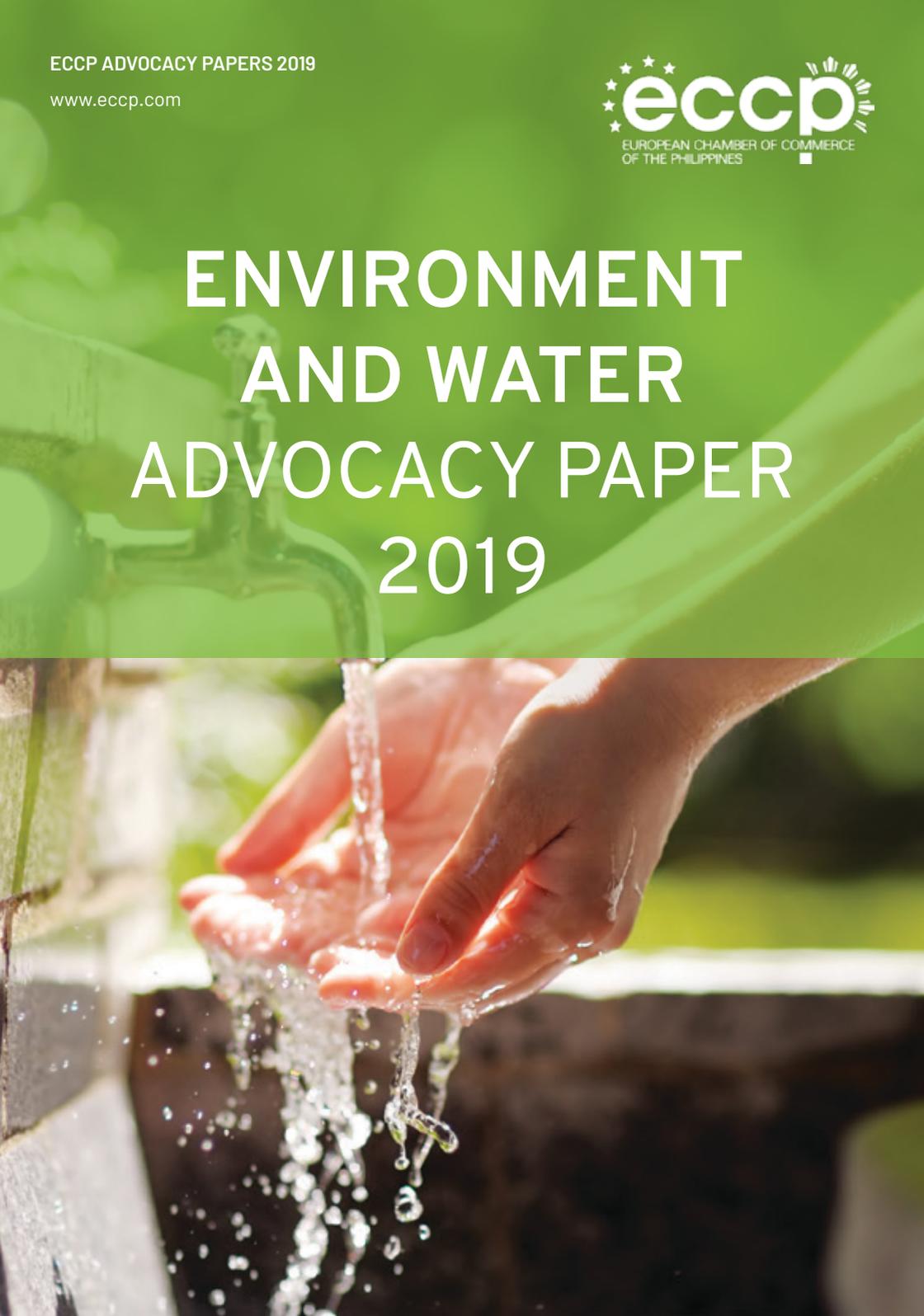


ENVIRONMENT AND WATER ADVOCACY PAPER 2019



ABOUT ECCP

The **European Chamber of Commerce of the Philippines** (ECCP) is a service-oriented organization whose main goal is to foster close economic ties and business relations between the Philippines and Europe. The ECCP does this by providing a wide range of consultancy services and by creating linkages between companies, organizations, and individuals with existing or potential business interests in Europe and the Philippines. It is also at the forefront of pro-business, pro-growth advocacy in the Philippines, representing European business interests for increased market access and trade facilitation, at the highest level of Philippine political discussions.

The ECCP sees itself as the stepping stone for Europeans into the Philippine market and for Filipinos into the European market.



ENVIRONMENT AND WATER ADVOCACY PAPER 2019



EUROPEAN CHAMBER OF COMMERCE OF THE PHILIPPINES

19th Floor, Philippine AXA Life Center Bldg.,
Sen. Gil Puyat Ave. cor. Tindalo Street,
Makati City, Metro Manila, Philippines, 1200

Positions expressed in the advocacy papers are the result of the activities of the Sector Committees working under the ECCP.

EDITORIAL BOARD

Florian Gottein
 Sophia Mari Antoinette Ordoña
 Katrina Angelica Baligod
 Lorenzo Jose Lombos
 Sandra Nicole Añonuevo
 Chelsea Murphy

ECCP COMMITTEE CHAIRS

COMMITTEE	COMMITTEE LEADERS
Agriculture	Ruth Novales Dr. Mary Ann Sayoc
Automotive	Reginald See
Customs	Atty. Mark Anthony Tamayo
Environment and Water	Kristoffer Rada
Food and Beverage	Helen Grace Baisa Atty. Gerrard Paez
Healthcare	Rommel Abuda Dr. Amal Makhoulfi Lih Chyun Yeong
Human Capital	Joe Bantiling Atty. Eliseo Zuñiga
ICT-BPM-KPM	Erik Moller Nielsen
Infrastructure and Transportation	Michael Kurt Raeuber Reinier Dizon
Renewable Energy and Energy Efficiency	Ruth Yu-Owen Ditmar Gorges Juergen Lorenz
Tax and Financial Services	Atty. Kristine Mercado-Tamayo

METHODOLOGY

The 2019 edition of the ECCP Advocacy Papers features issues and recommendations formed after extensive discussions between members of the ECCP sector committees, dialogues and meetings with representatives from the Philippine Government, and other stakeholders. The ECCP has also taken into consideration the information gathered from organizing different events, participating in numerous hearings and committee meetings in both chambers of the Philippine Congress, as well as in private sector consultations held by several government agencies.

Further, the recommendations provided in each paper were primarily based on the discussions during the quarterly sector committee meetings. In close cooperation with the sector committee leaders and members, the ECCP Advocacy Team thoroughly analyzed every issue and advocacy recommendation to ensure that they are in line with European business interests and priorities. Once the Advocacy Team has finalized the first draft of each sector paper, it was then circulated to the Committee members and other stakeholders for consultation and subsequently, gathered inputs to be included in the final draft of the papers.

The assessment of the status of each recommendation included in 2018 Advocacy Papers were examined under the following criteria:

Completed/Substantial Progress: Recommended action has either been completed or there has been significant progress towards the realization of the recommendation.

Some Progress: Movement towards realizing the recommendation has been made, but substantial work still needs to be done to fully achieve and complete the proposed measure.

No Progress/Retrogression: Minimal progress or no movement towards attaining the recommended reforms were done, or the status of the issue has worsened and has evolved to an even bigger bottleneck for European businesses.

MESSAGE FROM ECCP PRESIDENT



2019 has truly been a year of opportunities for the European-Philippine business community. This year, we welcome the implementation of the landmark Ease of Doing Business Act as well as the 18th Congress, with its list of legislative economic priorities. We also acknowledge the enactment of laws on Universal Health Care, Tax Amnesty, Energy Efficiency and Conservation, amongst other measures. Steady macroeconomic fundamentals as well as the administration's plans and pronouncements concerning economic reforms also open opportunities for further trade and investments. Furthermore, the ECCP aims to build upon the achievements of the past years in making the Philippine business environment friendlier for European companies and ensuring that these businesses can make the most of these exciting developments.

To further build on such success, several matters need to be addressed in order to fully realize the potential of the European-Philippine economic ties and the Philippine economic growth. It becomes increasingly important for the Philippines to improve global market integration, enhance its competitiveness as a Foreign Direct Investment (FDI) destination, and accelerate infrastructure development in order to achieve much needed sustainable and inclusive growth.

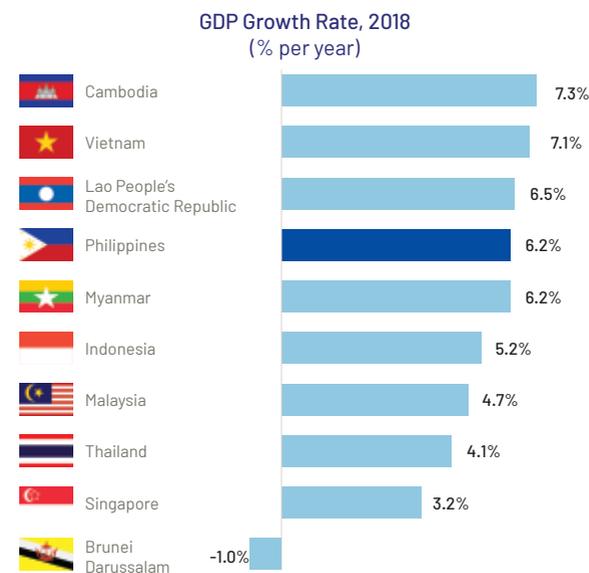
It is in this context that we are pleased to present the 2019 ECCP Advocacy Papers. The ECCP Advocacy Papers include suggested reforms on priority sectors identified by the Chamber and its members. As an advocate of economic liberalization and sustainable economic growth, the ECCP stands ready to support the Philippines in making these much needed changes for the mutual benefit of Europe and the Philippines.

Mr. Nabil Francis
ECCP President

WHERE ARE WE NOW?

THE PHILIPPINES

The Philippines strives to maintain its robust economic performance amidst several challenges. Though the GDP posted a decelerated growth of 6.2% in 2018, it is still considered as one of the fastest-growing countries in the Association of Southeast Asian Nations (ASEAN). With a 10-year average annual GDP growth of 5.4%,¹ the Organisation for Economic Co-operation and Development (OECD) recognizes the Philippines as one of the countries, along with Vietnam, who are expected to lead the ASEAN-5 in terms of economic growth.²



Source: Asian Development Bank. *Asian Development Outlook 2019*

The GDP was mainly driven by manufacturing, trade and repair of motor vehicles, motorcycles, personal and household goods, and construction. Services accounted for the biggest share with 57.8%, followed by Industry with 34.1%, and Agriculture, Hunting, Forestry and Fishing (AHFF) with 8.1%.³ The steady flow of remittances from Overseas Filipino Workers (OFWs), the ambitious *Build Build Build* Program, and resilience of the business and knowledge outsourcing industry are anticipated to keep the momentum going in the upcoming years.⁴ The GDP Per Capita posted a decelerated growth of 0.5% from 2017, placing the Philippines 5th in rank amongst the ASEAN.⁵

¹ World Economic Forum. (2018) *The Global Competitiveness Report*. Retrieved 15 September 2019 from www3.weforum.org/docs/GCR2018/05FullReport/TheGlobalCompetitivenessReport2018.pdf.

² OECD. (2018) *Economic Outlook for Southeast Asia, China and India 2018: Fostering Growth Through Digitalisation*. Retrieved 14 September 2019 from dx.doi.org/9789264286184-en.

³ Philippine Statistics Authority. (2019). *Gross Domestic Product of the Philippines Highlights for 2018*. Accessed 14 September 2019 from psa.gov.ph/regional-accounts/grdp/highlights.

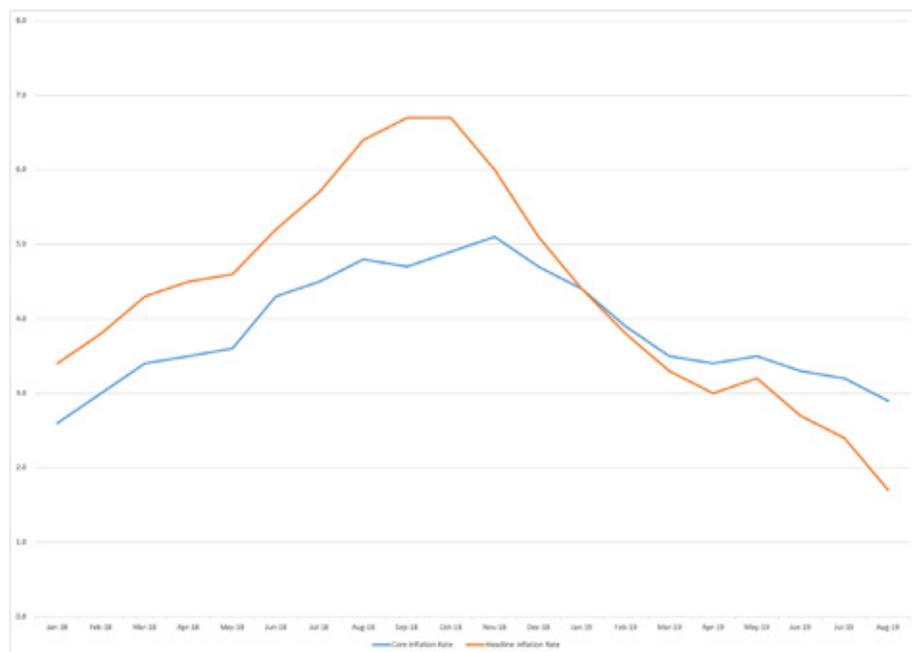
⁴ OECD. (2018) *Economic Outlook for Southeast Asia, China and India 2018: Fostering Growth Through Digitalisation*.

⁵ Asian Development Bank. (n.d.) *Economic indicators for the Philippines*. Retrieved 16 September 2019 from adb.org/countries/philippines/economy.

The inflation rate for 2018 steadily rose throughout the year. The headline inflation rate increased from 2.9% in 2017 to 5.2% in 2018. Inflation peaked at 6.7% in the third quarter of 2018, and only decreased during the last two months of the said year. The drastic increase in prices was primarily attributed to the tight domestic supply, impact of natural calamities, and the rising global crude oil rates.⁶

The average core inflation rate reached 4.1% in 2018 – a 2.5% increase from 2017, that could be linked to the impact of fiscal expansion as well as the pass-through effect of a weaker peso.⁷ The full year average inflation was brought up to 5.2%, which is above the National Government's announced target range for 2018.⁸ However, as of August 2019, the headline inflation rate decelerated to 1.7%, the lowest rate achieved since October 2016 which was at 1.8%. The deceleration was brought about by the slower annual increase in prices of food and non-alcoholic beverages.⁹

Philippines: Inflation Rate, January 2018 – August 2019



Source: PSA and BSP

6 World Bank. (2019) *Philippines Economic Update April 2019: Safeguarding Stability, Investing in the Filipino*. Retrieved 16 September 2019 from documents.worldbank.org/curated/en/442801553879554971/pdf/Philippines-Economic-Update-Safeguarding-Stability-Investing-in-the-Filipino.pdf

7 Ibid.

8 Bangko Sentral ng Pilipinas. (2018) *Inflation Report Q4 2018*. Retrieved 15 September 2019 from bsp.gov.ph/downloads/Publications/2018/IR4qtr_2018.pdf.

9 Philippine Statistics Authority. (2019). *Summary Inflation Report Consumer Price Index (2012=100): August 2019*. Accessed 27 September 2019 from psa.gov.ph/statistics/survey/price/summary-inflation-report-consumer-price-index-2012100-august-2019.

The country's credit rating over the past year proves itself to be stable according to Moody's Investor Service.¹⁰ The table below shows ratings from various agencies throughout the year:

2018 Philippine Credit Ratings		
Date	Agency	Rating
26 April	S&P	BBB Positive
20 July	Moody's	Baa2 Stable
19 December	Fitch	BBB

Source: Standard and Poor's, Moody's, Fitch.

The demographics for 2018 puts the country's economy at a prime advantage. A population of 106.60 million,¹¹ with a median age of 23.7,¹² adds a young, dynamic and competitive workforce to the country's competitive advantages including its strategic business location in the region and a pursuit for developing infrastructure for global growth,¹³ among others.

A 2018 Philippine Statistics Authority (PSA) Survey records the employment rate at 94.7%. Categorically, the Services sector had the biggest share with 56.6%, followed by the Agriculture sector with 24.3%, and the Industry sector with 19.1%.¹⁴ This leaves the unemployment rate at 5.3% and the underemployment rate with 16.4%. Though the statistics on employment displayed a positive growth of approximately 0.3-0.4% from 2017, high levels of unemployment remain to be a recurring challenge for the Philippines.

For international rankings, the 2018 Global Competitiveness Report ranks the Philippines 56th out of 140 countries, with a score of 52.1.¹⁵ The report highlighted the country's Macroeconomic Stability as its strongest pillar, ranking 43rd with a score of 90. However, Innovation Capability was noted as the country's weakest, ranking 67th with a score of 37.2.¹⁶ As for the World Bank Doing Business 2018 Report, the Philippines was given an overall ranking of 113th out of 190 countries. The country's factor of Getting Electricity is ranked best at 31st, while Starting a Business is ranked the worst at 173rd.¹⁷

10 Moody's Investors Service. (2018) *Announcement: Moody's: Philippines' credit profile supported by strong growth and progress on reform*. Retrieved 16 September 2019 from moody.com/research/Moodys-Philippines-credit-profile-supported-by-strong-growth-and-progress-PR_387103.

11 Asian Development Bank. (2018) *Philippines: By the Numbers*. Retrieved 16 September 2019 from data.adb.org/dashboard/philippines-numbers.

12 Central Intelligence Agency. (2018). *The World Factbook: Philippines*. Retrieved 15 September 2019 from cia.gov/library/publications/the-world-factbook/geos/rp.html.

13 Philippine Consulate General. (n.d.) *The Philippines possesses several competitive advantages*. Retrieved 18 September 2019 from vancouverpcg.org/trade-01.html.

14 Philippine Statistics Authority. (2018). *2018 Annual Labor and Employment Status*. Accessed 15 September 2019 from psa.gov.ph/content/2018-annual-labor-and-employment-status.

15 World Economic Forum. (2018) *The Global Competitiveness Report*.

16 Ibid.

17 World Bank. (2018). *Doing Business 2018: Reforming to Create Jobs*. Retrieved 16 September 2019 from doingbusiness.org/content/dam/doingBusiness/media/Annual-Reports/English/DB2018-Full-Report.pdf.

With regard to Foreign Direct Investments (FDIs), the Bangko Sentral ng Pilipinas officially registered USD 9.8 Billion in net inflows for 2018, down by 4.4% from the USD 10.3 billion record from 2017.¹⁸ Majority of equity capital placements were mainly channeled to manufacturing, financial and insurance activities, and real estate activities with Singapore, Hong Kong, and Japan as the top partners.¹⁹ With the country's relations with the European Union, three member states ranked in the top ten with Netherlands, Luxembourg, and Germany placing 7th, 8th, and 10th, respectively.²⁰



Total external trade amounted to USD 182.15 billion in 2018. The top three major trading partners for the year were People's Republic of China, Japan, and the United States of America.²¹ The European Union (EU) immediately followed with a 9.6% share in total trade, valued at USD 17.49 billion. Germany ranked the highest as the Philippines' top trading partner in the EU, followed by the Netherlands, and France. Alternatively, the Philippines is the EU's 41st largest trading partner globally, accounting for only 0.4% of the EU's total trade.²²



Indeed, the Philippines has made notable progress in recent years. However, much work still needs to be done in order to improve the country's global competitiveness. Substantial economic reforms, especially concerning the ease of doing business as well as the creation of a level playing field have yet to be realized to capitalize on the substantive gains of the Philippines. Furthermore, boosting the Philippine manufacturing sector, deepening the ASEAN integration, and enhancing trade facilitation are all imperative to take the Philippine economy to greater heights.



18 Bangko Sentral ng Pilipinas. (2019). *FDI Registers US\$677 million in December 2018; Full-Year Reaches US\$9.8 Billion in 2018*. Retrieved 14 September 2019 from bsp.gov.ph/publications/media.asp?id=4967&yr=2019.

19 Ibid.

20 Department of Trade and Industry. (2018) *NET FOREIGN DIRECT INVESTMENTS REPORT*. Retrieved 16 September 2019 from dti.gov.ph/resources/statistics/net-foreign-direct-investments-fdi#graph.

21 Philippine Statistics Authority. (2019). *Highlights of the 2018 Annual Report on International Merchandise Trade Statistics of the Philippines (Preliminary)*. Accessed 15 September 2019 from psa.gov.ph/content/highlights-2018-annual-report-international-merchandise-trade-statistics-philippines.

22 European Commission. (2019). *Countries and Regions: The Philippines*. Retrieved 16 September 2019 from ec.europa.eu/trade/policy/countries-and-regions/countries/philippines/.

ENVIRONMENT AND WATER ADVOCACY PAPER 2019

ON WATER

INTRODUCTION

While water is a finite resource, there has been a great demand for water as it is deemed a basic necessity for life. Global water demand projections are estimated to increase to 55% by 2050 while the world population is projected to increase to 10 billion as reported by the Asian Development Bank (ADB).¹ On the supply side, according to the National Economic and Development Authority (NEDA), based on the 2015 population, the Philippines' water availability is roughly 1,446 CM per capita per year.² Despite having relatively higher per capita water availability in Asia, the Philippines ranked 57th out of the 167 listed countries in terms of water stress, posting a stress score of 3.01.³ Unfortunately, the availability of water supply in the country has been affected by several factors such as natural disasters, inefficient resource management system, population growth, among others. Further, the complexity and ambiguity provided by the Philippines' lack of a single lead agency in the water sector remains to be one of the country's major bottlenecks in fully achieving water security.

In light of the foregoing, the European Chamber of Commerce of the Philippines (ECCP) believes it becomes increasingly important that the establishment of the Department of Water and the phased implementation of the Department of Environment and Natural Resources' 2016 Department Administrative Order on water quality guidelines and general effluent standards be considered.

¹ Asian Development Bank. (2016). Asian Water Development Outlook 2016. Retrieved 19 June 2018 from <https://www.adb.org/sites/default/files/publication/189411/awdo-2016.pdf>

² National Economic and Development Authority (2010). Philippine Water Supply & Sanitation Master Plan Databook. Retrieved from <http://www.pwssmp.com/databook/page/water-resources>

³ World Resources Institute (2015). Retrieved from <http://www.wri.org/blog/2015/08/ranking-worlds-most-water-stressed-countries-2040>

RECENT REFORMS AND INDUSTRY DEVELOPMENTS

- The National Economic and Development Authority is pursuing the **creation of a Department of Water Resources (DWR)** and the establishment of a Water Regulatory Commission (WRC). While awaiting the passage of the laws creating the DWR and the WRC, a **draft Executive Order on strengthening and transforming the National Water Resources Board (NWRB) into the National Water Management Council (NWMC)** is being sought as an interim measure while the legislative reforms are under deliberation in Congress.
- In his 4th State of the Nation Address, Philippine President Rodrigo Duterte mentioned the need to have both a Department of Water Resources and Water Regulatory Commission to help solve problems in the water sector and avoid another water shortage which occurred in Metro Manila in early 2019. President Duterte then included these in the list of priority measures which Congress may consider.
- On the legislative front, in response to the call of President Duterte, several related bills have been filed in the 18th Congress. As of writing time, these include Senate Bill Nos. 20, 44, 123, 195, 208 and House Bills No. 193, 232, 1320, 1358, 2272, 2481, 2514, 2586, 2725, 2879, 2887, 2981, 2997, 3172, 3347, 3350, 3380, 3512, 3656, 3987, 4026, 4098, 4168, 4251, and 4329.
- The NEDA-led formulation of the **Philippine Water Supply and Sanitation Master Plan (PWSSMP)**, is underway and nearing completion. The Master Plan lays out the strategies and policy reforms, as well as the priority programs and projects in achieving the Water Supply and Sanitation (WSS) related targets in the Philippine Development Plan (PDP) 2017-2022 and the United Nations (UN) Sustainable Development Goals (SDG).



ADVOCACY RECOMMENDATIONS

1. The Creation of the Department of Water

With over 30 government agencies involved in varying roles and jurisdictions, the governance of the Philippine water sector has long been fragmented and uncoordinated. This has unnecessarily created bottlenecks and confusion for potential and existing investors in the sector. Furthermore, the lack of leadership, accountability, and strategic direction in the water sector is often identified as a key factor affecting the Philippines' poor state of water resources. It is then imperative to approach water resource planning using Integrated Water Resource Management (IWRM).

As an interim measure, the ECCP welcomes the move to strengthen the National Water Resources Board (NWRB) and provide adequate resources for the Board to effectively fulfill its mandates. In the longer term, the ECCP urges the Philippine government to **create an apex and centralized body which will act as the lead agency to oversee and coordinate overall policy and program implementation on all matters relating to water**. This is imperative in achieving water security in the country. Furthermore, this will also help the establishment and operations of businesses, as well as attract new investors given the improved governance of the said sector.

Creating a Department to oversee the Philippine Water Sector, at the very least, will ensure that issues and concerns in the sector are being handled by a line agency led by a member of the Cabinet of the President of the Philippines. This will allow for a better venue for the resolution of the same issues and concerns which are critical to the sector that provides both a social and economic good to Filipinos.

2. Phased implementation of DENR Administrative Order Water Quality and Effluent Standards Guidelines

In line with the principles of the Clean Water Act of 2004, the DENR issued Department Administrative Order (DAO) No. 08 series of 2016. The said DAO, in comparison to the superseded DAO Numbers 34 and 35 Series of 1990, has stricter provisions on water quality and effluent standards.

Key changes in Water Quality Standards (DAO 2016-08) include:

- Introduction of standards for nutrients
- General Effluent Standards (GES) apply to all points of source of pollution irrespective of the volume of generated wastewater
- New parameters considered: ammonia, boron, selenium, fluoride
- More stringent standards for arsenic, cadmium, chromium, lead mercury
- Standards are defined based on the sector of the industry. For most of the sectors, introduction of standards for nitrates, ammonia, phosphates, and surfactants
- More stringent standards for the industries with strong wastewater

Under this revised regulation, the scope of the DAO has expanded from initially covering freshwaters, sea areas and coastal waters to covering all water bodies in the country such as marine waters, groundwater and freshwaters through the establishment of the Water Quality Guidelines (WQG). The WQG will also be used as a basis to evaluate the status of water pollution and the corresponding measure to address water pollution.

Furthermore, the definition of "effluent" in the previous DAO only covered wastewater discharges from industrial, treatment or manufacturing plant. However, in the 2016 DAO, the scope was broadened including discharges from institutional and commercial plants. Additionally, the effluent standards, which set the parameter of allowed chemical effluent discharges, were also expanded to all industry categories. This also applies to all sources of pollutants regardless of the volume being released by the facility through the General Effluent Standards introduced in the 2016 DAO. Under the GES, the effluent standards shall also vary depending on the industry's category.

Further, the current DAO also imposes stringent standards on chemicals that were not previously regulated by the superseded DAO. The chemicals include Ammonia, Boron, Selenium, Fluoride, among others. This thereby imposes stricter parameters on several chemicals such as mercury, cadmium, lead, arsenic and chromium. With the stricter standards imposed by the 2016 DAO, companies are given a maximum grace period of five (5) years to transition and comply with the revised set of water quality and effluent standards.

However, the said grace period is deemed insufficient as complying with the new standards would require abrupt upgrade of facilities, incorporation of new technologies, among others. Such an undertaking would require costly investments and higher cost of operations for both public and private sectors. For example, the revised parameters set for ammonia is ten times stricter compared to other Asian countries and would require more advanced technologies and process operation such as carbon dosing and pH control. In addition, adjusted standards for phosphorus is five times stricter than other Asian countries and would require carrying out a chemical treatment.

While the ECCP appreciates the move towards higher water quality standards, we believe that both provisions and deadlines set in the DAO may be impractical and onerous. With this, the ECCP strongly advocates for the revision of DENR Administrative Order (DAO) 2016-08, establishing a **phased implementation of the 2016 DAO standards** starting with critical areas and catchments. The Chamber also recommends the review of some parameters that are too stringent and impractical.

The ECCP looks forward to working closely with concerned agencies to find an optimal solution with the objective to attain improved water quality standards that are reasonable and realistic to all concerned parties. The Chamber and its Environment and Water Committee stands ready to contribute its expertise and knowledge in order to improve the current water quality.



ON WASTE MANAGEMENT

INTRODUCTION

The increase of waste generation nationwide as well as the lack of enforcement of waste management law provisions has also been a cause of concern. The National Solid Waste Management Commission (NSWMC) reports that waste generation in the Philippines has consistently increased from 37,427.46 tons in 2012 to 40,087.45 tons in 2016, posting a daily estimate average of 0.40 kg per capita waste generation for rural and urban areas. Three main sources of solid wastes in the country are residential, institutional, and industrial wastes accounting for 57%, 12% and 4% of the total solid wastes, respectively.⁴

Legally, waste disposal in the country remains limited to the use of sanitary landfills. Open dumping was banned by the enactment of Republic Act 9003 in 2000 which required all LGUs to close all open dumpsites three years after the enactment of the law. Despite the increase of sanitary landfills from 48 in 2010 to 135 in 2018, landfills remain to be insufficient as the volume of waste is now threatening to surpass the available space in dumpsites. Clearly, effective waste management is crucial in further improving the current environmental state of the Philippines.

With this, the ECCP recommends that the following measures be considered for an improved solid waste management:

- Strengthened implementation of Republic Act 9003 or the Ecological Solid Waste Management Act; and
- Combatting plastic pollution should be addressed in consideration of the following: (1) adoption of a tailor-fit approach based on thorough scientific studies instead of a sweeping ban on plastics especially without the presence of affordable, viable alternatives; (2) the creation of a market for recycling and provide financial and non-financial incentives for the same; and (3) strengthening public awareness on waste minimization and improved implementation of RA 9512 or the National Environmental Awareness and Education Act of 2008.



⁴ Senate Economic Planning Office (2017). Philippine Solid Wastes At A Glance. Retrieved from https://www.senate.gov.ph/publications/SEPO/AAG_Philippine%20Solid%20Wastes_Nov2017.pdf

RECENT REFORMS AND INDUSTRY DEVELOPMENTS

- Over the past months, the current administration has looked into the cleanup, rehabilitation and preservation of major waterways. Manila Bay became the government's next big target after the rehabilitation of Boracay. The government's cleanup of the polluted bay kicked off in late January 2019. President Rodrigo Duterte created a task force that would expedite the rehabilitation and restoration of Manila Bay. The task force is ordered to enforce relevant laws to ensure the rehabilitation and conservation of Manila Bay, improve its water quality, implement a comprehensive plan for massive relocation of informal settler families, and facilitate information drive on Manila Bay clean-up, among others.
- As of writing time, there are a number of bills filed on single-use plastics including House Bill Nos. 103, 139, 178, 499, 546, 574, 635, 1754, 2396, 2484, 2811, 2969, 3140, 3338, 3536, 4339, 4435, 4644, 4724, as well as Senate Bill Nos. 557, 333, and 40.





ADVOCACY RECOMMENDATIONS

Despite being enacted for nearly two decades, the implementation of Republic Act 9003, Ecological Solid Waste Management Act of 2000, remains to be a challenge especially for the local government units (LGUs). Technical, political and financial limitations have been cited as bottlenecks in the implementation. Moreover, many LGUs have yet to comply with the establishment of local solid waste management (SWM) boards, submission of SWM Plans, establishment of materials recovery facilities (MRFs) and closure of all open and controlled dumpsites.⁵ Given the status quo, it is crucial that the Ecological Solid Waste Management Act of 2000 is properly enforced.

Furthermore, inadequate solid waste management systems and human negligence has also led to one of today's most serious concerns — **plastic pollution**. Over recent years, plastic pollution has been a global concern and has therefore received increased attention. It is estimated that more than 8,300 million metric tons of virgin plastic have been produced globally.⁶ Moreover, according to the United Nations Environment Programme (UNEP), merely nine percent of these tons of the globally produced plastic has been recycled. Most plastics end up in landfills, dumpsites or in the environment. If no positive changes are made in current consumption patterns and waste management practices, approximately 12 billion tons of plastic litter will be in landfills and the environment by 2050.⁷ Furthermore, approximately 80 percent of ocean plastics come from land-based sources, and 20 percent from marine.⁸ It therefore becomes imperative that all actors join hands and address the large issue at hand.

In 2018, the European Parliament voted to reduce marine litter through the ban of specific single-use plastics. It is important to note that the current said regulation only prohibits specific types of single-use plastics (i.e., cutlery, plates, stirrers, straws, and cotton bud sticks)⁹ which already have existing affordable alternatives; recycled materials such as wooden stirrers and straws are not banned. Otherwise, the following approaches¹⁰ as defined by the European Parliament were applied:

- **Consumption reduction:** This requires EU member states to achieve a 'significant reduction' in consumption through setting national targets, making alternative products for consumers, ensuring that plastic products are not provided for free.
- **Separate collection:** This approach requires Member States to increase and ensure collection through deposit refund schemes.
- **Product design:** This requires that single-use plastic drinks containers and bottles to have their caps and lids attached.

⁵ Ibid.

⁶ United Nations Environment Programme (2018). Single-Use Plastic: Roadmap to Sustainability. Retrieved from https://wedocs.unep.org/bitstream/handle/20.500.11822/25496/singleUsePlastic_sustainability.pdf?isAllowed=y&sequence=1

⁷ Ibid.

⁸ Our World in Data (n.d.). Plastic pollution. Retrieved from <https://ourworldindata.org/plastic-pollution>

⁹ European Parliament (2018) Single-use plastics and fishing gear: Reducing marine litter. Retrieved from: [http://www.europarl.europa.eu/RegData/etudes/BRIE/2018/625115/EPRS_BRI\(2018\)625115_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/BRIE/2018/625115/EPRS_BRI(2018)625115_EN.pdf)

¹⁰ Ibid.

- **Extended producer responsibility (EPR):** This requires Member States to ensure that EPR schemes are established. It is important to note that EPR may take various definitions and forms. For an example, producers would cover the costs of waste management and cleanup as well as efforts in raising awareness.
- **Labelling:** This requires certain items to include a label on how the items should be disposed as well as the negative consequences of improper disposal of plastic wastes.
- **Awareness raising:** This requires Members States to raise consumers' awareness on the available re-use systems and waste management options as well as about the negative impacts of inappropriate disposal.

Zooming in on the local context, plastic pollution has also received increased attention from the public in recent years. Both public and private sectors, as well as other stakeholders, have stepped up and launched various initiatives to curb marine debris. The rehabilitation of Manila Bay as well as the crafting of the National Action Plan on Marine Litter and Microplastics, together with other government agencies' efforts, are among the recent initiatives of the current administration in light of the aforementioned issues. On the legislative front, several bills have been filed during the 18th Congress which seek to ban single-use plastics from manufacture, sale, importation and use.

While these initiatives and proposals are noteworthy, it is important to re-examine the current situation and consider the following key messages:

1. Banning necessitates affordable and appropriate alternatives. Otherwise, this can put consumers at a disadvantage and worsen the problem at hand.

Banning single-use plastics necessitates the existence of affordable, viable alternatives. The alternatives must meet (1) the desired quality, (2) minimum specifications; and (3) circumstances for the use; (4) supply of materials; (5) policy side; and (6) competitive cost.

Plastics are widely used given their versatile properties including the following: (1) moisture-resistant, providing a barrier against moisture and oxygen, preventing immediate the contamination of a product; (2) widely available and inexpensive; (3) malleable, easily be shaped in different forms (4) lightweight but highly durable, making it an excellent packaging material; (5) protection of product when transported, and transferred from one transport mode to another; and (6) resistant to corrosion and chemicals.

Any alternative material that fails to meet the aforementioned criteria could do more harm than good. It is feared that hastily banning plastics without an appropriate alternative will lead to proliferation of untested substitutes. This could ultimately compromise consumers' health and safety as food products could potentially get contaminated or spoiled.

2. Proper waste management should be prioritized. Merely shifting from single-use plastics to reusables may not guarantee significant marine litter reduction.

While shifting to reusables from single-use plastics may be beneficial, it still does not fully guarantee significant reduction in marine litter. In the Philippines, 74% of plastic leakage originates from waste that has already been collected.¹¹ With the dumping of private haulers and the habitual littering of individuals, shifting from single-use plastics to reusable may not be enough to solve the entire marine litter issue. The need to strictly enforce RA 9003, Ecological Solid Waste Management Act of 2000 becomes even more obvious and crucial.

¹¹ World Wild Fund (2018). The scourge of single-use plastic in the Philippines. Retrieved from https://wwf.panda.org/knowledge_hub/where_we_work/coraltriangle/?329831/The-scourge-of-single-use-plastic-in-the-Philippines

3. Policy decisions must be backed up by thorough, scientific studies. A complex problem requires a tailor-fit approach based on the purpose, minimum specifications, and circumstances of its use.

Policy decisions should be backed up by scientific studies such as the life-cycle sustainability assessment (LCSA) which will help provide an objective evaluation of a product's environmental, social and economic benefits and negative impacts throughout its life-cycle. In addition, a one-size-fits-all solution is not ideal; a tailor-fit approach must be considered depending on the scenario.



[Scenario 1] For single-use plastics of low functional value, these items should be removed from circulation and banned immediately or replaced with recyclable materials.

[Scenario 2] Should there be an existing alternative with a lower life-cycle assessment impact and a lower marginal cost increase, there must be a shift in delivery mode: replace these single-use plastics with recyclables. Such an approach should be promoted and even incentivized.

[Scenario 3] In cases where single-use plastic products are still the most appropriate materials, **packaging and product redesign** should be applied to reduce the plastic in general and to facilitate the shift to circular economy. For this scenario, materials reduction, improvement of recyclability, shifting to compostable, as well as product redesign are potential options. Materials reduction requires innovation in order to decrease the amount of plastic in a particular product without sacrificing its functionality. Shifting to compostable and product redesign are also deemed as viable options.

Even after implementing the aforementioned solutions, there will still be waste that comes after consumer use. It is necessary to put in place a system that would convert these **wastes into materials of value**. Potential approaches include (1) waste to raw materials conversion; (2) upcycling into more valuable products; (3) and financially-viable down cycling; (4) industrial plastic composting; and (5) waste-to-energy (WTE).

Possible options for **Waste to Energy** include co-processing, pyrolysis, and gasification. For this, it must be ensured that input wastes are pre-processed and sorted. WTE, when implemented properly, may not only help in producing much needed energy but also aid in significantly reducing the volume of trash after recycling. However, it is important that a clear policy and framework for the utilization of waste-to-energy facilities be laid out by the Philippine government.

Furthermore, **waste diversion** has also been used as an approach to eliminate wastes in disposal facilities. Under RA 9003, LGUs are mandated to have at least 25% waste diversion rate. The City of San Fernando, Pampanga features an excellent case of waste diversion strategies. Before starting its Zero Waste Program in 2012, San Fernando's waste diversion rate was merely 12%. After six months, the city was able to increase the rate to 35% through decentralized door-to-door collection of segregated waste, and the establishment of Materials Recovery Facilities (MRFs) in every barangay, school, and private subdivision. In 2014, two years after the commencement of its Zero Waste Program, the city increased its waste diversion rate to 68%. This highlights the potential of waste diversion approach in limiting the wastes that go into the landfills. Other approaches such as **waste or recycling credit schemes**¹² are also being explored in order to further improve waste management.

4. There is a need to create a market for recycling and provide financial and non-financial incentives for the same.

In order to create waste-to-value, it is imperative that market-based collection system, waste-to-value facilities, and markets be established in order to maximize the potential value of the said wastes. Moreover, the Philippine government is encouraged to create policies and programmes for the provision of incentives (financial and non-financial) to promote recycling industries.

Potential areas for financial incentives may include: 1) energy and electricity; 2) collection and transportation of domestic recyclable materials; 3) waste-to-value facilities promoting co-processing of alternative fuels to cement kilns, and other high-value products such as biofuels, biochar, compost, among others; 4) quantity/quality assurance of recyclable materials; 5) domestic procurement of recyclable materials; and 6) environmental financing. Non-financial incentives may include the following: government initiative on procurement of recycled products (*Green Purchasing Initiative*); 2) environmental labeling (*Green Choice*); and 3) Guidelines for Selecting Recycled Products (*Green Consumer Initiative*).

5. Introduction and integration of environmental education in the formal curriculum

Education undoubtedly plays a crucial role in shaping and motivating positive behavior change. Looking into the Philippines' environmental education model, Section 3 of the Environmental Awareness and Education Act of 2008 (RA 9512) currently provides for the introduction of environmental education in school curricula across the board.

Furthermore, the Law covers both theoretical and practicum modules comprising activities, projects, programs including, but not limited to, tree planting; waste minimization, segregation, recycling and composting; freshwater and marine conservation; forest management and conservation; relevant livelihood opportunities and economic benefits and other such programs and undertakings to aid the implementation of the different environmental protection law.¹³ The ECCP also appreciates the inclusion of waste minimization education in the K-12 Program. However, the curriculum only introduces the said subject starting Fourth Grade.

¹² Waste or recycling credits are intended to incentivize the collection and recycling of household waste for local authorities and also for third parties.

¹³ Department of Natural Resources (2017). The National Environmental Education Action Plan 2018-2040 (Version 1). Retrieved from https://www.switch-asia.eu/fileadmin/user_upload/Publications/2017/PSC_Philippines/National_Environmental_Education_Action_Plan__NEEAP_.pdf

While this is a commendable undertaking, **environmental education must be intensified and introduced at an earlier stage**. New Zealand offers introductory waste minimization courses as early as pre-school.¹⁴ In Asia, good practices can also be learnt from Japan. Since 2000s, schools in Japan have developed diverse approaches to environmental education and have incorporated this into each subject, special activity, and even its moral education. The textbooks on Japanese language and moral education also featured literary works on environmental conservation and protection of nature.¹⁵

Given the complex issue of plastic pollution, a sweeping ban on all single-use plastics is not ideal; a tailor-fit approach must be considered depending on the scenario. Moving forward, the ECCP Environment and Water Committee recommends the following actions:

- Adopt a tailor-fit approach based on thorough scientific studies instead of the unitary sweeping ban of plastics especially without the presence of affordable, viable alternatives;
- Strengthen the enforcement of the RA 9003 or Ecological Solid Waste Management Act of 2000, especially further empowering local government units to comply;
- Create a market for recycling and provide financial and non-financial incentives for the same; and
- Strengthen public awareness on waste minimization and improve implementation of RA 9512 or the National Environmental Awareness and Education Act of 2008.



ASSESSMENT OF 2018 RECOMMENDATIONS

ADVOCACY	RECOMMENDATIONS	COMPLETED / SUBSTANTIAL PROGRESS
Improvement of governance and formulation of a long-term vision for the water sector	Establishment of the Department of Water	
	Proper implementation of the Philippine Water Supply, Sanitation and Sewerage Masterplan	
Establish water quality standards that are achievable and can be properly implemented by all concerned	Phased implementation of the DAO 2016-08	
	Establish regular public-private dialogue	
Utilization of alternative waste disposal to solve waste issues in the country	Employment of integrated recycling plants in pursuit of solving the waste problem in the country and have a clear policy on waste-to-energy (WTE)	

SOME PROGRESS	NO PROGRESS / RETROGRESSION
Water sector reform has been included as one of the priorities of the current Administration. On the legislative front, several bills have already filed as of writing time.	
According to NEDA, the Master Plan is underway and is near completion.	
	No revisions have been made in the said DAO.
Several DENR pronouncements were made on the Department's intention to pursue waste-to energy.	
Waste-to-Energy bills were filed in both Chambers of Congress.	





EUROPEAN CHAMBER OF COMMERCE OF THE PHILIPPINES

 19th Floor, Philippine AXA Life Center Bldg.,
Sen. Gil Puyat Ave. cor. Tindalo Street,
Makati City, Metro Manila, Philippines, 1200

 8845-1324 to 26

 info@eccp.com

 www.eccp.com

