

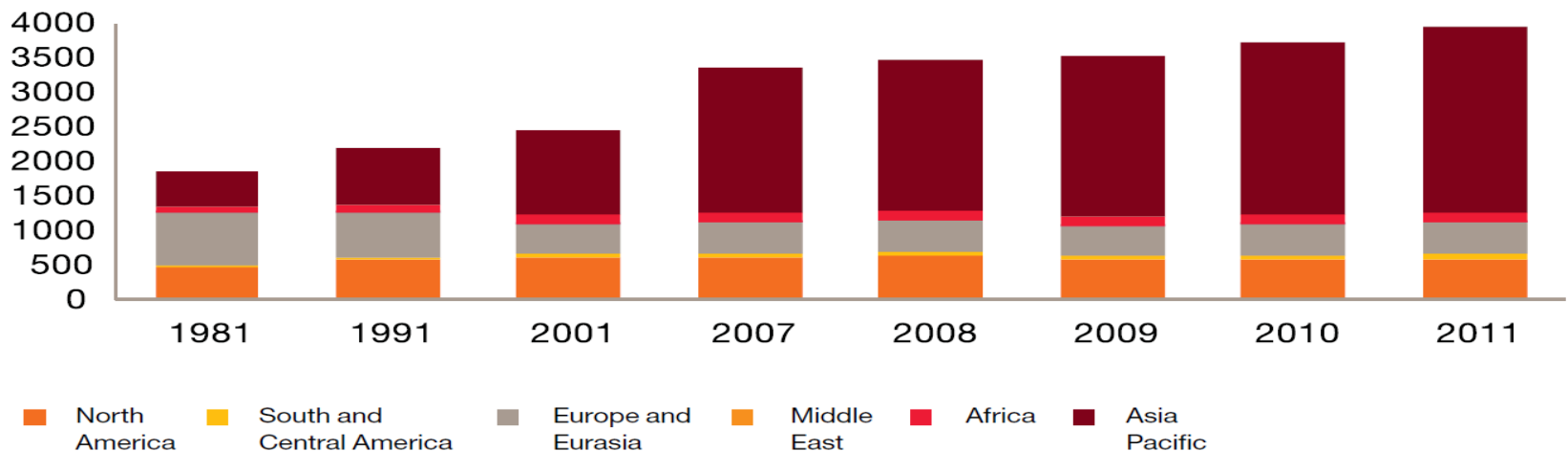
Sustaining India's Coal Imports

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Coal: Reserves & Requirements

- Global coal reserves: 861 billion tonnes
- Indian coal reserves: Estimated 286 billion tonnes

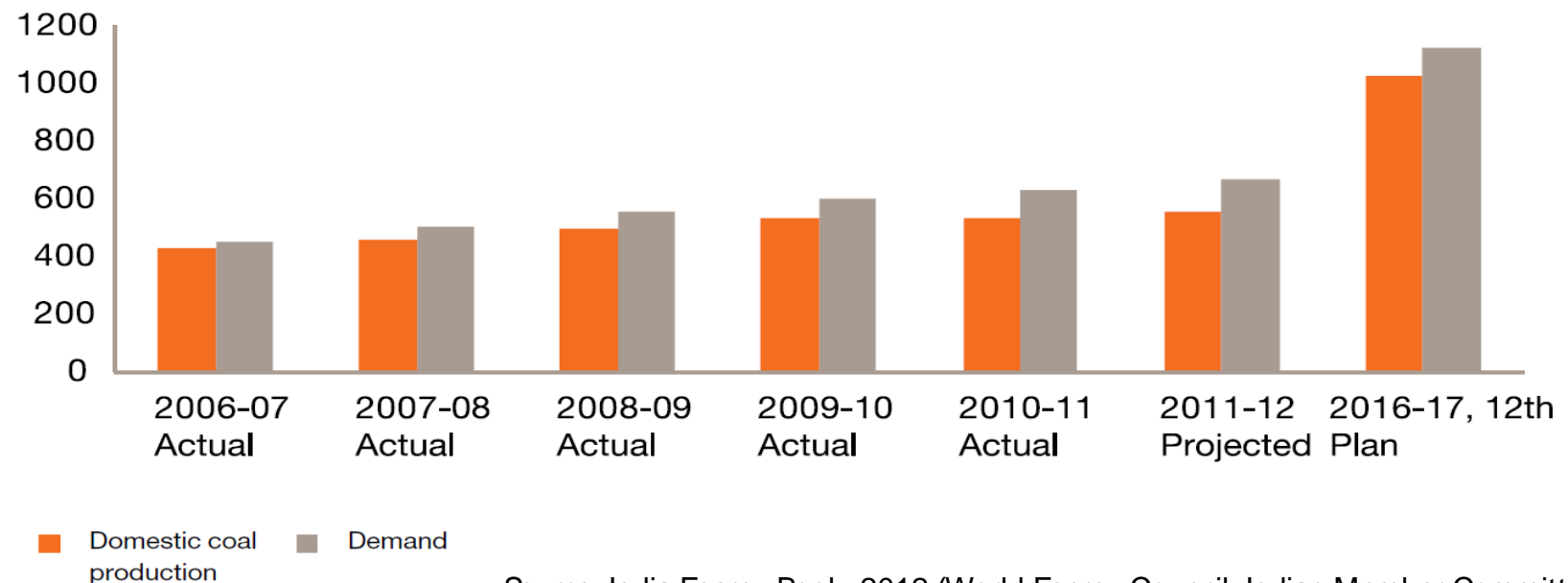
Global coal production (Mt):



Source: BP's Statistical Review of World Energy, June 2012

Supply & Demand in India

- Demand-supply gap 2011-12: 114 MMT
- Expected demand-supply gap in 2017: Estimated 200 MMT



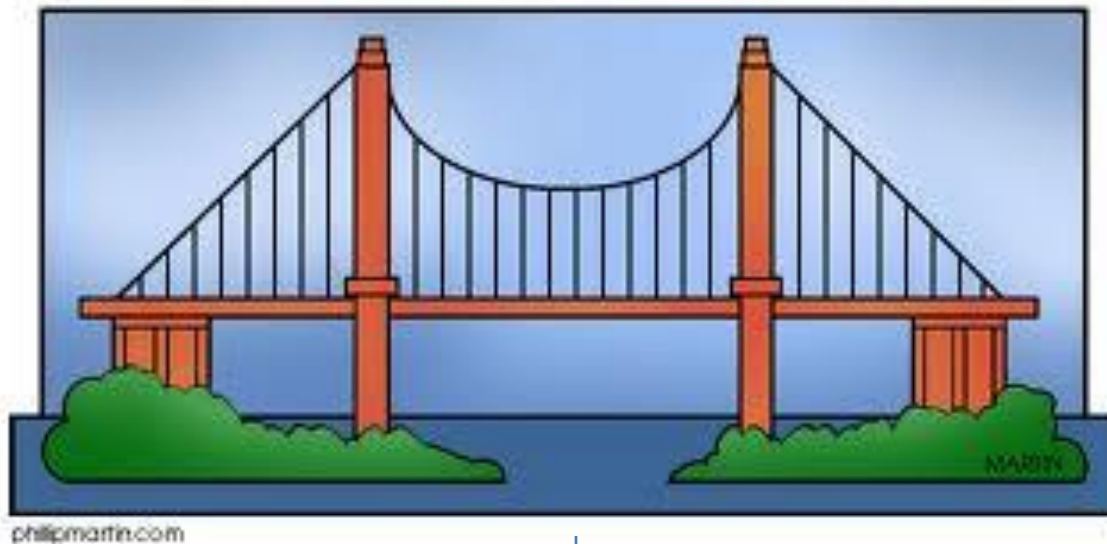
Source: India Energy Book, 2012 (World Energy Council, Indian Member Committee)

Bridging the Gap

- Current growth of domestic coal supplies: 5%
- Coal imports in Dec 2012 was up by over 45%, from 14.2 million tonnes in Dec 2011
- Growing energy demand and India's reliance on thermal power mean there's a need to augment the supply by importing coal

Solution

DEMAND



SUPPLY



IMPORTS

Key cost considerations for importing coal

Price of coal in the international market

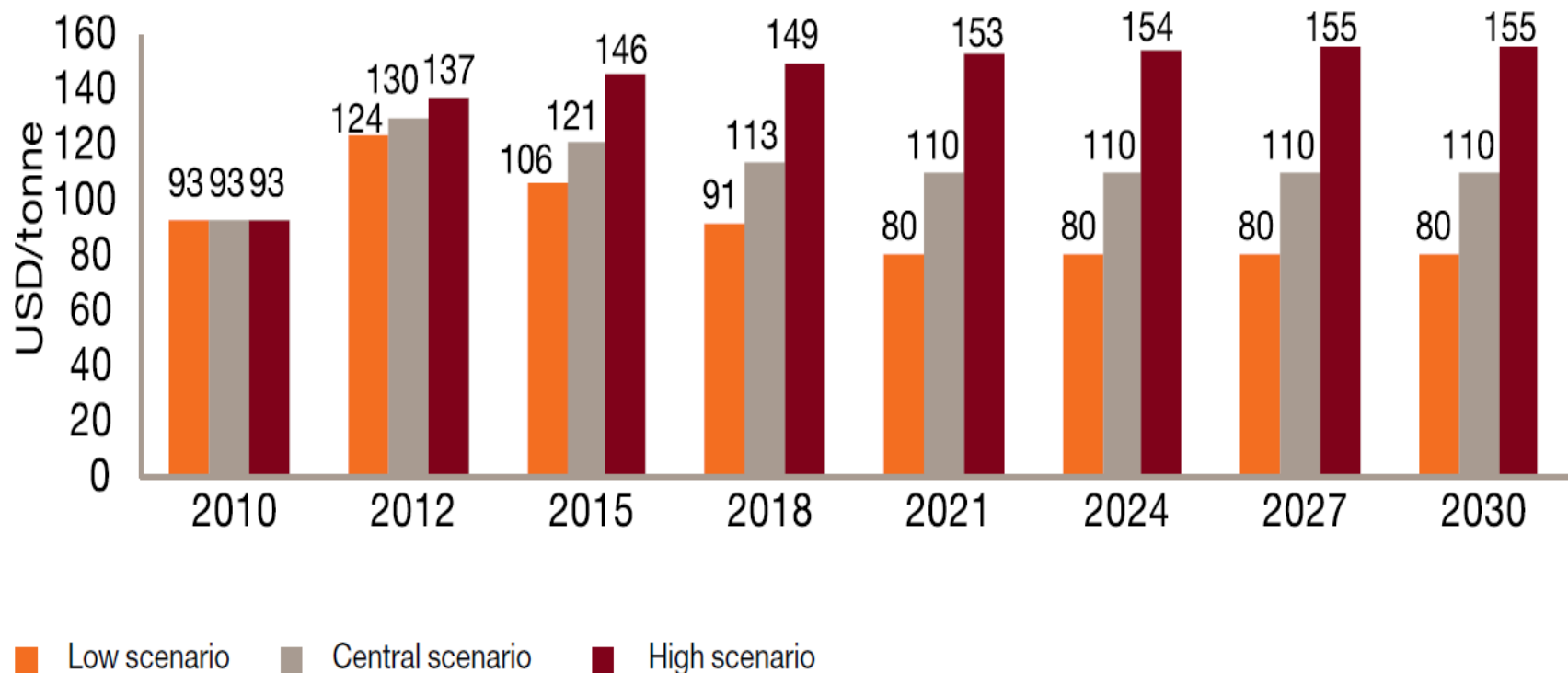
- FOB price forms about 65 -70% of landed cost
- Significant variation in price over last 5 years

Thermal Coal Price (58.25USD/MT as of 5 Feb 2013)



Source: Infomine.com

Coal price projections



Source: DECC, UK, October, 2011

Freight Charges

- Sea freight costs form about 50-60% of total transportation cost and about 10-15% of total landed cost (depending on the origin of import)
- Past low freight charges benefitted the shipper
- Present freight charges are not realistic
- Bunker prices also affect freight charges
- Significant variations in bunker costs can have an effect on the landed cost of coal

Exchange Rate

Indian buyers are also affected by the volatile USD-INR exchange rate.

History of USD – INR exchange rate over the last 5 years



Source: Yahoo!

Changing Vessel Demographics

Economies of Scale

- Freight and Charter rate comparison

Voyage rates on 15th Feb for a parcel from Richards Bay to ECI ports

Cape	USD 11.15/Mt
Panamax	USD 14.50/Mt
Handymax	USD 17.75/Mt

Voyage rates on 15th Feb for a parcel from Indonesia to India ECI

Cape	USD 6.75 to 8/Mt
Panamax	USD 8.75 to 11/Mt
Handymax	USD 9.70 to 13/Mt

We saw earlier that there is cost advantage in shipping on bigger vessels, subject to the requirements of the customer.

Bringing cargoes in capes give one a substantial reduction in freight cost and hence, a reduction in the landed cost.

Comparative chart of vessels that carried coal into India 2011 and 2012

	HANDYSIZE		HANDYMAX		PANAMAX		CAPESIZE		VESSELS	TONNAGE
2012	269	65,37,797	1,324	5,51,21,420	993	5,89,56,079	222	3,05,55,324	2,810	15,13,76,108
2011	289	64,26,522	1,122	4,68,22,528	820	4,28,58,355	105	1,42,15,667	2,336	11,03.23,072

Challenges

- Having established the advantage of shipping on bigger vessels, the question we would like to ask is: ***“Do we have adequate and the right infrastructure?”***
- The ports that were developed recently have the capacity to handle Capes.
- However, ports having this infrastructure may not be able to yield optimal result, as there are other barriers and logistical challenges that need to be addressed.
- Most ports do not have coal terminals; they have berths for discharging coal

- Manual handling – lack of adequate mechanisation. Manual handling results in lower output and involves transportation from the berth to the storage yard.
- Berth to yard transportation results in additional movement of vehicles and traffic bottlenecks.
- Manual loading of rakes, trucks
- Poor evacuation arrangements, which may be attributed to:
 - Inadequate rolling stock
 - Poor rail connectivity and no dedicated rail freight corridors
 - Poor roads
 - Lack of higher payload trucks and poor load bearing capacity of the roads

About GAC

GAC is a global provider of integrated shipping, logistics and marine services. Emphasising world-class performance, a long-term approach, innovation, ethics and a strong human touch, GAC delivers a flexible and value-adding portfolio to help customers achieve their strategic goals. Established since 1956, GAC employs over 9,000 people in more than 300 offices worldwide.

About GAC India

- Established in 1983, GAC Shipping (India) Pvt. Ltd. has grown steadily to become a one-stop provider of shipping, logistics and distribution services.
- GAC India is headquartered in Cochin, and operates 25 other full-fledged offices throughout India, covering all major and minor ports and Inland Container Depots. The airport offices are established exclusively to attend to various air cargo jobs.

THANK YOU

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