



IRON & STEEL

PAKISTAN ECONOMIC FORUM

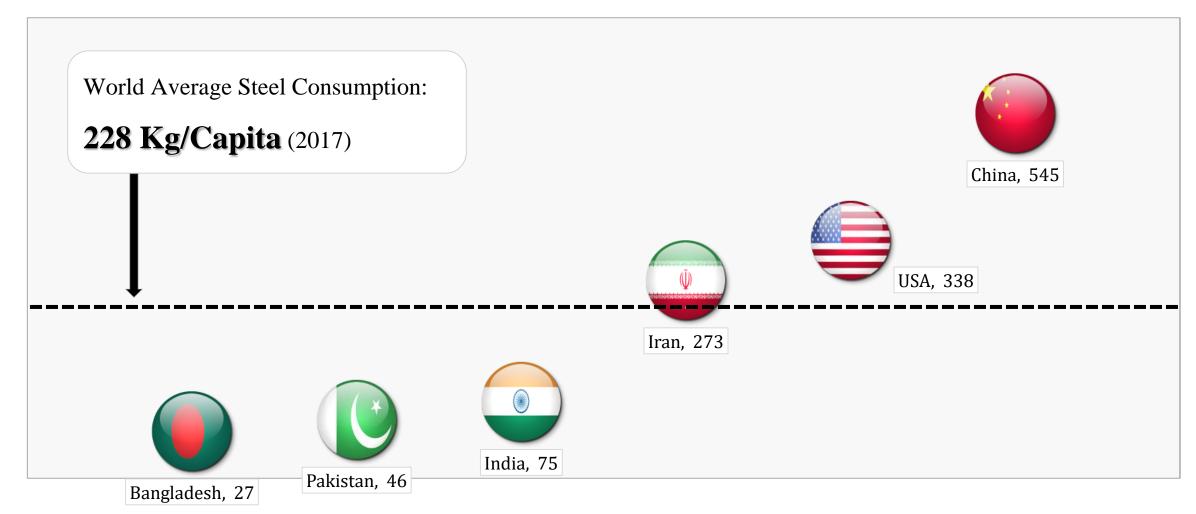
13th DECEMBER 2018





STEEL CONSUMPTION PER CAPITA





- Potential for Pakistan to increase per capita steel consumption by up to 5 times
- During the last 5 years Pakistan had a CAGR of 19% for steel products

Source: World Steel Association



WORLD STEEL PRODUCTION



Metric Tons (MT) in Millions

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Rank	Countries	1980	1990	2000	2010	2017
1	China	37	66	127	639	832
2	Japan	111	110	106	110	105
3	India	10	15	27	69	101
4	USA	124	90	102	80	82
5	USSR / Russia	147	67	59	67	71
28	Pakistan	n/a	0.78	1.0	0.8	5
	WORLD	717	770	847	1,433	1,689

• Exponential rise in Chinese steel output from 2000 - 2017

 Pakistan's private sector steel industry driving growth from 2010 onwards

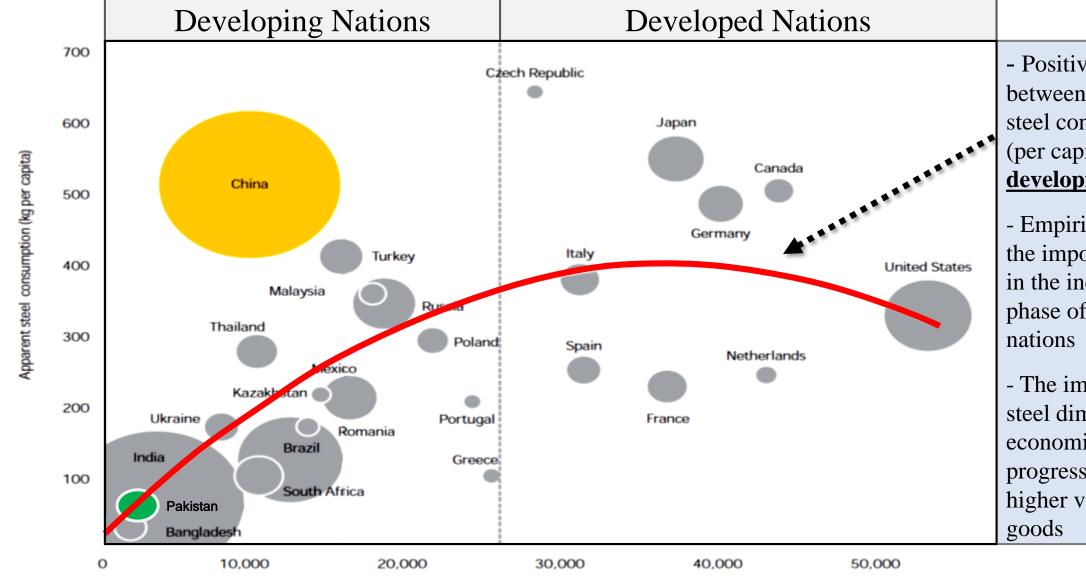
Currently 70% of steel worldwide is made from iron ore, 30% from recycled scrap

Source: World Steel Association



GDP VS. STEEL CONSUMPTION (PER CAPITA)





- Positive correlation between GDP & steel consumption (per capita) for developing nations

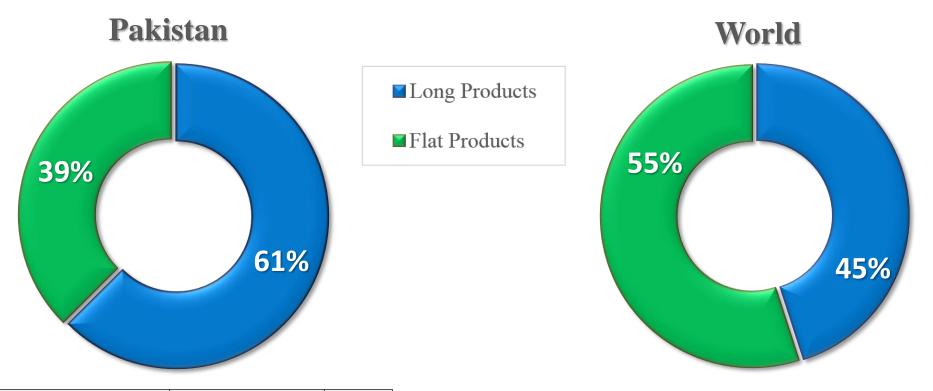
- Empirical data shows the importance of steel in the industrialization phase of developing nations
- The importance of steel diminishes as economies mature and progress towards higher value added goods

GDP per capita



WORLD VS. PAKISTAN'S STEEL PRODUCT MIX





Product Category	Market Size (MT in millions)	%
Long Products	5.5	61
Flat Products	3.5	39
Total	9	100

Product Category	Market Size (MT in millions)	%
Long Products	760	45
Flat Products	929	55
Total	1,689	100

Pakistan has inverse ratio as compared to the world in production between long and flat products



PAKISTAN'S STEEL DEMAND OUTLOOK



Steel consumption growing at 19% CAGR during last 5 years

INDIGENIZATION DRIVING GROWTH

- Expansion of all major listed private sector flat and long steel producers in 2018
- Upcoming PSX listings in long products to further strengthen engineering sector capabilities
- Infrastructure development to drive demand for long and flat products

DOWNSTREAM INDUSTRIES GRADUALLY LOCALIZING

- Autos
- Appliance manufacturers,
- Tube manufacturers
- Other various fabrication industries

VALUE ADDITION TO CAPTURE DOWNSTREAM RETAIL DEMAND

• Investment in steel service centers to capture additional retail level demand and boost entrepreneurial drive



ENHANCING DOMESTIC STEEL PRODUCTION



Enhancement of 9 million MT / annum

Investment = \$ 2.2 billion

Land	1,000 acres
Energy	1,800 MW
Water	15 million gallons / day





Policy Support

Tariff Support

- 1. Limit mutually agreed tariff support to maximum 10 years for finished products and raw materials
- 2. Essential to build scale in presence of China-Pakistan FTA

Energy

1. Gas at the rate for the five export sectors for import substitution

Finance

- 1. Forward cover for import of machinery
- 2. LTTF for 50% of project cost

Taxation

- 1. No tax holiday required
- 2. Exemption from Minimum Income Tax, Alternate Corporate Tax

Quality

1. PSQCA to be strengthened to limit sub-standard steel products



BENEFITS OF LOCAL MANUFACTURING



Enhancement of 9 million MT / annum

Investment US\$ 2.2 billion

4.5 million MT Flat Products + 4.5 million MT Long Products

US\$ 2.2 billion / annum

Foreign currency savings through import substitution

11% balance of payments of FY 17

100,000+ Jobs

(20,000 Direct Skilled + 80,000 Indirect)

Development of local labor & technical expertise

10 Times

Anticipated **multiplier effect** on GDP of having strong industrial steel base

Source: Pakistan China Joint Chamber of Commerce and Industry Research and Development Cell

Technology Transfer

Enhanced engineering capability and support for downstream industries



PAKISTAN STEEL MILLS LTD. (PSM)



OVERVIEW		
Capacity & Production	 Current capacity 1.1 million MT/ annum (expandable up to 3 million MT/ annum) At current capacity PSM needs 5 times increase in capacity to meet domestic demand of just long products Highest ever production approx. 1,000,000 MT / annum (2003-04) 	
Raw Material	- Imported high grade iron ore and coking coal. Other minor raw materials sourced domestically	
Area	- 19,000 acres (including 8,000 acres for employee housing colonies)	
Workforce	- Approx. 11,000 people (Year 1990: 27,500 people). Significant shortage of technically trained manpower	
Estimated repair cost	- <u>PKR 24 billion</u> (excluding HSM, CRM, galvanizing and expansion up to 3 million MT) - Blast furnace, coke oven batteries, by-product plant, and pipelines require technical audit to ascertain actual cost	

WAY FORWARD

Conduct technical audit to ascertain health of steelmaking machinery & equipment

As per experts <u>current capacity of 1.1 million MT is sub-economical</u> due to high cost of production. To compete with imported material & realize economies of scale, <u>capacity to be increased to 3 million MT</u> at minimal cost as infrastructure for this has been provided in the original design

Assessment of available technical and semi-skilled man power

Conversion of billet into bar mill to be considered in view of CPEC projects





THANK YOU!

