

Evolution Of Converters / Downstream Industries In The Middle East And Asia



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Singapore ♦ Shanghai ♦ Houston ♦ New York ♦ London ♦ Düsseldorf ♦ Dubai



The plastics processing industry plays an important role in the supply chain and acts as the linkage between the oil & petrochemicals industry and the consumers. Plastic resins are processed and converted into a form which can be sold as primary or secondary products. China's position as the factory for the world results in a huge appetite for energy, commodities and also for plastic resins. Plastics demand growth has been driven mainly by China and at the expense of other countries in the region. China's successful formula lies in its huge pool of relatively low cost and highly productive labor; the focus on exports of finished goods and also the attraction of a large domestic market. The challenges ahead for China's plastics processing industry is to move up the value chain to counter the effects of rising labor costs, business costs and appreciation of currency. The Middle East region and India have relatively smaller scale plastics processing industry than China, but both have great growth potential. India has been touted as the next China and the term "Chindia" was used to describe the next phase of economic cooperation between the two giants. India's plastics processing industry intends to emulate the success of the industry in China. The Middle East region's plastics processing industry will see a vast increase in supply of plastic resins over the next few years. Governments in the region are tapping the opportunity to encourage the growth of plastics processing industry via introduction of plastics processing zones. In the future, plastics exports will comprise of plastic resins and plastic products. Investments in engineering plastic resins production will widen the scope for the industry in terms of producing non-durables and durables goods. Due to the sheer size of the industry, China will continue to feature prominently in terms of plastics processing. However, the new frontiers like India and the Middle East region will enjoy double digit growth rates for plastics processing industry.

What Is Exported From China, India And Middle East ?

- **China makes for the world**

- Textiles
- Toys
- Consumables
- White goods – VCR, refrigerator, TV, PC, etc



- **India connects the world**

- IT (People)
- BPO
- Call Centre



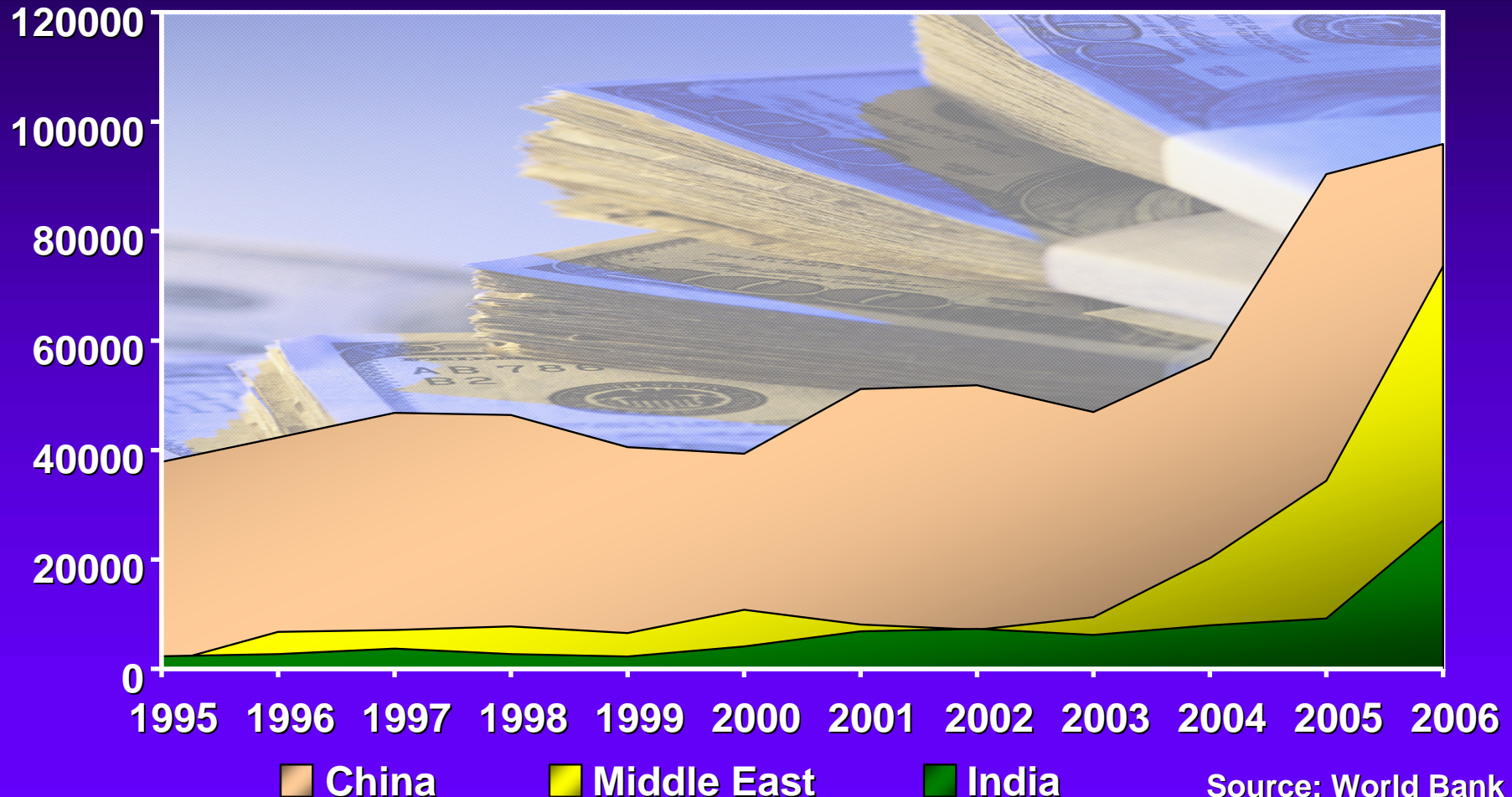
- **Middle East powers the world**

- Oil
- Petrochemicals



Who Has Been Receiving The Bulk of FDI ?

Million of U.S. Dollars



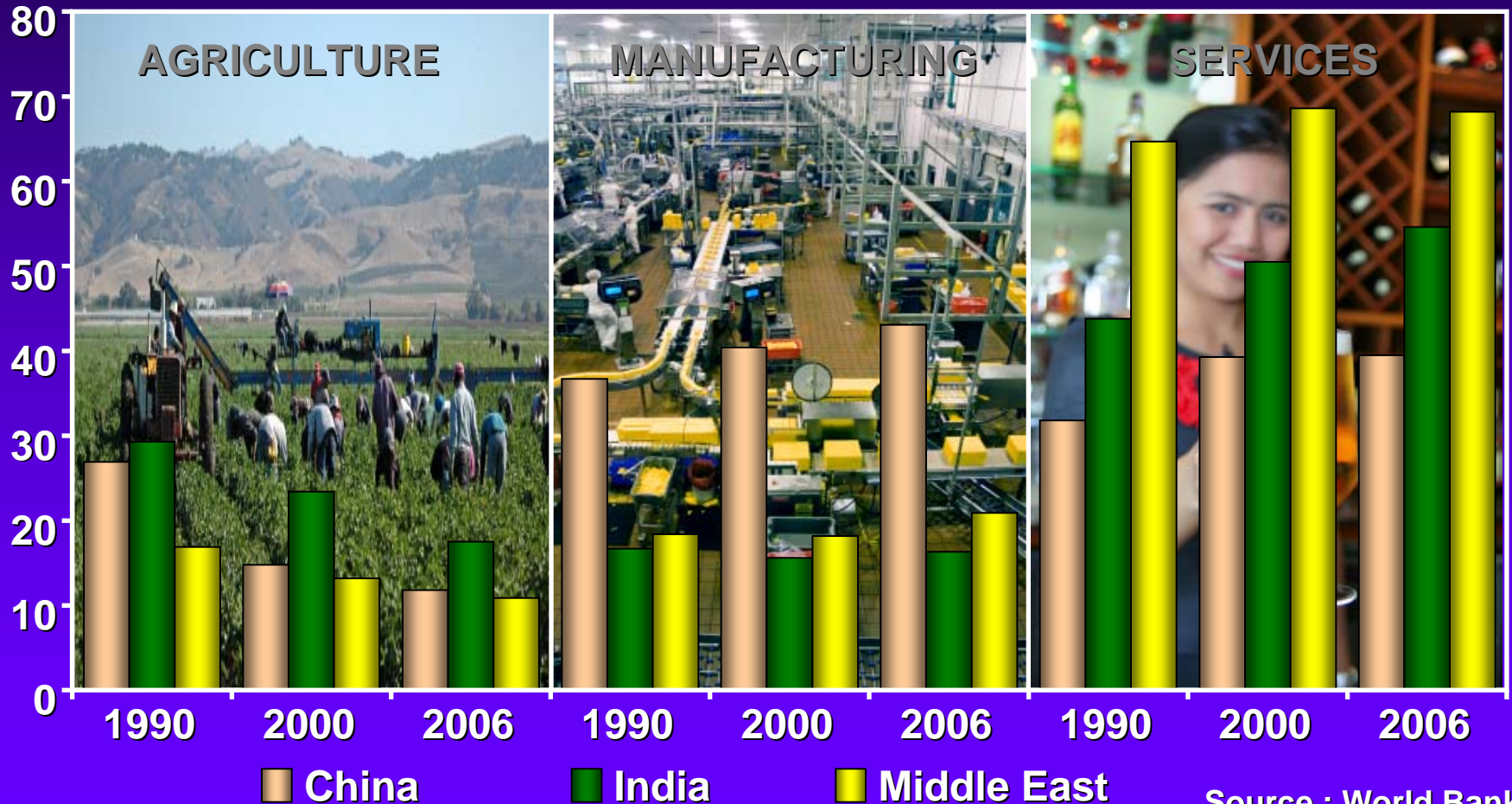
Source: World Bank

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China And India Have Different Focus For Economic Development

Percent



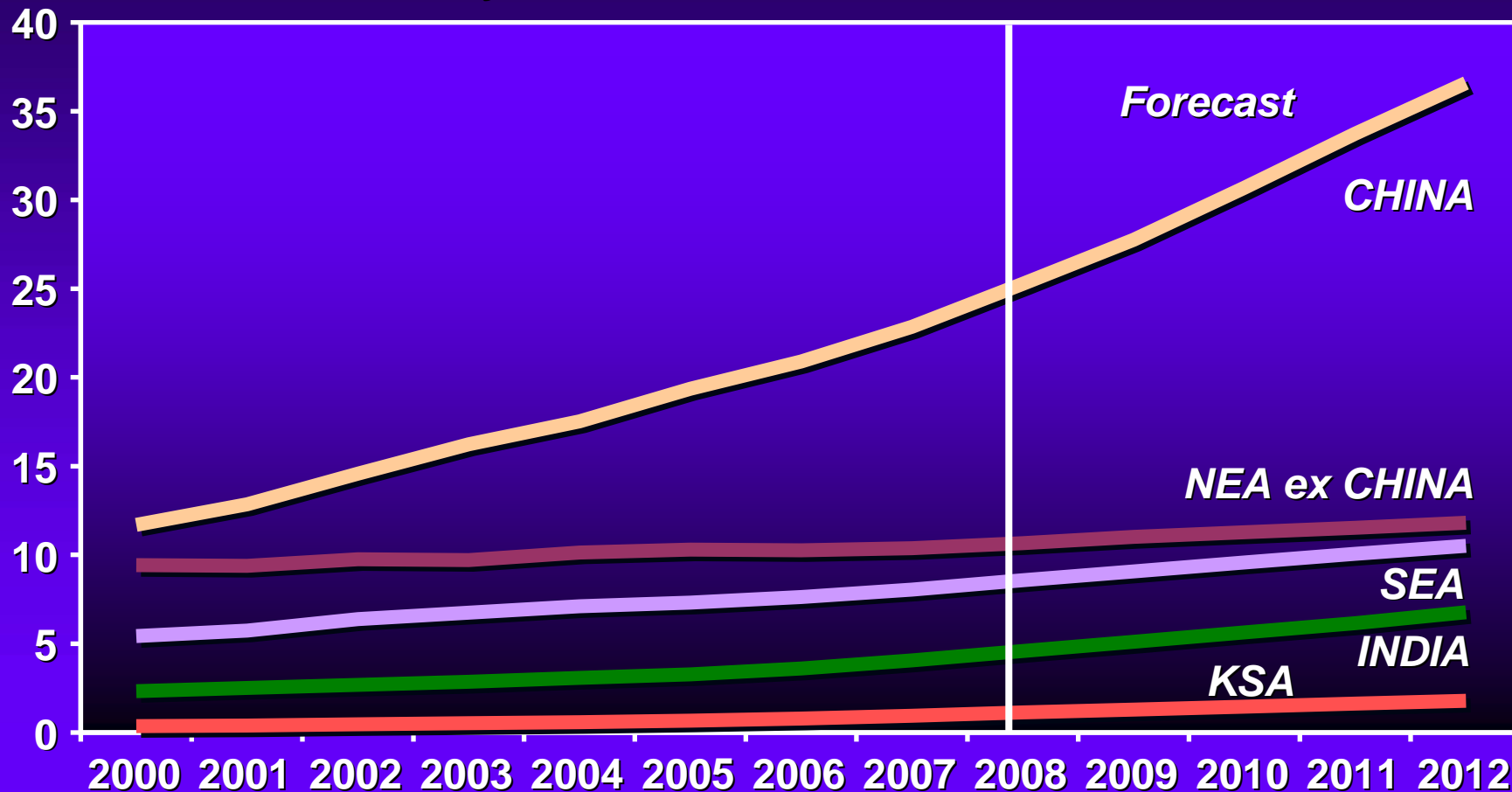
Source : World Bank

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Where's The Growth Of Plastics Demand ?

Million Metric Tons, Polyolefins

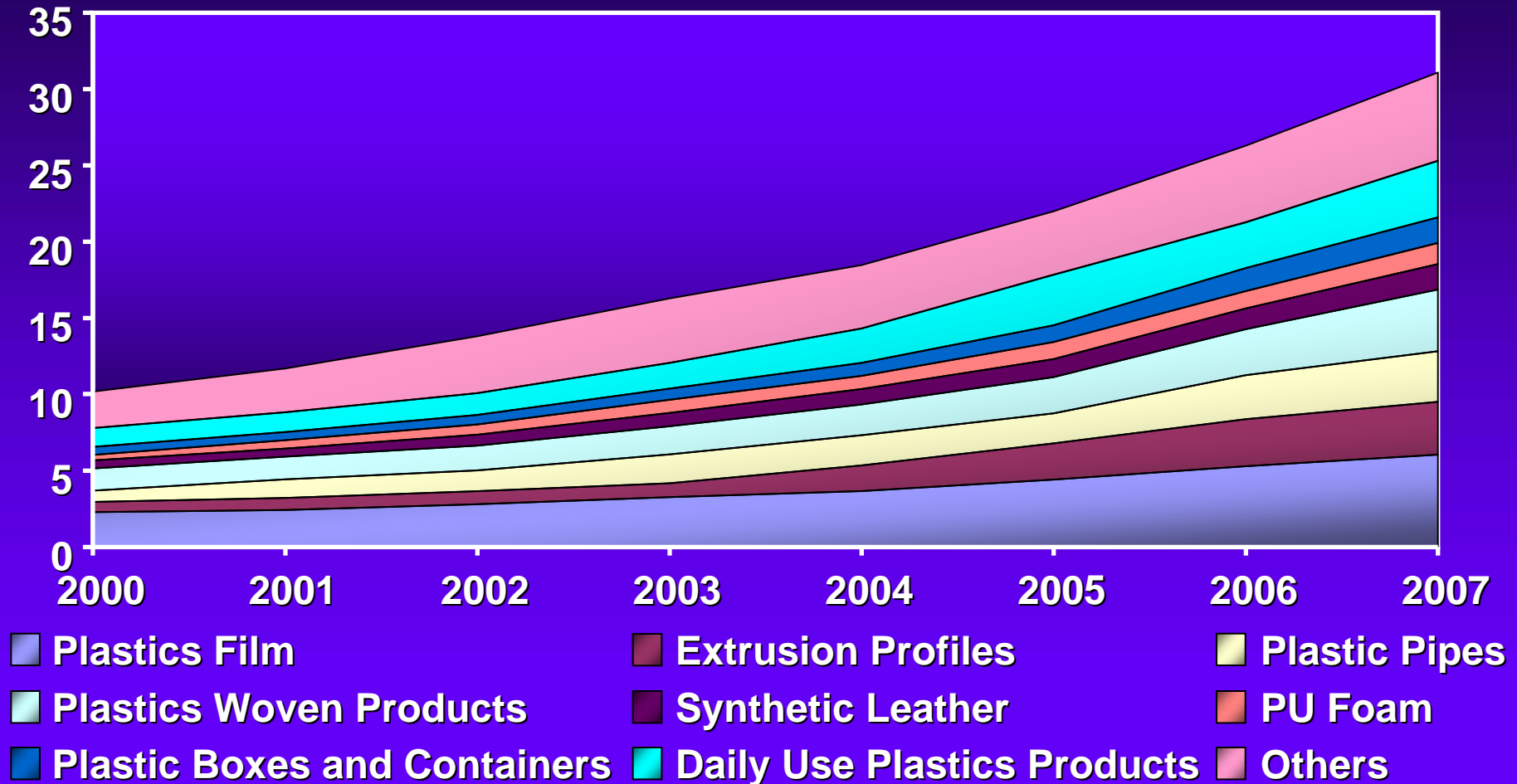


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What is China's Plastics Processing Industry Producing ?

Million Metric Tons



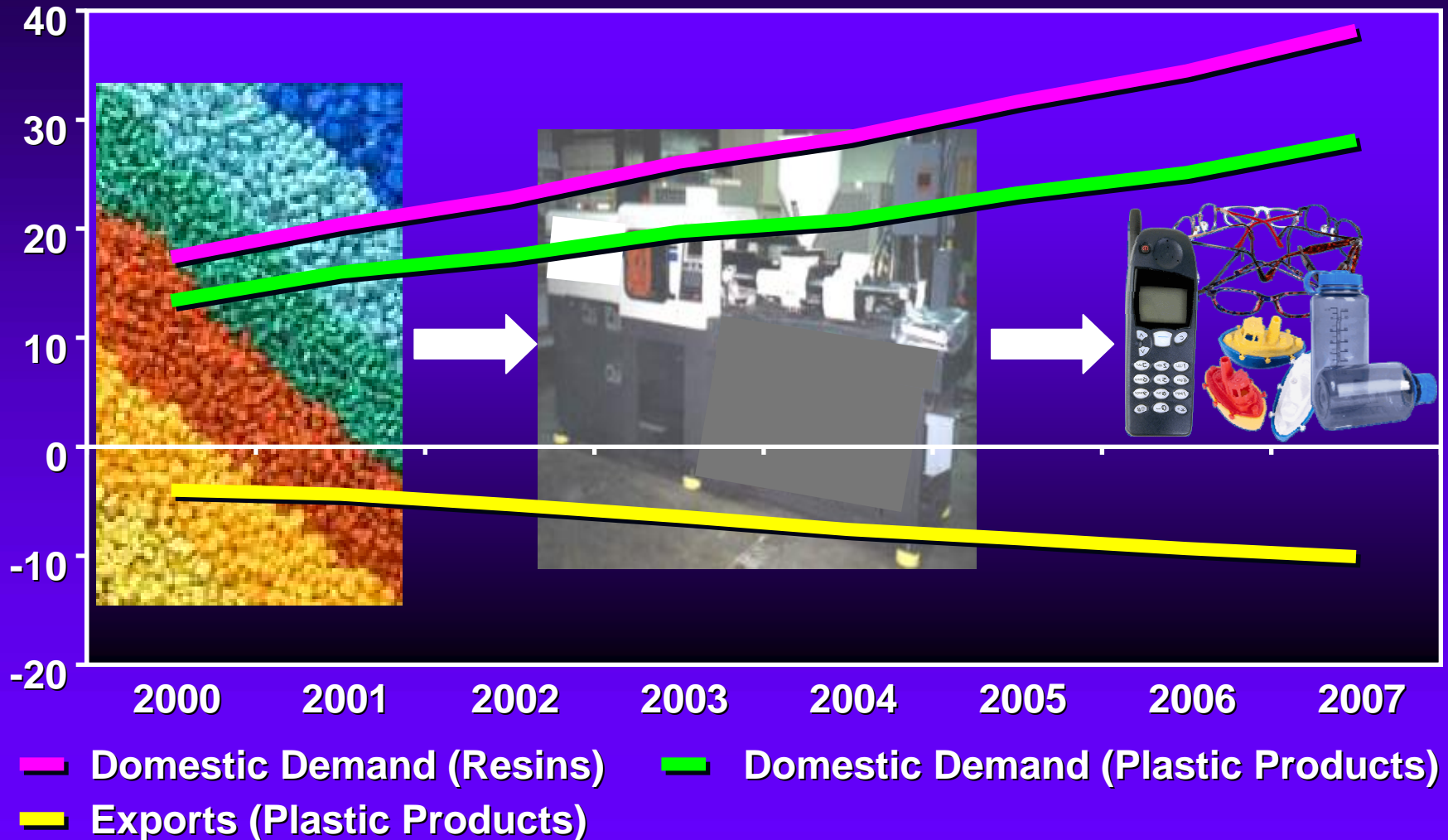
Source : CPPIA

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Plastics Demand Is Not Just For China

Million Metric Tons



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The Converting Industry In Middle East/India – The Next China



They are two of the fastest growing converting industries worldwide at 12-15 percent per annum

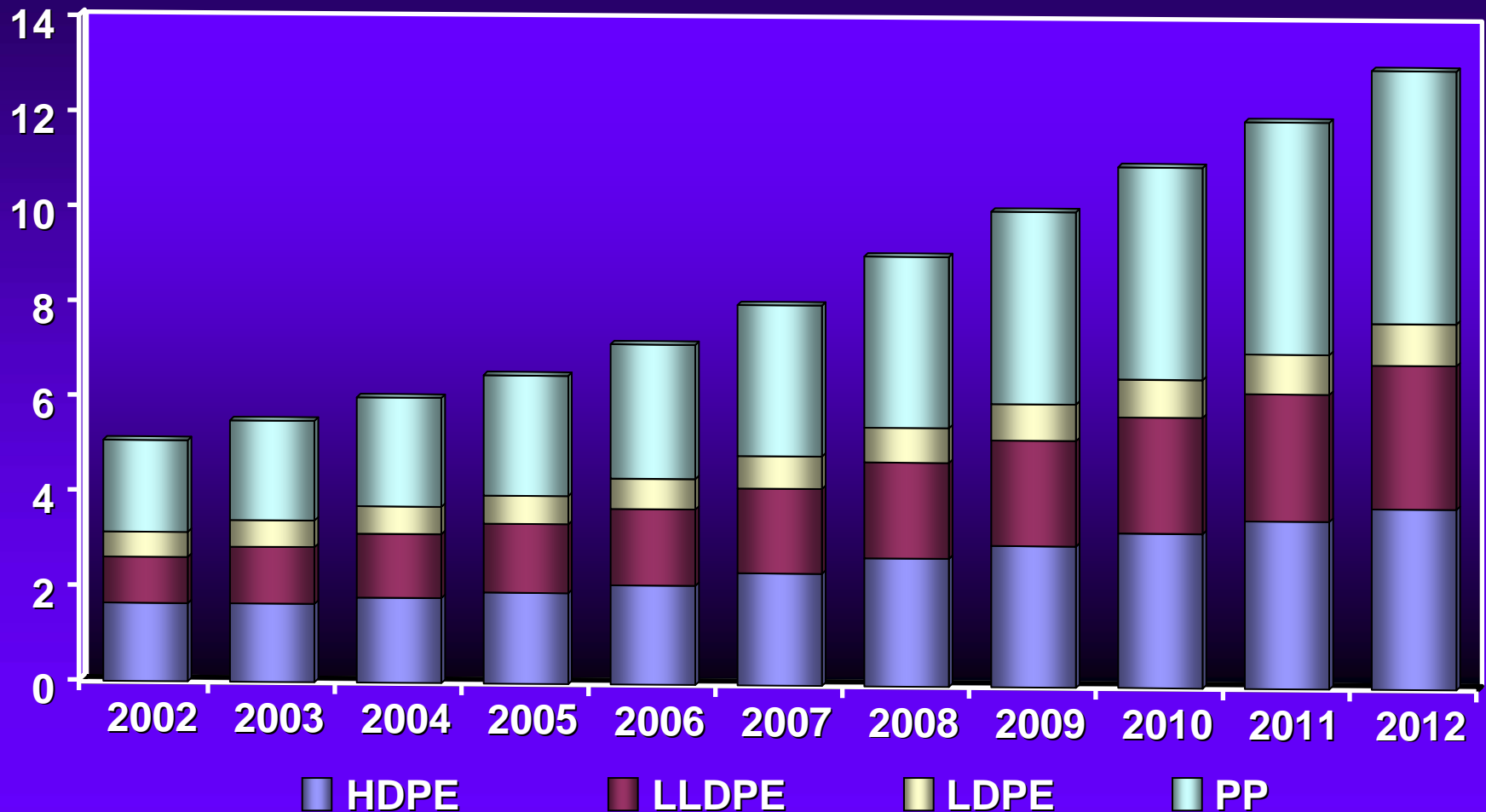
There will be a huge increase in domestic supplies of polyolefin resin

Middle East is striving for higher value added production for domestic markets and foreign exports

India has a rapidly expanding domestic finished goods market, low labor costs and a desire to become more self-sufficient

Middle East & India PO Demand Growth

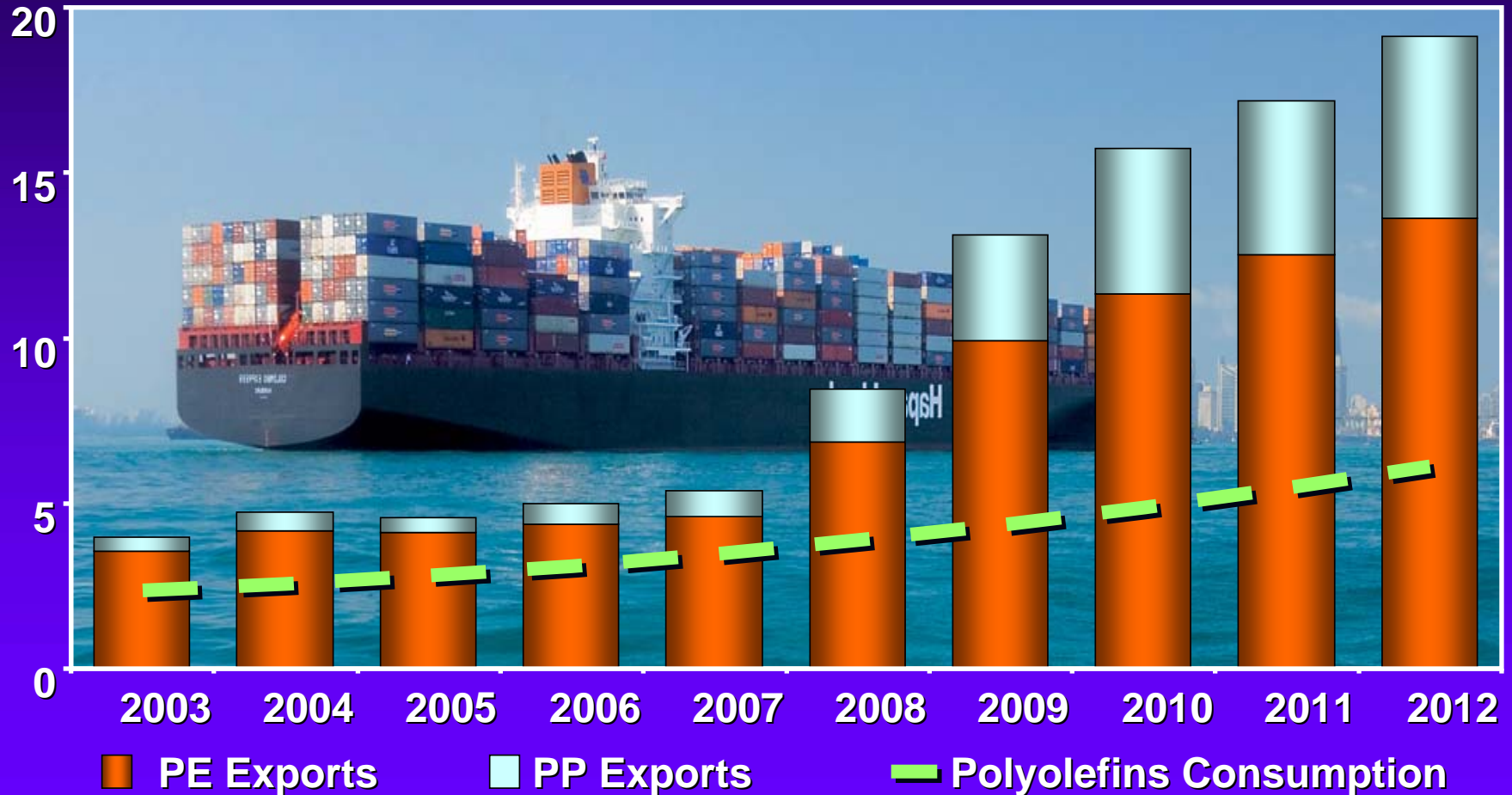
Million Metric Tons



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Middle East Still Relies Heavily On Export Despite Strong Growth Of Domestic Consumption

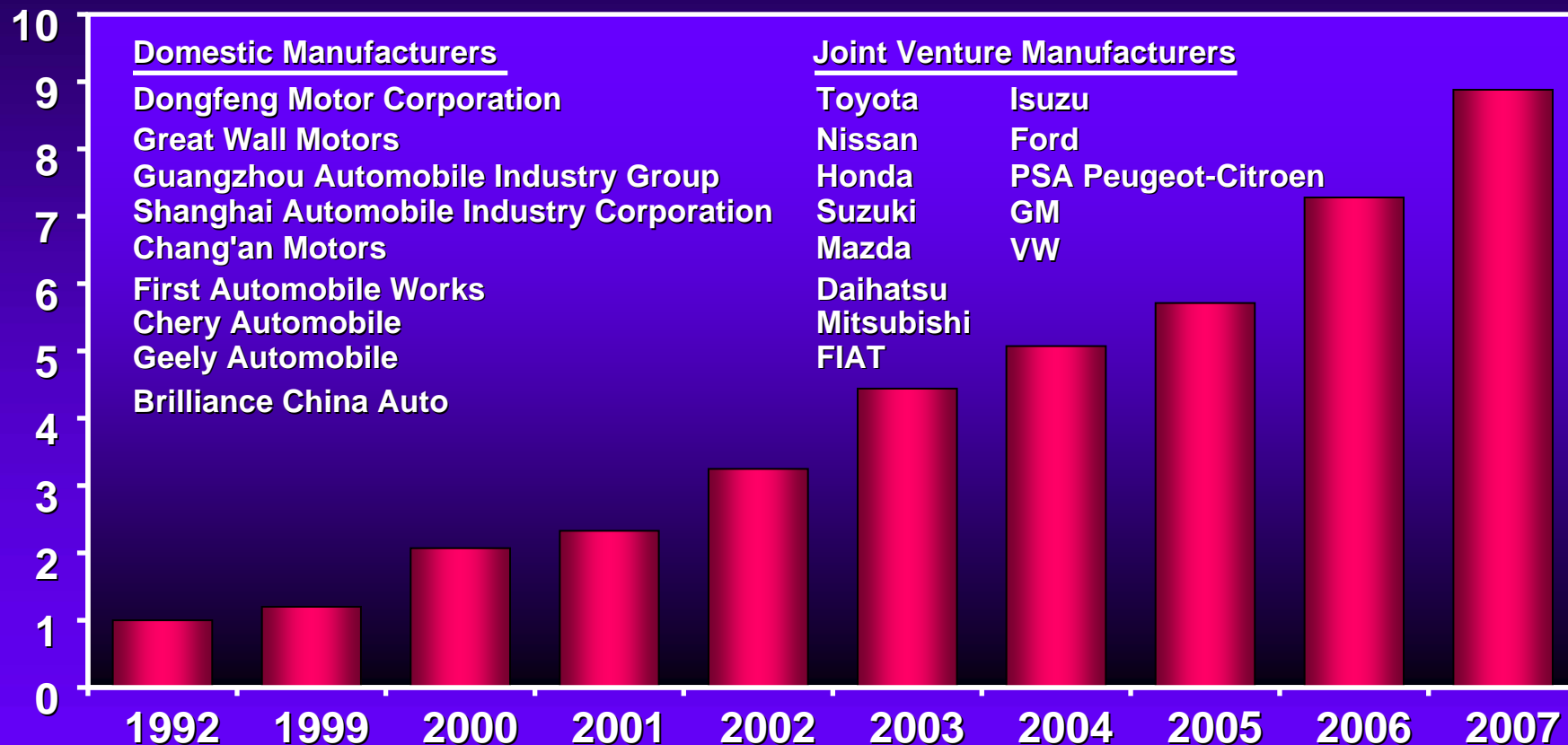
Million Metric Tons



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China's Plastics Processing Industries To Focus On Higher Value Products

Million Units



During the "11th Five-year Plan" period, the demand of four industries including packaging; autos; chemical building material and electronic/electrical appliances...will drive the growth of plastics demand. – Dr Hong DY, Science Committee, Sinopec Corporation.

India's Plastics Processing Industries Learn From Their Chinese Counterparts

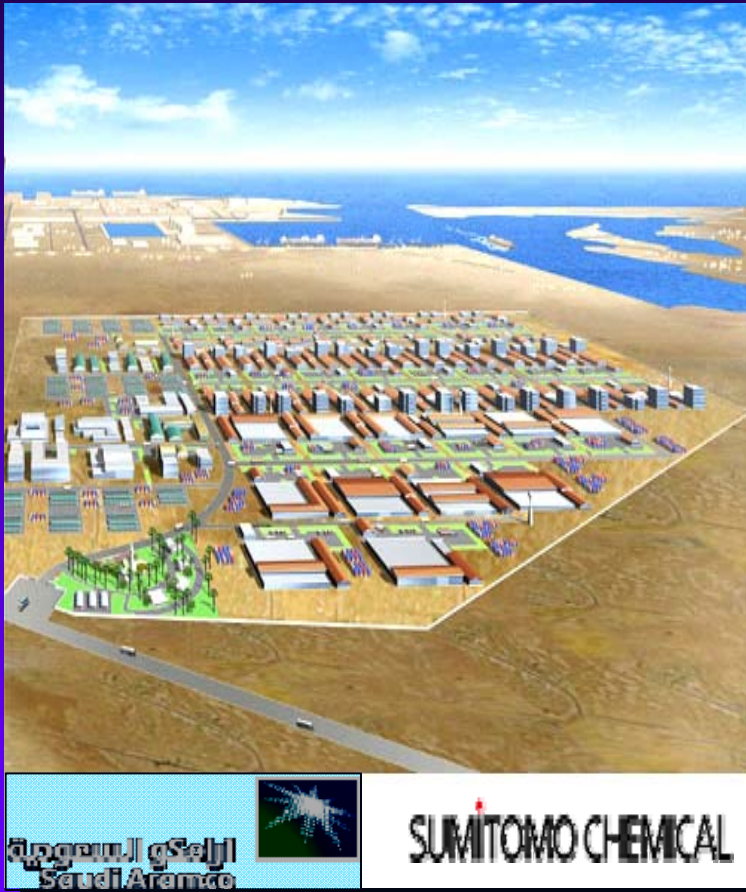


Chinaplas 2007 - 1st China-India Plastics Industry Summit

PlastIndia 2009 – 2nd China-India Plastics Industry Summit

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New Industrial Park in Saudi Arabia



Competitively-priced resins supplied

Electricity at government prices

Incentives provided by government

110 miles from Jeddah port

10 Miles from King Abdullah Economic City

Access to multiple markets

Rabigh Conversion Industrial Park

End-to-End Investment in UAE

**UAE providing
infrastructure and
technical support
Employment
opportunities for
local work force
is also important**



Shared services & facilities



Material and application R&D



Abu Dhabi Basic Industries
Corporation



Academic polymer science
education and R&D

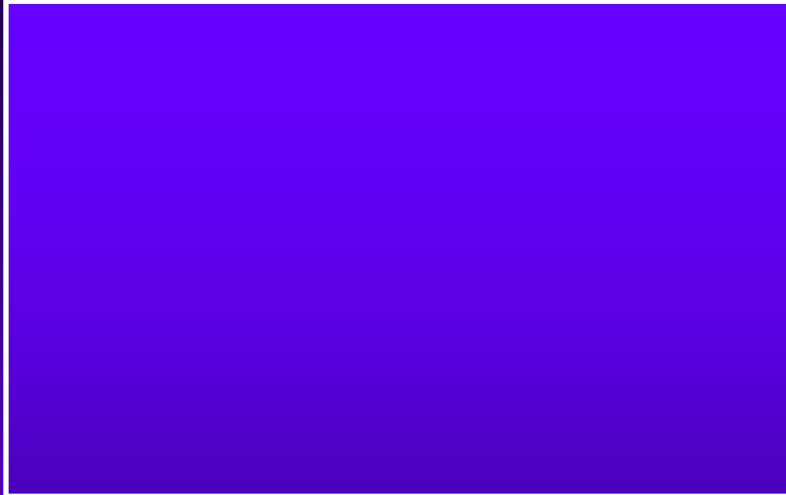


GULF PLASTICS PIPE ACADEMY

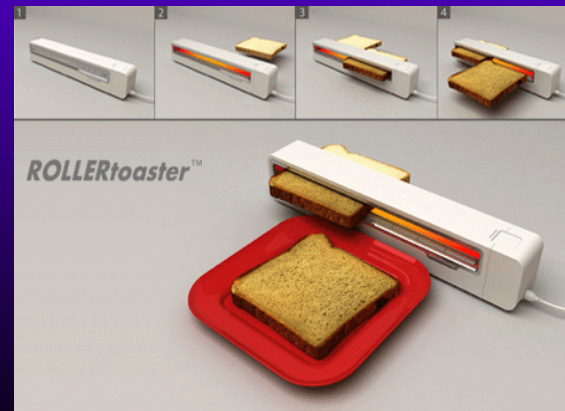
Industry & Value chain organizations

Development Of Plastics Industry

Lower Plastics Content



Higher Plastics Content



Lower Value Added

Higher Value Added

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Development Of Plastics Industry

Low Labor required



High Labor required



Low unit freight costs

High unit freight costs

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Development Of Plastics Industry

Higher complexity of
support industry needed

Tooling, Moulding Making, Precision Engineering



Lower complexity of
support industry needed

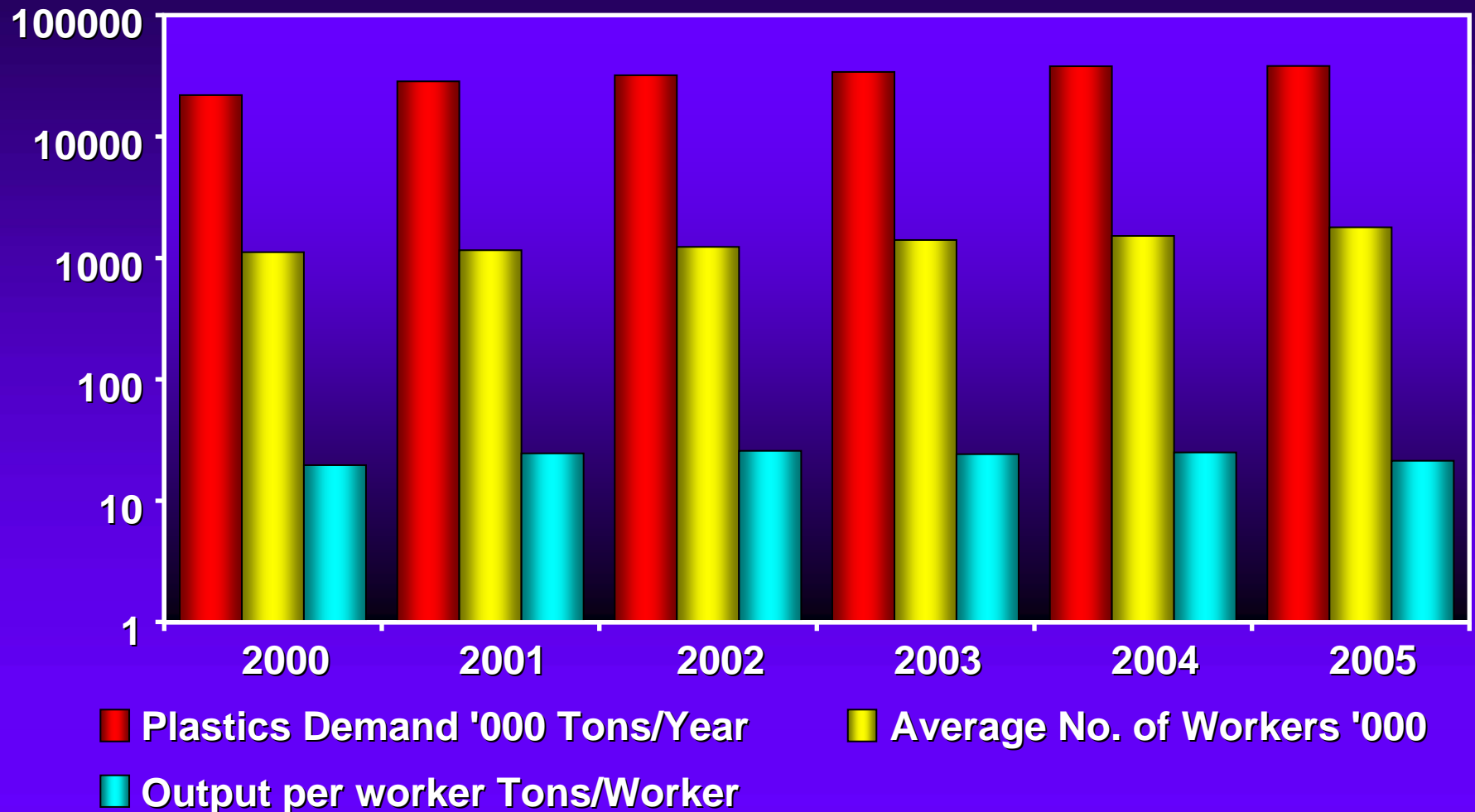


Commodity Plastics

Engineering Plastics

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Plastics Processing In China Is Labor Intensive



China's Manufacturing Industries Are Faced With Rising Costs

	2006	2008	Remarks
Exchange Rate, RMB/US\$	7.9	7.0	Appreciation of RMB
Bank Lending Rates, %	6.12	7.02	Rise in interests costs
Drawback for export, %	11	5	Loss of 6% of duty drawback
Labor cost(RMB/month)	1200-1500	1500-2000	Increase of between RMB300-RMB500 per month per worker



Where To Find US\$2/Day Labor

MILLION



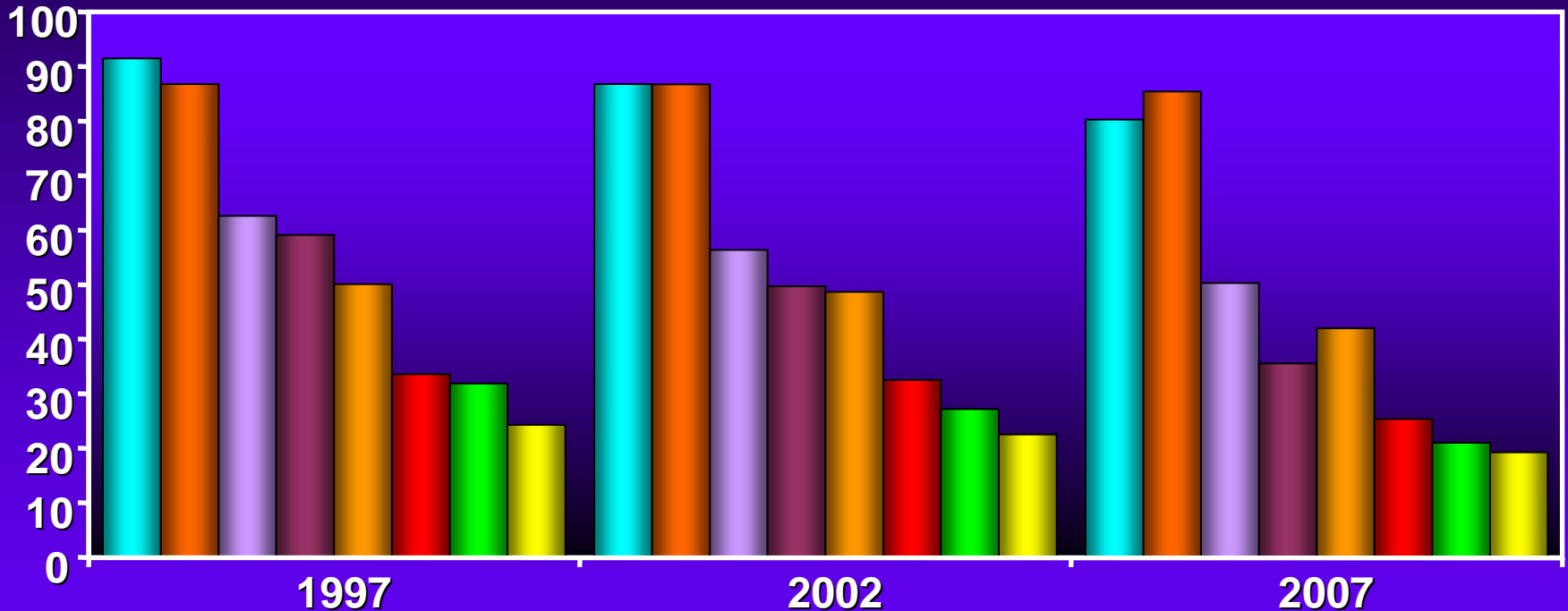
Source : ILO

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US\$2 A Day Working Poor – Percent Of Total Employment

Percent



Source : ILO

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Automation Is Not A Priority When Low Costs Labor Readily Available



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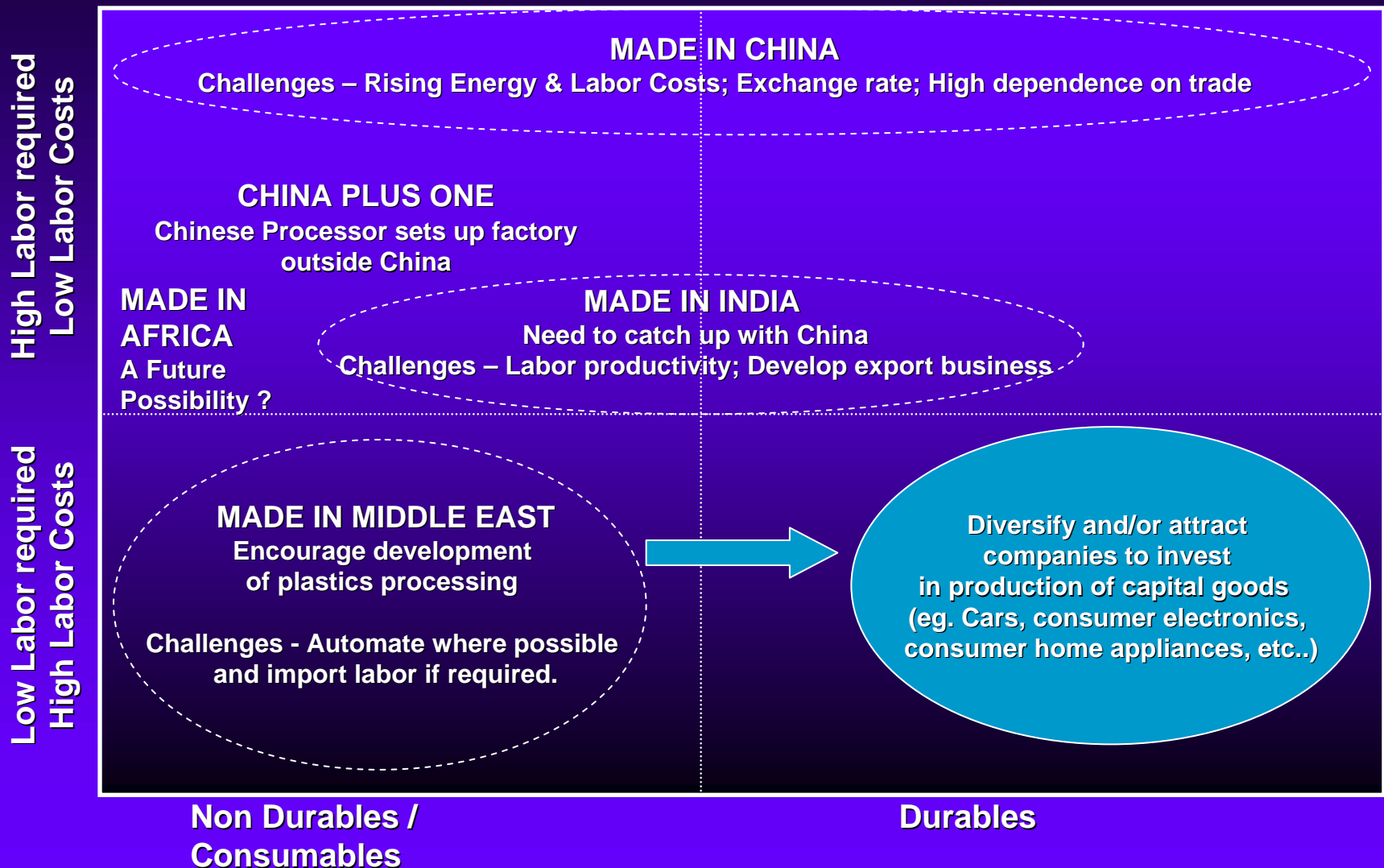
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Other Factors That Can Influence Business Decisions By Enterprises



Source : World Bank/IFC

Development of Plastics Industry



Concluding Remarks

China – The next phase of development of plastics processing industries will focus on moving up the value chain to higher value added products in packaging; automobile; chemical building material and electronics/electrical appliances.

India – The plastics industry in India will tapped on the experience and knowledge from their Chinese counterparts in order to hasten the development of the industry.

Middle East – The Middle East region's plastics processing industry will be spurred on by Government led programs and also by the growth of supply of plastics resins.

