008	2009	2010
Companies (number)	2,656	2,699	2,726	2,818	2,853	2,869
Value of investment (Rp billions)	132,381	135,648	137,906	142,068	146,170	150,525
Employees (number)	1,176,773	1,191,326	1,234,250	1,289,400	1,337,497	1,399,856

Source: Kuncoro 2013.

The sector is characterized by a handful of large, fully integrated manufacturers, more than 800 medium-sized corporations, plus numerous small companies (EKONID 2001). SMEs have grown in number by more than 50 per cent between 2005 and 2011 (Kuncoro 2013).

## Export Performance

Indonesia ranked 11th among garment exporters of HS Chapter 62 (woven apparel), with US\$4.0 billion in 2015, representing about 1.8 per cent of global exports. For Chapter 61 (knitted apparel), Indonesia ranked 15th among global exporters, with US\$3.3 billion, equivalent to 1.5 per cent of total trade worldwide. During the last 20 years, total Indonesian textile and garment exports, which cover several more chapters of products, have continuously increased, (Kuncoro 2013) reaching \$12.6 billion (ranking 12th) in 2012 (TPSA, unpublished; *Textile World Asia* 2013).

According to a 2014 International Labour Organisation (ILO) report on the effects of the abolition of the Multi-Fibre Agreement, there have been more changes in garment industry value-added<sup>4</sup> than in textiles production. In the latter, the ranking among the 15 major textiles-producing countries in the world changed little from 2005 to 2013 in terms of total value-added. However, global market share in clothing value-added changed substantially in the same period, with Indonesia growing over 100 per cent in the same period. Other countries that benefited from the abolition of the Multi-Fibre Agreement quota system were China (with a growth rate of 66 per cent), Brazil, and India. In contrast to these, in that same period the U.S., Japan, Korea, and the main producers from Europe experienced reductions in their shares of value-added of more than 30 per cent. The most acute decline, 63 per cent, was in the United Kingdom (ILO 2014).

Indonesia's strength and success in international export markets result from its quality improvement, including its local fabric production. Indonesian fabrics are popular among fashion designers. Additionally, textiles play an important role in Indonesian culture. (See box "Textiles in Indonesian Culture.")

### Textiles in Indonesian Culture

Batik is a traditional fabric of Indonesia that dates back to the 17th century. Intricate patterns are hand-etched, mostly by women, using wax and pens, then natural dyes are applied in sequence. Recognized by UNESCO for its cultural heritage, batik in Indonesia also represented social status and regional tradition (Rulistia 2015).

There are over 1,800 classical motifs in Yogyakarta and Solo, and over 1,000 in East Java. The most complex hand-painted classical batik can only be found in Yogyakarta and Surakarta areas of Central Java.<sup>1</sup> Motifs and colour, shaped by cultural influences, identify the city/region of production. As traditional dress, different batiks (particularly in the form of a sarong or shirt) would be worn for different purposes. Batik fabric is not only used for clothing, but also for table dressings, bed covers, men's ties, decorations, soft toys, handbags, and shoes. In modern Indonesia, high-quality *batik tulis* is still produced by artisans in small shops.

Prices may be quite high for intricate pieces and one piece may take a woman up to six months to produce.<sup>2</sup> There are also more moderate price points, as batik has worked its way into everyday fashion in Indonesia and internationally. Today, most fully printed batik

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4 "Gross value added is the value of output less the value of intermediate consumption; it is a measure of the contribution to GDP made by an individual producer, industry or sector; gross value added is the source from which the primary incomes of the SNA are generated and is therefore carried forward into the primary distribution of income account." <https://unstats.un.org/unsd/snaama/glossresults.asp?gID=51>.



textiles are produced by machine with chemical dyes. These textiles are produced in factories, largely dominated by male operators (while women dominate in garment-making factories).

Another example of Indonesian traditional craft and heritage are hand-woven textiles. These textiles are produced throughout the Indonesian archipelago, mostly by SMEs and micro producers. Some of the artisans use natural dyes, and the fabrics then become known as hand-woven eco-textiles (HWET). This small industry has recently been given a boost by SWITCH-Asia's Project for Handwoven Eco-textiles. It supports women-owned businesses to improve their technical, management, and business capacity and introduces new eco-friendly materials and processes. Regarding governance, the project has models establishing direct connections between producer cooperatives and exporters (World Bank Group 2015).

Footnotes:

1. Many complex and sacred motifs, such as those that are worn by sultans, were created after the artisan completed her fasting ritual processes as a way to reach the highest quality (interview with Nita Kenzo, owner of Mustokoweni's Gallery, Yogyakarta).
2. Based on five to six hours of work per day on the same piece of cloth.

## **Growth Opportunities in Canada**

Many Canadian producers have offshored their manufacturing operations to take advantage of lower wage costs and avoid the duties Canadian apparel firms pay when importing raw materials. In many instances, manufacturers based in countries in Southeast Asia can import fabric duty-free from countries such as China, and manufacture apparel for export to Canada duty-free. However, a Canadian-based manufacturer using the same fabric would be at a disadvantage due to higher domestic production costs, as well as the higher tariff rates on inputs.

Import penetration is expected to continue its upward trajectory, and the trade volume between East Asia and Canada is anticipated to increase further. Growth opportunities for Indonesia also arise from changing dynamics, for example, a shift in offshore apparel manufacturing away from China to other lower-cost countries, which may also benefit from preferential access to countries like Canada. Indeed, most of the major players in the Canadian import market in this segment, especially ones that have been growing rapidly such as Cambodia and Bangladesh, benefit from preferential access.

Market participants can explore opportunities for growth by taking advantage of the world price of cotton, which is expected to continue to decline. Lower cotton prices can result in higher profit margins for producers.

Technical textiles have become an important contributor in the advancement of new apparel products, such as functional products manufactured for protection or for safety in military, defence, and security markets.

From a growth perspective, there are two important trends for apparel: the growth of online retailers and e-commerce, and the increasing use and potential of technology, including D2C (direct-to-consumer) technology such as 3D body scanning, which scans and imports a model's body measurements into a design program streamlining the production process and lowering overall costs (IBISWorld 2016).



Growth prospects in the Canadian market are better at the higher-margin, higher-quality end of the apparel market.

### Value Chain

The whole Indonesian textile and garment industry has a complex value chain; it is vertically integrated and divided into upstream, midstream, and downstream sub-industries. (See Table 3 and Exhibit 1.) The upstream sub-industry produces fibres—natural (cotton), synthetic (acrylic, polyester), and semi-synthetic (rayon). This sub-industry is made up of producers of inputs for the non-woven manufacturing, spinning, and weaving industry. The upstream sub-industry is capital- and technology-intensive, but not labour-intensive. The midstream sub-industry includes yarn (spinning) and weaving. The weaving process varies depending on two basic types of looms: hand operated (Alat tenun bukan mesin—ATBM) or automated looms (operated by machines). The ATBM technology is mainly used by smaller companies. Outputs of the midstream TPT industry are processed by garment and polyester manufacturers (the downstream industry).

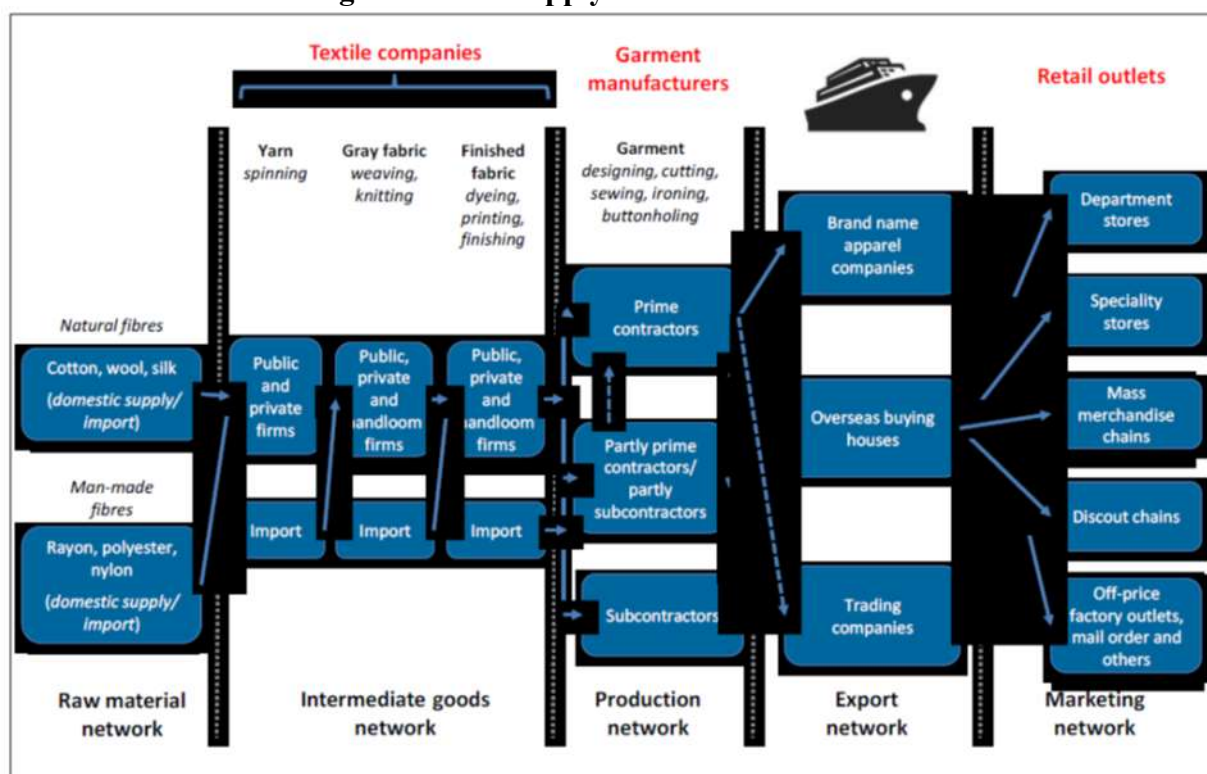
**Table 3**  
**Indonesia's TPT Sector Value Chain**

Industry structure	Sector	Industrial characteristics
Upstream	<ul style="list-style-type: none"> <li>- natural fibre</li> <li>- man-made fibre</li> </ul>	<ul style="list-style-type: none"> <li>- capital-intensive and large-scale industry</li> <li>- fully automated industry</li> <li>- large number of small-scale firms with large output</li> <li>- very high energy absorption</li> <li>- product: fibre—natural and synthetic</li> </ul>
Midstream	<ul style="list-style-type: none"> <li>- spinning</li> <li>- weaving</li> <li>- knitting</li> <li>- dying/printing/finishing</li> </ul>	<ul style="list-style-type: none"> <li>- moderately capital and investment intensive</li> <li>- modern technology and continuous growth</li> <li>- workforce is larger than in upstream industry</li> <li>- high energy absorption</li> <li>- product: thread, yarded fabric (woven and knitted), and finished fabric</li> </ul>
Downstream	<ul style="list-style-type: none"> <li>- garment</li> <li>- other textile/household products</li> </ul>	<ul style="list-style-type: none"> <li>- labour-intensive and mostly women</li> <li>- growing technology and between capital- and labour-intensive</li> <li>- high flexibility with various end-product consumers</li> <li>- product: clothing, bed linens, curtains, blankets, car seats, tents, carpets, etc.</li> </ul>

Source: Kuncoro 2013.

## Exhibit 1

### The Textiles and Clothing Industries Supply Chain



Source: ILO (2014).

### Government Policies in Support of the Apparel Industry

The Ministry of Industry has two main institutions to support the development of all Indonesian industries: the *Balai Besar* (*Balai*) and the *Balai Riset dan Standarisasi* (*Baristand*). Their aim is to provide different industry sectors with expert services to improve the quality of their products and commodities, ensuring compliance with international and national standards. The *Balai Besar Tekstil*, or Textile Research Institute, was established by the Dutch in 1922 in Bandung, once the nation's textile capital. Among its duties, the *Balai* is in charge of research on materials, processes, pollution control, the provision of technology extension services (testing and quality control), and training (e.g., machinery use, colour dyes, etc.). Additionally, the Indonesian Ministry of Cooperatives and SMEs was allocated Rp1 trillion in 2012 to support the export processes of SMEs (Sari 2015). Furthermore, the Government of Indonesia has given tax breaks in the labour-intensive industries of furniture, textiles and textile products, and toys to support these sectors (APIDKI 2013). Finally, major cities in West Java have implemented particular policies to boost technology and planning to incentivize the industry's growth (TPSA, unpublished).

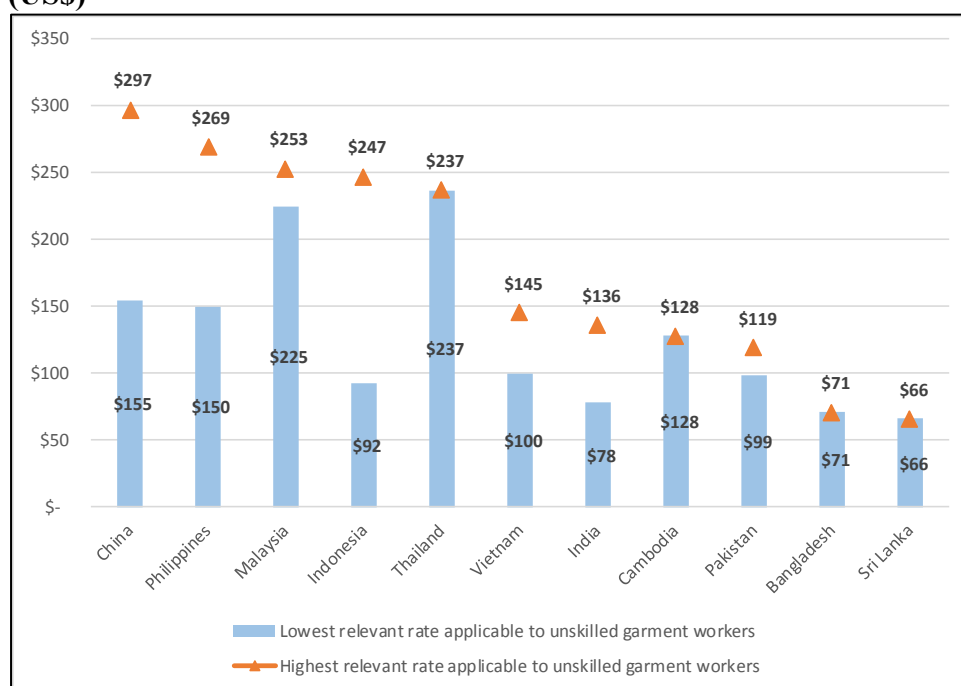
### Employment in the Apparel Sector

In 2012, the textile and garment industry employed 1.35 per cent of Indonesia's 110.8 million workers, equal to 9.7 per cent of all workers in the manufacturing sector (GBG 2013). In West Java, the city of Sukabumi, with a large pool of skilled workers, is a major area to allocate foreign garment investments (Ministry of Trade 2011; TPSA, unpublished).

Globally, real average wages have been increasing since 2011; however, as shown by UNIDO's *Industrial Development Report 2013*, wages in the textiles and clothing industry are lower than the average. According to this report, average wages in the clothing sector were 35 per cent lower than the average wage in the whole manufacturing industry, and in the textiles sector the difference was 24 per cent lower (quoted in ILO 2014, 23).

Many of the largest textile and garment producing countries in the world—such as Indonesia, Vietnam, India, Cambodia, Pakistan, Bangladesh, and Sri Lanka—pay the lowest minimum wages (ILO 2014). (See Chart 7.)

**Chart 7**  
**Monthly Minimum Wages in the Clothing Industry as of January 1, 2015**  
**(US\$)**



Source: ILO 2015.

## Gender Considerations in Textile Production

### Legislation, Policy, and Regulatory Frameworks

Indonesia has ratified the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW). It has also ratified International Labour Organization (ILO) Convention No. 111, which encourages states to develop measures to provide equal opportunities to men and women in education and vocational training and enable women to enter and advance in a wider variety of jobs and occupations, and at senior levels (Haspels and others 2011).<sup>5</sup> Indonesian Law Number 39 of 1999 on Human Right also prohibits discrimination on the grounds of sex.

In 2000, a presidential decree was issued that obliges government agencies to mainstream gender into their work in an effort to eliminate gender discrimination (UN Women 2017).

<sup>5</sup> A tripartite task force established by the department initially focused on gender discrimination, though the guides includes broader concerns.

Moreover, in 2005, the Department of Manpower and Transmigration issued a set of guidelines on equal employment opportunity (EEO), which was adopted by trade unions and employers' organizations. Gender was also a cross-cutting theme in the government's 2010–2014 Medium Term National Development Plan (UN Women 2017).

## **Women in the Sector**

About 52 per cent of full-time workers in the garment industry are women (IFC 2015). The upstream and midstream of the industry is capital and semi-capital intensive. Full-time jobs in the downstream garment industry are dominated by young single women. This work represents a new income stream for women and the opportunity for increased independence, empowerment, and promotion (36 per cent of top management positions are occupied by women) (IFC 2015). It should, however, be understood that most downstream jobs are largely unskilled and labour-intensive with limited security (Kuncoro 2013). Jobs in the downstream also include a significant amount of short-term contract work, carried out largely by women over 30. Employers say they prefer women because of their “attention to detail” and willingness to work flexibly. Recruitment notices commonly make being female a job requirement (Muna and Farid 2015).

In Indonesia, wages and working conditions in the textile and clothing industry are similar or better than the average within the economy, with some studies suggesting that greater trade openness is positively correlated with the betterment of women's economic rights.

The garment industry is known to employ a significant number of home-based workers, 87 per cent of whom are women, who finish garments on a piece-work basis (ILO 2014).

Regarding women as owners of SMEs, garment production is a business with low barriers to entry, and it is common for women to start micro/small businesses, home businesses, and internet businesses in this industry (Sadiana 2014; Tambunan 2012). Women-owned home-based businesses allow the flexibility to reconcile work and family, which is often preferred by women (Novianti 2012).

In southern Central Java, a batik cluster covering six districts has formed to address challenges related to access to material and markets. On the production side, they share labour for dyeing and washing fabrics. This cluster approach has led to increased productivity. A study on this cluster recommended formalizing it into a cooperative in order to effectively pool funds and resources, and organizing a batik industry association for south Central Java (Setyorini, Pinasti, and Rokhayati 2013). Another example of cooperation is in Solo, where clustering through a *gotong royong* (mutual cooperation society) has improved marketing (Maryam 2015).

Women's SMEs dominate in the growing niche (high-value) markets. These include designed garments, *batik tulis*, Islamic fashion (Hijup), and eco and ethical fashion (Ethical Fashion Forum).<sup>6</sup>

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<sup>6</sup> See also SOURCE—an Ethical Fashion Forum platform for the fashion and textiles industries, which aims to promote a sustainable industry. See [www.ethicalfashionforum.com](http://www.ethicalfashionforum.com).

## Environmental Regulations

The legal basis of Indonesia's natural resource and environmental regulations are the 1945 Constitution, which notes that every person has rights to a good and healthy environment and that the organization of the national economy shall uphold principles of sustainability, keeping the environment in perspective. General environmental regulations refer to legislation that applies to all sectors, the most important of which is Law No. 32/2009 on environmental management and protection. This law establishes the basic principles of environmentally sustainable development, including environmental planning, natural resource utilization, development, maintenance, restoration, supervision, and control of the environment, and law enforcement. There are various environmental management tools, such as strategic environmental assessment for policies and programs, ecoregional analysis, and environmental budgets. Environmental impact assessment (EIA or *Analisis Mengenai Dampak Lingkungan*, AMDAL) is the key instrument to prevent environmental damage from new initiatives. Physical activities or businesses that are likely to have substantial impact on the environment are obliged to follow the AMDAL process. Depending on the extent of the project's environmental impacts, a company may be required to issue an environmental impact assessment, an environmental management statement (*Surat Pernyataan Pengelolaan Lingkungan* or SPPL), and/or an environmental management efforts/environmental monitoring efforts report (*Upaya Pengelolaan Lingkungan/Upaya Pemantauan Lingkungan* or UKL/UPL).

## Sector Voluntary Frameworks

### Labour

Following the collapse of Rana Plaza in Bangladesh, the global spotlight has focused on the garment industry. Its sheer size, and sourcing strategies in the supply chain (with an effect on labour conditions), have caused one research report to conclude: *Business as Usual Is Not an Option* (Labowitz and Baumann-Pauly 2014).

Internationally, there are responsible production standards promoted by global companies sourcing from local suppliers (i.e., BSCI Code of Conduct, Ethical Trading Initiative, Apparel Industry Partnership, and WRAP<sup>7</sup>). Ethical fashion focuses on sustainable materials, fair wages, and safe production. ISO9001 standards and sustainable production are attracting global brands. The Ethical Trading Initiative Base Code (ITC 2011), subscribed to by 68 companies in 140 countries, including Indonesia, includes application of minimum labour standards in business, production, and sourcing (work is freely chosen, collective bargaining respected, work conditions are safe, non-discrimination is practiced, living wages are paid, child and forced labour is not practiced, health and safety measures are in place). The International Labour Organization's Better Work program in Indonesia provides skill training and resources for employers in the implementation of labour standards (Better Work 2014).

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<sup>7</sup> See [www.wrapcompliance.org/en/12-principles](http://www.wrapcompliance.org/en/12-principles). WRAP has 12 principles rooted in the spirit of International Labour Organization conventions. These include 1) compliance with laws and workplace regulations; 2) prohibition of forced labour; 3) prohibition of child labour; 4) prohibition of harassment or abuse; 5) compensation and benefits; 6) hours of work within the country's laws; 7) prohibition of discrimination; 8) provision of a safe and healthy work environment; 9) freedom of association and collective bargaining; 10) compliance with environmental rules, regulations, and standards; 11) customs compliance; and 12) maintenance of security procedures to guard against non-manifested cargo in outbound shipments.

## Environment

The term sustainable or “environmentally responsible,” when applied to textile products, should mean minimal environmental effects from the entire life cycle—from fibre production to manufacturing, usage, maintenance, and disposal (Chen and Burns 2006). Efforts to make the industry more environmentally friendly are making some inroads, although still considered nascent. Unlike the food industry—where green product demand is more a result of consumer pressures—it is the producers and retailers who are the main drivers of sustainable textiles and of raising consumer awareness (European Commission 2013).

### Sustainable Fibre Production

Greener fibres include organic cotton, polyester made from recycled materials, and regenerated cellulose fibres made from fast-growing renewable resources (e.g., bamboo, hemp, or abundant corn fibres). Organic cotton, grown without using pesticides or other toxic chemicals, is now produced in 20 countries, led by India. Although global market share is still small (0.7 per cent), demand over the last few years has increased. Growth is expected to remain strong as organic cotton products begin to fill U.S. and European mainstream fashion outlets and retailers. Synthetic fibres are also being produced from recycled polyester fabric and from bottles made of polyethylene terephthalate (PET). Recycled polyester makes up the vast majority of recycled fibres in the industry. The market share of green fashion, however, is still small, estimated at 2 per cent of the overall industry (Nasser 2013). Expansion barriers include the higher prices of organic products, manufacturers’ and consumers’ reluctance to use recycled materials, and weak infrastructure for fabric recycling and waste drop-off (Chen and Burns 2006).

### Sustainable Manufacturing

In textile manufacturing, new technologies and materials are being developed and deployed to reduce environmental impacts. New generations of machines are more energy- and water-efficient. More environmentally benign substances can be utilized at each stage of the manufacturing process. For example, the use of organic enzymes in cotton’s desizing and scouring is a much greener alternative than sodium hydroxide (Chen and Burns 2006). Natural dyes (usually derived from plants) can substitute for synthetic ones. New waterless dyeing technologies are also being developed, although still expensive and only for certain fibres (mostly polyester). Greener wood pulp-based fibres derived from eucalyptus trees (i.e., Tencel) can be produced using less-toxic chemicals, and a closed-loop process—whereby the solvent is recycled—can also be used. However, these new green technologies are still costly, meaning that sustainable textiles are still years away from becoming mainstream practice.

### Voluntary Environmental Labelling

Textile environmental performance is communicated to consumers through several different eco-labelling systems. Prominent ones include the Global Organic Textile Standard (GOTS), Fair Trade, Cradle to Cradle, EU Ecolabel, Nordic Ecolabel, and Sustainable Textile Production (STeP) by Oeko Tex.<sup>8</sup> The majority of these eco-labels are voluntary, with the exception of the Organic Label, which is strictly regulated in many countries. Different certification schemes may focus on environmental (and sometimes social) performance at

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<sup>8</sup> For a more complete list, please see [www.ecotextilelabels.com/](http://www.ecotextilelabels.com/).



different phases, e.g., raw materials, manufacturing, disposal, or a combination. Some of the most common textile certifications found in Canada are GOTS (which incorporates both organic and fair trade standards), bluesign, Cradle to Cradle, EU Ecolabel, and Oeko-Tex.

### Sustainable Textiles in Indonesia

The government has launched its Textile Restructuring Program to help the industry with the financial capital necessary to acquire new equipment. Since 2000, the Indonesian Ministry of Environment has also established eco-label benchmarking for various industries, including textiles, with the hope that industries would comply and self-administer eco-label practices.

There are some signs that sustainable textiles are beginning in Indonesia. A small number of Indonesian garment manufacturers have produced polyester fibres from recycled products. A handful of large companies in Indonesia also have acquired sustainable textile certification (e.g., GOTS, Oeko-Tex) for their manufacturing processes. A few cottage industries that are using more environmentally benign fibres and dyes (e.g., organic cotton, modal, natural dyes) have sprung up in Bali (Greenspeak 2010).

### **Certification in Canada**

According to Trade Facilitation Office (TFO) Canada, there are a number of relevant certifications for apparel imports to Canada. Many buyers consider labour rights issues as important as environmental issues; this can affect sourcing decisions (TFO 2014). Brands see a role for governments in textile-producing countries to improve standards and ensure enforcement. In terms of responsible and sustainable apparel, trends in Canada include and go beyond organic cotton. For example, clothing made from recycled fabrics has become popular, as well as apparel manufactured by corporately responsible companies.

Appendix A provides an overview of all standards that could be applied to Indonesian apparel destined for Canada according to the International Trade Center's [Standards Map](#).<sup>9</sup>

### **Conclusions**

Indonesia's garment industry is vast and has significant export capacity in knitted and woven apparel. These products go to major textile export destinations such as the U.S., Japan, Germany, Turkey, Korea, China, United Arab Emirates, the U.K., Brazil, and Malaysia. The garment industry is one of the biggest contributors to the Indonesian trade balance thanks to its export gains, making the country an important player in this industry worldwide. It is also one of the largest employers in Indonesia.

Growth opportunities exist in the Canadian market for Indonesian exporters of DSST apparel. Indonesia's position in the Canadian import market for DSST apparel is relatively better than its global position for the same market. Indonesia makes the list of top 10 exporters to Canada but not in global exports of this apparel segment.

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<sup>9</sup> ITC Standards Map, [www.standardsmap.org/identify](http://www.standardsmap.org/identify).

## References

- APIDKI (Asosiasi Pertekstilan Indonesia Api Dki Jaya/Indonesia Textile Association). 2013. *Industri Padat Karya Dapat Keringanan Pajak*. <http://apidki-jakarta.weebly.com/berita/industri-padat-karya-dapat-keringanan-pajak> (accessed January 22, 2017).
- Better Work Indonesia. 2014. *Better Work Indonesia: Garment Industry 4th Compliance Synthesis Report*. Geneva, Switzerland: International Labour Organization (ILO). <http://betterwork.org/indonesia/?p=5889> (accessed January 13, 2017).
- CBSA (Canada Border Services Agency). 2015. *B255—Certificates of Origin—Textile and Apparel Goods Originating in a Least Developed Country*. [www.cbsa-asfc.gc.ca/publications/forms-formulaires/b255-eng.html](http://www.cbsa-asfc.gc.ca/publications/forms-formulaires/b255-eng.html) (accessed January 22, 2017).
- Chen, Hsiou-Lien, and Leslie Davis Burns. 2006. “Environmental Analysis of Textile Products.” *Clothing and Textile Research Journal* 24, no. 3: 248–61. [www.researchgate.net/publication/247782661\\_Environmental\\_Analysis\\_of\\_Textile\\_Products](http://www.researchgate.net/publication/247782661_Environmental_Analysis_of_Textile_Products) (accessed January 23, 2017).
- CIS (Canadian Industry Statistics). 2016. *Women’s, Girls’ and Infants’ Cut and Sew Clothing Manufacturing—31524*. [www.ic.gc.ca/app/scr/app/cis/summary-sommaire/31524](http://www.ic.gc.ca/app/scr/app/cis/summary-sommaire/31524) (accessed January 22, 2017).
- EKONID (The German-Indonesian Chamber of Industry and Commerce). 2001. *Pilot Project Strengthening Environmental Capability in Developing Countries (ETC)*. Germany: GTZ.
- European Commission. 2013. *Sustainability of Textiles*. Issue Paper No. 11, Brussels: Retail Forum for Sustainability. [http://ec.europa.eu/environment/industry/retail/pdf/issue\\_paper\\_textiles.pdf](http://ec.europa.eu/environment/industry/retail/pdf/issue_paper_textiles.pdf) (accessed January 29, 2017).
- Fibre2Fashion. 2014. *Indonesian Batik Exports Grow Manifold in Last Five Years*. [www.fibre2fashion.com/news/announcement/newsdetails.aspx?news\\_id=167996](http://www.fibre2fashion.com/news/announcement/newsdetails.aspx?news_id=167996) (accessed January 25, 2017).
- GBG (Global Business Guide Indonesia). 2013. *Indonesia’s Garment and Apparel Sector*. [www.gbgingonesia.com/en/manufacturing/article/2012/indonesia\\_s\\_garment\\_and\\_apparel\\_sector.php](http://www.gbgingonesia.com/en/manufacturing/article/2012/indonesia_s_garment_and_apparel_sector.php) (accessed January 16, 2017).
- . 2014. *Indonesia’s Textile and Clothing Industry*. [www.gbgingonesia.com/en/manufacturing/article/2014/indonesia\\_s\\_textile\\_and\\_clothing\\_industry.php](http://www.gbgingonesia.com/en/manufacturing/article/2014/indonesia_s_textile_and_clothing_industry.php) (accessed February 13, 2017).
- . 2015. *Indonesia’s Textile Industry—Testing Times Upstream*. [www.gbgingonesia.com/en/manufacturing/article/2015/indonesia\\_s\\_textile\\_industry\\_testing\\_times\\_upstream\\_11119.php](http://www.gbgingonesia.com/en/manufacturing/article/2015/indonesia_s_textile_industry_testing_times_upstream_11119.php) (accessed January 16, 2017).
- Greenspeak [pseud.]. 2010. “Eco Textiles—Threads to Watch.” *Bali Advertiser*, <http://baliadvertiser.biz/textiles-3/> (accessed February 2, 2017).



Haspels, Nelien, Tim de Meyer, and Marja Paavilainen. 2011. *Equality and Non-discrimination at Work in East and South-East Asia*. Bangkok, Thailand: International Labour Organization. [www.ilo.org/wcmsp5/groups/public/@asia/@ro-bangkok/@sro-bangkok/documents/publication/wcms\\_178415.pdf](http://www.ilo.org/wcmsp5/groups/public/@asia/@ro-bangkok/@sro-bangkok/documents/publication/wcms_178415.pdf) (accessed March 2, 2017).

IBISWorld. 2015. *Women's and Girls' Apparel Manufacturing in Canada: Market Research Report*. N.p.: IBISWorld.

—. 2016. *Industry Performance in Men's and Boys' Apparel Manufacturing in Canada: Market Research Report*. N.p.: IBISWorld.

IFC (International Finance Corporation). 2015. *Enterprise Survey—Indonesia*. <http://www.enterprisesurveys.org/data/exploretopics/gender> Accessed January 22, 2017.

ILO (International Labour Organization). 2014. *Wages and Working Hours in the Textile, Clothing, Leather and Footwear Industries*. Issue paper, Geneva, Switzerland: ILO. [www.ilo.org/sector/Resources/publications/WCMS\\_300463/lang--en/index.htm](http://www.ilo.org/sector/Resources/publications/WCMS_300463/lang--en/index.htm) (accessed February 1, 2017).

—. 2015. *Strong Exports and Job Growth in Asia's Garment and Footwear Sector*. Geneva: ILO. [www.ilo.org/asia/whatwedo/publications/WCMS\\_419798/lang--en/index.htm](http://www.ilo.org/asia/whatwedo/publications/WCMS_419798/lang--en/index.htm) (accessed January 30, 2017).

ISED (Innovation, Science and Economic Development Canada). 2017. *Apparel Industry Profile*. [www.ic.gc.ca/eic/site/026.nsf/eng/h\\_00070.html](http://www.ic.gc.ca/eic/site/026.nsf/eng/h_00070.html) (accessed February 1, 2017).

ITC (International Trade Centre). 2011. *Ethical Trading Initiative—ETI*. Geneva, Switzerland: ITC. [www.intracen.org/WorkArea/DownloadAsset.aspx?id=58613](http://www.intracen.org/WorkArea/DownloadAsset.aspx?id=58613) (accessed January 6, 2017).

Kuncoro, Mudrajad. 2013. "Indonesia's Textile and Its Products Industry: Recent Development and Challenges." *The Business and Management Review*, 4 no. 2: 126–39.

Labowitz, Sarah, and Dorothée Baumann-Pauly. 2014. *Business as Usual Is Not an Option: Supply Chains and Sourcing After Rana Plaza*. New York: NYU Stern School of Business Center for Business and Human Rights.

Maryam, Siti. 2015. "Gotong Royong Marketing Formulation to Improve Batik in Kampoen batik Laweyan." *Journal of Business & Economic Policy* 2, no. 3: 69–74.

Mather, Celia. 2004. *Garment Industry Supply Chains: A Resource for Worker Education and Solidarity*. Manchester, United Kingdom: Women Working Worldwide.

Ministry of Trade. 2011. *Recent Review of Trade in Indonesia*. Jakarta: Ministry of Trade, 2011.

Muna, Naufa, and Miftah Farid. 2015. *Analysis on Enhancing Indonesian Exports to the Canadian Market*. Jakarta: Canada–Indonesia Private Sector Assistance Project.

Nasser, Haya El. 2013. "What's in Style: Eco-Friendly, Green Fashion." *USA Today*. [www.usatoday.com/story/money/business/2013/04/28/the-rise-of-green-fashion/1996773/](http://www.usatoday.com/story/money/business/2013/04/28/the-rise-of-green-fashion/1996773/) (accessed February 3, 2017).

Novianti, Diah. 2012. *Analisis Faktor Motivasi Wirausahawan Wanita dan Hubungannya dengan Pertumbuhan Usaha: Studi Kasus Pada UMKM Batik di Solo*. Jakarta, Indonesia: Universitas Indonesia. <http://lib.ui.ac.id/detail?id=20314107&lokasi=lokal> (accessed January 25, 2017).

Rulistia, Novia D. 2015. "The Rise and Fall of Indonesian Batik." *Jakarta Post*. October 3. [www.thejakartapost.com/news/2015/10/03/the-rise-fall-indonesian-batik.html#sthash.SuqVMft5.dpuf](http://www.thejakartapost.com/news/2015/10/03/the-rise-fall-indonesian-batik.html#sthash.SuqVMft5.dpuf) (accessed January 25, 2017).

Sadiana, Netty. 2014. *Bisnis Rumahan Yang Mudah, Bagaimana Cara Menemukannya?* [Easy home business, how to find it?]. [www.bisniskecil.org/2014/10/bisnis-rumahan-yang-mudah-bagaimana.html](http://www.bisniskecil.org/2014/10/bisnis-rumahan-yang-mudah-bagaimana.html) (accessed January 25, 2017).

Sari, Novita Intan. 2015. *Pemerintah siapkan Rp 1 T biayai UKM berorientasi ekspor*. [The government prepared Rp 1 T finance for export-oriented SMEs]. [www.merdeka.com/uang/pemerintah-siapkan-rp-1-t-biayai-ukm-berorientasi-ekspor.html](http://www.merdeka.com/uang/pemerintah-siapkan-rp-1-t-biayai-ukm-berorientasi-ekspor.html) (accessed January 25, 2017).

Setyornini, Christina, Margani Pinasti, and Hijroh Rokhayati. 2013. "Strengthening the Internal Factors of Batik Cluster SMEs in Indonesia: A Case of Six Districts in South-Central Java." *International Journal of Business, Humanities and Technology* 3 no. 1: 21–28. [www.ijbhtnet.com/journals/Vol\\_3\\_No\\_1\\_January\\_2013/4.pdf](http://www.ijbhtnet.com/journals/Vol_3_No_1_January_2013/4.pdf) (accessed January 19, 2017).

Tambunan, Tulus. 2012. "Women's Entrepreneurship in Indonesia: Determinants, Motivations and Constraints." Working paper for the *Eighth Annual Asia Pacific Economic Conference*. Held at Nanyang Technological University, Singapore, June 28–29, 2012.

Tambunan, Tulus. n.d. *Development and Some Constraints of SME in Indonesia*. Jakarta, Indonesia: University of Trisakti.

Textile Exchange. 2015. *Organic Cotton Market Report 2014*. [http://textileexchange.org/upload/TE\\_2014\\_Organic\\_Cotton\\_Market\\_Report.pdf](http://textileexchange.org/upload/TE_2014_Organic_Cotton_Market_Report.pdf) (accessed November 20, 2015, page removed).

*Textile World Asia*. 2013. "Indonesia: Driving Ahead." December 18, 2013. <http://textileworldasia.com/textile-world-asia/country-profiles/2013/12/indonesia-driving-ahead/> (accessed January 22, 2017).

TFOC (Trade Facilitation Office of Canada). 2013. *Apparel and Textiles*. Ottawa, Canada: TFO.

TPSA (Canada–Indonesia Trade and Private Sector Assistance). Unpublished manuscript. *Textiles and Garments*. Jakarta, Indonesia: The Conference Board of Canada, 2016.

UN Women. 2017. *Indonesia*. <http://asiapacific.unwomen.org/en/countries/indonesia> (accessed January 22).

World Bank Group. 2015. *Enterprise Surveys—Indonesia (2009)*.  
[www.enterprisesurveys.org/data/exploreeconomies/2015/indonesia#gender--sector](http://www.enterprisesurveys.org/data/exploreeconomies/2015/indonesia#gender--sector) (accessed March 2, 2017).

## Appendix A: Standards for Indonesian Textiles Exports to Canada

<b>Table 1</b> <b>Full List of Standards for Textiles From Indonesia to Canada [Table title]</b>	
<b>Standard</b>	<b>Description and Scope</b>
<a href="#"><u>BSCI (Business Social Compliance Initiative Code of Conduct)</u></a>	The Business Social Compliance Initiative (BSCI) is a business-driven initiative for supporting retailers, importers, and brands committed to improving working conditions in their international supply chains. BSCI's vision is a world of free trade and sustainable global supply chains, in which factories and farms are compliant with national labour legislation, as well as with ILO conventions protecting workers' rights. BSCI unites hundreds of companies around one common code of conduct and supports them in their efforts toward building an ethical supply chain by providing them with a development-oriented system, applicable to all sectors and all sourcing countries.
<a href="#"><u>EcoVadis</u></a>	EcoVadis strives to improve environmental and social practices of companies by leveraging the influence of global supply chains. It operates as a collaborative platform providing supplier sustainability ratings. EcoVadis has a methodology for CSR analysis that covers 21 criteria across four themes—environment, fair labour practices, ethics/fair business practices, and supply chain. It offers training and consulting, and aims to find solutions for buyers and suppliers.
<a href="#"><u>Ethical Trading Initiative (ETI)</u></a>	ETI is an alliance of companies, trade unions, and NGOs promoting respect for workers' rights around the globe. The ETI Code is based on the conventions of the International Labour Organization, and aims to support members in establishing ethical trade strategies within their own supply chains.
<a href="#"><u>Fair for Life</u></a>	Fair for Life aims to ensure fair and positive relations between producers and their cooperatives or contracting companies, between workers and their employers, and between sellers and buyers on the world market, while at the same time ensuring performance of standards. The initiative offers two certification schemes—Fair for Life Social & Fair Trade Certification Programme and Social Responsibility Certification. Fair for Life offers brand-neutral third-party inspection and certification in initial production, manufacturing, and trading. It combines strict social and fair trade standards with adaptability to local conditions. The system is designed for both food and non-food commodities (like cosmetics, textiles, or tourist services).
<a href="#"><u>Fairtrade International</u></a>	Fairtrade International is an independent, non-governmental, not-for-profit organization. With its member organizations, Fairtrade International represent the world's largest and most recognized fair trade system. The organization coordinates fair trade labelling at the international level and is based in Bonn, Germany.
<a href="#"><u>FLA Workplace Code of Conduct</u></a>	FLA is a collaborative effort of universities, civil society organizations, and socially responsible companies dedicated to protecting workers' rights around the world. The FLA Workplace Code of Conduct defines labour standards that aim to achieve decent and humane working conditions. The Code's standards are based on International Labor Organization standards and internationally accepted good labour practices. The FLA has also created an independent monitoring, remediation, and verification process to achieve compliance with this Code.
<a href="#"><u>Global Organic Textile Standard (GOTS)</u></a>	The Global Organic Textile Standard (GOTS) was developed through collaboration by leading standard setters. They aim to define requirements that are recognized worldwide and that ensure the organic status of textiles, from harvesting of the raw materials through environmentally and socially responsible manufacturing all the way to labelling, to provide credible assurance to the consumer. Since its introduction in 2006, the GOTS has already demonstrated its practical feasibility. Supported by the growth in consumption of organic fibres and the remarkable demand for unified processing criteria from the industry and retail sector, it has gained universal recognition, enabling processors and manufacturers to supply their organic textiles with one certification accepted in all major markets. With the introduction of the logo and labelling system, the GOTS is already visible on the shelves of not only natural textile shops, but large-scale retailers and brand dealers as well. This is a

	milestone in consumer recognition and a strong acknowledgement of GOTS' reliable quality assurance concept.
<a href="#">ILO (International Labour Organization) Standards</a>	Since 1919, the ILO, a specialized agency of the United Nations, has maintained and developed a system of international labour standards aimed at promoting opportunities for women and men to obtain decent and productive work, in conditions of freedom, equity, security, and dignity. International labour standards are legal instruments drawn up by the ILO's constituents (governments, employers, and workers from 185 member states) that set out basic principles and rights at work. They are either conventions, which are legally binding international treaties that may be ratified by member states, or recommendations, which serve as non-binding guidelines. In many cases, a convention lays down the basic principles to be implemented by ratifying countries, while a related recommendation supplements the convention by providing more detailed guidelines on how it could be applied.
<a href="#">Naturland</a>	Naturland is an independent, non-governmental, non-profit organization that promotes organic farming with social responsibility and fair partnerships on a regional, national, and global level. It supports long-term and fair business partnerships while putting a lot of effort into developing projects with small-scale farmers. Naturland is both an organic farmers' association with farmers as members, delegates, and directors, and a standard-setting and certification body with its own label. It is run with the principles of grassroots democracy. Standard-setting and certification has been a trailblazing working area, with new standards being developed beyond organic agriculture, such as social responsibility, organic aquaculture, organic forestry, North-South fair partnerships, or sustainable capture fishery. Apart from its offices in Germany, Naturland works with a network of representatives in Egypt, Ecuador, India, Peru, Bolivia, Tanzania, and in the United States. Currently over 40,000 farmers manage an area of some 250,000 hectares according to the Naturland standards.
<a href="#">Oeko-Tex 100</a>	The International Oeko-Tex Association was established in 1992 and consists of 16 textile research and test institutes in Europe and Japan with over 60 local offices worldwide. The OekoTex Standard is for various textile products to ensure that the chemicals used throughout the production process are not harmful or dangerous to human health. The scope of the human ecological requirements is based on the intended use of the textile. In principle, the more intensively a textile comes into contact with the skin, the stricter the limit values it must fulfill.
<a href="#">Sedex Global</a>	Sedex is a not-for-profit membership organization dedicated to driving improvements in ethical and responsible business practices in global supply chains. Sedex was founded by a group of U.K. retailers in 2004 with two main goals: to ease the burden on suppliers facing multiple audits, questionnaires, and certifications, and to drive improvements in the ethical performance of global supply chains. As the largest collaborative platform for sharing ethical supply chain data, Sedex is an effective supply chain management solution, helping companies to reduce risk, protect company reputation, and improve supply chain practices. Sedex also has a best-practice guide.
<a href="#">Social Accountability International (SAI)—SA8000</a>	Social Accountability International is a non-governmental, not-for-profit organization that promotes the human rights of workers through the development of a voluntary standard, named SA8000. The core normative elements are derived from ILO standards and include issues such as health and safety, right to collective bargaining, and working hours.
<a href="#">Verified Carbon Standard—VCS</a>	VCS is a comprehensive quality-assurance system for carbon credits issued in voluntary markets. Projects use Verified Carbon Standard requirements to ensure their carbon reductions meet accepted quality standards and are independently verified, uniquely numbered, and transparently listed in a central database.
<a href="#">WFTO Guarantee System</a>	The World Fair Trade Organization (WFTO) is a global network of organizations representing the fair trade supply chain. WFTO is the home of fair traders: producers, marketers, exporters, importers, wholesalers, and retailers that demonstrate 100 per cent commitment to fair trade. The goal of the WFTO is to enable small producers to improve their livelihoods and communities through sustainable fair trade. It does this by delivering market access through policy, advocacy, campaigning, marketing, and monitoring.

<a href="#"><u>Workplace Conditions Assessment (WCA)</u></a>	<p>In 2010, the largest CSR supply chain auditing and certification body, Intertek, set out to challenge norms on scheduling, tracking, conducting, and reporting on social responsibility audits. Rooted in 20 years of experience in supply chain auditing for CSR performance, the Workplace Conditions Assessment (WCA) is a data-driven, software-based community platform that enables automated data collection leading to ratings-based measurable audit results. Auditors are provided an efficient and streamlined audit format based on Intertek's leading eAudit technology, and brand/retailer users of the WCA have access to invaluable data mining tools that can help set performance metrics that are capable of being benchmarked against global, industry, and country averages. WCA addresses the following and more: labour (child/forced labour, discrimination, discipline, harassment/abuse, freedom of association, labour contracts); wages and hours (wages and benefits, working hours); health and safety (general work facility, emergency preparedness, occupational injury, machine safety, safety hazards, chemical and hazardous material, dormitory and canteen); management systems (documentation and records, worker feedback and participation, audits and corrective action process); and environment (legal compliance, environmental management systems, waste and air emissions).</p>
<a href="#"><u>Worldwide Responsible Accredited Production (WRAP)</u></a>	<p>WRAP is an independent, objective, non-profit team of global social compliance experts dedicated to promoting safe, lawful, humane, and ethical manufacturing around the world through certification and education. The WRAP Certification Program is based on 12 Principles focusing on compliance with local laws, workplace regulations, universal workers' rights, the environment, customs compliance, and security. WRAP is also an IRCA (International Register of Certified Auditors) accredited training organization and runs social systems and internal auditor training courses and related seminars around the world.</p>

Notes: Does not include standards identified for other countries, such as the British Retail Consortium Global Standards or the U.S. Department of Agriculture's Organic Program for example. Some information is drawn directly from the StandardsMap website.

Source: ITC Standards Map.