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July 11, 2020

EMBASSY OF BRAZIL
16th Floor, Liberty Center,
104 H.V. de la Costa Street, Salcedo Village
Makati City, Philippines

Attention: **H.E. Rodrigo do Amaral Souza**
Ambassador

Your Excellency:

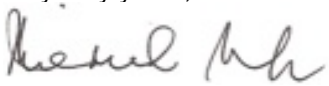
We are pleased to submit the Market Research Report on Self-propelled Bulldozers and Other Heavy Equipment that we prepared for the Embassy of Brazil in Manila. The report incorporates the comments and additions to the draft submitted on June 20, 2020.

The information and data presented were gathered through research and interviews with representatives of relevant agencies and associations. Our report was prepared following the COVID-19 pandemic announcement by the World Health Organization on March 11, 2020. There may have been changes in the Philippine economic and business conditions brought about by the pandemic which may affect the forecasts and estimates provided in the report. Reyes Tacandong & Co. (RT&Co.) assumes no responsibility for updating or revising this report based on circumstances, developments or events occurring after this date.

We understand that the results of the market research will be shared with appropriate agencies of the Government of Brazil as well as private sector entities for the purpose of generating interest in doing business in the Philippines. It is not to be used for any other purpose or to be distributed to any other party.

We would like to thank the Embassy of Brazil in Manila for the opportunity to be of service.

Very truly yours,



Mildred R. Ramos
Managing Partner, Advisory Services

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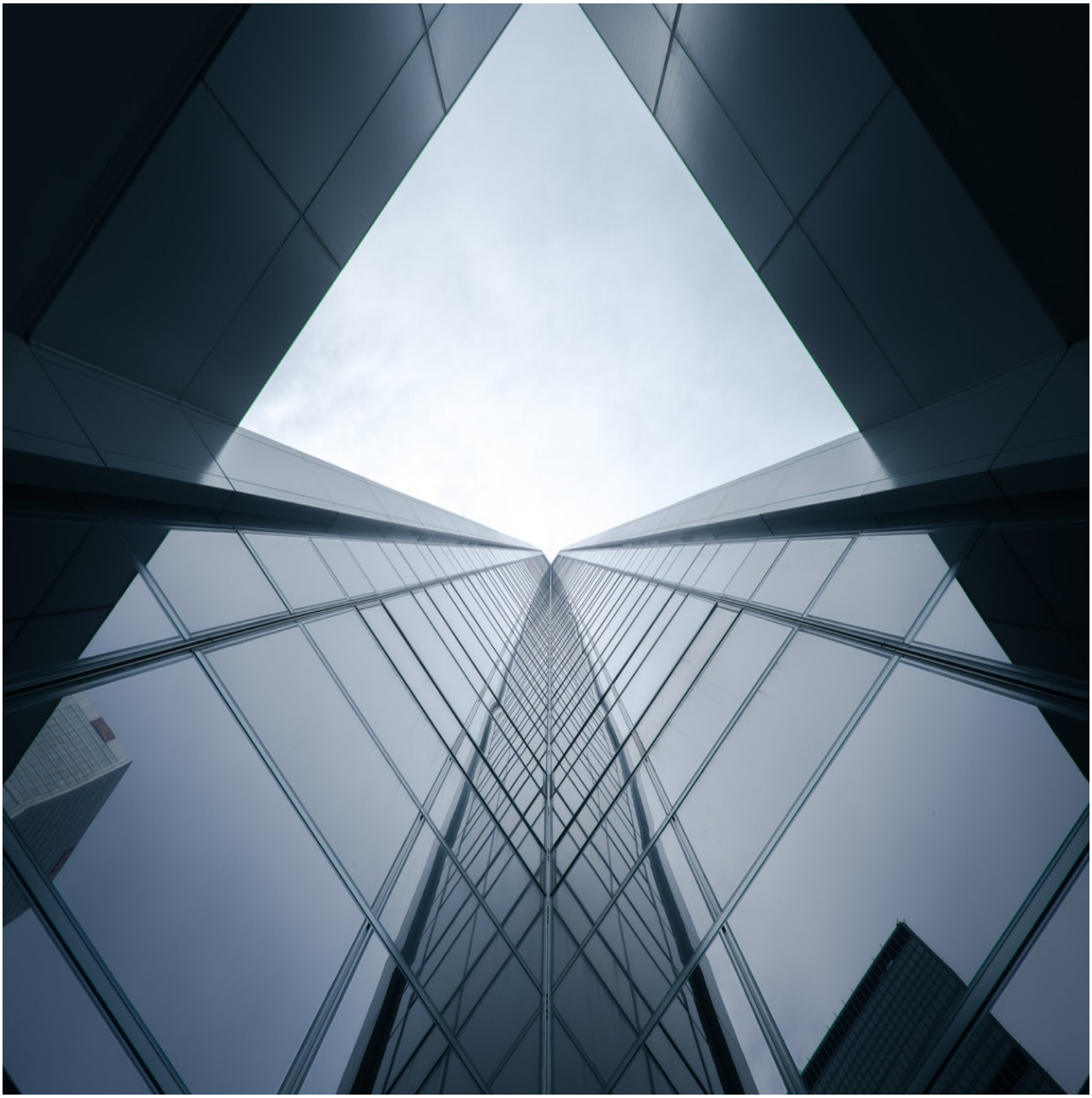

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Self-propelled Bulldozers and Other Heavy Equipment
Market Research Report

Disclaimer

This Report was prepared after the COVID-19 pandemic announcement by the World Health Organization on March 11, 2020. Statistics and other data shown in this Report were based on the latest available relevant research materials obtained and analyzed before the pandemic and the interviews conducted during that same period. The impact of the pandemic on the Philippine economy has not been considered in the forecasts and estimates provided in the Report.

In converting Philippine Peso to US Dollar, the Bangko Sentral ng Pilipinas average annual exchange rate corresponding to the particular year of the data presented was used.

EXECUTIVE SUMMARY

The Philippine construction industry is experiencing a period of strong growth, supported by the continuous government spending on large-scale infrastructure projects under the “Build, Build, Build” program. The industry is expected to reach USD 64.60 billion in 2023 from USD 39.60 billion in 2018, a compounded annual growth rate (CAGR) of 10.3 percent for the period 2018 to 2023.

The key infrastructure projects under the Build, Build, Build program involve total investment of USD 40.50 billion, which include bridge construction, flood management project, extension of light rail transit, road extensions, and erection of provincial airports. Since these are long-duration projects, the government has institutionalized the Build, Build, Build program to secure funding for these developments. In addition, the Philippine government has been partnering with private companies in some national projects through Public Private Partnership (PPP) agreements to accelerate the country’s infrastructure projects.

Apart from the anticipated rise in volume of construction activities brought about by the government’s infrastructure plan, the country’s rapid urbanization and expanding real estate development are also expected to drive the growth of the construction industry, thus increasing the demand for self-propelled bulldozers and other heavy equipment.

The Philippines is one of the fastest urbanizing countries in the East Asia and Pacific region. The National Capital Region (Metro Manila), where the capital city of the country is situated, is classified as entirely urban and has posted the highest construction value in 2019.

The real estate developments arising from the private sector accounted for 74.9 percent of the total construction expenditure of the country in 2019, a 13.9 percent increase from 2018. The Philippine top property developers include, but are not limited to, SM Prime Holdings, Inc.; Ayala Land, Inc.; Megaworld Corporation; Vista Land & Lifescapes Inc.; and Robinsons Land Corporation. These developers normally put out tenders for their projects to construction companies.

The absence of any relevant local or domestic heavy equipment manufacturing unit in the Philippines resulted in the country’s reliance on importation of heavy equipment. For the period 2015 to 2019, the total importation of self-propelled bulldozers and other heavy equipment, new and used, grew at a CAGR of 7.2 percent, from USD 318.61 million to USD 420.68 billion. In 2019, the Philippines’ top two country suppliers were China and Japan, which collectively contributed 59 percent of the country’s total importation of self-propelled bulldozers and other heavy equipment. Brazil currently ranks 16th. The top two companies importing into the Philippines are Monark Equipment Corporation, the sole authorized dealer for Caterpillar, and Maxima Machineries Incorporated, a subsidiary of Marubeni Corporation.

Executive Summary

Heavy equipment leasing is common in the Philippine construction industry. The majority of importers of heavy equipment in the country are engaged in selling and leasing their imports. Depending on their needs, some domestic construction companies purchase their own heavy construction equipment from foreign suppliers and local distributors, or lease heavy equipment from other suppliers.

Opportunities in entering the Philippine heavy construction equipment industry lie in public-private partnerships as the number of government infrastructure projects are rising, and the selling or leasing of heavy equipment to private companies, since all the requirements for self-propelled heavy equipment, under AHTN Code no. 84.29, of the local market are imported.

COVID-19 and the Philippine Construction Industry

The Philippine Statistics Authority (PSA) reported that the country's GDP declined by 0.2 percent during the first quarter of 2020, from the same period in 2019. The agriculture and industry sectors' gross value added dropped by 0.4 percent and 3.0 percent, respectively, while the services sector experienced a growth of 1.4 percent. The manufacturing, transportation and storage, and accommodation and food services sectors were identified to be the main contributors to the decline in economic activities. The International Monetary Fund has projected that the Philippine GDP growth in 2020 will be at 0.6 percent – 5.7 percentage points lower than the pre-COVID-19 forecasted growth of 6.3 percent.

Due to temporary construction cessations imposed on high-risk areas during the enhanced community quarantine, the country's gross fixed capital formation in construction declined to USD 12.09 billion in the first quarter of 2020 from USD 12.51 billion in the same quarter of 2019 – a year-on-year drop of about 3.4 percent. Also, the gross value added of the construction industry in the first quarter of 2020 (USD 5.4 billion) was lower than the previous year's gross value added (USD 5.5 billion) by about 1.8 percent. The estimated total lost revenue of the construction industry is USD 732.3 million, with the National Capital Region having the highest share of losses at 64.3 percent (USD 470.7 million).

Apart from construction delays, the industry is expected to experience continuing logistical challenges and supply chain disruptions, especially for resources coming from offshore or overseas suppliers. The growth forecast for the industry also slowed down. According to Fitch Solutions' report, the projected growth of the construction industry for 2020 has dropped to 3.6 percent from the previous 5.8 percent.

As a response to the pandemic, the Philippine Congress has passed the "Bayanihan to Heal as One Act" in March 2020, which authorizes the president to realign the government's budget. For instance, a portion of the budget for the Department of Public Works and Highways was reallocated to give way to the COVID-19 response program fund.

Executive Summary

Further, the Philippine's House of Representatives recently approved the Accelerated Recovery and Investments Stimulus for the Economy (ARISE) package that is aimed at strengthening the economy by providing liquidity and giving subsidies to, or otherwise supporting, sectors most affected by the pandemic. The total amount of the stimulus package is about USD 26.5 billion, of which USD 13.3 billion is allocated over a three-year period to the "Enhanced Build, Build, Build" program as a structural intervention. Such government response augurs well for the Philippine industry sector in general, and the construction industry, its supporting segments and businesses, in particular.

Opportunities for key businesses are seen in the following:

1. Development, expansion, and rehabilitation of healthcare facilities nationwide to improve the capacity of the healthcare system.

2. Potential increased demand for construction development in rural areas as Filipinos begin to realize the advantages of less dense areas leading to additional demand for construction materials and equipment.

3. Adoption of digital technology and building solutions in the construction industry, like modular designs to easily redesign areas to become isolation or quarantine wards.

4. Improvement in transport and logistics system through establishments of better roads and infrastructures, warehouse facilities, and marketplaces to address supply chain concerns and ensure easier access for consumers.

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INTRODUCTION

The Philippines is one of the largest archipelago nations situated in the Southeast Asia Region. The islands of the Philippines are classified into three main geographical areas, namely Luzon, Visayas, and Mindanao. Manila, a highly urbanized city, is the country's capital. It is one of the cities that make up the National Capital Region (NCR), which is located in Luzon. NCR is composed of 16 cities and one municipality and is the political, economic, and commercial center of the Philippines.

The Philippine population is about 108.27 million, equivalent to 1.4 percent of the total world population. It is reported to be the 13th most populous country in the world. The country's primary languages are Filipino and English – the latter being the business language and principal medium of instruction, making the Philippines one of the world's largest English-speaking countries. Literacy rate is high, at 97.96 percent.

The Philippines has a presidential system of government. There are three sovereign yet interdependent branches: Executive, Legislative, and Judicial. The executive power is vested in the president of the country while the legislative power is vested in the Congress of the Philippines, which consists of 24 Senate members elected at large by qualified voters, and about 250 members of the House of Representatives elected in their respective resident geographical areas, including party-list representatives elected through a party-list system. The judiciary branch is composed of the Supreme Court and such lower courts as established by law.

The Philippines is one of the fastest-growing economies in Asia. Its Gross Domestic Product (GDP) grew at a CAGR of 6.6 percent from USD 329 billion in 2015 to USD 374 billion in 2019 with the services sector as both the fastest growing and the largest contributor to the GDP. Further, the Gross National Income (GNI) per capita was USD 3,861 in 2019 which was higher by 4.6 percent than the previous year's GNI.

Poverty incidence has been declining, from 27.6 percent in 2015 to 21 percent in 2018. The Philippine unemployment rate was estimated to be 5.1 percent in 2019, which is lower than the unemployment rate of 5.4 percent in 2018.

Filipinos 15 to 64 years old make up about 64 percent of the country's population. Due to improved living conditions and better access to health care services, Filipinos are expected to live much longer than before. Currently, the life expectancy is 66.2 years for males and 72.6 years for females.

Demographic Indicator	
GNI per capita, 2019 (USD)	3,861
Total Population, 2019 (in thousands)	108,274
Population annual growth rate 2019 (%)	1.6
Population in urban areas 2019 (%)	47.1
Population, under 15 years of age (%)	30
Population, over 60 years of age (%)	6
Average Life Expectancy (year)	71

Introduction

In terms of contribution to GDP, the three major economic sectors are the services sector, 61 percent; industry sector, 30 percent; and agriculture sector, nine percent. The industry sector is composed of the following: manufacturing; construction; electricity, gas and water supply; and mining and quarrying. The sector's gross value added grew from USD 106 billion in 2018 to USD 113 billion in 2019. The construction industry, one of the industries that the government has been focusing on for the past years, had an average contribution of USD 24 billion (7.0 percent) to the country's GDP and a CAGR of 10.0 percent from 2015 to 2019.

The Construction Industry Authority of the Philippines (CIAP) is the government agency that has central authority over the Philippine construction industry. The CIAP is responsible for providing policies and programs as well as regulating and promoting the development of the industry. The Department of Public Works and Highways (DPWH), the engineering and construction arm of the government, is mandated to carry out the major infrastructure projects of the country.

The Philippine government has an extensive infrastructure development program to increase the country's spending on infrastructure from the current five percent of the total GDP to over six percent in 2022. The Build, Build, Build infrastructure program has 75 infrastructure flagship projects that are focused on transportation and mobility; water and energy resources; information and communications technology; and other public infrastructure. On the other hand, the private sector is primarily driven by the increasing number of real estate developments in the country. The construction projects with approved building permits had increased to 161,207 projects with a total value of USD 8.8 billion in 2019 from 132,006 projects valued at USD 7.3 billion in 2015.

With a growing population, favorable demographic structure, and rapid urbanization, the government infrastructure spending grew to USD 17 billion in 2019 from USD 15.3 billion in 2018. These trends equate to an increased demand for heavy construction equipment. However, currently, the Philippines is not equipped to manufacture heavy equipment and instead relies on importation of these items.

The Philippines presents various investment opportunities to foreign companies in the heavy construction equipment industry given the lack of supply of locally manufactured heavy equipment, the dependency on imported heavy equipment and the expanding construction activities. In line with this, the Embassy of Brazil in Manila commissioned a research on the Philippine heavy construction equipment market to provide information that would be useful to individuals and companies in Brazil who are looking into investment opportunities in the Philippine construction industry, specifically in the heavy construction equipment industry.

This report highlights demographic data relevant to the construction industry, local market and import trends, major developments in the industry, and government support to the industry. Information on key industry players is likewise provided.

SELF-PROPELLED BULLDOZERS AND OTHER HEAVY EQUIPMENT

SECTION 1

Self-propelled bulldozers and other heavy equipment that fall under AHTN Code no. 84.29 are pieces of equipment that are capable of moving without requiring external means of propulsion.

There are eight major classifications of heavy equipment based on application and function: (1) earthmoving equipment, (2) earth compaction equipment, (3) hauling equipment, (4) hoisting equipment, (5) conveying equipment, (6) aggregate production equipment, (7) concreting equipment, and (8) pile driving equipment.

Based on the above-stated classifications, self-propelled bulldozers and other heavy equipment that are categorized under AHTN Code no. 84.29 are generally classified as earthmoving equipment and earth compaction equipment. Earthmoving equipment are used to dig, break rocks, lift, and do construction operations which involve earthworks. Earth compaction equipment, on the other hand, are used to create flat and smooth surfaces by compressing the soil and increasing its density.

AHTN Code 84.29 – Self-propelled Bulldozers and Other Heavy Equipment

The products listed under heading no. 84.29 with the applicable tariff rates for Most Favored Nations (MFN), ASEAN-China Free Trade Area (ACFTA), ASEAN-Japan Common Effective Partnership Agreement (AJCEPA), ASEAN-Korea Free Trade Agreement (AKFTA), and ASEAN Trade in Goods Agreement (ATIGA) are as follows:

Table 1.1 Self-propelled Bulldozers and Other Heavy Equipment's AHTN Code 84.29 (2017)

AHTN Code	Description	Rates of Duty for MFN, ACFTA, AJCEPA, AKFTA, and ATIGA
84.29	Self-propelled bulldozers, angledozers, graders, levellers, scrapers, mechanical shovels, excavators, shovel loaders, tamping machines and road rollers.	
	Bulldozers and angledozers:	
8429.11.00	-- Track laying	0%
8429.19.00	-- Other	0%
8429.20.00	Graders and levellers	0%
8429.30.00	Scrapers	0%
8429.40	Tamping machines and road rollers:	0%
8429.40.30	-- Tamping machines	0%
8429.40.40	-- Vibratory smooth drum rollers, with a centrifugal force drum not exceeding 20 tons by weight	0%
8429.40.50	-- Other vibratory road rollers	0%
8429.40.90	-- Other	0%
	Mechanical shovels, excavators and shovel loaders:	
8429.51.00	-- Front-end shovel loaders	0%
8429.52.00	-- Machinery with a 360 degree revolving superstructure	0%
8429.59.00	-- Other	0%

Source: Philippine Tariff Commission
Note: Zero rated tariff rates for the products are included to differentiate products from the tariff exempt category.

Self-propelled Bulldozers and Other Heavy Equipment

Below is a brief description of each type of heavy equipment that falls under AHTN Code no. 84.29:

- Bulldozers and Angledozers are used for digging and ditching; short-range lifting and transportation of materials; removing weak soil or rock strata; rough grading; and clearing the site of work.
- Graders and Levellers are generally used in the construction and maintenance of roads with their main function being leveling and smoothing of the topmost layer.
- Scrapers are earthmoving equipment used for moving or removing dirt, gravel and other unnecessary materials from the surface. This machine type is not only used for construction tasks, also suitable for various mining applications.
- Mechanical Shovels and Shovel Loaders are used in construction sites to load the materials onto dumpers and trucks. The loaded materials may be excavated soil, demolition waste, and raw materials.
- Excavators are mainly used for digging holes and foundations; other uses are heavy lifting, demolition, river dredging, and cutting of trees.
- Tamping Machines are used for tamping or packing the earth under track ballast of a railroad.
- Road Rollers are used to compact gravel, asphalt or earth surface in the construction of roads and foundations. Rollers are also used at landfills and farms.

LOCAL MARKET TRENDS

SECTION 2

The Philippine construction industry reached a value of USD 39.60 billion in 2018 and is estimated to grow to USD 64.6 billion in 2023, or at a compounded annual growth rate (CAGR) of 10.3 percent over the five-year period.[1]

The positive outlook for the industry is attributed to the growing population, favorable demographic structure, and rapid urbanization. Further, some of the infrastructures in the Philippines are still underdeveloped – a constraint and a factor for stable future development.

The resulting market for heavy equipment will be driven by the increased investment in infrastructure development and growth in services and industry sectors.

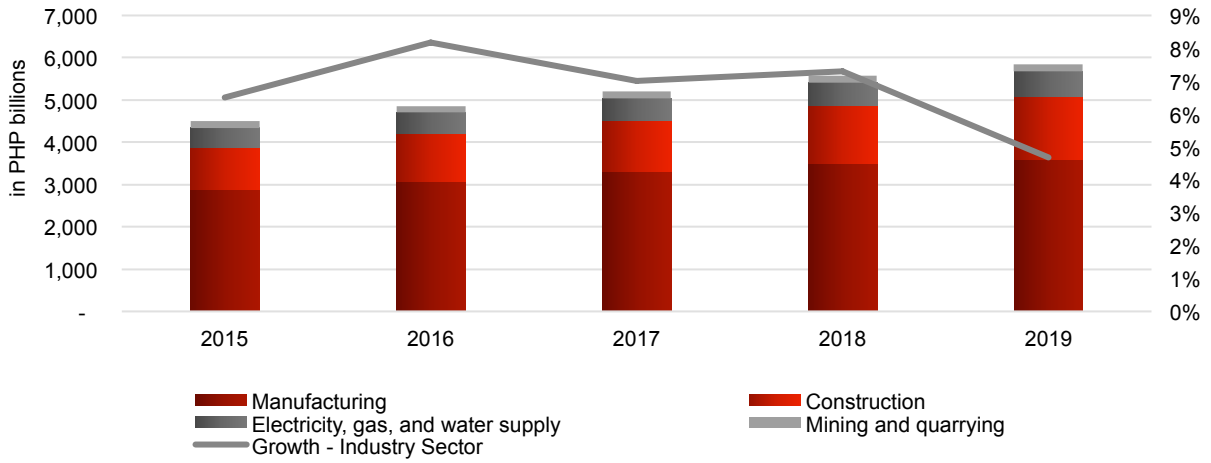
[1]From the published report by Market Line, 2019.

Philippine Industry Sector

The Philippine industry sector is made up of the following industries: manufacturing; construction; electricity, gas and water supply; and mining and quarrying.

The value of each industry under this sector is shown below.

Figure 2.1 Industry Sector Composition, 2015 to 2019



Source: Philippine Statistics Authority

The manufacturing industry had the highest contribution to the industry sector with an average of 63 percent from 2015 to 2019 followed by the construction industry with 24 percent (Figure 2.1). Furthermore, the construction industry registered the fastest growth at a CAGR of 10 percent as against six percent of the manufacturing industry.

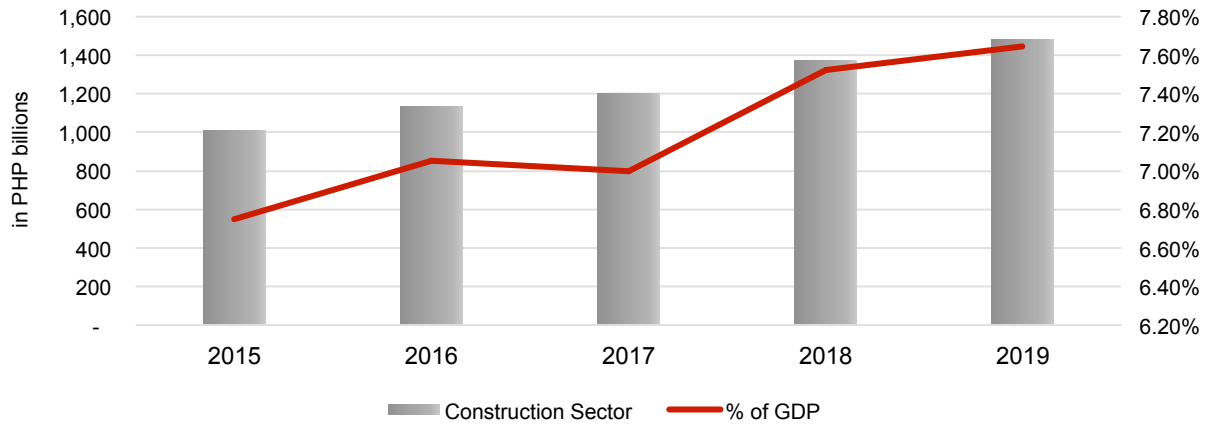
Construction Industry

The construction industry is essential for the creation and maintenance of the built environment. The built environment is defined by the Country Health Rankings as the "human-made (versus natural) resources and infrastructure designed to support human activity such as buildings, roads, parks, and other amenities." This environment encompasses simple housing projects, mall establishments, and infrastructures.

The contribution of the construction industry to the Philippine gross domestic product (GDP) appears twice – as part of capital formation, the total construction expenditures by both private and public firms, and as a component of the industry sector.

In terms of gross value added (GVA), a measure of the contribution to GDP, the Philippine construction industry contributed an average of 7.2 percent to the country's GDP for the period 2015 to 2019. The industry's contribution grew from PHP 1.01 trillion (USD 22.24 billion) in 2015 to PHP 1.48 trillion (USD 28.59 billion) in 2019 with a CAGR of 10 percent (Figure 2.2).

Figure 2.2 Philippine Construction Industry, 2015 to 2019



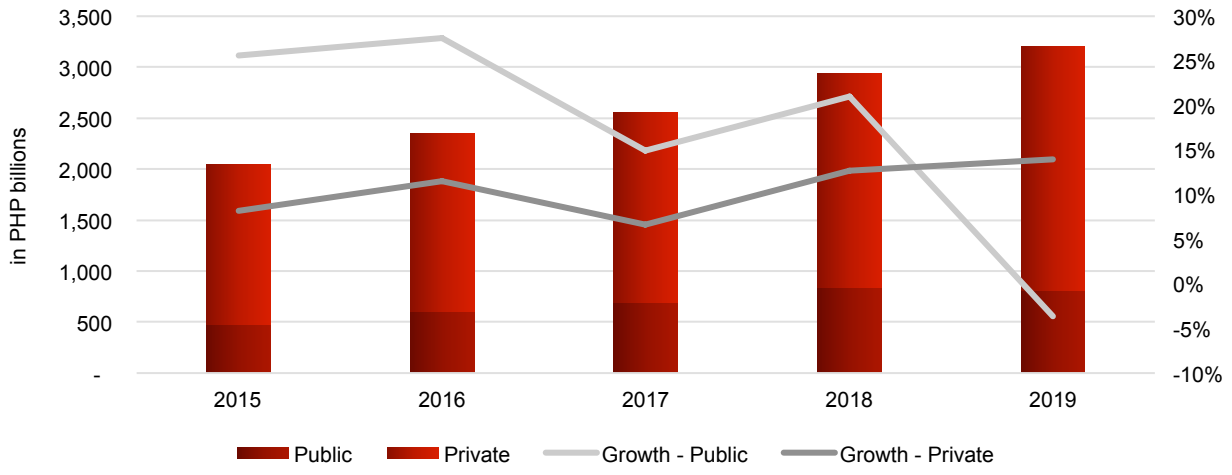
Source: Philippine Statistics Authority

The growth in the construction industry is largely attributable to the sustained domestic demand for real estate development and the consistent efforts of the government in increasing the number of infrastructure development projects. Revenues generated by the newly implemented tax reforms are expected to support the expanding construction industry.

Local Market Trends

The construction expenditure for capital formation reached PHP 3.20 trillion (USD 61.82 billion) in 2019 from PHP 2.04 trillion (USD 44.89 billion) in 2015 or a five-year CAGR of 11.9 percent.

Figure 2.3 Gross Fixed Capital Formation - Construction Expenditure, 2015 to 2019



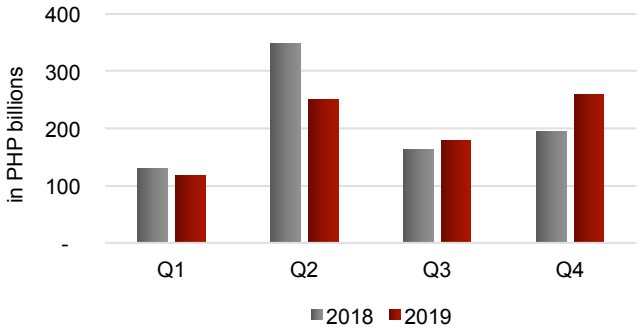
Source: Philippine Statistics Authority

Private construction expenditure accounted for about 74.9 percent (PHP 2.4 trillion; USD 46.8 billion) of the total construction expenditure in 2019; the remaining 25.1 percent (PHP 804.97 billion; USD 15.54 billion) came from public construction expenditure (Figure 2.3).

The total construction expenditure of the country has been increasing since 2015. However, there was a 3.6 percent decline in public construction expenditure in 2019 from PHP 835.36 billion (USD 15.86 billion) in 2018. The drop was mainly caused by the delay in the passage of the 2019 national budget which further delayed the allocation and disbursements for government infrastructure projects.

The public construction expenditure in the first quarter and the second quarter of 2019 was lower by nine percent and 28 percent, respectively, than the public capital expenditure of 2018 in the same period. During the last two quarters of 2019, the public construction expenditure was higher by 10 percent and 32 percent, respectively, than that of same period in 2018. The national budget had been approved by then.

Figure 2.4 Gross Fixed Capital Formation - Public Construction Expenditure, 2018 - 2019, Quarterly



Source: Philippine Statistics Authority

Heavy Construction Equipment Industry

The global heavy construction equipment market was valued at USD 128.46 billion in 2018 and is projected to grow to USD 186.42 billion in 2026, or at a CAGR of 4.8 percent during the forecasted period 2019 to 2026. Additionally, the Asia Pacific heavy construction equipment market was valued at approximately USD 55 billion in 2018 and is expected to grow at a CAGR of five percent during the period 2019 to 2025 (Fortune Business Insights, 2018).

The Philippines is dependent on the importation of heavy construction equipment mainly coming from other Asian countries. The absence of any local player or domestic heavy equipment manufacturing unit in the country is a major concern in the construction equipment market.

A normal business practice in the heavy construction equipment industry is the leasing of equipment. Leasing is a cost-effective way for end users who are in need of project-specific equipment as it eliminates logistical and storage considerations. Even foreign heavy equipment companies can lease out heavy equipment directly to the Philippine market; however, it is not advisable to do so since it will be costly and logistically inefficient to return an equipment upon completion of a project to a foreign lessor, unless the foreign heavy equipment company either has an appointed dealer, distributor, or a registered subsidiary in the Philippines that can undertake the leasing activity.

The Association of Carriers and Equipment Lessors (ACEL) pioneered the practice of equipment leasing and rental in the Philippines. Endorsed by several government agencies, a guidebook of rental rates is regularly published by ACEL. The standard rates, however, may vary from the actual rates due to several factors such as worksite condition and availability of equipment. The standard monthly rental rates per brand for earthmoving equipment (tractors, crawler with dozer) are summarized in Table 2.1. Rental rates range from USD 2,344 (Fiat-Allis/Hitachi model FD5) to USD 76,655 (Komatsu model D475A-5).

Table 2.1 Standard Rental Rates for Earthmoving Equipment (Tractors, Crawler with Dozer)

Brand	Price Range for Monthly Rental, in USD*			
	Minimum	Model	Maximum	Model
Caterpillar	3,244	D4E LGP	53,233	D11R
Dressta	3,462	TD-8G	39,083	TD40E
Fiat-Allis/Hitachi	2,344	FD5	14,005	FD255
John Deere/Hitachi	4,494	DX75M	9,140	DX175
Komatsu	2,550	D21P-8	76,655	D475A-5
Liebherr	10,267	D750	18,502	PR742B

Source: ACEL
Converted to USD*

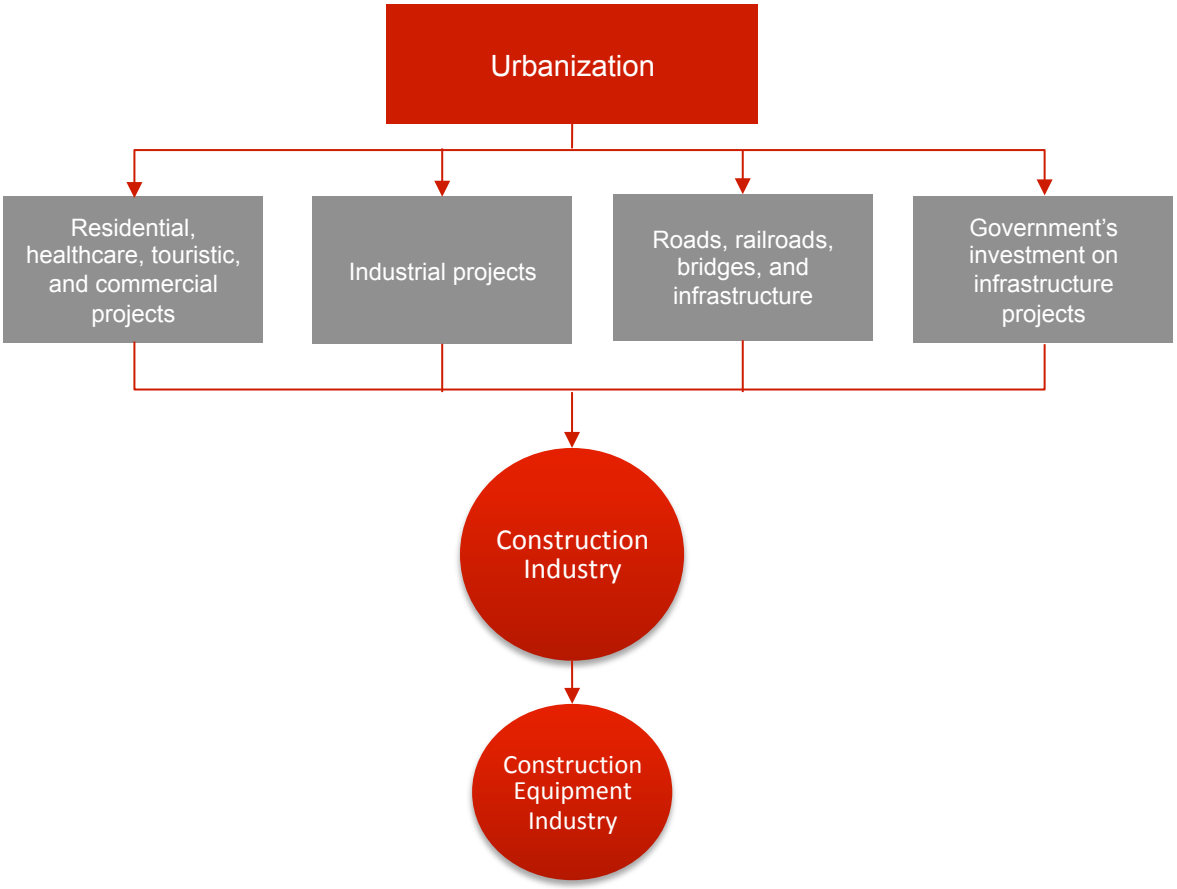
Local Market Trends

Below are some of the factors that contribute to the market growth for Philippine heavy construction equipment industry:

- The fast urbanization of areas in the Philippines;
- The increase in residential, healthcare, touristic, and commercial projects;
- The growth in demand for office buildings arising from the business process outsourcing (BPO) industry;
- The rise in demand for roads, bridges, and public infrastructures especially in the provincial regions of the country; and
- The increase in government investments in infrastructure projects through the present administration's Build, Build, Build[2] infrastructure program.

The diagram (Figure 2.4) illustrates the factors of urbanization leading to projects for the construction industry and ultimately, increasing the demand for heavy construction equipment.

Figure 2.5: Factors of Urbanization



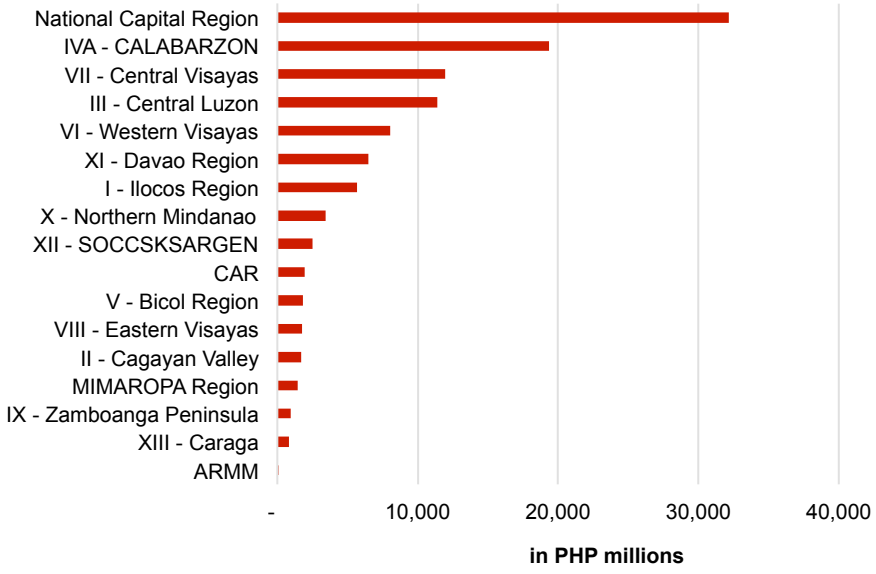
[2]Kindly refer to Section 4 of this report for further information on the Build, Build, Build program.

Urbanization of the Country

Urbanization is one of the factors affecting the economic development in the country. Based on the latest Census of Population, 51.2 percent of the Philippine population resided in urban areas in 2015 as compared to the level of urbanization in 2010 which was at 45.3 percent. National Capital Region (NCR) accounts for one-third of the total urban population of the country. Aside from NCR, four other regions had a higher level of urbanization than the Philippines in 2015. These regions were Region IV-A (CALABARZON), Region XI (Davao), Region III (Central Luzon), and Region XII (SOCCSKSARGEN).

The construction value, which is the value for construction projects declared on the approved building permits, per region in the Philippines is presented in Figure 2.5. It is to be noted that aside from being the two most highly urbanized areas in the country, NCR and Region IV-A are also the top regions in terms of construction value.

Figure 2.6 Construction Value from Approved Building Permits by Region, Fourth Quarter 2019

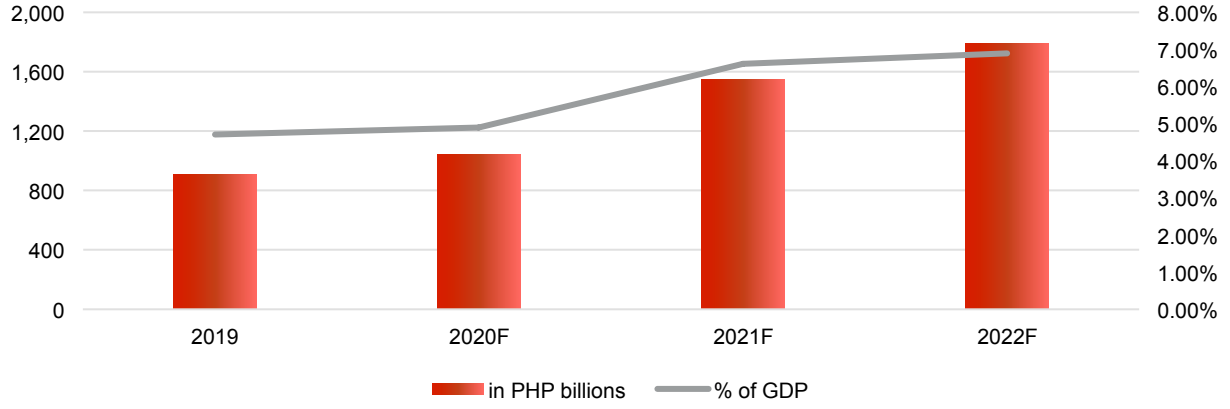


Source: Philippine Statistics Authority

Infrastructure Development

The Philippine government has entered into an extensive infrastructure development drive, the Build, Build, Build infrastructure program, that is expected to boost the construction industry, which in return will drive the demand for heavy construction equipment. The Department of Budget and Management forecasted the investment requirement for infrastructure development to be PHP 1.8 trillion (USD 34 billion) by 2022 from PHP 909.7 billion (USD 17.56 billion) in 2019 (Figure 2.8).

Figure 2.7 Total Appropriation for Infrastructure Development, 2019 to 2022



Source: Department of Budget and Management

Apart from the government's Build, Build, Build program, the Department of Trade and Industry (DTI), through the Construction Industry Authority of the Philippines and the Philippine Contractors Association, launched the Construction Industry Roadmap 2020-2030 in March 2019. This roadmap aims to ensure the sustainability of growth and competitiveness of the construction industry, and to increase the contribution of the construction industry to the economy from PHP 2.3 trillion (USD 44.4 billion) in 2018 to a cumulative contribution of about PHP 130 trillion (USD 2.5 trillion) by 2030.

Local Market Trends

Key Industry Players

The following are the top five companies by net sales revenue in 2017 in the real estate development industry based on the latest Philippine Real Estate and Construction Industry report of EMIS in 2018.

SM Prime Holdings, Inc. is one of the largest integrated property developers in the Philippines. Its community developments include malls, residences, offices, hotels, and convention centers. Apart from commercial developments, the company also has residential developments through its subsidiary.

Ayala Land, Inc. is the real estate arm of the Ayala Group, which is one of the oldest and biggest conglomerates in the Philippines. The company is responsible for the development of Makati City, which is the leading financial and central business district in the Philippines. Its other developments are focusing on estates, residences, offices, malls, hotels and resorts.

Megaworld Corporation is one of the largest real estate developers in the country. It is engaged in property-related activities such as project design, construction, and property management of residential condominiums and commercial properties.

Vista Land & Lifescapes Inc. is one of the leading homebuilders in the Philippines as it offers a wide range of housing products from luxury houses, middle-class housing to low-cost housing. The company's numerous projects are mainly located in the National Capital Region area.

Robinsons Land Corporation is the real estate arm of JG Summit Holdings, Inc., one of the largest conglomerates in Philippines. The company is known for their mixed-used properties that include office buildings, residential condominiums, lifestyle shopping malls, and hotels.

Local Market Trends

The top construction companies in the country based on gross revenues in 2017 are enumerated below.

Makati Development Corporation is the construction and property management arm of Ayala Land. The company's initial projects were schools, industrial plants, and business parks. The company also constructs malls, offices, buildings, and leisure developments.

Megawide Construction Corporation was established in 1997 as a mid-sized construction firm. The company's portfolio includes engineering, procurement and construction, airport infrastructure, property development, and renewable energy. Through the public-private program, Megawide has partnered with the Philippine government for some of its projects.

D.M. Consunji, Inc. was a pioneer in advanced engineering technology in the Philippines. Due to the company's efficient project execution, DMCI has been patronized by its clientele – Ayala Group, SM Group, and Robinson's Group, to name a few.

EEI Corporation is both a construction company and a general engineering contractor. The company's three major areas of construction expertise are infrastructures, buildings and industrial facilities for oil, petroleum, and cement. Its construction projects range from heavy and light industrial projects, infrastructure, and community development. The company is also a known Philippine contractor in the Middle East region.

Sta. Clara International Corporation was initially established in 1976 as a single proprietorship. The company's projects include civil works (bridge, irrigation, flood control, dam), plant works (energy storage system, hydroelectric, thermal), and building works (manufacturing plant, warehouse supermarket, office building).

Local Market Trends

Atlantic, Gulf and Pacific Company of Manila, Inc. is a multinational company headquartered in Singapore that specializes in infrastructure, gas, and logistics businesses. The Philippine office is located in the National Capital Region. The company delivers construction solution for gas and industrial infrastructure projects.

DDT Konstract, Inc. is a Filipino corporation with expertise in the construction of general buildings. The company has partnerships with Ayala Group, Filinvest Group, and Robinsons Group.

DATEM, Inc. was incorporated by a group of engineers and its initial projects were the construction of low-cost housing in Southern Luzon. Through its construction innovation and expertise, it has construction projects such as residential buildings, offices, hotels and resorts.

MDC Buildplus, Inc. is a subsidiary of MDC that caters to medium-rise housing projects and fit-out requirements. It also handles the projects of MDC in the Western Visayas region.

Monolith Construction & Development Corporation is a Filipino corporation engaged in construction. Its projects include warehouses, residential, and commercial buildings in the National Capital Region.

Source: BusinessWorld (2018)

IMPORT TREND ANALYSIS

3 SECTION

The Philippine construction industry will benefit from the growing government expenditure on infrastructure in the years ahead. An increase in government involvement in planning, coordinating and financing projects is to be expected, which will also generate further demand for heavy equipment in the country (Reciprocus International, 2017).

Government and private investments in complex infrastructure projects compel the contractors and other government agencies to procure new and technologically advanced equipment to facilitate efficient work operations and operator safety.

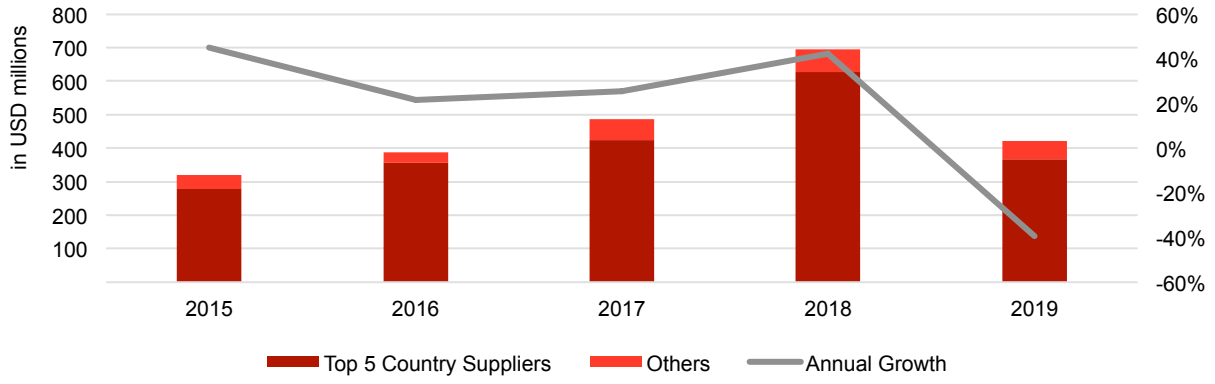
Because of the requirements for technological innovations in heavy construction equipment industry and the absence of a relevant local manufacturer, there is a strong dependency on imported heavy equipment.

Import Trend Analysis

Philippine Importation of Self-propelled Bulldozers and Other Heavy Equipment

Over the period of 2015 to 2019, the total importation of self-propelled bulldozers and other heavy equipment (under AHTN Code 84.29) grew at a CAGR of 7.2 percent, from USD 318.61 million to USD 420.68 million. In the five-year period, the country had the highest importation in 2018 totaling USD 694.15 million while the average yearly import value was USD 461.76 million (Figure 3.1).

Figure 3.1 Importation of Self-propelled Bulldozers and Other Heavy Equipment, 2015 to 2019

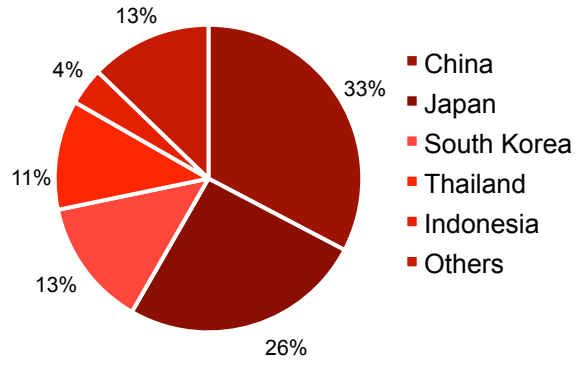


Source: Tradeline Philippines

On average, the top five country suppliers collectively contributed approximately 88.7 percent of the total importation under AHTN Code 84.29. These countries are China, Japan, South Korea, Thailand, and Indonesia. The drop in the annual growth rate in 2019 can be attributable to the delayed enactment of the government's national budget and the postponement of certain public works nationwide along with the delay in the release and disbursement of public funds due to the mid-term elections in 2019.

In 2019, self-propelled bulldozers and other heavy equipment were mainly sourced from the five major country suppliers: China (33 percent), Japan (26 percent), South Korea (13 percent), Thailand (12 percent), and Indonesia (4 percent) (Figure 3.2). The five countries have consistently been the top suppliers of the Philippines in the five-year period. Other countries, consisting of 48 nations, accounted for 13 percent of the total importation of self-propelled bulldozers and other heavy equipment.

Figure 3.2 Contribution of Country Suppliers, 2019



Source: Tradeline Philippines

Import Trend Analysis

The total importation of self-propelled bulldozers and other heavy equipment by product category of AHTN Code 84.29 is presented below.

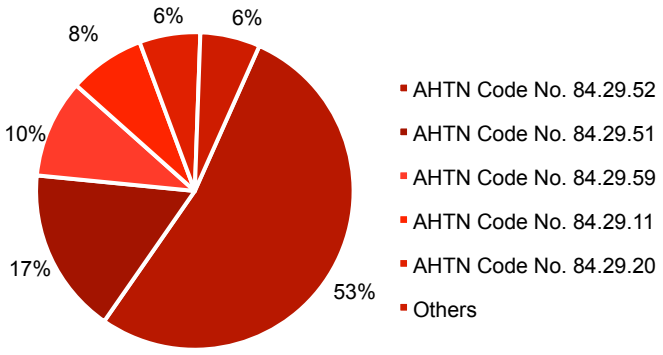
Table 3.1 Total Importation of Self-propelled Bulldozers and Other Heavy Equipment by Product Category, 2019

AHTN Code	Description	Amounts in USD
84.29.52	Self-propelled Mechanical Shovels, Excavators and Shovel Loaders with a 360 Degrees Revolving Superstructure	222,984,603
84.29.51	Self-propelled Front-End Shovel Loaders	71,075,376
84.29.59	Other Self-propelled Mechanical Shovels, Excavators and Shovel Loaders	42,142,380
84.29.11	Self-propelled Track Laying Bulldozers and Angledozers	32,660,010
84.29.20	Self-propelled Graders and Levellers	26,131,825
84.29.40, 84.29.19, 84.29.30	Self-propelled Tamping Machines and Road Rollers; Other Self-propelled Track Laying Bulldozers and Angledozers; Self-propelled Scrapers	25,690,124

Source: Tradeline Philippines

More than half of the total imported self-propelled bulldozers and other heavy equipment under AHTN Code 84.29 in 2019 were self-propelled mechanical shovels, excavators and shovel loaders (Figure 3.3). The self-propelled front-end shovel loaders (under AHTN Code 84.29.51) were listed as the second most imported product category while other self-propelled mechanical shovels, excavators and shovel loaders accounted for 10 percent of the total importation.

Figure 3.3 Product Category Contribution, 2019

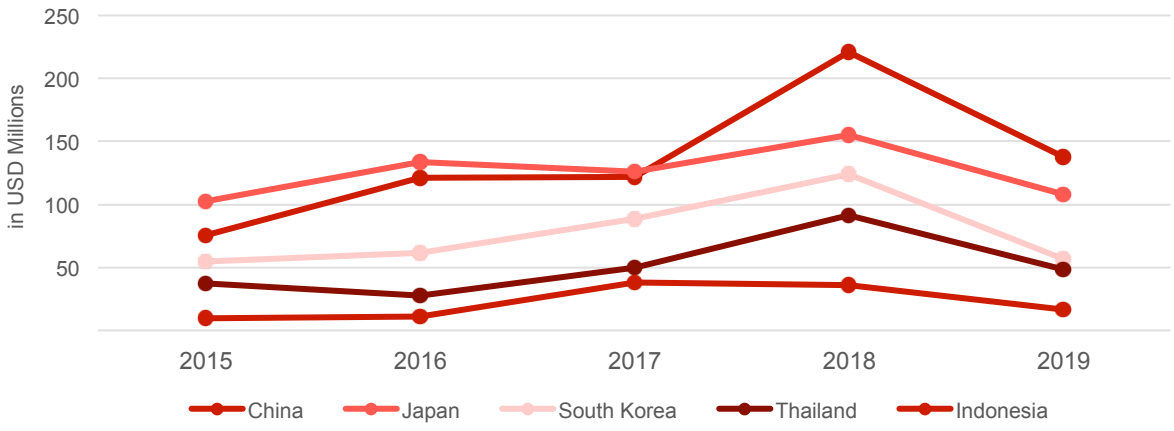


Source: Tradeline Philippines

Top Country Suppliers

The yearly level of exportation of self-propelled bulldozers and other heavy equipment of the five major country suppliers to the Philippines is illustrated in Figure 3.4.

Figure 3.4 Exportation of the Top Five Country Suppliers, 2015 to 2019



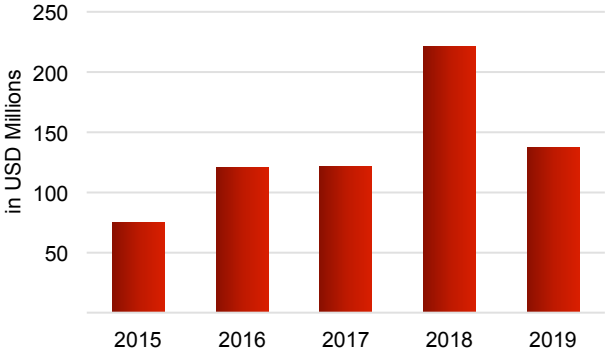
Source: Tradeline Philippines

Based on the analysis of the graph, all the top country suppliers of the Philippines are from Asia and each top country supplier's export value peaked in 2018, with the exception of Indonesia. Over the past five years, except for China and Japan, the countries' respective rankings have been generally consistent. In 2015 and 2016, Japan was the top country supplier while China ranked 2nd. In 2017, China gradually overtook Japan for the top spot in the country rankings and has since been the top country supplier of the Philippines.

China

The Philippine total importation of self-propelled bulldozers and other heavy equipment from China grew at a CAGR of 16.3 percent over the period 2015 to 2019. China's total import value amounted to USD 676.31 million while the average annual exportation to the Philippines was USD 135.26 million from 2015 to 2019. Some of its top export companies are Caterpillar Ltd., Shandong Lingong Construction Machinery Co. Ltd, Lonking (Fujian) International Trade Co. Ltd., Xuzhou Construction Machinery Group, Liugong Machinery Co. Ltd, and JCB Construction Equipment Shanghai Co. Ltd.

Figure 3.5 China's Total Exportation of Self-propelled Bulldozers and Other Heavy Equipment, 2015 to 2019



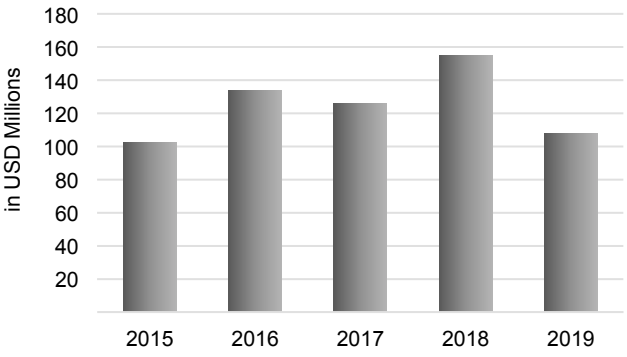
Source: Tradeline Philippines

Import Trend Analysis

Japan

The Philippine total importation of self-propelled bulldozers and other heavy equipment from Japan grew at a CAGR of 1.3 percent over the period 2015 to 2019. Japan's total import value amounted to USD 624.93 million while the average annual exportation to the Philippines was USD 124.99 million from 2015 to 2019. Some of its top export companies are Komatsu Ltd., Marubeni Corporation, Great Eastern Trading Co. Ltd., and Hitachi Construction Machinery.

Figure 3.6 Japan's Total Exportation of Self-propelled Bulldozers and Other Heavy Equipment, 2015 to 2019

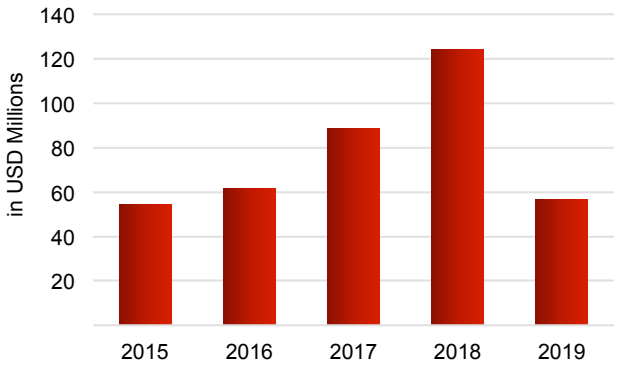


Source: Tradeline Philippines

South Korea

The Philippine total importation of self-propelled bulldozers and other heavy equipment from South Korea grew at a CAGR of 1.0 percent over the period 2015 to 2019. South Korea's total import value amounted to USD 385.88 million while the average annual exportation to the Philippines was USD 77.18 million from 2015 to 2019. Some of its top export companies are Volvo East Asia (Pte.) Ltd., Doosan Group, Sekyung Auto Trading Co. Ltd., Hyundai Construction Equipment, and Daelim Corporation.

Figure 3.7 South Korea's Total Exportation of Self-propelled Bulldozers and Other Heavy Equipment, 2015 to 2019



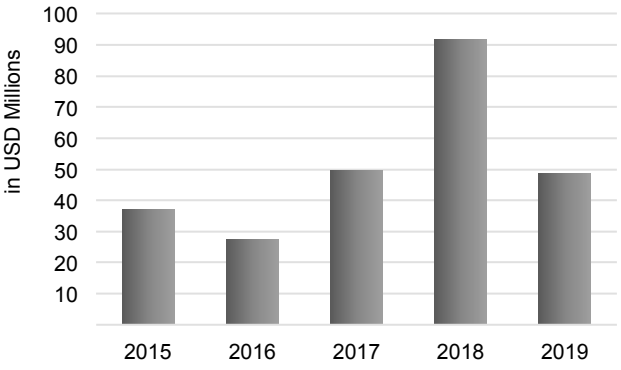
Source: Tradeline Philippines

Import Trend Analysis

Thailand

The Philippine total importation of self-propelled bulldozers and other heavy equipment from Thailand grew at a CAGR of 6.9 percent over the period 2015 to 2019. Thailand's total import value amounted to USD 254.49 million while the average annual exportation to the Philippines was USD 50.90 million from 2015 to 2019. Some of its top export companies are Bangkok Komatsu Co. Ltd., Caterpillar (Thailand) Limited, Kobelco Construction Machinery Southeast Asia Co. Ltd., and Ohtake Trading Co. Ltd.

Figure 3.8 Thailand's Total Exportation of Self-propelled Bulldozers and Other Heavy Equipment, 2015 to 2019

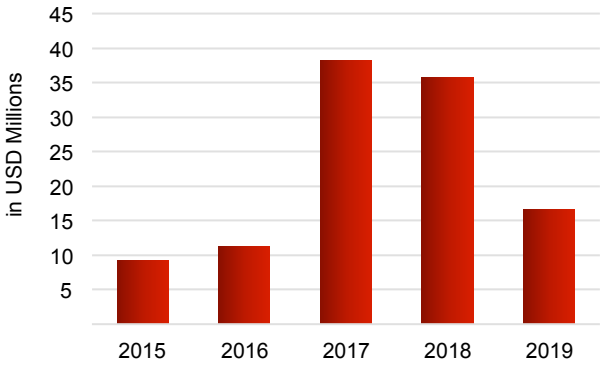


Source: Tradeline Philippines

Indonesia

The Philippine total importation of self-propelled bulldozers and other heavy equipment from Indonesia grew at a CAGR of 15.7 percent over the period 2015 to 2019. Indonesia's total import value amounted to USD 111.14 million while the average annual exportation to the Philippines was USD 22.23 million from 2015 to 2019. Some of its top export companies are PT Hitachi Construction Machinery Indonesia, Caterpillar Group, PT Sumitomo Indonesia, PT Sakai Indonesia, and CNH Industrial.

Figure 3.9 Indonesia's Total Exportation of Self-propelled Bulldozers and Other Heavy Equipment, 2015 to 2019



Source: Tradeline Philippines

Import Trend Analysis

Below is the top 20 country suppliers of self-propelled bulldozers and other heavy equipment under AHTN Code 84.29 in 2019, along with the total export value. In 2019, Brazil ranked 16th, between United States of America and United Arab Emirates.

Table 3.2 Top 20 Country Suppliers of Self-propelled Bulldozers and Other Heavy Equipment to Philippines, 2019

Rank	Country Supplier	Export Value (in USD)
1	China	137,530,517
2	Japan	107,704,463
3	South Korea	56,576,141
4	Thailand	48,489,086
5	Indonesia	16,625,894
6	Belgium	10,500,000
7	India	10,349,655
8	Qatar	4,441,777
9	Singapore	3,876,979
10	Hong Kong	3,249,955
11	Poland	3,186,780
12	Russian Federation	2,737,008
13	Sweden	2,655,160
14	Turkey	2,435,363
15	United States of America	2,032,006
16	**Brazil**	**1,600,059**
17	United Arab Emirates	1,272,601
18	Germany	957,546
19	Austria	932,643
20	Taiwan	800,179

Source: Tradeline Philippines

Further, a list of the export companies whose products originated from Brazil, the respective Philippine importers, and the corresponding exported equipment for the period 2016 to 2019 is presented in Table 3.3.

Table 3.3 Brazilian Exporters, Philippine Importers and Exported Equipment

Brazilian Export Company	Philippine Importer	Exported Equipment*
Caterpillar Brasil Ltda.	Cargill Oil Mills Philippines Inc., Monark Equipment Corporation	Wheel loader
CNH Industrial Brasil Ltda.	Filholland Corporation, BJ Marthel International, Inc.	Motor grader, crawler dozer, soil compactor
Golden Star Trade Company Ltd.	Local government of Lantapan, Local government of San Isidro	Motor grader
Volvo Do Brasil Veiculos Ltda.	Local government of Gingoong, Provincial government of Iloilo, Local government of Monkayo, Topspot Heavy Equipment Inc.	Wheel loader, motor grader

This is not the full list of imported goods.*
Source: Bureau of Import Services

Top Importers of Self-propelled Bulldozers and Other Heavy Equipment

Based on the Bureau of Import Services' raw dataset on the importation of self-propelled bulldozers and other heavy equipment, the following companies were listed to be the top 10 importers in terms of import value in the Philippines for the period 2016 to 2019 (Table 3.4). Some of the imported self-propelled bulldozers and other heavy equipment under AHTN Code 84.29 are brand new while others are used equipment.

Table 3.4 Top 10 Importers of Self-propelled Bulldozers and Other Heavy Equipment, 2016 to 2019

Importer	Primary Business	Imports Used Equipment?*	Import Value (in USD)
Monark Equipment Corporation	Distributor, Lessor	Yes	347,203,307
Maxima Machineries Inc.	Distributor, Lessor	Yes	309,485,989
Topspot Heavy Equipment Inc.	Distributor	N/A	134,172,750
Civic Merchandising Inc.	Distributor	N/A	130,631,641
Semirara Mining & Power Corporation	User (Coal and Power Producer)	N/A	83,646,563
Brighton Machinery Corporation	Dealer	Yes	70,218,216
Inframachineries Corporation	Distributor	N/A	63,304,588
United Auctioneers Inc.	Auctioneer	Yes	54,518,050
Bono De Luxe Philippines Inc.	Supplier	Yes	44,954,217
Concrete Masters Inc.	User (Concrete Manufacturer)	N/A	31,007,723

Information was only based on the provided description of imported goods*
Source: Bureau of Import Services

Import Trend Analysis

Some of the challenges in the overall construction industry that may affect the demand for imported self-propelled bulldozers and other heavy equipment are the following:

1. Changes in government policies and priorities, particularly between administrations, such that public sector-based projects and public-private partnership-based projects of long duration may be indefinitely suspended, aborted or totally discontinued. Recognizing this risk, contractors are urging legislators to pass a law that will institutionalize the present administration's Build, Build, Build program to ensure continued commitment to the completion of the infrastructure projects.

2. The shortage of skilled construction workers has caused project delays or postponement since most skilled workers prefer to work overseas. According to the Department of Trade and Industry, an additional 2.5 million workers are needed to complete the government's infrastructure projects. To address the country's labor shortage, the Department of Labor and Employment is slowing down the deployment of workers to foreign countries. Furthermore, training offerings from the Technical Education and Skills Development Authority, a government agency that is responsible for the technical education of the Philippine workforce, are continuously being rolled out to enhance the skills of laborers and to resolve jobs-skills mismatch.

3. Adding to the shortage of skilled workers is the dearth of heavy equipment operators who are outsourced along with the leased equipment – in the case of suppliers, or who are employed and trained by heavy equipment owners for their own projects, or hired directly from the industry. These operators must be trained by the equipment manufacturers before they could use the equipment. However, given their specialized skill set, heavy equipment operators are in demand overseas. In addition, suppliers and owners of heavy equipment need to invest in equipment maintenance training programs for their already limited team of equipment specialists, fully aware of the risk of losing them to the overseas market.

REGULATORY ENVIRONMENT

4 SECTION

The Construction Industry Authority of the Philippines (CIAP) is the government agency that has central authority on the Philippine construction industry by providing policy and program formulation, and promoting and regulating the development of the industry in conformity with national goals. It has authority, jurisdiction, and supervision over the following agencies which act as its implementing boards:

1. The Philippine Contractors Accreditation Board (PCAB) is responsible for issuing, suspending, and revoking the licenses of public and private contractors.
2. The Philippine Overseas Construction Board (POCB) is responsible for the development of the Philippine overseas construction industry by formulating strategies, policies, and programs. POCB also controls the participation of contractors and consultants in overseas construction projects.
3. The Philippine Domestic Construction Board (PDCB) provides policies and guidelines for the public construction projects which include pre-qualification, bidding, and contract awarding activities.
4. The Construction Industry Arbitration Commission (CIAC) acts as an arbiter in disputes arising before or after the completion of government and private contracts.
5. The Construction Manpower Development Foundation (CMDF) is responsible for the training and development of the industry's manpower.

The Department of Public Works and Highways is the engineering and construction arm of the government mandated to carry out major infrastructure projects of the Philippines such as national roads and bridges, flood control, water resources projects, and other public works.

Regulatory Environment

Government Regulations

The following regulations, published in the Official Gazette of the Republic of the Philippines, address different factors that contribute to the realization of the government's objectives relevant to the construction industry.

RA 6957: An Act Authorizing the Financing, Construction, Operation and Maintenance of Infrastructure Projects by the Private Sector, and for Other Purposes

The law recognizes the vital role of the private sector in national growth and development of infrastructure projects. Under this law, all government infrastructure agencies are authorized to enter into contract with any duly pre-qualified private contractor.

This act was amended by RA 7718, also known as the "Philippine Amended Build-Operate-Transfer (BOT) Law". The law states that infrastructure projects may obtain financing from foreign and/or domestic sources, and/or may engage the services of a foreign and/or Filipino contractor, with the following provisions: (1) if the operation requires public utility franchise, the operator must be a Filipino or if a corporation, it must be duly registered with the Securities of Exchange and owned up to at least 60 percent by Filipinos; (2) in the case of foreign contractors, Filipino labor should be employed or hired in the different phases of the construction where Filipino skills are available; and (3) in case of difficulty in sourcing funds, financing may be sourced partly from direct government appropriations and/or from Official Development Assistance of foreign governments or institutions not exceeding 50 percent of the project cost, and the balance to be provided by the project proponent. Further, RA 7718 has introduced other schemes such as build-own-and-operate, build-lease-and-transfer, contract-add-operate, and rehabilitate-operate-and-transfer.

Pubic utility projects, as defined in the implementing rules and regulations of RA 6957 and as amended by RA 7718, are projects pertaining to public roads and thoroughfares, railways and urban rail mass transit, electricity and gas distribution systems, city and municipal water distribution and sewerage systems, and telecommunication systems for the general public and other public services as defined by the Public Services Act, as amended.

In addition, to guide the national government entities and local government units in the preparation and development of such projects, the Public-Private Partnership (PPP) Center was created by virtue of the Executive Order No. 8 series of 2010, which was further amended by Executive Order No. 136 series of 2013.

Regulatory Environment

Government Regulations

RA 7227: Bases Conversion and Development Act of 1992

The law was enacted to convert military reservations such as Clark and Subic military reservations into alternative productive uses, to raise funds by selling portions of military camps within Metro Manila, and to use the funds for the development and conversion of the lands covered under the 1947 Military Bases Agreement to productive civilian use. These properties shall promote economic and social development through the government's special economic and freeport zones within selected areas. In order to carry out the mandate of the law, Bases Conversion and Development Authority (BCDA) was created. RA 7227 was amended by RA 7917 in 1995, and further amended by RA 9400 in 2007.

Special tax incentives are given to enterprises within the special economic and freeport zones as mandated by the law.

EO No. 24 series of 2017: Reorganizing the Cabinet Clusters System by Integrating Good Governance and Anti-corruption in the Policy Frameworks of all the Clusters and Creating the Infrastructure Cluster and Participatory Governance Cluster

Through EO No. 24 series of 2017, the Infrastructure Cluster was created to concentrate on the infrastructure development of the country, in particular, to enhance delivery of public infrastructure by ensuring the management of resources of all stakeholders, improve the quality and reliability of the structures, and strengthen implementation capacity and budget execution. The Infrastructure Cluster is headed by the Secretary of the Department of Public Works and Highways.

The executive order was amended by EO No. 86 series of 2019 to include BCDA as a member of the Infrastructure Cluster.

RA 11201: Department of Human Settlements and Urban Development Act

The law expresses that underprivileged and homeless citizens shall have access to adequate homes. The Department of Human Settlements and Urban Development was created to act as the government entity responsible for the management of housing, human settlement and urban development. Further, it is mandated to develop a national strategy to provide adequate and affordable homes to Filipinos.

Regulatory Environment

Build, Build, Build Program

The insufficiency of infrastructure in the country has long been a barrier to the Philippine economic development.

The Build, Build, Build (BBB) Program has been the centerpiece program of the current administration. The BBB program is intended to accelerate infrastructure spending and consequently, develop industries to boost economic growth.

The BBB Program has identified 75 infrastructure flagship projects (IFP) with a total indicative cost of PHP 2.4 trillion (USD 40.5 billion). Of the 75 IFP, 46 are in the implementation stage, 20 are under project development, four are awaiting government's approval, and the remaining five are under review as of July 31, 2019. The government expects to complete 21 projects by 2022 while the remaining 54 projects will have to be completed by the next administration.

Further, a proposed legislation was included in the Construction Industry Roadmap 2020-2030 which features a 30-year Infrastructure Master Plan to ensure project continuity even when the administration changes. The proposed law seeks to allot a budget of at least five percent of the Philippine GDP for infrastructure programs.

Some of the Philippine infrastructure investments in 2019 are as follows:

Table 4.1 Key Infrastructure Investments, 2019

Metro Manila	Luzon (outside Metro Manila)
• Metro Manila Flood Management Project Phase 1 • Light Rail Transit 1 North Extension • Bonifacio Global City to Ortigas Center Road Link Project	• North-South Railway Project Phase 2 • Philippine National Railway North 2 • Chico River Pump Irrigation
Visayas	**Mindanao**
• New Cebu International Container Port • Panay River Basin Integrated Development Project • New Bohol (Panglao) International Airport	• Mindanao Railway Project Phase 1 • Panguil Bay Bridge • Davao Airport

Source: Department of Budget and Management, Budget Information and Training Service

Product Importation

Equipment under AHTN Code 84.29 are considered as goods that may be freely imported into and exported from the Philippines. As such, they may be freely imported into and exported from the Philippines without the need for import and export permits, clearances or licenses unless otherwise provided by law or regulation. The importation requirements for these kinds of equipment are to be submitted to the Bureau of Customs (BOC).

The process and requirements of the BOC for product importation are shown on Annex A.

Public Private Partnership (PPP) Center

The PPP Center is tasked with facilitating and monitoring the implementation of the country's PPP programs and projects. The PPP projects are contractual agreements between the Philippine government and private firms targeted towards financing, designing, implementing, and operating infrastructure facilities and services. Under these projects, private firms earn a reasonable rate of return on their investments.

Infrastructure projects that are normally financed through PPP agreements are highways, expressways, roads, bridges, interchanges, tunnels, and related facilities; railways; non-rail mass transit facilities; port infrastructures; power generation, transmission, sub-transmission, distribution, and related facilities; telecommunications and related service facilities; information technology (IT) and data base infrastructures; irrigation and related facilities; education and health infrastructure; and government buildings.

Presented in Table 4.2 is the list of some of the PPP Center partners.

Table 4.2 List of PPP Center Partners

International Association	Private Sector Partner
• Asian Development Bank • Association of Southeast Asian Nations • Global Affairs Canada • Infrastructure Asia • Japan International Cooperation Agency • The World Bank	• Australia Philippines Business Council • European Chamber of Commerce of the Philippines • Makati Business Club • Management Association of the Philippines • Philippine Constructors Association, Inc.

The Project Development and Monitoring Facility (PDMF), managed and administered by the PPP Center, was established as a revolving fund for PPP infrastructure projects. To date, PDMF has supported 38 projects and approved 52 out of the 105 PDMF applications.

The government bodies have various proposed projects under PPP agreements. The DPWH priority projects as of January 2020 are shown in Annex B of this report while other national government projects are shown in Annex C.

Bases Conversion and Development Authority (BCDA)

The BCDA is a government-owned and controlled corporation created to transform former military reservations into productive land usage. With the participation of the private sector, the BCDA develops urban communities and vital public infrastructures to decongest cities and create more opportunities for Filipinos.

Some of the BCDA's projects have been:

- Bonifacio Global City (BGC) - is a 240-hectare land in Taguig City, which is located in the National Capital Region. It was developed in partnership with Ayala Land and the Campos Group, a major food conglomerate in the Philippines. BGC today has become a business hub and a choice of residence for many Filipinos due to its proximity to office establishments, residential developments, shopping malls, and restaurants.

- Newport City - is a 25-hectare land located across the Ninoy Aquino International Airport, which is the airport servicing Manila and the nearby areas. Formerly used as a military air base, it was launched by Megaworld Corporation as an integrated airport-related development with several leisure and business establishments like Maxim, Marriott Hotel, and Resorts World Manila.

The BCDA's current project is the development of Clark Freeport and Special Economic Zone (Clark) which is located in Central Luzon. The BCDA is positioning it as an up and coming investment center in the Philippines. Only one-third of Clark's total land area is to be developed while the remaining area will not be built over. Clark has four main districts: Clark Freeport Zone, a mixed-used complex developed in 1990s; Clark Global City – a business district; New Clark City, the country's first smart, disaster-resilient city within the Clark Special Economic Zone; and Clark International Airport. Furthermore, by virtue of RA 9400, business enterprises located within the Clark Freeport Zone have the following incentives: (i) tax rate of five percent on gross income earned, in lieu of national and local taxes; and (ii) tax- and duty-free importation of raw materials and capital equipment. However, the exports from the zone to other parts of the Philippine territory shall be subject to custom duties and taxes.

Housing and Urban Development Coordinating Council (HUDCC)

By virtue of Executive Order No. 90 series of 1986, HUDCC was created to become the government agency responsible for housing and urban development as well as addressing concerns such as housing finance, housing regulation, and institutional development.

According to the 2019 Housing Sector Year-end Report, HUDCC aims "to improve access of a significant number of homeless and underprivileged Filipino families to a decent, affordable, and climate resilient housing in sustainable communities through the collaborative efforts of housing agencies, the private sector and other stakeholders."

Together with the HUDCC, the following Key Shelter Agencies (KSA) are to assist in addressing various issues regarding housing finance, housing regulation, housing production, and institutional development.

- Home Guaranty Corporation (HGC)
- Housing and Land Use Regulatory Board (HLRB)
- National Housing Authority (NHA)
- National Home Mortgage Finance Corporation (NHFC)
- Social Housing Finance Corporation (SHFC)
- Home Development Mutual Fund (HDMF)

The HUDCC along with its affiliated KSA and in partnership with the private sector, have launched the BALAI Filipino program to provide housing assistance to at least 1.5 million Filipino families by 2022.

Present below is a summary of the number of accomplished households of each key shelter agency.

Table 4.3 Total Accomplished Households

KSA	July 2014 – June 2016	July 2016 – May 2019
HDMF	122,356	250,368
NHA	241,214	187,609
HGC	55,602	112,710
SHFC	44,984	33,666
Total	**464,156**	**584,353**

Source: HUDCC

INDUSTRY OPPORTUNITIES AND SELECTED MARKET PLAYERS

5 SECTION

As most of the construction projects in the Philippines are awarded for a specified period, it would be favorable to companies that supply heavy equipment to provide assistance as a private partner in a PPP agreement, or to sell and/or lease heavy equipment to construction companies, large real estate development companies, and to a lesser extent, utility, energy, and mining entities.

Industry Opportunities and Selected Market Players

The increasing public and private capital expenditures for construction and development presents the following business opportunities for heavy equipment companies.

Public Private Partnership

According to Section 5.1 of the implementing rules and regulations of the BOT Law, any business entity - local or foreign, including consortia of foreign or local firms, can participate or apply for pre-qualification or simultaneous qualification for PPP projects. However, the entity must be 60 percent Filipino-owned if the project involves the operation of a public utility.

PPP entails optimal risk allocation between the parties – minimizing cost while achieving developmental objectives. The agreement is structured to provide the private sector a reasonable return on its investment.

The plan to increase infrastructure spending and industry development projects of the Build, Build, Build program provides a greater opportunity for local and foreign construction companies to bid for and enter into PPP agreements.

Sell and/or Lease to Construction and Real Estate Development Companies, and to Utility, Energy and Mining Companies

The presence of large construction and property/real estate development companies in the Philippines provides an opportunity for foreign companies to enter the heavy equipment industry through selling and/or leasing of heavy equipment to local players.

Utility, energy, and mining companies are also potential lessees or buyers of heavy equipment. However, the nature of their projects – duration and locations – and long-term relationships with their suppliers may create challenges to a prospective provider of the product and services.

Strategic alliances, joint ventures, or even acquisitions of local companies should be considered. The expertise and access to the product and related resources that can be brought into the country combined with knowledge of the business environment and the local market, an understanding of national and local regulatory requirements, and important connections would make a strong business proposition for such partnerships.

The following pages present a brief description of 16 of the key players earlier identified in the construction equipment, construction, and property/real estate development industries. For construction equipment companies, the selected companies accounted for about 50 percent of the total Philippine importation value of self-propelled bulldozers and other heavy equipment. Selected real estate development and construction companies are also presented.

Monark Equipment Corporation (Monark)

Monark is the sole authorized dealer of Caterpillar, a leading manufacturer of construction, industrial and mining equipment, and diesel and natural gas engines.

Monark has been involved in the following projects in the Philippines:

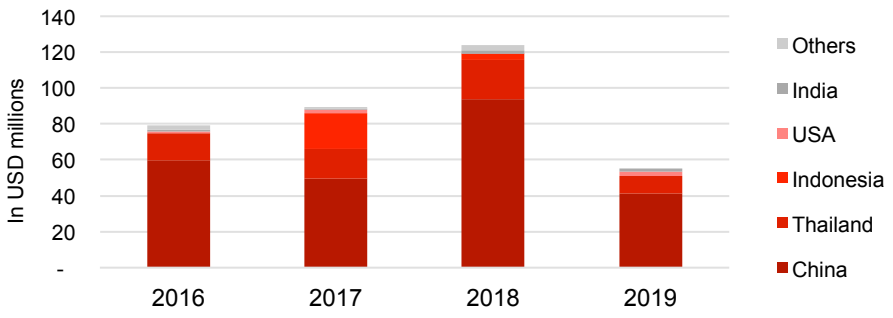
- Angat Dam
- US Bases (Sangley, Subic, and Clark)
- Cement Plants (Island, Continental, Northern, Floro, and Hi-Cement)
- Mines (Pan-Asia, Marinduque/Nonoc, Nickel, and Acojo)
- Building Excavations (Makati Medical Center, Makati Stock Exchange, San Miguel Corporation, Development Bank of the Philippines, and PLDT)

The company was also a partner of a joint venture and a lead group in hydro resources, wherein they played a vital role in the successful completion of the following projects.

- Dams (Pantabangan, Magat, and Wandaslintang)
- Power Plants (Bataan Nuclear, Makban Geothermal, and Masiway)
- Roads (Ilo-ilo, Gamu Roxas, and NLEX)
- Refineries (Shell LPG and Exxon Bataan)
- Site Preparation (Corinthians, Philippine Shipyard, Jamjoon-Hydro, and Aurora Transbasin)

The self-propelled bulldozer and other heavy equipment import trend of Monark from 2016 to 2019 is presented in Figure 5.1. During the four-year period from 2016 to 2019, Monark's total importation of heavy equipment under AHTN Code 84.29 amounted to USD 347.20 million. Of the total amount, 70 percent was sourced from China (USD 244.43 million), followed by Thailand and Indonesia with USD 62.43 million (18 percent) and USD 23.08 million (seven percent), respectively.

Figure 5.1 Monark's Importation of Self-propelled Bulldozers and Other Heavy Equipment, 2016 to 2019



Source: Bureau of Import Services

Monark's suppliers of equipment under AHTN Code 84.29 from 2016 to 2019 are summarized in Table 5.1.

Table 5.1 Monark's Import Partners and Country Origin, 2016 to 2019

Company	Country Origin
Borusan Makina Ve Guc Sistem	India
Caterpillar Co. Ltd.	Belgium, Brazil, China, India, Indonesia, Italy, Japan, Malaysia, Singapore, Thailand, United Kingdom of Great Britain and Northern Ireland, United States of America
Haein Corporation	Korea
Huasing Construction & Trading PTE	Singapore
Metero Machinery Co. Ltd	Thailand
Okada Aiyon Corporation	Japan
Seo Machinery Co. Ltd.	Korea
Sime Darby Industrial Sdn Bhd	France
Supertrak Inc.	United States of America
Tractors Singapore Limited	China
Xiamen Sime Darby Cel Machinery	China

Source: Bureau of Import Services

The following table summarizes Monark's importation of self-propelled bulldozers and other heavy equipment by product category for the period 2016 to 2019.

Table 5.2 Monark's Importation of Self-propelled Bulldozers and Other Heavy Equipment by Product Category, 2016 to 2019

AHTN Code 2017	Description	Total Value in USD (2016-2019)
84.29.52.00	Machinery with a 360 degree revolving superstructure	222,260,478
84.29.11.00	Track laying	66,727,575
84.29.51.00	Front-end shovel loaders	19,609,114
84.29.20.00	Graders and levellers	14,726,714
84.29.40.50	Other vibratory road rollers	9,492,007
84.29.40.90	Other, Tamping machines and road rollers	7,025,366
84.29.59.00	Other, Mechanical shovels, excavators and shovel loaders	6,183,308
84.29.40.40	Vibratory smooth drum rollers, with a centrifugal force drum not exceeding 20 tons by weight	847,902
84.29.40.30	Tamping machines	330,842

Source: Bureau of Import Services

Maxima Machineries Inc. (Maxima)

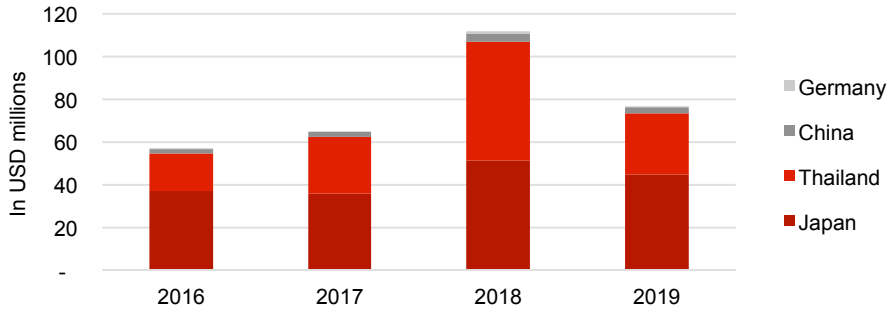
Maxima, a subsidiary of Marubeni Corporation in Japan, is the sole distributor of Komatsu Construction and Mining Equipment in the Philippines. The company aims to be known for providing quality heavy and industrial equipment with competitive and innovative services.

The company offers brand new and used equipment for sale and for rent as well as provides product support, trainings, and other services. Maxima sells or lease the following equipment:

- Excavators
- Bulldozers
- Wheel Loader
- Motor Grader
- Rigid Dump Truck
- Vibratory Rollers
- Forklifts
- Generator Set
- Hydraulic Breakers
- Crushers

The self-propelled bulldozer and other heavy equipment import trend of Maxima from 2016 to 2019 is presented in Figure 5.2. During the four-year period from 2016 to 2019, Maxima's total importation of heavy equipment under AHTN Code 84.29 amounted to USD 309.49 million. Of the total amount, 55 percent was sourced from Japan (USD 168.84 million), followed by Thailand and China with USD 127.94 million (41 percent) and USD 10.84 million (four percent), respectively.

Figure 5.2 Maxima's Importation of Self-propelled Bulldozers and Other Heavy Equipment, 2016 to 2019



Source: Bureau of Import Services

Maxima' s suppliers of AHTN Code 84.29 from 2016 to 2019 are summarized in Table 5.3.

Table 5.3 Maxima's Import Partners and Country Origin, 2016 to 2019

Company	Country Origin
Bomag, GMBH	China, Germany
Komatsu Corporation Limited	Japan, Thailand

Source: Bureau of Import Services

The following table summarizes Maxima's importation of self-propelled bulldozers and other heavy equipment by product category for the period 2016 to 2019.

Table 5.4 Maxima's Importation of Self-propelled Bulldozers and Other Heavy Equipment by Product Category, 2016 to 2019

AHTN Code 2017	Description	Total Value in USD (2016-2019)
84.29.52.00	Machinery with a 360 degree revolving superstructure	200,586,487
84.29.11.00	Track laying	57,659,323
84.29.20.00	Graders and levellers	21,922,423
84.29.51.00	Front-end shovel loaders	16,031,481
84.29.40.40	Vibratory smooth drum rollers, with a centrifugal force drum not exceeding 20 tons by weight	10,728,429
84.29.40.50	Other vibratory road rollers	1,617,042
84.29.59.00	Other, Mechanical shovels, excavators and shovel loaders	577,503
84.29.40.90	Other, Tamping machines and road rollers	363,300

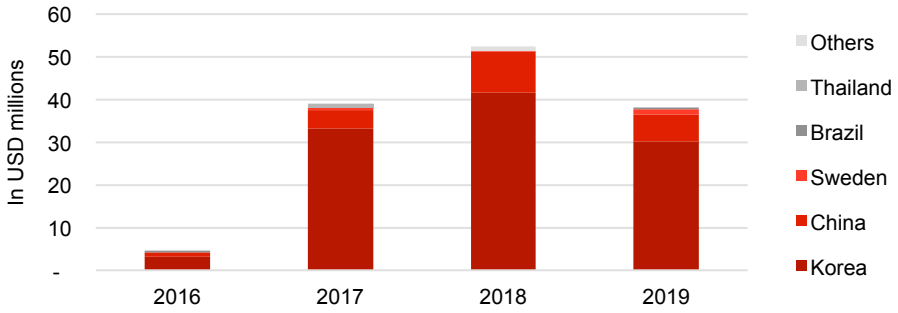
Source: Bureau of Import Services

Topspot Heavy Equipment Inc. (Topspot)

Topspot is an ISO-certified Volvo and SDLG heavy equipment distributor in the Philippines which serves various construction and mining firms. The company offers excavators, wheel and backhoe loaders, road solutions, rigid and articulated haulers, and graders. Topspot has over 40 service centers across the Philippines.

The self-propelled bulldozer and other heavy equipment import trend of Topspot from 2016 to 2019 is presented in Figure 5.3. During the four-year period from 2016 to 2019, Topspot's total importation of heavy equipment under AHTN Code 84.29 amounted to USD 134.17 million. Of the total amount, 81 percent was sourced from Korea (USD 108.25 million), followed by China and Sweden with USD 21.07 million (16 percent) and USD 1.92 million (one percent), respectively.

Figure 5.3 Topspot's Importation of Self-propelled Bulldozers and Other Heavy Equipment, 2016 to 2019



Source: Bureau of Import Services

Topspot's suppliers of equipment under AHTN Code 84.29 from 2016 to 2019 are summarized in Table 5.5.

Table 5.5 Topspot's Import Partners and Country Origin, 2016 to 2019

Company	Country Origin
Shandong Lingong Construction	China
Volvo Group Co. Ltd	Korea, Brazil, China, Sweden, Singapore, Thailand, India

Source: Bureau of Import Services

The following table summarizes Topspot's importation of self-propelled bulldozers and other heavy equipment for the period 2016 to 2019.

Table 5.6 Topspot's Importation of Self-propelled Bulldozers and Other Heavy Equipment by Product Category, 2016 to 2019

AHTN Code 2017	Description	Total Value in USD (2016-2019)
84.29.52.00	Machinery with a 360 degree revolving superstructure	109,998,004
84.29.51.00	Front-end shovel loaders	11,726,721
84.29.59.00	Other, Mechanical shovels, excavators and shovel loaders	8,658,551
84.29.20.00	Graders and levellers	2,892,032
84.29.40.90	Other, Tamping machines and road rollers	897,443

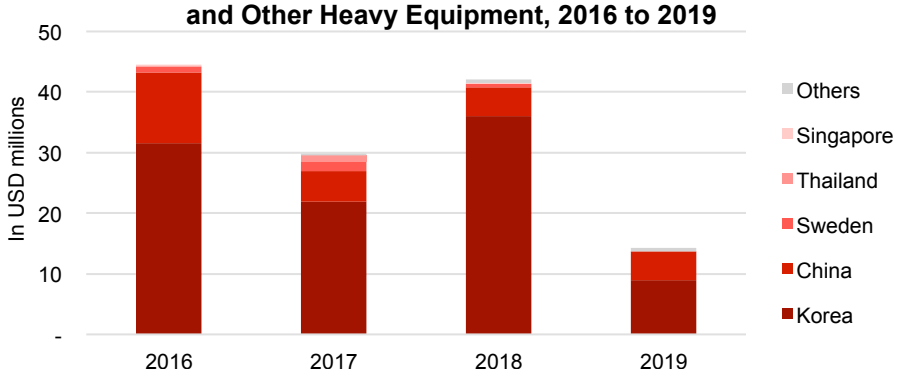
Source: Bureau of Import Services

Civic Merchandising Inc. (Civic)

Civic Merchandising Inc. is a privately-owned trading company engaged in construction, mining, and transport in the Philippines. The company serves local and multinational companies that are involved in a wide range of projects – from land development to building infrastructure. Civic is the exclusive distributor of leading brands in construction and mining equipment worldwide including Volvo, SDLG, Sany, Doosan, Soosan, and Power Pavers.

The self-propelled bulldozer and other heavy equipment import trend of Civic from 2016 to 2019 is presented in Figure 5.4. During the four-year period 2016-2019, Civic's total importation of heavy equipment under AHTN Code 84.29 amounted to USD 130.63 million. Of the total amount, 75 percent was sourced from Korea (USD 98.29 million), followed by China and Sweden with USD 26.25 million (20 percent) and USD 3.13 million (two percent), respectively.

Figure 5.4 Civic's Importation of Self-propelled Bulldozers and Other Heavy Equipment, 2016 to 2019



Source: Bureau of Import Services

Civic's suppliers of equipment under AHTN Code 84.29 from 2016 to 2019 are summarized in Table 5.7.

Table 5.7 Civic's Import Partners and Country Origin, 2016 to 2019

Company	Country Origin
Doosan Bobcat Manufacturing Corporation	Korea
Shandong Anchi Tyres Co Ltd	China
Shandong Lingong Construction	China
Volvo Group Co. Ltd	China, Korea, Singapore, Sweden, Thailand, United States of America

Source: Bureau of Import Services

The following table summarizes Civic's importation of self-propelled bulldozers and other heavy equipment for the period 2016 to 2019.

Table 5.8 Civic's Importation of Self-propelled Bulldozers and Other Heavy Equipment by Product Category, 2016 to 2019

AHTN Code 2017	Description	Total Value in USD (2016-2019)
84.29.52.00	Machinery with a 360 degree revolving superstructure	94,291,647
84.29.51.00	Front-end shovel loaders	18,417,883
84.29.59.00	Other, Mechanical shovels, excavators and shovel loaders	9,390,493
84.29.20.00	Graders and levellers	5,709,357
84.29.40.90	Other, Tamping machines and road rollers	1,960,728
84.29.40.30	Tamping machines	766,402
84.29.40.40	Vibratory smooth drum rollers, with a centrifugal force drum not exceeding 20 tons by weight	95,131

Source: Bureau of Import Services

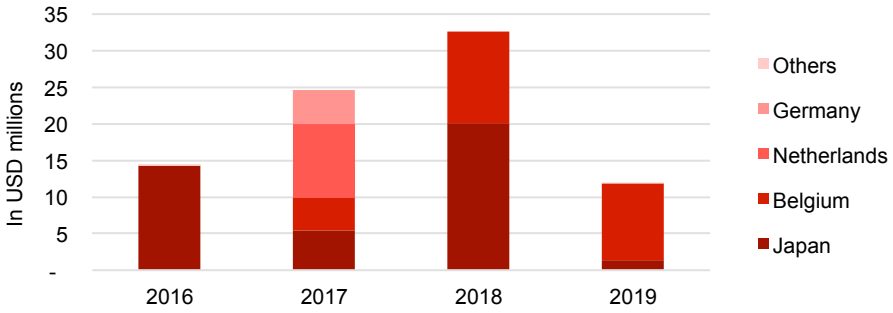
Semirara Mining & Power Corporation (SMPC)

SMPC is the largest coal producer and the only power producer in the country that owns and mines its own fuel source (coal). The company operates one of the largest pit mines in the Philippines that can produce 16 million metric tons of coal a year. It is the dominant local source of the country's coal requirements.

SMPC is a publicly-listed company and a subsidiary of DMCI Holdings, Inc.

The self-propelled bulldozer and other heavy equipment import trend of SMPC from 2016 to 2019 is presented in Figure 5.5. During the four-year period from 2016 to 2019, SMPC's total importation of heavy equipment under AHTN Code 84.29 amounted to USD 83.65 million. Of the total amount, 49 percent was sourced from Japan (USD 41.17 million), followed by Belgium and Netherlands with USD 27.45 million (33 percent) and USD 10 million (12 percent), respectively.

Figure 5.5 SMPC's Importation of Self-propelled Bulldozers and Other Heavy Equipment, 2016 to 2019



Source: Bureau of Import Services

SMPC's suppliers of equipment under AHTN Code 84.29 from 2016 to 2019 are summarized in Table 5.9.

Table 5.9 SMPC's Import Partners and Country Origin, 2016 to 2019

Company	Country Origin
Bomag GMBH	Germany
Caterpillar Co. Ltd.	Belgium, Germany, Netherlands
Doosan Bobcat Manufacturing Corporation	United States of America
Kiann Engineering PTE LTD	Singapore
Marubeni Corporation	Japan
Mckenzie Product And Service	Australia

Source: Bureau of Import Services

The following table summarizes SMPC's importation of self-propelled bulldozers and other heavy equipment for the period 2016 to 2019.

Table 5.10 SMPC's Importation of Self-propelled Bulldozers and Other Heavy Equipment by Product Category, 2016 to 2019

AHTN Code 2017	Description	Total Value in USD (2016-2019)
84.29.51.00	Front-end shovel loaders	40,700,253
84.29.11.00	Track laying	22,853,686
84.29.52.00	Machinery with a 360 degree revolving superstructure	7,346,452
84.29.19.00	Other, Bulldozers and angledozers	5,952,713
84.29.20.00	Graders and levellers	3,926,808
84.29.59.00	Other, Mechanical shovels, excavators and shovel loaders	2,794,182
84.29.40.40	Vibratory smooth drum rollers, with a centrifugal force drum not exceeding 20 tons by weight	70,000
84.29.40.90	Other, Tamping machines and road rollers	2,469

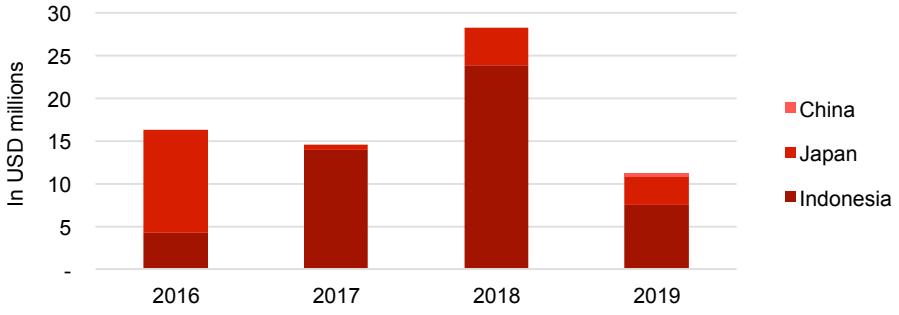
Source: Bureau of Import Services

Brighton Machinery Corporation (BMC)

Brighton Machinery Corporation (BMC) has expertise in rental of equipment, parts supply, and other services. It is the exclusive dealer of Hitachi construction and mining equipment, Bell equipment, and John Deere Construction equipment.

The self-propelled bulldozer and other heavy equipment import trend of BMC from 2016 to 2019 is presented in Figure 5.6. During the four-year period from 2016 to 2019, BMC's total importation of heavy equipment under AHTN Code 84.29 amounted to USD 70.22 million. Of the total amount, 70.5 percent was sourced from Indonesia (USD 49.48 million), followed by Japan and China with USD 20.35 million (29 percent) and USD 0.38 million (0.5 percent), respectively.

Figure 5.6 BMC's Importation of Self-propelled Bulldozers and Other Heavy Equipment, 2016 to 2019



Source: Bureau of Import Services

BMC's suppliers of equipment under AHTN Code 84.29 from 2016 to 2019 are summarized in Table 5.11.

Table 5.11 BMC's Import Partners and Country Origin, 2016 to 2019

Company	Country Origin
Hitachi Construction Machinery	China, Indonesia, Japan
Omar K. Alesayi & Co., Ltd.	Japan
Pt.Hexindo Adiperkasa Tbk	Indonesia
Sumisho Machinery Trade Corporation	Japan

Source: Bureau of Import Services

The following table summarizes BMC's importation of self-propelled bulldozers and other heavy equipment for the period 2016 to 2019.

Table 5.12 BMC's Importation of Self-propelled Bulldozers and Other Heavy Equipment by Product Category, 2016 to 2019

AHTN Code 2017	Description	Total Value in USD (2016-2019)
84.29.52.00	Machinery with a 360 degree revolving superstructure	55,580,148
84.29.59.00	Other, Mechanical shovels, excavators and shovel loaders	14,032,086
84.29.51.00	Front-end shovel loaders	605,982

Source: Bureau of Import Services

Real estate companies in the Philippines normally bid out their projects to different contractors. Some real estate developers have their own construction arm while others award their projects to independent construction companies. Depending on the contractual agreement, the heavy construction equipment required for the project are either imported, bought from a local supplier, leased, or provided by the contractor.

The country's top real estate companies based on revenues are presented below.

SM Prime Holdings, Inc. (SMPHI)

Founded in 1994, SMPHI is a publicly-listed company. The company started as a mall developer and operator, and has evolved into a large integrated property developer in the country. Through its several subsidiaries, SMPHI operates the following businesses:

- Malls – it is one of the Philippines' biggest developer, operator, and owner of 74 malls in the country and seven malls in China. The company has a total of 9.8 million square meters of gross floor area, 18,716 tenants in the Philippines, and 1,960 tenants in China.

- Residences – it develops residential projects located in key areas in Metro Manila. Aside from residential homes, it has also developed leisure homes such as a beach resort town, mountain resort, and residential complex. Currently, it has a total of 70 residential establishments.

- Commercial – it handles the development and leasing of office buildings situated in Metro Manila and other strategic locations in the country, and manages the building and other land holdings. Its office buildings usually cater to the BPO industry. Currently, it has a total of 70 office buildings.

- Hotels and Convention Centers – it was established to address the growth of tourism in the country as it develops and operates hotels and convention centers across the Philippines. It has a total of 1,722 rooms housed in its different hotels. It also manages a five-star hotel, Conrad Manila. Aside from hotels, it operates various convention centers and trade halls, which have become popular venues for both local and international events. Currently, it has a total of 15 hotels and convention centers.

SM Engineering Design & Development Corporation is an operating company under SMPHI responsible for the design, constructions, and maintenance of its malls and other commercial properties.

SMPHI is directly-owned by SM Investments Corporation, one of the biggest conglomerates in the Philippines.

Ayala Land, Inc. (ALI)

ALI, a publicly-listed company, is one of the largest integrated property developers in the Philippines with over 12,000 hectares in its land bank and 29 estates. ALI was formally a business division specializing in real estate of the Ayala Corporation, which is one the biggest and oldest conglomerates in the Philippines. In 1988, it was organized to be an independent subsidiary of Ayala Corporation.

The company's business is divided into the following:

- Property Development – it handles the sale of residential lots and units, office spaces, and commercial/industrial lots. The residential properties offered are diverse that covers a broad market segment all over the country. ALI has five distinct residential brands which are based on their target market.

- Commercial Leasing – it manages the operations of office buildings, malls, and hotels and resorts.

    1. Office buildings – it offers prime office buildings which are centrally-located and transport-connected. Its tenants include the Fortune 500 companies, the top 1,000 corporations of the Philippines, and leading international BPO companies. Located in 11 key cities in the country, the company's total leasable space is measured at one million square meters.

    2. Malls – it is the forerunner in shopping venture development in the Philippines. Ayala malls market themselves as a convergence of lifestyle and culture while being accessible through point-to-point bus routes and terminals.

    3. Hotels and Resorts – it manages world-class accommodations ranging from luxury resorts to modern urban hotels. The company manages one of the major eco-tourism destinations in the Philippines – El Nido, Palawan.

- Service – it provides supporting services to its organization through property management, construction services, electricity services, and other services.

Makati Development Corporation, one of the leading construction companies in the Philippines, is a wholly-owned subsidiary of ALI.

Megaworld Corporation (MEG)

MEG was founded and incorporated in 1989 by Mr. Andrew Tan. The publicly-listed company engages in the development, leasing, and marketing of real estate. Most of MEG's developments are called townships – a mix of residential properties, commercial spaces, office establishments, and learning institutions.

MEG's business is divided into the following:

- Real Estate – it handles the sale of residential and commercial developments
- Rental – it operates the leasing of office and commercial spaces
- Hotel Operations – it manages hotels under its homegrown brands
- Corporate and Others – it provides supporting services such as business process outsourcing, educational, facilities provider, maintenance and property management operations, marketing services, and corporate income and expense items

Currently, MEG has 24 townships, 696 residential developments, 63 office buildings, 19 malls, and nine hotels.

Vista Land & Lifescapes Inc. (Vista Land)

Vista Land, a publicly-listed company, is one of the leading homebuilders in the Philippines. As of 2018, Vista Land launched 57 projects offering a wide range of housing products. Its business can be categorized by its five subsidiaries.

- Britanny – it offers luxury homes and caters to high-end customers in the National Capital Region
- Crown Asia – it offers housing developments to the middle class located in the National Capital Region and Southern Luzon areas
- Camella Homes – it offers low-cost houses in the Southern Luzon area
- Communities Philippines – it offers affordable housing developments that are located in Northern Luzon, Southern Luzon, and Mindanao
- Vista Residences – it offers condominiums within the National Capital Region

Robinsons Land Corporation (RLC)

RLC is the real estate arm of JG Summit Holding, one of the most diversified business conglomerates in the Philippines.

The company has five business units:

- Commercial Centers Division – it owns and operates shopping malls all over the country. As of 2019, it has a total of 52 malls, of which nine are located in the National Capital Region
- Hotels and Resorts Division – it owns and operates chains of hotels under the names “Go Hotel” and “Summit Hotel.” It also launched its very first luxury resort, Dusit Thani Mactan Cebu
- Industrial and Integrated Developments Division – it engages in strategic land bank acquisition and management, exploration of real estate-related infrastructure project developments, and leasing of warehouse and logistics facilities
- Office Buildings Division – it leases office space to business process outsourcing companies
- Residential Buildings Division – it develops and sells condominium units and other horizontal housing projects.

The five companies to be discussed comprised approximately 80 percent of the total revenues of the top 10 construction companies in the Philippines. Construction companies either buy, lease, or import their heavy construction equipment depending on the several factors such as budget and the duration of the project.

The country's top construction companies based on revenues are presented below.

Makati Development Corporation (MDC)

MDC is an ISO-certified company, a quadruple-A[3] contractor and is a wholly-owned subsidiary of Ayala Land, Inc. The company has 45 years of experience in building commercial, residential, industrial, and infrastructure projects.

MDC offers the following services to its clients.

- Engineering – it offers geodetic surveying, quantity surveying, civil works, contracts management, leadership in energy and environmental design, architectural and engineering, architectural design, structural design, electro-mechanical design, building information modeling, and research and development.

- Procurement – it supports safe, quality, timely, and cost-efficient execution of construction activities by procuring needed materials and services from different vendors. MDC's procurement strategies have driven standardization of specifications and aggregation of construction material requirements which resulted in the reduction of turnaround time from purchase requisition to purchase order creation.

- Construction – it provides pre-construction, construction, and post-construction services for land development, infrastructure, housing, landscaping, buildings, and golf course management.

- Construction Management – it offers construction management starting from land acquisition, project conceptualization, project planning, project implementation, project delivery to after-sales services. The company's approach provides customers with technical and objective guidance from conception through completion.

- Other Services – it has other products and services such as concrete products, equipment solutions, building systems, landscaping and ground maintenance, and fit-out.

[3]Quadruple-A is the highest rating for contractors issued by PCAB.

Megawide Construction Corp. (MWIDE)

MWIDE is a publicly-listed company and is recognized as a quadruple-A, PCAB-licensed general contractor. MWIDE has partnerships with different companies like Megaworld, Double Dragon Properties Corporation, and Rockwell Land.

As an infrastructure conglomerate, MWIDE has the following business segments.

- Airport Infrastructure – it operates the Mactan-Cebu International Airport (MCIA) through GMR-Megawide Cebu Airport Corporation. The terminal 1 of MCIA is expected to accommodate eight million passengers per annum while the terminal 2 is projected to board 12.5 million passengers annually.

- Progressive Property Development – it aims to improve the country's inter-city public transportation through its project, Parañaque Integrated Terminal Exchange.

- Renewable Energy – it has two solar farms located in Bataan and Negros Occidental with a capacity of 18 megawatts and 25 megawatts, respectively.

- Engineering, Procurement, and Construction – it offers services such as the engineering and construction of residential and commercial buildings, hotels and casino, mixed-used buildings, and low-cost housing. MWIDE is also part of the construction of the Clark International Airport expansion project which is scheduled to be completed by 2020

Based on the data from the Bureau of Import Services, for the four-year period 2016 to 2019, MWIDE imported heavy equipment under AHTN Code 84.29.

D.M Consunji, Inc. (DMCI)

DMCI is a wholly-owned subsidiary of DMCI Holdings, Inc. and a related company of SMPC. The company is known to be a pioneer in the application of advanced engineering technology in the Philippine construction industry. Its services include construction of buildings, powerplants, and housing projects as well as heavy lifting services, and civil works.

The company's landmark projects include the Cultural Center of the Philippines, Philippine International Convention Center, Manila Doctors Hospital, and Solaire Resorts and Casino. Currently, DMCI has various ongoing projects which include infrastructure projects such as railways, dams, expressways, skyway, and the light-rail transit extension.

The company has completed a number of international projects such as the Istana of the Sultanate of Brunei, the Salim-Halban Highway, and several facilities in Saudi Arabia. DMCI also constructed bridges in Kuwait and irrigation projects in Iraq.

EEI Corporation (EEI)

EEI is a publicly-listed company and a quadruple-A rated general contractor. It has several ISO certificates based on the quality, environment management, and occupational health and safety standards.

The company's construction projects include power plants, refineries, petrochemical plants, cement plants, mining facilities, industrial plants, buildings, schools, hospitals, roads, bridges, seaports, airports, railways, water distribution stations, and flood control systems. Apart from local projects, EEI also provides overseas construction services. It won major contracts in United Arab Emirates, Saudi Arabia, Kuwait, Iraq, Algeria, Libya, Brunei, Qatar, Malaysia, New Caledonia, and Singapore.

Based on the data from the Bureau of Import Services, for the four-year period 2016 to 2019, EEI imported heavy equipment under AHTN Code 84.29. The company's supplier was Liebherr (Thailand) Co., Ltd. for spare parts of a batching plant compact mix and scraper.

Sta. Clara International Corporation (SCIC)

Founded in 1976, SCIC offers services such as engineering, construction, development, and management enterprise. It is a quadruple-A licensed contractor.

The company has civil, plant, and building works. SCIC's current projects are hydroelectric power plants, flour mill, sewage treatment plant, and a reservoir and pumping station.

Based on the data from the Bureau of Import Services, for the four-year period 2016 to 2019, SCIC imported heavy equipment under AHTN Code 84.29. The company's supplier was Yanagawa Shoji Co., Ltd. from Japan for a used bulldozer.

INDUSTRY ASSOCIATIONS AND CONVENTIONS

6 SECTION

The associations and conventions listed and discussed in this section play a collaborative role in the Philippine construction industry.

Industry Associations and Conventions

Industry Associations

Philippine Constructors Association, Inc. (PCA)

PCA is a non-stock, non-profit association for Filipino contractors in the country. Established in 1945, the organization initially had a short vision to take the lead in rebuilding the Philippines after World War II. Today, PCA is committed towards the continued development of local construction industry, with approximately 1,500 members who handles over 70 percent of the annual construction turnover of the country.

3rd Floor Padilla Building, F. Ortigas Jr. Road,
1605 Ortigas Center, Pasig City

8-631-2778
8-631-3135

pcainc.secretariat@gmail.com

Association of Carriers and Equipment Lessors (ACEL)

In 1966, ACEL was organized by several contractors and equipment lessors to address the unavailability of certain construction equipment in the Philippine market. Since then, the organization has developed numerous programs that seek to resolve the major problems in the industry through partnerships with other industry organizations. Additionally, ACEL periodically publishes “ACEL Equipment Rental Rates Guidebook” which provides information such as equipment specifications, rental fees, and purchase rates.

Suite 1601, 16th Floor Jollibee Plaza
Condominium, F. Ortigas Jr. Road, Ortigas
Complex, Pasig City

8-631-3136

acel_i@acel.com.ph
acel_i@yahoo.com

Conventions (as of April 2020)

Philippine International Construction Equipment and Building Materials Exhibition (Philconstruct)

Philconstruct is the largest construction exhibit in the Philippines. It presents the latest products and services for the construction sector by gathering suppliers and buyers under one venue. The tradeshow goes around the country by having local exhibits in Manila, Clark, Cebu, and Davao.

The annual event is organized by the Philippine Construction Association, Inc. with Association of Carriers and Equipment Lessors, Inc., and Philippine Society of Ventilating, Airconditioning and Refrigerating Engineers, Inc. as co-organizers. Below are some of the key details of the Manila exhibit:

November 5-8, 2020;
9:30 am – 7:00 pm

SMX Convention Center Manila
Mall of Asia Complex, Seashell Lane, Pasay City

World Trade Center
1300 Pasay Extension corner, Sen. Gil J. Puyat Ave., Pasay City

Ipil-ipil Lot, Cultural Center of the Philippines Complex Grounds,
Roxas Boulevard, Malate, Pasay City

PHP 200 (USD 4) entrance fee per person per day

Approximately 2,500 suppliers
From 23 countries

https://www.philconstructevents.com/

Conventions (as of April 2020)

Philippine World Building and Construction Exposition (Worldbex)[4]

Wolrdbex is an annual event that gathers local and international companies in one venue to provide the latest innovations in the industries of construction, engineering, and interior designing. It is a platform for companies within the industry to create new business relationships, exchange knowledge and ideas, or meet world-class interior designers, architects and engineers.

The event is organized by Worldbex Services International and below are some of the key details:

March 17 –21, 2021
10:00 am – 7:00 pm

SMX Convention Center Manila
Mall of Asia Complex, Seashell Lane, Pasay City

World Trade Center
1300 Pasay Extension corner, Sen. Gil J. Puyat Ave., Pasay City

Philippine International Convention Center
Vicente Sotto St., Pasay City

Entrance fee is free

Approximately 775 exhibitors
And 188,000 visitors

8-656-9239

https://www.worldbex.com/

inquire@worldbexevents.com

[4]Due to COVID-19, the convention for 2020 has been cancelled.

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Annexes

Annex A: Product Importation

To register as an importer, the following procedures must be done:

1. Secure an Import Clearance Certificate (ICC) from the Bureau of Internal Revenue. The ICC is valid for three years;
2. Register with the Bureau of Customs (BOC) and setup an account with the Client Profile Registration System (CPRS). The Customs Client Profile Accreditation must be updated annually. The accreditation in the CPRS costs PHP 1,000 (USD 19) and typically takes 15 working days to process.

Based on the Customs Memorandum Order no. 31-2019 of the BOC, the following documents must be submitted for accreditation of importers:

A. Duly notarized accomplished application form and signed by owner (for sole proprietorship), responsible officer (for corporation), chairman (for cooperative), and authorized partner (for partnership);
B. Bureau of Customs Official Receipt (BCOR) evidencing payment of the processing fee of PHP 1,000 (USD 19);
C. Corporate Secretary Certificate (for Corporation) / Affidavit (Sole Proprietorship) / Partnership Resolution (Partnership) / BOD resolution (Cooperative) designating its authorized signatories in the import entries;
D. Two valid government issued IDs of applicant, president and responsible officers;
E. NBI clearance of applicant (issued within three months prior to the application);
F. Photocopy of DTI registration or SEC registration/Articles of Partnership and latest General information Sheet, or Cooperative Development Authority Registration and latest Cooperative Annual Progress Report, whichever is applicable;
G. Personal profile of applicant, president and responsible officers;
H. Company profile with pictures of office with proper and permanent signage and pictures of warehouse/storage area;
I. Valid Mayor's Permit as certified by the Bureau of Permits and Licensing Office;
J. Proof of financial capacity to import goods; and
K. Endorsement from the District Collector, if applicable.

Annex B: DPWH - PPP Priority Projects

The DPWH list of priority projects under Public-Private Partnership agreement as of January 2020 is shown below.

Project	Description
Central Luzon Link Expressway (CLLEX)	The project is a 4-lane extension of CLLEX Phase I and connects Cabanatuan City and San Jose City passing through the municipalities of Talavera and Llanera in Nueva Ecija of about 35.70 km. in road length that will provide a free-flowing alternative route and decongest traffic along the Pan Philippine Highway (PPH) between said cities of Nueva Ecija and town of Plaridel in Bulacan Province. Estimated Total Project Cost - PHP 12.61 billion (USD 243.44 million)
Quezon-Bicol Expressway	The project will start at Pagbilao, Quezon and will end at existing Maharlika Highway in San Fernando, Camarines Sur. The project will have an indicative length of approximately 220 kilometers and will be an alternative option of travel from Quezon and the Bicol Provinces.
Davao-Digos Expressway	The project involves an approximate 60-km. toll road which will start at the Bukidnon-Davao National Highway in Davao City and will terminate at Digos-Sultan Kudarat Road. The project will traverse the towns of Toril and Santa Cruz and will serve as an alternative route for the Davao-Cotabato National Highway (AH26).
Metro Cebu Expressway (O&M)	Approximately 73.75 KM long high standard arterial road planned to meet Metro Cebu's existing and future traffic demand. The project will serve as another north-south backbone highway providing a seamless traffic flow from Naga City up to Danao City traversing along the slopes of the mountain range of Cebu Province and is expected to significantly address the traffic congestion within Metro Cebu especially its urban core and Central Business Districts. Estimated Total Project Cost - PHP 28.1 billion (USD 542.47 million)
Davao Bypass (O&M)	The proposed Davao City Bypass Construction Project which is located within Davao City has an approximate 44.6KM length, including the tunnel section, which will start from Davao-Digos section of the Pan Philippine Highway in Toril, Davao City and will terminate intersecting the Davao-Agusan National Highway in Panabo City. Estimated Total Project Cost - PHP 29.81 billion (USD 575.48 million)
Mindoro-Batangas Super Bridge (Floating Bridge)	The proposed project involves the construction of a 15-kilometer Super Bridge, two (2) or four (4) lanes with an optional pedestrian/bicycle lane, which will link Mindoro Island to the Province of Batangas. The bridge will cover the 8.5 km from Mindoro Island to Verde Island and 6.5 km from Verde Island to Batangas, over a 10m – 300m water depth.
TPLEX Extension	The project involves a 59.4 km four (4)-lane toll road which will start from the last exit of the Tarlac-Pangasinan-La Union Expressway (TPLEX) in Rosario, La Union and will terminate at San Juan, La Union. Estimated Total Project Cost - PHP 23.95 billion (USD 462.36 million)
North Luzon Expressway East, Phase II	
Delpan-Pasig-Marikina Expressway	

Source: Department of Public Works and Highways

Annex C: National Government - PPP Projects

The list of projects under Public-Private Partnership agreement of the national government is shown below.

Project	Description
Unsolicited Proposal Received by Implementing Agency	
Iloilo Commercial Port Complex and Port of Dumangas Development Project	The project involves the development, modernization, management, operation and maintenance of Iloilo Commercial Port Complex (ICPC) and the Port of Dumangas (POD). Indicative Cost - PHP 8.72 billion (USD 168.34 million)
Development, Operations and	
Maintenance of General Santos Port	The Project's overall objective is to re-develop, operate and maintain the Port of General Santos or Makar Wharf located 136 nautical miles south of Davao City.
Unsolicited Proposal for the New Bohol International Airport	The project involves the operations and maintenance (O&M) and capacity augmentation/expansion and enhancement of facilities of the New Bohol Airport with a concession period of 35 years in order to meet and maintain applicable standards in a phased implementation. Indicative Cost - PHP 25.45 billion (USD 491.31 million)
Ninoy Aquino International Airport Project	An unsolicited proposal submitted by the NAIA Consortium for a comprehensive upgrade, rehabilitation and expansion of NAIA by improving and expanding the terminals in the current NAIA land area and developing additional runway, taxiways and passenger terminals. Indicative Cost - PHP 102.12 billion (USD 1.97 billion)
Solicited Procurement	
Balicasag Island Dive Resort (BIDR) Project	The scope of the Project includes the development and management of BIDR in order to upgrade the facilities of the asset, improve efficiency in operations, and create significant contribution to a thriving and sustainable tourism in the area. Indicative Cost - PHP 110 million (USD 2.12 million)
Club Intramuros Golf Course Project (formerly Development and Management of the Club Intramuros Golf Course)	The Project involves the finance, design, construction, operation and maintenance, and management of the Club Intramuros Golf Course and its facilities. Currently, it is a Par 66 golf course set amidst lush greenery with rolling fairways, lagoons and sand traps straddling the Intramuros Wall Indicative Cost - PHP 250 million (USD 4.83 million)
Road Transport Information Technology (IT) Infrastructure Project (Phase II)	The project involves the upgrade of existing IT infrastructure of the Land Transportation and Franchising Regulatory Board (LTFRB), including: (a) computerization of its manual processes; (b) development of an online database of franchise information; (c) data migration; and (d) procurement, installation, operations and management of IT hardware equipment, software and network development. Indicative Cost - PHP 300 million (USD 5.79 million)

Annex C: National Government - PPP Projects

Project	Description
50 year Integrated Development Plan for Mactan Cebu International Airport (MCIA) Project	
C5 MRT 10 Project	The project involves the design, building, operating and maintaining the approximately 22.5 kilometer mostly elevated Light Railway Transit (LRT) System consisting of sixteen (16) stations along circumferential road C-5 connecting the Ninoy Aquino Terminal Airport (NAIA) Terminal 3 to Quezon City, terminating at Commonwealth Avenue with possible interchange with MRT7 at Tandang Sora Station and LRT Line 2 at Aurora Station. Trains will be stabled at the depot to be built at the UP property in Diliman, Quezon City.
Cavite-Tagaytay-Batangas Expressway Project	The project involves the financing, construction, operations and maintenance of the 2×2 lane, approximately 50 kilometers Cavite-Tagaytay-Batangas Expressway with spur roads to (i) Tagaytay City and (ii) Tuy. The project will improve access to Tagaytay City and Nasugbu, Batangas thereby ensuring faster travel in support of the government's tourism thrust.
Cebu Monorail Transit System Project	The Project involves the construction/development of approximately 27-kilometer rail transit system. Indicative Cost - PHP 73.24 billion (USD 1.41 billion)
Davao Sasa Port Modernization Project	The Project will involve the development of the existing Davao Sasa Port in Davao City into a modern, international-standard container terminal that will improve trade access to Mindanao and the Philippines by providing a dedicated containerized port in the region. This will in turn support the region's growing agro-industrial sector, spurring economic growth in Mindanao.
Davao People Mover	Indicative Cost - PHP 25.95 billion (USD 500.97 million)
Davao International Airport Development, Operation, and Management	The project involves the financing, construction, operations and maintenance of a 13-km elevated rail line with sixteen (16) stations, starting at Bangkal and terminating at SM Lanang. The straddle-type monorail technology is proposed for the Project.
Development of the Former Manila Seedling Site Owned by the National Housing Authority (NHA)	The project involves the development, operation and management of the Davao International Airport. The scope includes undertaking the operation, management and maintenance of all existing and project assets within the boundary of the subject airport, and all necessary development works (construction, rehabilitation, improvement, betterment, expansion, modernization) needed to meet the projected demand for the airport services within the concession period.
East-West Rail Project	Unsolicited Proposal from Filinvest Land, Inc. (FLI) for the construction, operations and maintenance of "Frontier North", a mixed-use development, on a 6.97-hectare NHA-owned property, located at EDSA corner Quezon Avenue.
	The project involves the financing, design, construction, and O&M of a mostly elevated 9.4-kilometer railway line from Diliman, Quezon City to Lerma, Manila including provision of interconnecting facilities with neighboring rail systems.

Annex C: National Government - PPP Projects

Project	Description
Fort Bonifacio – Makati Skytrain Project	The project involves the design, engineering, construction, operation and maintenance of a 1.873-km, monorail system connecting Fort Bonifacio and EDSA Guadalupe.
Manila Bay Integrated Flood Control, Coastal Defense and Expressway Project	The project involves the construction and operations of a City Flood Barrier that will protect about 250,000 people in Navotas City from storm surges and wave attacks; Expressway which connects Bataan with Metro Manila through the northern part of Manila Bay and offers the prospective of enhanced interconnectivity of several regions in Bulacan, Pampanga and Bataan with Metro Manila; Coastal Sea Barrier that reduces the impact of typhoon waves and surges in the northern coastal zone of Manila Bay.
MRT-11 Project	The project involves the construction of an approximately 18 kilometers Metro Railway Transit System (MRTS) of elevated structure starting from Epifanio Delos Santos Avenue (EDSA), Balintawak in Quezon City traversing along Quirino Highway, Novaliches and Zabarte Road in North Caloocan City up to Barangay Gaya-gaya in San Jose del Monte, Bulacan. A passenger transfer facility shall be provided proximate to the EDSA-Balintawak station of LRT Line 1 and the MRT 11 Balintawak station.
Modified Light Rail Transit (LRT)-6 Project (formerly LRT 6 Cavite Line A)	The project involves the construction, operation and maintenance of an approximately 23.5 km. Light Rail Transit System, consisting of nine (9) stations that will extend the LRT-1 Extension Project from Niog in Bacoor to Governor's Drive in Dasmarinas traversing Bacoor, Imus and Dasmarinas Cities, all in the Province of Cavite Indicative Cost - PHP 56.27 billion (USD 1.09 billion)
MRT 7 Airport Access – North Line	The MRT 7 Airport Access- North Line is a 30.30 km mixed at-grade and elevated metro rail transportation system with seven (7) strategically placed stations which aims to provide a safe, reliable, and convenient mode of transportation going to and from the New Manila International Airport and neighboring provinces. Indicative Cost - PHP 130.90 billion (USD 2.53 billion)
MRT 7 Katipunan Spur Line	The scope of the project includes the financing, design, construction, operation, and maintenance of a 13.09 km rail system connecting the MRT7 Tandang Sora Station to a spur line traversing Katipunan Avenue and terminating at Bonifacio Avenue, Cainta. The project will be located on the east side of Metro Manila bordering the province of Rizal. The rail alignment will pass through Quezon City, Marikina City, Antipolo City, Cainta, and Pasig City. Indicative Cost - PHP 107 billion (USD 2.07 billion)
North Luzon Express Terminal (NLET) Project	The Project Proponent will finance, construct, own, operate and maintain the integrated terminal from which it can recover its total investment, operating and maintenance cost plus reasonable return thereof, by collecting tolls, fees, rentals or other charges from facility users. Indicative Cost - PHP 7.24 billion (USD 139.77 million)

Annex C: National Government - PPP Projects

Project	Description
Under Evaluation by Relevant Approving Body	
O&M and Facility Upgrade of Kalibo International Airport	The project involves the operation and maintenance of the current airport facility and implementing a facility upgrade of the airport including systems and construction of the terminal building.
Preservation and Development of Laguna de Bay Project	The project involves the financing, design, construction, preservation and development works within the Laguna Lake, as a flood mitigation measure for the areas surrounding Laguna de Bay. The development and preservation works include the construction of a six-lane, 46.6km. toll road on a viaduct structure to be located 100 meters from the western shoreline of Laguna Lake, and a reclamation and development of 2,000 ha. of land within the jurisdiction of Taguig City.
San Ramon Newport Project	The San Ramon Newport Project aims to improve the competitiveness of the Zamboanga City Special Economic Zone and Freeport (ZamboEcozone) and fulfill its vision of becoming a world-class economic zone that will link resources, markets, and other logistical activities that can contribute to the economic development of Zamboanga City and Mindanao. It will entail construction, operation and maintenance (O&M) of a world-class seaport to be located within the First Industrial Park of ZamboEcozone.
Tarlac-Pangasinan – La Union Expressway (TPLEX) Extension Project	The Project involves the design, financing, construction, operation and maintenance of a 59.4 km four-lane TPLEX Extension Project from Rosario to San Juan, La Union. Indicative Cost - PHP 24.10 billion (USD 465.25 million)
Upgrade, Expansion,Operations and Maintenance of Laguindingan Airport	The Laguindingan Airport Project will involve the upgrade, operations and maintenance, and future expansion of the Laguindingan Airport. The project aims to address the Laguindingan Airport's existing capacity constraint issue and accommodate air traffic growth.
Project Under Evaluation	
Development, Operations and Maintenance of General Santos Port	The Project's overall objective is to re-develop, operate and maintain the Port of General Santos or Makar Wharf located 136 nautical miles south of Davao City.

Source: Public-Private Partnership Center