



ASIAN TRADE CENTRE

Study Report

Market Study on Industry 4.0 Trade Obstacles in ASEAN

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Mission of Canada to the Association of Southeast Asian Nations

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List of Abbreviations and Acronyms

ADB	Asian Development Bank
AI	artificial intelligence
AR	augmented reality
APEC	Asia-Pacific Economic Cooperation
ASEAN	Association of Southeast Asian Nations
BSN	Badan Standardisasi Nasional (Indonesia)
CBPR	APEC Cross-Border Privacy Rules System
CPTPP	Comprehensive and Progressive Agreement for Trans-Pacific Partnership
GDP	gross domestic product
EU	European Union
GDPR	General Data Protection Regulation
HS	Harmonized Commodity Description and Coding System/Harmonized System
ICT	information and communications technology
Industry 4.0	Fourth Industrial Revolution/4IR
IoT	Internet of Things
IP	intellectual property
IPR	intellectual property rights
LCRs	local content requirements
MSMEs	micro, small, and medium enterprises
R&D	research and development
STAMEQ	Directorate for Standards, Metrology and Quality (Vietnam)
TISI	Thai Industrial Standards Institute (Thailand)
VAT	value-added tax
VR	virtual reality

Executive Summary

In recent years, Southeast Asia has seen itself as a key player in global production networks. Elevated supply chain pressures driven by trade tensions between major economies and the ongoing COVID-19 pandemic have led firms to look for alternate markets to minimize risk and build resilience. These shifts also highlight another trend in the use of digital solutions and other disruptive technologies in manufacturing activities, opening opportunities for foreign suppliers like those in Canada to bring their goods to the region. While this may be the case and the markets are ripe for greater trade and investments for advanced manufacturing processes, the region has yet to fully unlock this untapped potential towards industrial transformation mainly due to high market entry barriers that remain in place for most of these countries.

The purpose of this short study is to assess these trade barriers that could act as potential constraints to the adoption of Industry 4.0 technologies in the advanced manufacturing sectors of select economies of the Association of Southeast Asian Nations (ASEAN). This report aims to help Canadian firms better understand the potential regulatory challenges when entering the region as well as offer insights to Canadian policymakers and trade officials on trade obstacles, particularly barriers to digital trade across sectors of interest to identify areas for cooperation to improve market access for Canadian companies.

Part A provides a general overview of market access barriers in key ASEAN countries. Overall, this study finds that while all ASEAN member states have policy blueprints to drive the industrial transformation towards Industry 4.0, regulatory impediments continue to exist such as local content requirements, import restrictions, cross-border data flow restrictions, and data localization rules, among others. This is mainly because of the varying levels of development among members of the bloc and that such Industry 4.0 masterplans are still at the early stages of implementation.

Part B delves deeper into a country-by-country stock take of these obstacles. The country reports are divided into two main groups. The first set of country reports features Singapore and Malaysia and provide a brief overview of their state of readiness to leverage Industry 4.0 as both countries are generally understood to have relatively low trade barriers. On the other hand, the second set in Indonesia, Thailand, and Vietnam takes a more substantive assessment of these countries' current state of readiness and adoption of Industry 4.0 in their manufacturing activities. For the latter part, trade barriers are distinguished specific to the country, sectors of interest, and those that could impact digital trade.

The report concludes with Part C offering some best practices on market entry considerations following suggestions made from stakeholders consulted for this report. For businesses, these include utilizing preferential trade arrangements of Canada and those in ASEAN, making good use of government resources on trade promotion services present both in Canada and the region, and adopting a more flexible way of doing business in a region known for its dynamism and diversity. There is also scope for increased cooperation and a greater role for policymakers to engage in both policy advocacy and market awareness-raising initiatives to facilitate ease of trade and address some of these underlying concerns faced by Canadian businesses.