

## IRON AND STEEL INDUSTRY ROADMAP

### ▪ **Mission**

The Philippine Iron and Steel Industry seeks to contribute to the country's sustainable development by manufacturing world-class products for industry and society.

### ▪ **Structure**

By 2030, the Philippine Iron and Steel Industry sees itself as a majority producer of quality steel products for domestic users.

This vision can be achieved when the industry is able to supply 70% of the tonnage of required apparent steel consumption for sustainable economic development in 2030.

### ▪ **Macro-economic benefits to the economy**

One measure of the significance of the iron and steel industry to the whole economy is the multiplier effects of raising the output and investment in the sector. Based on the current economic structure surrounding the steel industry, a new investment of P100 million leads to a P270 million increase in total output, a P24 million rise in household incomes, and 117 new jobs. The figures get higher as linkages with local suppliers and buyers are further developed and locally produced inputs replace imported inputs until the effects approximate the global multipliers.

The iron and steel industry remains a major driver in raising national output. The domestic output multiplier of the industry is higher than construction, private health services, transportation, financial intermediation, wholesale and retail trade, other personal services, real estate, nickel mining, private education and mining / quarrying. It is overtaken by only five other sectors: manufacturing, fishing, agriculture and forestry, electricity/gas/water, and hotel / restaurants.

### ▪ **Share to GDP, employment, and manufacturing output**

Based on the sectoral income accounts of the National Statistical Coordination Board (NSCB), the local iron and steel sector is comprised of the basic metal industries and fabricated metal products. Except for the sharp drop in the first semester of 2012, the share of gross value added (GVA) in the local iron and steel sector to GDP, GVA in industry, and GVA in manufacturing has been fairly stable (See Table 3.5). Share of the iron and steel industry hovered at 0.7% to 0.8% range during the 2003-2011 period before falling to 0.5% in the first half of 2012. The significant decline in the share to GDP is largely attributed to the 20.6% contraction

in output of the iron and steel industry coupled with the 6.1% expansion in the domestic economy.

▪ **Trade Performance (Exports and Imports)**

Considering the local iron and steel industry’s limited production, the country imports about half of its requirements. Over the past two years, there has been a noticeable increase in imports iron and steel products. In 2011, importations expanded by some 24% to 3.92 million MT. The expansion in imports of iron and steel products was due in part, to the shutdown status of Global Steel, the sole manufacturer of flat products, and to higher demand by the construction sector as a result of the recovery of the real estate sector.

<b>Imports of Iron and Steel Products (in metric tons)</b>		
<b>Year</b>	<b>Total Imports</b>	<b>% change</b>
2007	3,432,639	11.6
2008	3,018,172	-12.1
2009	2,830,103	-6.2
2010	3,170,891	12.0
2011	3,921,994	23.7

The export performance of the Philippine iron and steel industry has been very erratic since 2004 (See Table 3.10). From a measly 92,339 MT in 2004, export volume increased by a whopping 275% to 346,076 MT in 2006. The uptrend in exports was largely attributed to attributed to Global Steel’s sales strategy of allocating more volumes for the export market. Also, higher volumes of export sales were realized for galvanized sheets. However, the strong export performance was short-lived as volumes dropped to 74,389 MT in 2009, when Global Steel began experiencing cash flow problems. The estimated export volume of iron and steel products in 2010 was 105,103 MT --- 70% lower than the industry’s all-time high.

<b>Table 3.10 - Exports of Iron and Steel Products<sup>11</sup> (in metric tons) Year</b>	<b>Total Exports</b>	<b>% change</b>
2004	92,339	
2005	162,324	75.8
2006	346,076	113.2
2007	219,949	-36.4
2008	150,516	-31.6
2009	74,389	-50.6
2010	105,103	41.3

Historically, the Philippines has been a net importer of iron and steel products (See Table 3.12). Net imports amounted to 3.04 million MT in 2010, an increase of 10.4% over the previous year. With the exception of Japan and Taiwan, all SEASI member countries are net importers of iron and steel products.

<b>Table 3.12 - Trade Performance, Philippines: 2004-2010 (in metric tons) Year</b>	<b>Exports</b>	<b>Imports</b>	<b>Trade Balance</b>
2004	92,339	2,866,458	-2,774,119
2005	162,324	2,721,205	-2,558,881
2006	346,076	3,076,805	-2,730,729
2007	219,949	3,432,639	-3,212,690
2008	150,516	3,018,172	-2,867,656
2009	74,389	2,830,103	-2,755,714
2010	105,103	3,147,891	-3,042,788

▪ **Linkages with other industries**

The iron and steel industry is widely considered one of the catalysts of industrialization and a major backbone of all industries in the economy. In fact, industrialization in many countries is strategically linked with the growth and development of the iron and steel industry.

Sustained long-run economic growth will require, among others, growth in public spending for infrastructure and private construction spending. Greater public spending on infrastructure and private construction spending will undoubtedly boost demand for iron and steel products.

In the Philippines, the surge of public-private partnerships in infrastructure development, expansion of the real estate industry, growth of the housing industry, and the emergence of the shipbuilding industry will intensify demand for iron and steel products.

To meet demand for its products, the iron and steel industry relies on other industries for production inputs and on households for labor inputs. The web of production interrelationships between the iron and steel industry and the rest of the economy intensifies production linkages and produces multiplier effects that help expand output, household income, and employment.

Input-output analysis was used to quantify the multiplier effects of the Philippine iron and steel industry and to measure the strength and diffusion of the industry's production.

The production structure of the steel industry consists primarily of intermediate inputs which account for about 66 percent. The major intermediate inputs of the iron and steel industry are as follows:

1. Blast furnace, steel making furnace, steel works, and rolling mills
2. Electricity
3. Wholesale and Retail Trade
4. Manufacture of Non-Metallic Mineral Products (not elsewhere classified)
5. Petroleum Refineries

About 25.2 percent of the production structure of the iron and steel industry can be traced to financial capital, 6.3 percent to labor inputs, two percent to physical capital inputs, and about 0.5 percent to other primary inputs. In sum, about 34 percent of the production structure of the iron and steel industry can be attributed to primary inputs.

### ▪ **Opportunities**

Three trends are making it likely that the Philippines is poised to enter a phase of long term rapid economic growth which will deepen and broaden markets for houses, roads and other products that will require steel products. First, the labor force will be growing faster (increasing by over 1 million per year) than the youth and elderly. Second, the government and private sector are investing more in the health and schooling of people. Third, the country is currently one of the darlings of local and foreign investors which could be further reinforced by a possible raise of our sovereign credit rating to investment grade based on real gains in fighting corruption and managing government finances.

We reckon that is likely that the government, companies and civil society could work together to prepare this labor force by investing in their health and schooling and to attract the investments that will generate the well-paid jobs to match this prepared labor force which could cause the Philippine economy to grow from 7-10% a year till 2040: the 2011 GDP per person in 2011 prices (\$2,345) could at least double in 2026 (\$4,700); quadruple in 2040 (\$9,400). The resulting growth of the middle class should raise the demand for roads, houses and office buildings—which should expand the demand for reinforcing bars, galvanized sheets and other locally produced steel products.

Four other trends—higher wages of Chinese workers, labor shortage in Japan and Korea, the flooding of export manufacturing zones in Thailand, and the slowdown in the Chinese economy—are making these major industry players look at the Philippines as a possible site for market and production expansion. If we are able to attract investments into appliances, ships and auto parts and to form part of a regional production chain to manufacture these products to form a critical mass of downstream users of flat steel products, we could attract more foreign industry players to form joint ventures with local players—which have emerged leaner and stronger after surviving the adverse economic conditions of the past decade—to produce flat steel products.



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