THE PHILIPPINE CHEMICAL INDUSTRY PROFILE

The chemical industry of the Philippines is the third largest sub-sector of the manufacturing industry with Php 480.5 Billion registered revenues as of 2013[1]. The chemical and chemical products sub-sector also remains to be the third largest contributor in the Gross Value Added for Manufacturing until the 3rd quarter of 2017 with Php 163.47 Billion (at constant 2000 prices)[2].

Chemicals touch nearly 90% of all manufactured products. It is also one of the largest tradable products in the world amounting to US$ 6 Trillion in total trade.

SECTORAL COVERAGE[3]

The Philippine Chemical Industry covers the following sub-sectors:

- Basic Chemicals (resins, basic chemicals, gases, organic, inorganic, alcohols)
- Chemical Products (pharmaceutical, soap & detergent, paints, inkcs, cosmetics, fertilizers, pesticides, adhesives)
- Rubber Products (tires, industrial products, re-threading)
- Plastic Products (plastic articles, plastic products, pipes & tubings, industrial products, films, sheets)

INDUSTRY PLAYERS AND ASSOCIATIONS

In 1977, the Samahan sa Pilipinas ng mga Industriyang Kimika (SPIK), or the Chemical Industries Association of the Philippines was organized by chemical company executives who saw the need to strengthen the industry's representation in the government, private, and even the international market. SPIK served as the umbrella organization of chemical industry associations.

The following are the association members of SPIK:

1. Philippine Association of Paint Manufacturers (PAPM)
2. Philippine Plastic Industry Association (PPIA)
3. Philippine Oleochemical Manufacturers Association (POMA)
4. Progressive Association of Printing Ink Manufacturers (PAPIM)
5. Association of Petrochemical Manufacturers of the Philippines (APMP)

Given the diversity of products and the nature of business chemical companies, SPIK has grouped its members into nine sub-sectors, namely: industrial gases, inorganic chemicals, oleochemicals and surfactants, petrochemicals, plastic products, specialty chemicals, coatings, petroleum, agrochemical and fertilizers.

[1] Annual Survey of Philippine Business and Industry (ASPBI) 2013, released 26 Sept 2016
[2] PSA, retrieved 25 Jan 2018
[3] Factbook and Directory Philippine Chemicals Industry, 5th Edition, 2010

SPIK is allied with the International Council of Chemical Associations (ICCA) and advocates Responsible Care, an international program for environment, health and safety. SPIK has 80 member companies representing the different chemical sub-sectors.

MAJOR PLAYERS AND LOCATION

Top 9 major players for the chemical industry:

- Petron
- JG Summit
- Boysen
- RI Chemical Corp.
- Chemrez Technologies
- Atlas Fertilizer
- Phil. Phospate Fertilizer Corp.
- RCI
- Charter Chemical and Coating Corp.

The chemical industry players are mostly located at the National Capital Region, Region 3 – Central Luzon (Bataan), Region 4-A (Laguna and Batangas), Central Visayas (Cebu), Eastern Visayas (Leyte), and Northern Mindanao (Iligan).

MANUFACTURING VALUE ADDED

Table 1 shows the gross value added (in 2000 constant prices) of chemical and chemical products in the Philippines.

Table 1. Chemical and Chemical Products GVA, 2012-2016 (in Php Million)

	2012	2013	2014	2015	2016	2017
Q1	18,652	23,026	24,251	28,892	40,975	42,416
Q2	21,029	38,462	40,675	46,712	48,256	46,640
Q3	23,527	54,939	55,009	63,378	67,359	74,418
Q4	32,058	67,936	71,294	83,059	83,675	
Total*	**95,267**	**184,363**	**191,229**	**220,902**	**240,265**	**163,474**
Growth rates		**93.52%**	**3.72%**	**15.51%**	**8.77%**	**(N/A)**
% to Manufacturing GVA		**11.98%**	**11.47%**	**12.6%**	**12.75%**	**11.2%**

* Details may not add up to totals due to rounding.

Source: PSA (NSCB) 2018

TRADE[4]

The industry is a net importer with import of chemical products growing at an average of 6.11% from 2010 to 2015. In 2016, the import of chemical products grew by 23.69%, amounting to US$ 8.495 Billion. Exports, on the other hand, grew by an average of 7.21% from 2010 to 2015. However, export receipts of Chemical and Chemical Products posted a decline of 12.78% in 2016 valued at US$1.722 Billion against US$ 1.878 Billion in 2015.

[4] PSA processed by DTI-EMB, 2017

The drop in exports for the covered period can also be attributed to the following:

- Tightened regulation of controlled chemicals and precursors

Exports

Figure 1. Philippine Chemical Exports from 2010 to 2016 (in US$ Billion)

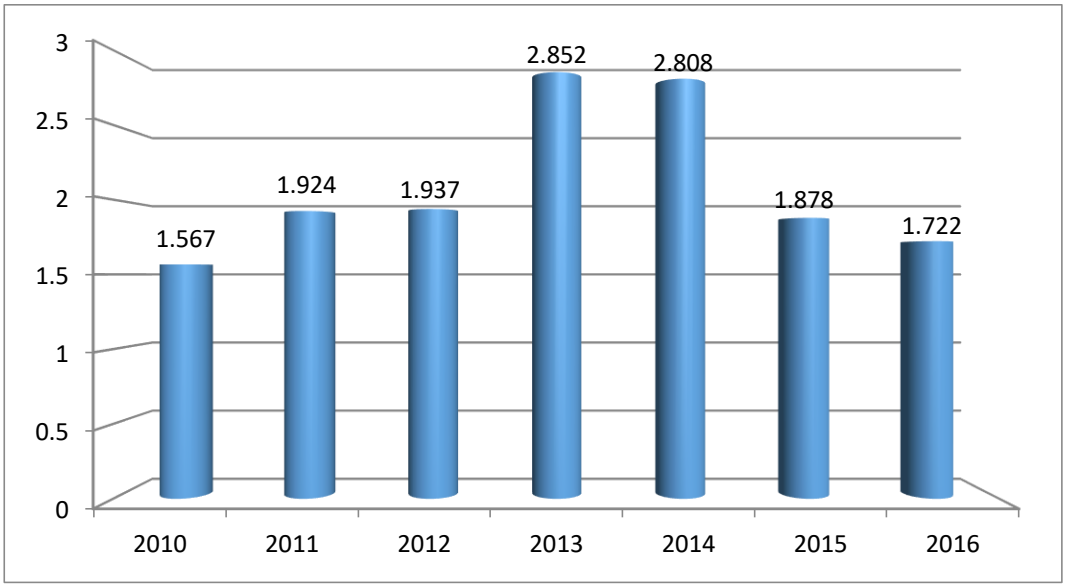


Table 2. Top 10 Philippine Export Destinations in 2016

Country of Destination	Value (US$)
JAPAN	282,014,818
CHINA, PEOPLE'S REP. OF	267,465,587
INDONESIA	130,596,846
TAIWAN (REP. OF CHINA)	95,510,382
UNITED STATES OF AMERICA	83,338,321
MALAYSIA	73,763,003
VIET NAM	65,342,830
THAILAND	65,189,631
NETHERLANDS	54,759,901
AUSTRALIA	45,666,544

Figure 2. Philippine Chemical Imports from 2010 to 2016 (in US$ Billion)

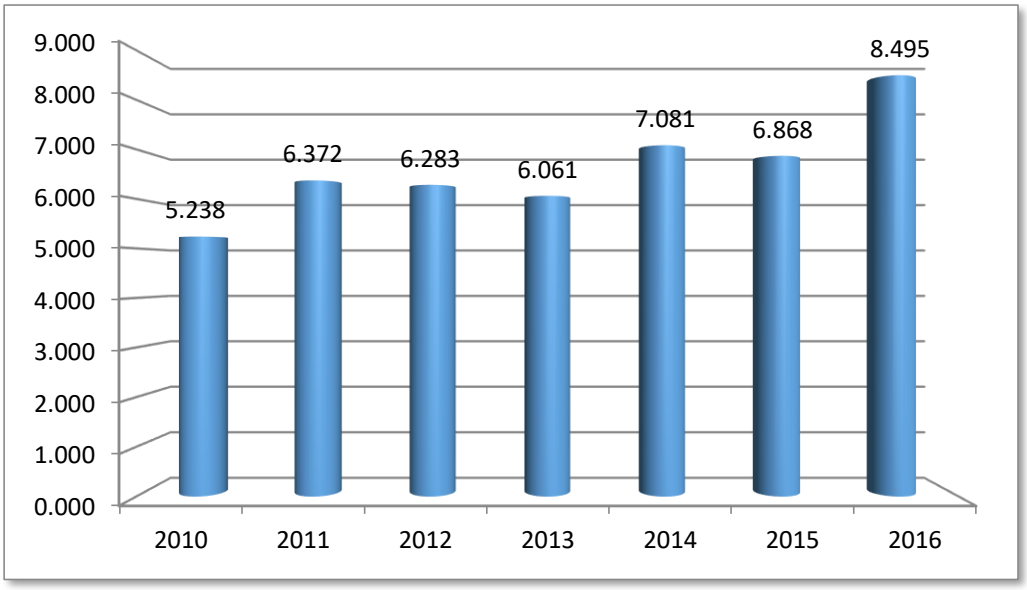


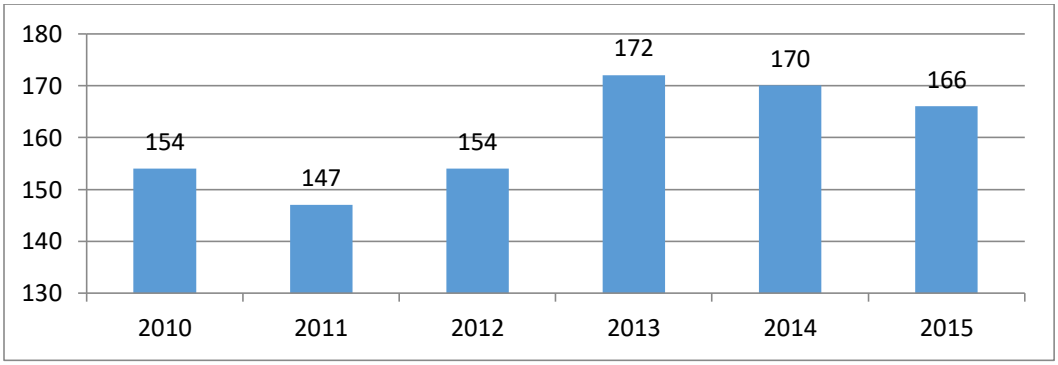
Table 3. Top 10 Philippine Import Sources in 2016

Country of Source	Value (US$)
CHINA, PEOPLE'S REP. OF	1,325,840,260
JAPAN	841,648,498
THAILAND	784,001,004
SINGAPORE	736,138,297
UNITED STATES OF AMERICA	659,462,279
INDONESIA	528,330,105
MALAYSIA	456,755,670
KOREA, REP. OF (SOUTH)	453,903,427
TAIWAN (REP. OF CHINA)	320,059,840
INDIA	296,159,342

EMPLOYMENT[5]

The typical labor composition of the industry are: operators, technical support, maintenance and repair, and clerical and general services, comprising the bulk of workers at 70%; followed by technical and professional staff (engineers, chemists and the like), 20%; and management and supervision, 10%.

Figure 2. Employment in the Chemical Industry from 2010 to 2015 (in thousands)



GOVERNMENT SUPPORT TO INDUSTRY DEVELOPMENT

The chemical industry, being one of the corner stone industries in any economy, should be given support to grow and fully develop to address the needs of the domestic and global markets. Government supports the industry through the following:

a. Roadmapping Activities through the DTI-BOI
b. Technology support through the research and development program of DOST
c. Establishment of science high schools to encourage more students to take on careers in science and technology

Firms can also register with the Board of Investments (BOI) or with the Philippine Economic Zone Authority (PEZA) if their products are for export. Under Book I of the Omnibus Investments Code, BOI-registered enterprises are given a number of fiscal and non-fiscal incentives in the form of tax exemptions and concessions. PEZA also provides fiscal incentives for PEZA-registered enterprises.

Apart from the incentives stated in the Omnibus Investments Code, the BOI crafts the Investment Priorities Plan (IPP) which is a tool for industrial development and economic growth and consists of specific economic activities that are strategic or critical to advance a particular industry or improve the product's value chain.

Chemical products for registration under the 2017 Investment Priorities Plan (IPP) would fall under Manufacturing:

[5] PSA (Bureau of Labor and Employment Statistics, BLES), 2017

- **All Manufacturing Activities Including Agro-Processing**
  This covers the manufacture of industrial goods and processing of agricultural and fishery products, including Halal and Kosher food, into (a) semi-finished/intermediate goods for use as inputs in the production of other goods, or (b) finished products or consumer goods for final consumption.

The BOI has facilitated the establishment of Sectoral Working Groups (SWGs) as a coordinating mechanism through which industry concerns could be addressed. The SWG has been further organized into four action tasks, namely:

- Trade & Investment Matters – the issues regarding industry clustering, tariff concerns, smuggling, and trade and investment promotions.
- Talent Development & Innovation – the issues on skills development and introduction of innovation and process.
- Ease Of Doing Business – the issue on the assistance that the government could provide the industry on streamlining the permit and documentary requirements which overlaps among various agencies.
- Environmental Practices – the issue on plastic banning, life cycle assessment (LCA) and the use of the same as basis of scientific and technological studies in crafting laws that would affect the industries which are deemed should be institutionalized.

Strengths and Opportunities of the Chemical Industry[6]

Strengths:

- Availability of human capital and sector expertise
- Market coverage and development (e.g. after sales support, significant contract volumes)
- Manufacturing competence (in terms of facilities and processes_
- Marketing Skills
- Logistics, Product Quality, Access to good technology
- Network capability for advocacies
- Compliance with environmental regulations
- Customer responsiveness

Opportunities

- Emerging local and international markets
- Shifts in consumer preferences for natural products, health and wellness, and environmentally-friendly products (Increase in global demand for environmentally sustainable and non-toxic products)
- Strong Philippine Economy
- Collaborative environment for industry policy development

Potential Upgrading Trajectories[7]

[6] Philippine Chemicals Industry Roadmap, 2014

[7] Duke University "The Philippines in the Chemical Global Value Chain" May 2016; (Bamber, Frederick, & Gereffi, 2016)

1. Process upgrading and strengthening backward linkages in the coco chemicals sectors (Upgrading coconut production as a raw material for coco chemicals and activated carbon)
   - Guarantee supply for the oleochemicals and activated carbon industry by requiring closer supply chain linkages between the processors and the industry
2. Product and process upgrading for niche markets
   - Finance market research activities regarding key geographic markets, lead firms, specific sourcing requirements and procurement contacts and make information available to firms in the sector
3. Market upgrading for niche green chemicals cluster
   - Position the Philippines as a potential production and investment location for green chemicals globally
4. Product and functional upgrading in activated carbon
   - Employ the use of new technologies to increase productivity and broaden the range of products
   - Encourage direct supply linkages between oleochemicals producers, activated carbon manufacturers and coconut farmers
5. Product diversification in basic inorganic chemicals
   - Formulate pre-feasibility and feasibility studies for high potential minerals such as nickel-based chemicals
6. Entry into production of intermediate and specialty chemicals
   - Initiate human capital development for specialized production facilities (with focus on production, marketing, and sales)
   - Formulate pre-feasibility and feasibility studies for synergistic products that are anticipated to have high demand from the country's manufacturing industries
   - Create opportunities for chemical firms to interact with emerging manufacturing sectors
   - Improve IP protection framework and enforcement in the Philippines