IRON AND STEEL

BASIC INDUSTRY INFORMATION

Product/Service Coverage
- **Long products** – used by the domestic construction sector (sections, bars, wire rods).
- **Flat products** – plates, hot-rolled sheets and strips, cold-rolled sheets and strips, tin plates, other metallic-coated sheets, pipes and tubes

Major Players
1. Steel Making (Long Product Sector)
   - Stronghold Steel Corporation
   - Cathay Pacific Steel Corporation
   - Treasure Steelworks Corporation
   - Ferromet Resources Inc.
2. Rolling Mills (Long Product Sector)
   - Capitol Steel Corporation
   - Pag-asa Steel Works, Inc.
   - Steel Asia Manufacturing Corp.
   - High Street (SPV-AMC), Inc.
   - Lunar Steel Corporation
   - Maxima Steel Mills Corp.
   - New Carcar Mfg. Inc.
3. Wire Product Manufacturing (Long Product Sector)
   - LLN Products & Services Corp.
   - Sterling Steel Inc.
4. Hot & Cold Rolling/ Galvanizing & Coil Coating (Flat Products)
   - Puyat Steel Corporation
   - Galvaphil Inc.
   - Union Galvasteel Corporation
   - Jacinto Color Steel Inc.
5. Pipe & Tube Manufacturing Sector (Flat Products)
   - Supreme Steel Pipe Construction
   - Super Industrial Corporation

Industry Association/s
- Phil Iron and Steel Institute
- Phil Steelmakers Association
- Phil Steel Rolling Mills Association
- Association of Phil Steel Mills
- Steel Angles, Shapes & Section Manufacturers Assoc. of Phils.
- Wire Roper Manufacturers Association of the Phil (WRMAP)
- Phil Galvanizers and Coaters Association
- Filipino Galvanizers Institute (FGI)
- Pipes and Tubes Manufacturers Assoc.
- Philippine Association of Steel Formers, Inc. (PASI)
- Tin Can Manufacturers Association (TCMAPI)
- Phil Iron and Steel Traders Association

Linkages
- Major Intermediate Inputs (66%)
- Blast furnace, steel making furnace, steel works, rolling mills
- Electricity
- Wholesale and retail trade
- Manufacture of Non-Metallic Mineral Products
- Petroleum Refineries

INDUSTRY ROADMAP

Roadmap was submitted to BOI on January 2013 by PH Iron & Steel Institute (PISI)

OPERATIONAL MANAGEMENT TEAM

BOI Sectoral Champion: Dir. Evariste M. Cagatan (BOI)
Industry Champion: Mr. Roberto M. Cola (PISI)

VISION, GOALS AND TARGETS

VISION
By 2030, the Philippine Iron & Steel industry sees itself as a globally competitive provider of quality steel products for domestic users

GOALS
ASC of 20 Million MT by 2030, translating to 130 kg per capita (from 50 kg per capita in 2012)

TARGETS
1. 70% Local Production share of Finished Goods by 2030 (from 50% in 2012)
2. Secured and competitively-priced raw material requirements for steel-making by 2015

OPPORTUNITIES
- Excellent PH economic growth prospects and improving credit investment rating.
- Unserved actual demand e.g. infrastructure, shipbuilding, tinplates, etc.
- Idle steel capacities for possible reactivation & rehabilitation
- Emerging investment opportunities in upstream or downstream industries wherein local businessmen & foreign investors can partner in to enter the sector’s value chain
- A growing pool of workers and engineers
- The manufacturing resurgence program through the industry roadmaps will attract more investments into downstream industries e.g. appliances, ships and shipbuilding, auto parts and can be an introduction.
- Growth in public spending for infrastructure and private construction spending will boost demand for iron and steel products.
- The surge of public-private partnerships in infrastructure development, expansion growth in the real estate industry and the housing industry, and the emergence of the shipbuilding industry will intensify demand for iron and steel products.
- Reconstruction of typhoon and earthquake affected areas

Prepared by: Manufacturing Industries Services (MIS) Heavy Industries Division (HID) – BOARD OF INVESTMENTS
Summary of Key Steel Performance

<table>
<thead>
<tr>
<th></th>
<th>In Metric Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crude Steel Production</td>
<td>1,075,182</td>
</tr>
<tr>
<td>Finished Steel Production</td>
<td>5,591,038</td>
</tr>
<tr>
<td>Finished Steel Import</td>
<td>5,497,958</td>
</tr>
<tr>
<td>Finished Steel Export</td>
<td>100,000</td>
</tr>
<tr>
<td>Apparent Steel Consumption</td>
<td>9,677,422</td>
</tr>
</tbody>
</table>

Source: PISI PH Country Report

Apparent Steel Consumption

<table>
<thead>
<tr>
<th></th>
<th>In Metric Tons</th>
<th>Yr-Yr Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2015</td>
<td>2016</td>
</tr>
<tr>
<td><strong>LONG PRODUCTS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Production *</td>
<td>4,013,251</td>
<td>4,346,038</td>
</tr>
<tr>
<td>Import</td>
<td>1,789,036</td>
<td>1,922,200</td>
</tr>
<tr>
<td>Export</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apparent Consumption</td>
<td>5,811,287</td>
<td>6,268,238</td>
</tr>
<tr>
<td><strong>FLAT PRODUCTS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Import</td>
<td>3,048,413</td>
<td>3,509,184</td>
</tr>
<tr>
<td>Export</td>
<td>100,000</td>
<td>100,000</td>
</tr>
<tr>
<td>Apparent Consumption</td>
<td>2,948,413</td>
<td>3,409,184</td>
</tr>
<tr>
<td>Total Long &amp; Flat Products</td>
<td>8,759,700</td>
<td>9,677,422</td>
</tr>
</tbody>
</table>

Sources: Bureau of Customs (BOC), Department of Trade & Industry (DTI) & Industry Sources
* Covers hot rolled products only in order to avoid double counting AND excludes bar products converted from wire rods

Breakdown of Finished Steel Production

<table>
<thead>
<tr>
<th></th>
<th>In Metric Tons</th>
<th>Yr-Yr Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2016</td>
<td>2015</td>
</tr>
<tr>
<td>Long Products</td>
<td>4,966,038</td>
<td>4,633,251</td>
</tr>
<tr>
<td>Bars</td>
<td>4,256,038</td>
<td>3,953,251</td>
</tr>
<tr>
<td>Shapes &amp; Sections</td>
<td>490,000</td>
<td>460,000</td>
</tr>
<tr>
<td>Wire</td>
<td>220,000</td>
<td>220,000</td>
</tr>
<tr>
<td>Flat Products</td>
<td>850,000</td>
<td>1,150,000</td>
</tr>
<tr>
<td>Hot Rolled Coils</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cold Rolled Coils</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GI Sheets/ Pre-Painted/ Zn-Al</td>
<td>520,000</td>
<td>820,000</td>
</tr>
<tr>
<td>Pipes and Tubes</td>
<td>330,000</td>
<td>330,000</td>
</tr>
</tbody>
</table>

Source: PISI PH Country Report 2015

CHALLENGES TO THE IMPLEMENTATION OF THE ROADMAP

- Brain drain among skilled workers
- High distribution cost
- High power costs
- Implementation & monitoring of Product Standards
- Increased volatility in the cost of raw materials of steel
- Lack of Industry data and statistics
- Port congestion
- Product standards
- Smuggling
- Truck weight limit

Philippine Advantages (related to the sector)

- Open Market Economy Reforms
- Quality Human Resource
- Strategically Located in Asia
- Reliable Infrastructure Support
- Competitive Investment Incentives
- Deregulation of Industries

Government Support

- Incentives to encourage iron making facilities and flat products manufacturing
- Incentives to modernize and rehabilitate facilities
- Strict enforcement of customs laws and technical regulations
- Discourage export of iron ore and scrap iron
- Support R&D for product development

RECOMMENDATIONS

- Improve the reliability in the supply of power and lower electricity costs through a full developed Wholesale Electricity Spot Market
- Keep a credible and consistent set of investment policies to attract both local and foreign investments
- Enlarge the pool of workers for the industry through more improve skills training
- Maintain an industry data bank to have a consistent and timely delivered industry data
- Sustain companies’ competitive advantage by upgrading their capacities continuously
- Adopt the strategies of our ASEAN neighbors
- Study the feasibility of integrating upstream all the way to mining to satisfy input requirements
- Improve production cost efficiencies
- Identify new products in which industry players can diversify into

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