



What does 2024 hold
for the Indian chemical
industry?

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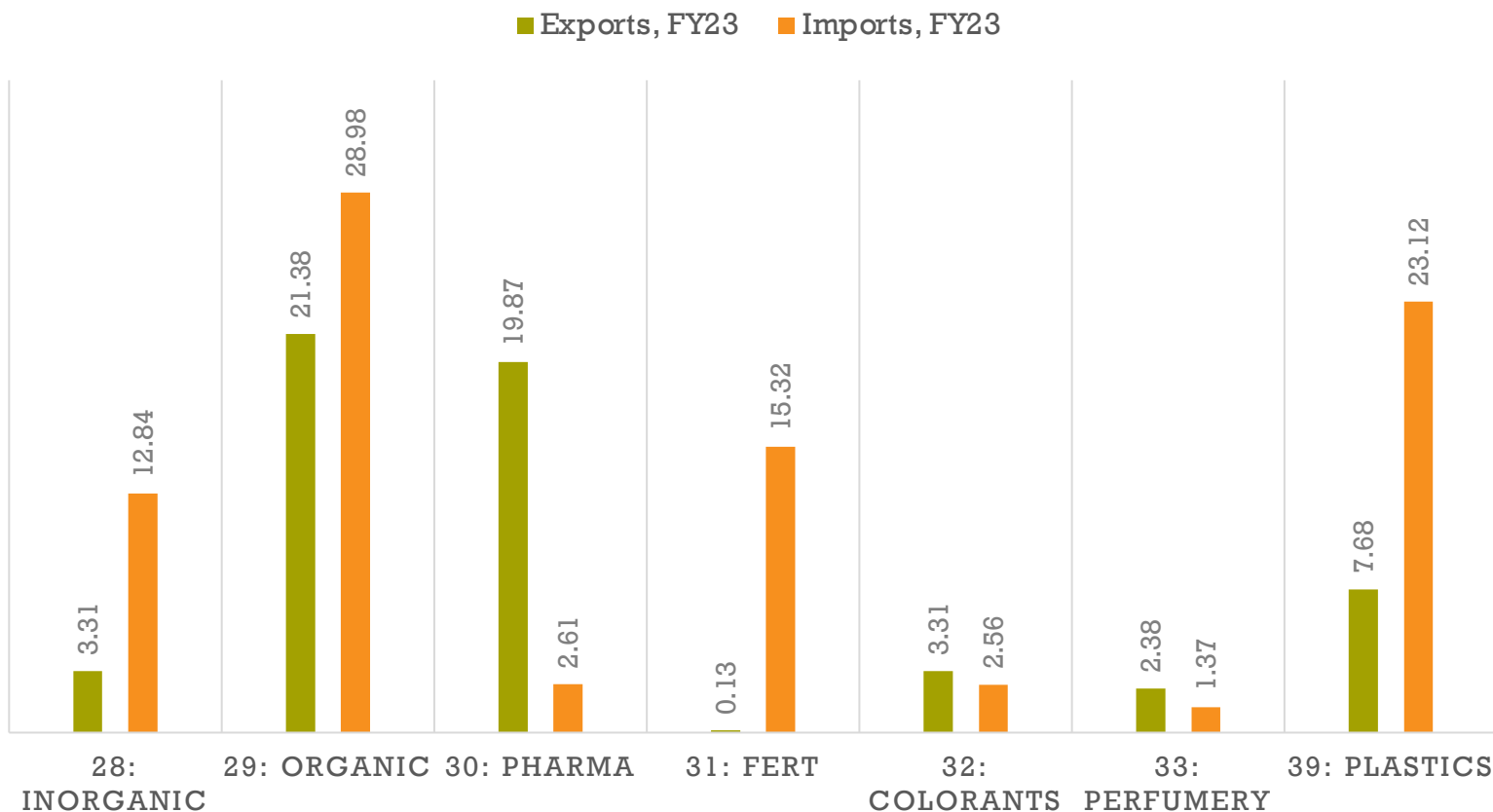


- Meeting India's needs for chemicals
 - The China impact
- Recent business dynamics
 - Petrochemicals
 - Fine and Speciality chemicals
- Attracting investments
 - Levers
- Some take-aways



Sizeable trade deficit

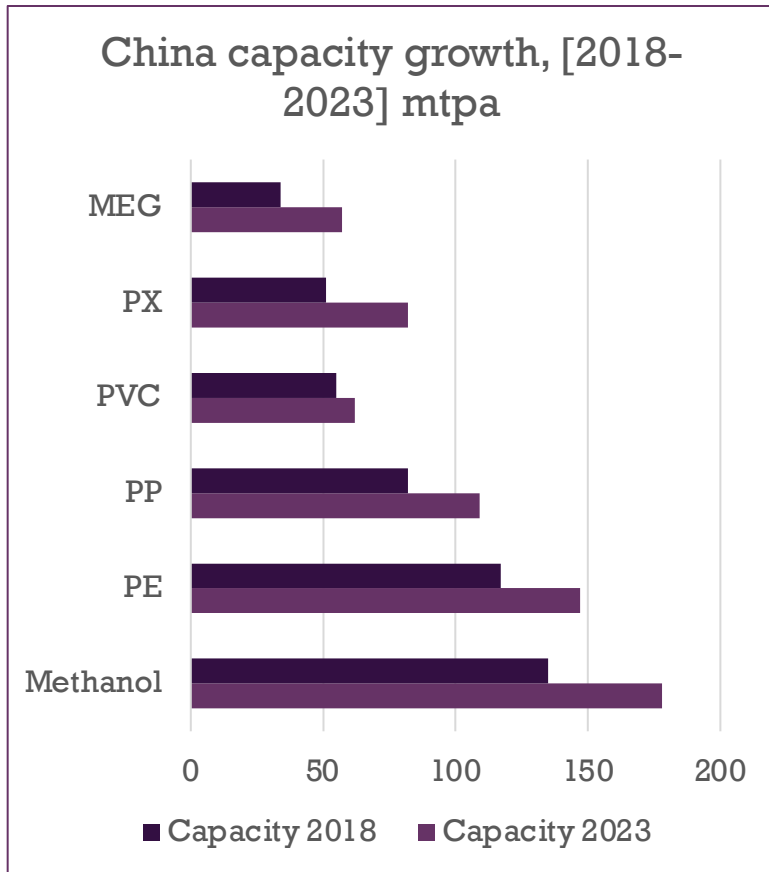
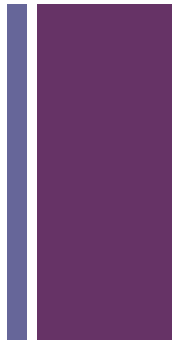
India faces a trade deficit of ~US\$29-bn in chemicals



..... But Colorants (dyes & pigments), Agrochemicals, Pharmaceuticals, F&F ingredients have trade surplus



Petrochemicals: China capacity build-up – unprecedented in scale And continuing



	Change	Share of world increase
MEG	68%	74%
PX	61%	94%
PVC	13%	86%
PP	33%	63%
PE	26%	47%
Methanol	32%	63%



Petrochemicals: Margins bearing the brunt of China's expansions

China & India – capacity comparison

Methanol	• 143x
Propylene oxide	• 123x
Acetic acid	• 74x
Propylene glycol	• 23x
TDI	• 20x
Phenol	• 15x
Toluene	• 13x
ABS resin	• 32x
PVC resin	• 19x
PTA	• 11x
MEG	• 10x
PET	• 6x
Polypropylene	• 6x
Polyethylene	• 4x

- China's chemical industry accounts for about half of global capacity and demand
- China's capacities are 5-20x India's
- Margins face a dual challenge of increasing feedstock prices and demand-supply imbalance
- Mammoth Crude oil to chemicals projects for aromatics add a new dimension
- Low profits may last through to 2026 or even longer.

Recovery in China's chemical industry key to global recovery

India's demand will see highest increase in near future



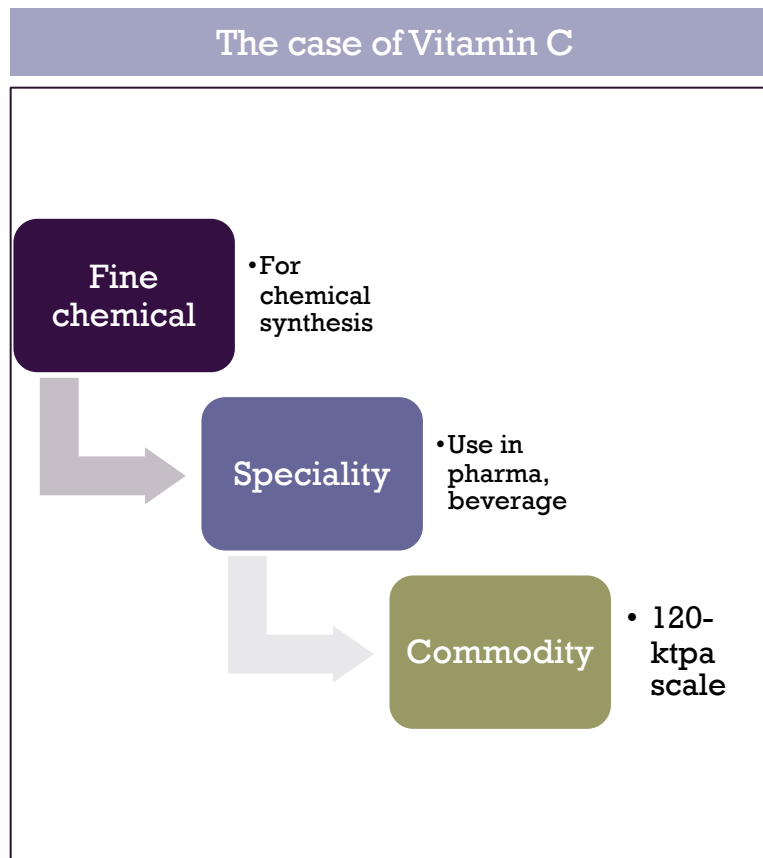
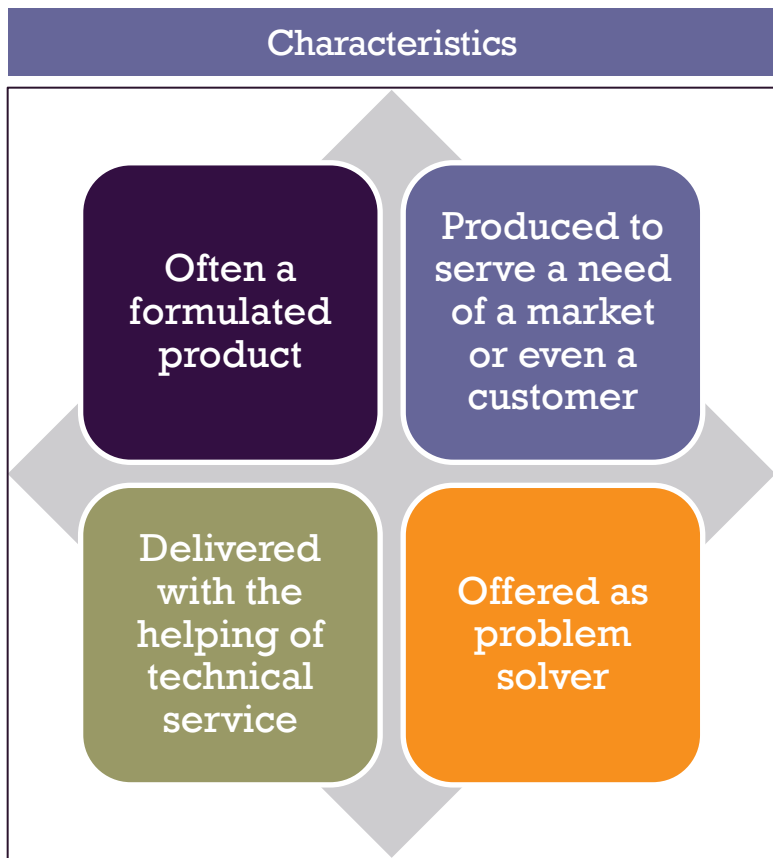
Fine & Speciality Chemicals (F&SC): India's good competitive position

Access to	Good	Fair	Poor
Cost advantaged hydrocarbons			× ×
Capital		✓	
Energy			× ×
Technology		✓	
Infrastructure			×
Human resources	✓✓✓		
Market potential	✓✓✓		

F&SC leverage India's strengths & don't fully expose weaknesses



F&SC: Is there anything special anymore?



Indian players face pricing pressure in export markets. Further declines likely.

Europe and Asia Pacific markets, major drivers of exports from India (>50%), have been sluggish. European recovery is some distance

+ F&SC: Levers for success

Portfolio choices

- Align portfolio with global mega-trends
- Focus on niche chemistries – Fluorochemistry, phosgenation, hydrogenations, lithiation, etc.
- Prepare for 'net zero' requirements of customers

Strategic partnerships

- Seek structured international partnerships with innovative companies
- Build capacity for innovation based on understanding of end-use markets

Technology

- Embrace continuous manufacturing for safety and efficiency
- Leverage biocatalysis more meaningfully
- Build competencies in Green Chemistry & Engineering

Raw materials

- Evaluate bio-based feedstock as starting points
- Local availability, wherever possible
- Build value chains through integration and/or strategic partnerships

Company must operate one or more levers for a successful play



Levers for attracting investments into India

Infrastructure & cluster creation

- Dedicated zones
- Clear zoning to mitigate risks
- Utilities, logistics, waste management

Value chain development

- Allocation policy for feedstock from crackers/refineries
- Roadmap of national needs
- Objective assessment of competitiveness

Ease of doing business

- Speedy clearances and permissions
- Reality check on environmental norms based on current science
- Favouring the compliant; punishing the deviant

- Selective tinkering with tariffs can upset value-creation efforts and only recast import profile
- Across the board increases find disfavour with consuming sectors

+ PLI Scheme for Pharma Intermediates & APIs

- First lot of projects are coming on stream
- Include some critical inputs, e.g., Penicillin G, para-aminophenol, etc.
- Most projects seem to be at competitive scale
- Technology choices left to promoters
- Competitiveness will be evident in next couple of years
- Global over-capacity in most value chains still persists
- Will put pressure on margins

Incentives will come in handy.... But are unlikely to be adequate in itself

PLI for chemicals – lots of talk, but nothing to show for it



Promoting self-reliance: Some points to keep in mind

- Chemical industry is diverse – in terms of technology, scale, complexity, end-use
- No country makes all that it needs....
- World trade in chemicals is substantial and has largely benefited economies
- Building walls through tariff, or as increasingly the case, non-tariff barriers, could lead to retaliatory action
- Importantly, end-users should not have to endure a high-cost base that jeopardizes their competitiveness
- Unfair trade practices are a problem
- But mechanisms exist to thwart them [e.g. Safeguard and Anti-dumping Duties]
- There is scope to speed-up process of scrutiny of applications and their implementation
- ... But voices of customers need to be heard.





Some takeaways

- Most petrochemical value chains are suffering from over-capacity, which is likely to persist in the near term
- Petrochemical producers will seek access to cheap feedstock
 - International partnerships, e.g., with Middle East
 - Sourcing of ethane (US), propane (Middle East, SE Asia) or even ethylene
 - Building simplified feedstock supply options [e.g., propane dehydrogenation]
- Opportunity to integrate into global value chains for Fine & Speciality chemicals
 - China is too big a shoe to step into ... differentiated offerings will be needed
- Sustainability and safety practices will be in focus
- Direct government support for industry unlikely

India will likely be the fastest growing large market for chemicals in 2014, but producers will be challenged to serve domestic & export markets