ENGINEERING INDUSTRY OF PAKISTAN


**METAL PRODUCTS**

- Table, kitchen and other cutlery, knives, Hand tools, files, hammers saws, garden tools, surgical, medical, and dental instruments, sanitary fittings
- Aluminum utensils, copper and brass utensils, Steel utensils
- Bolts, screws, and nuts
- Light steel fabricated structures, ducts, metal doors, windows and grills, steel furniture, stampings and simple pressings, Non-electric household appliances (gas heaters and cookers) Steel fencing wire, barbed wire, ropes, nails, metal trunks, agricultural implements, plumbing and sanitary fittings, drums, small containers, tin plate cans, steel cans, non-ferrous cans and containers, metal boxes Locks, padlocks, general hardware
- Motor vehicles, motor cycles, tractors, LCVs, trucks, buses, & parts, Boats

**ELECTRICAL EQUIPMENT**

- Ceilings, wall extraction, circo, pedestal, and table fans
- Switchgear and circuit breakers, construction of switchboards and control equipment for transmission and distribution of electrical energy
- Distribution oil filled transformers, diesel power generator sets and large and small electric motors
- Domestic refrigerators and deep freezers, air-conditioners and washing machines, TV & Radio
- Wire & cables industry PVC insulated, enameled and power transmission types, electrical bulbs and tubes, dry and wet cell batteries, electrical accessories such as plastic sockets, plugs, miniature circuit breakers and electric meters, Tube lights & bulbs

**MECHANICAL MACHINERY**

- Diesel engines (Non-Stationery)
- Metal and woodworking machinery
- Textile machinery
- Industrial Machinery (excluding agricultural, metal and textile machinery)
- Sewing machines as well as agricultural machinery, pumps, compressors, service industry machines, etc, but excludes farm tractors

**BASE METALS**

- Mild steel ingots and billets
- Mild steel bars, rods, light and medium sections, and transmission towers
- Iron, steel and non-ferrous castings
- Steel tubes and pipes
- Steel forgings & casting
ENGINEERING INDUSTRY

ELECTRONICS
• Radios and TV sets, tape recorders, equipment, VCRs, dictation machines
• Telephone and telephone carrier system, defense communications equipment

NON-METALS
• Bottles, jars etc.
• Sheet glass
• Tableware, Pharmaceutical containers, Fluorescent Tubes, etc.
• Ceramic insulators
• Tableware, wall tiles, sanitary ware, etc.)

OTHER PRODUCTS
• Rubber and rubber products
• Plastic products
ENGINEERING INDUSTRY

- Civil Engineering Projects
- Civil Engineering Services
  - Architects
  - Structural Engineers
  - Design of
    - Bridges
    - Airports
    - Dams
    - Canals etc
  - Other faces of civil engineering
- Aeronautical Engineering
  - Parts, manufacturing and assembling of aircrafts
- Marine Engineering
  - Design, development, production and maintenance of the equipment used at sea and on board vessels
SIGNIFICANCE OF ENGINEERING GOODS INDUSTRY

- Contributes around 4.8% to the total exports of Pakistan
- Contributes US $10 billion to the GDP of Pakistan
- Provides employment to around 3 million individuals
- Saves US $18 billion per annum through import substitution
- The only sector that has the largest and strongest cross-sectoral linkages and can drive the industrial growth in the country
ISSUES FACED

• Employment Issues
  • Availability of Skills
  • Wages

• Lack of Value Addition
  • Absence of technology up-gradation and plant modernization
  • Engineering industry mostly operates in the un-organized sector e.g. small workshops manufacture small items using conventional methods and machines.

• Strategic Self- Reliance
• Low productivity
• High cost of input
• Low volumes, inward looking
• Lack of competitiveness.
<table>
<thead>
<tr>
<th>Projects</th>
<th>Location</th>
<th>Size</th>
<th>Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up-gradation of Khi-Pesh Railway Track (ML -1)</td>
<td>Karachi-Lahore-Peshawar</td>
<td>1,872 km</td>
<td>8,172 US$ Million</td>
</tr>
<tr>
<td>KKH Phase II Expressway</td>
<td>Thakot-Havelian Section</td>
<td>118 km</td>
<td>1,313 US$ Million</td>
</tr>
<tr>
<td>Peshawar Karachi Motorway</td>
<td>Multan-Sukkur Section</td>
<td>392 km</td>
<td>2,889 US$ Million</td>
</tr>
<tr>
<td>Suki Kinari Hydropower Station</td>
<td>Naran KPK</td>
<td>870 MW</td>
<td>1,707 US$ Million</td>
</tr>
<tr>
<td>RYK Fuel Power Plant</td>
<td>Rahim Yar Khan</td>
<td>1320 MW</td>
<td>1,600 US$ Million</td>
</tr>
<tr>
<td>Cross Border Optical Fibre Cable</td>
<td>GB, KPK, Punjab</td>
<td>820 km</td>
<td>US$ 37 Million</td>
</tr>
</tbody>
</table>

Source: Planning Commission of Pakistan
<table>
<thead>
<tr>
<th>Elements</th>
<th>India</th>
<th>China</th>
<th>Bangladesh</th>
<th>Vietnam</th>
<th>Pakistan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity Tariff Cents/KWT</td>
<td>8</td>
<td>8</td>
<td>9</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Gas Tariff US $/mm BTU</td>
<td>3.4</td>
<td>-</td>
<td>5.2</td>
<td>4.2</td>
<td>7</td>
</tr>
<tr>
<td>Minimum Wage Rate US $/Month</td>
<td>72.67</td>
<td>351.2</td>
<td>63.26</td>
<td>171</td>
<td>112.78</td>
</tr>
<tr>
<td>Land Cost, Leasing Price (US $/SQM)</td>
<td>80</td>
<td>40-80</td>
<td>-</td>
<td>140</td>
<td>20-40</td>
</tr>
<tr>
<td>Raw Water Cost (US cent/m3)</td>
<td>46</td>
<td>45</td>
<td>30</td>
<td>48</td>
<td>18</td>
</tr>
<tr>
<td>Steam (US cent/kg)</td>
<td>1.3</td>
<td>1.64</td>
<td>-</td>
<td>1.2</td>
<td>1.1</td>
</tr>
<tr>
<td>Transportation (Diesel Rate US Cents/Liter)</td>
<td>105</td>
<td>102</td>
<td>78</td>
<td>80</td>
<td>80</td>
</tr>
<tr>
<td>Exchange Rate 1 US $/local currency (12-Nov-2018)</td>
<td>72.90</td>
<td>6.97</td>
<td>83.99</td>
<td>23,502</td>
<td>143.80</td>
</tr>
</tbody>
</table>
## IMPACT OF DUTIES ON RAW MATERIALS

<table>
<thead>
<tr>
<th>Raw Material</th>
<th>HS Code</th>
<th>CD %</th>
<th>RD %</th>
<th>ACD %</th>
<th>Punjab + Sindh CESS %</th>
<th>Impact of CD, RD &amp; CESS %</th>
<th>ST %</th>
<th>WHT %</th>
<th>TOTAL Impact %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel Sheets</td>
<td>72.13</td>
<td>20</td>
<td>30</td>
<td>2</td>
<td>2.05</td>
<td>54.05</td>
<td>17</td>
<td>6</td>
<td>88.5</td>
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<tr>
<td>Aluminum Bars</td>
<td>76.01</td>
<td>3</td>
<td>10</td>
<td>2</td>
<td>2.05</td>
<td>17.05</td>
<td>17</td>
<td>6</td>
<td>42.62</td>
</tr>
<tr>
<td>Plastics</td>
<td>39.01</td>
<td>11</td>
<td>0</td>
<td>2</td>
<td>2.05</td>
<td>15.05</td>
<td>17</td>
<td>1.7</td>
<td>40.14</td>
</tr>
</tbody>
</table>
ENGINEERING IMPORTS

Source: ITC World Trade Map

USD Million

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>11525.90</td>
</tr>
<tr>
<td>2014</td>
<td>13792.32</td>
</tr>
<tr>
<td>2015</td>
<td>15184.81</td>
</tr>
<tr>
<td>2016</td>
<td>18251.72</td>
</tr>
<tr>
<td>2017</td>
<td>21505.66</td>
</tr>
</tbody>
</table>
KEY DRIVERS OF GROWTH STRATEGY

◆ Focus on market enhancement, both domestic and global
◆ Ensure free mobility of Factors of Production to enhance competitiveness
◆ Facilitate transfer of technology to enable shift to a higher technological orbit
◆ Ensure free flow / availability of information across all sectors
◆ Focus on Proactive / Targeted HR development
◆ Transform Government philosophy from Control to Support
◆ Enhance the depth of Industrialisation to support Defence and other sectors of the economy
Recommendations

◆ Technology

➔ Projects resulting in transfer of technology should be encouraged
➔ Formulate clear cut policy to promote technology up-gradation
➔ Expedite disbursement of TDF with project evaluations from Engineering Universities
➔ Facilitate adoption of Engineering Standards; role of PSQCA be strengthened

◆ Human Resource

➔ Technical Education budget be fixed as 1% of the total annual outlay for at least first five years
➔ Engineering Universities should be controlled by an autonomous Board comprising of members from the Engineering Industry
➔ Engage foreign consultants to introduce process efficiencies and upgrade skills and technology
RECOMMENDATIONS

◆ Regulatory

➔ Formulate a long term Industrial Policy
➔ Policy making in coordination and consultation with the stakeholders to avoid sudden business shocks
➔ Reform taxation system to ensure effective implementation of R&D tax benefits, timely tax refunds and implementation of sales tax throughout the value chain (up to retail stage)
➔ Remove discrepancies/anomalies of preferential treatment for duty free imports, particularly for infrastructure projects
➔ Implement intellectual property laws and monitor through proper enforcement system
➔ Formulate productivity oriented labour policy
➔ Restructure/re-organise EDB for effective support to the Industry
RECOMMENDATIONS

◆ Trade and Marketing
  ➔ Country image to be improved
  ➔ Become a part of an effective trade bloc
  ➔ Industrial representation in negotiation/resolution of important issues with all the multilateral organizations like ILO, WTO etc

◆ Finance
  ➔ Access to long term funds owing to long gestation period
  ➔ Streamline repossession laws and procedures
  ➔ 75% of TDF should be allocated to the engineering sector
  ➔ Establishment of EXIM bank

◆ Other
  ➔ Political Stability is necessary to ensure effective implementation of reforms
  ➔ Law & Order situation be improved to ensure conducive investment climate
ENGINEERING EXPORT PROJECTION FOR NEXT 5 YEARS

If nothing Changes
If Engineering given Export Sector Status
• Car Sales in the first five months of FY 2018-19 increased marginally by 0.71% to 87,897 units as compared to 87,273 units in the same period last year.

• Sales of Motorcycles in the first five months of FY 2018-19 decreased marginally by 0.72% to 780,601 units as compared to 786,223 units in the same period last year.

• Sales of Farm Tractors in the first five months of FY 2018-19 decreased by 12.82% to 23,829 units as compared to 27,334 units in the same period last year.
RECOMMENDATIONS FOR AUTO INDUSTRY

• Increase domestic market demand of vehicles by curtailing used car imports.
• Formulate strategies to become a part of the global supplier chain.
• Implement quality/safety and environment standards for automobiles.
• Incentivize localization to broaden domestic auto parts manufacturing base.
• Incentivize design and development so that technology is brought to Pakistan.
• Engage global consultants to explore the untapped potential of auto parts exports.
• Control smuggling and under-invoicing by strict monitoring, to protect the local auto parts manufacturers.
• Up-grade testing facilities and revive Vendor Development and Training Cell.