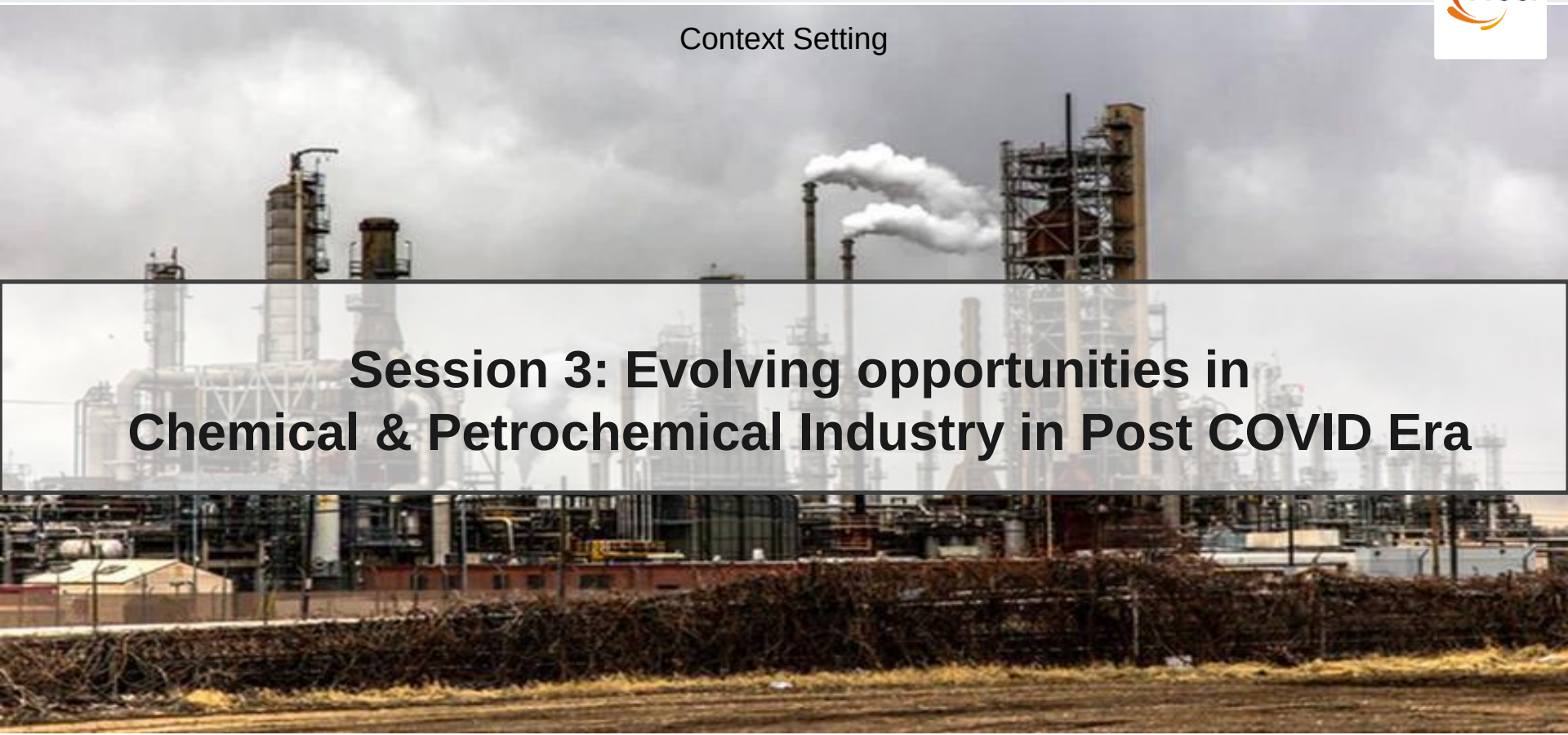
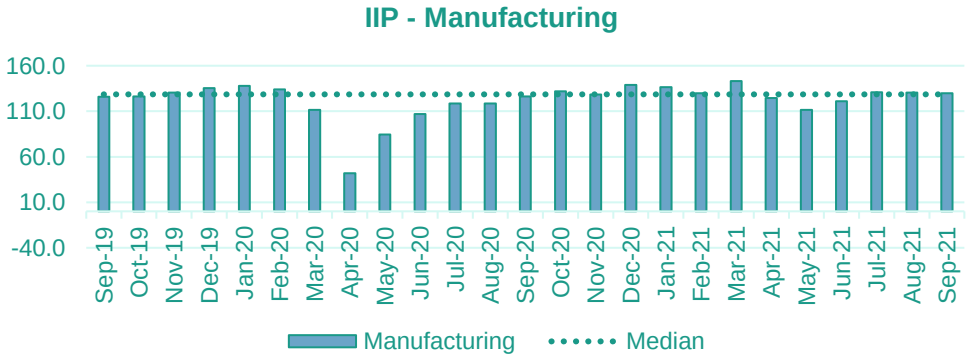


Session 3: Evolving opportunities in Chemical & Petrochemical Industry in Post COVID Era

Resilient India fends off the pandemic blow…

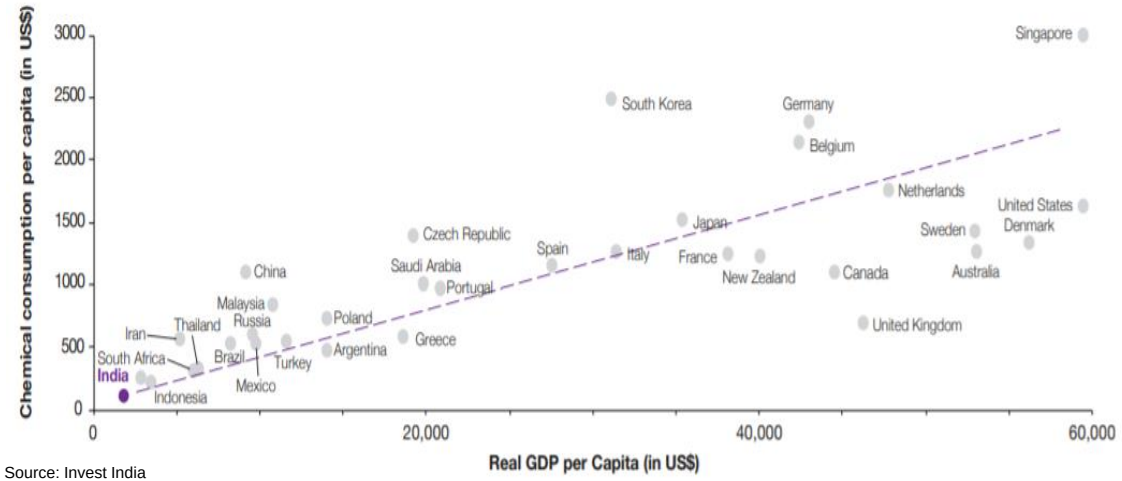
- GDP grew at average of 7% in the last decade
- C&Pc demand grew at ~1.3 times the average GDP growth during the last 5 years
- The economic impact of COVID-19 pandemic has been severe.
- However, India has recovered strongly and is expected to grow at a healthy rate
- Index of industrial production (IIP) has returned to pre-COVID levels demonstrating resilience of the Indian economy.

Source: IMF

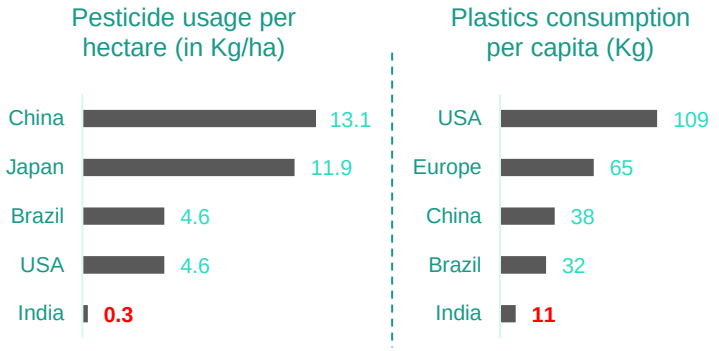


MoSPI

India remains underpenetrated in chemicals, with significant headroom for growth..



Source: Invest India



- India's per capita chemical consumption is very low compared to ROW
- Increased per capita consumption will lead to significant increase in domestic consumption in the next 10 years

India's current per-capita chemical consumption (~$110) is significantly lower compared to other developed markets – indicating significant headroom to grow.

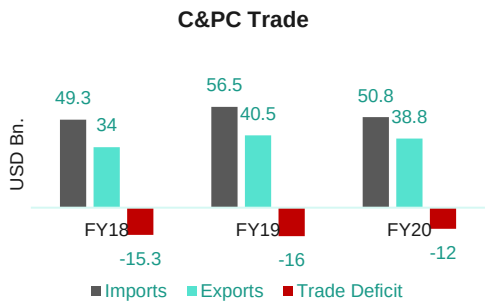
Triple growth drivers expected to aid the Indian Chemical and Petrochemical industry to grow at a CAGR of 9–11% (2020–25)

Increasing domestic demand

- **Demographic dividend** and **disposable income**
- **Rapid urbanisation**
- Low per capita chemical consumption
- **Higher consumption-led growth** due to rising nuclearization of families and improved consumption standards
- **Shift in consumer** preferences leading to new product development

Room for import substitution

- **~ 30%** of demand met by imports
- C&Pc **imports worth $51 bn,** of which **organic chemicals** were **$20 bn** in FY20
- Opportunity to produce substantial volume of chemical products



Expanding Export Opportunities

- **China + 1:** Global corporations are striving to minimize the risk by reducing their dependency on China
- **US - China Trade tensions**
- **Capitalize on strengths:** Specialty chemicals account for more than 50% of India's total chemical exports, with agrochemicals, dyes and pigments being some of the most exported categories.

Advantages India: Global manufacturing hub

Low cost of construction and operation

- Low man power costs
- Lower local equipment and fabrication costs
- Competitive engineering and Project management cost
- Highly competitive renewable energy cost

Large local market

- Large middle class
- Rising per capita income
- Rising urbanization

"China+1" Model

- De-risking global supply chain
- Supply security

Rule of Law

- IP protection
- Contract Enforcement

Large Talent Pool

- Research Chemist
- PHD's/ Scholars
- Engineers

Post-Covid trends shaping Indian Chemical and Petrochemical industry

 **Health & Safety**	• Demand for PPE kit viz. masks, face-shields, gowns, and gloves shall remain high – **driving ethylene and propylene** sales • Materials such as **isopropyl alcohol** and **ethanol** will still be needed to combat the pandemic • Continuing demand for antibacterial wipes, **disinfectants, and surfactants** for soaps and hand sanitizers
 **Demand for biocidal & functional materials**	• The pandemic has created new opportunities for players in the **paints and coatings industry** as customers insist on healthier, biocidal paints and coatings. • Bio-based recyclable materials or those that ensure energy conservation driven by awareness.
 **"Work from Home" and Digitalization**	• Corporations around the world are providing flexible working conditions including **work from home** that led to increased investments in homes, electronic equipment etc. by consumers. • The shift in working style is expected to **bolster demand for Construction chemicals and electronic chemicals** for semi-conductors, Printed Circuit Board etc.
 **Financial incentives**	• PLI scheme for downstream industries like pharma, textiles, electronics, etc are a driver for growth of the chemical industry. Extending the scheme to Specialty Chemicals will benefit import substitution. • Depreciation of INR vs Chinese renminbi by ~15% over last two years has improved competitiveness.

Broader Trends shaping Indian Chemical and Petrochemical industry

Emergence of new ecosystems: The disruption in the value chain during the pandemic has changed the business dynamics that lead to new alliances and a realignment in the supply chain

Preference for remote or digital sales channels: This trend began before the pandemic, but now more remote and digital channels are driving B2B and B2C interactions amid the new norms.

Increasing Automation and Digitalization

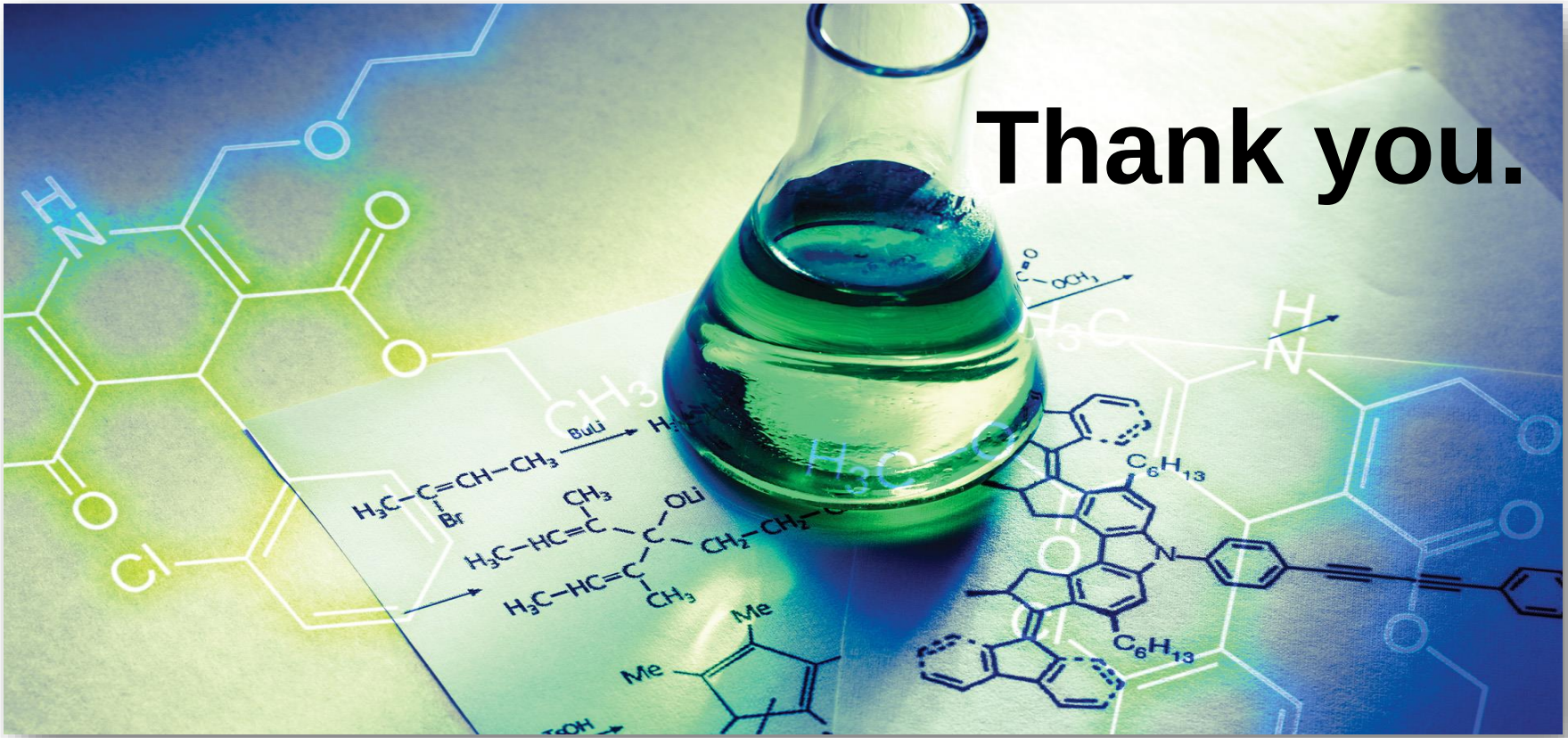
- **T**here is now increasing automation in production, marketing, sales and R&D activities.
- **Industry 4.0** combines digital and physical advanced technologies that are potentially transforming the chemicals industry. These technologies enable "smart" supply chains and factories, as well as create new business models.

More investments to drive sustainability:

- Safety is critical for our industry and programs like “Responsible Care” help increase focus.
- The growing concerns of climate change and customer consciousness has led to **ESG driven investments**.
- **COP26:** Achieving net-zero emission status by 2070, reducing emissions intensity, and increasing the renewable mix will shape the future sustainability initiatives in Chemical and Petrochemical industry
- Corporations are now focusing on reducing carbon footprint by signing up for Science-Based Targets, which provides a clearly defined path to reduce emissions *(2018 CO_2 emissions from the chemical sector were 1.5 gigatonnes or 18% of industrial CO_2 emissions (per IEA))*

R&D and Innovation

- Many major players spend <3% of the revenues on R&D activities, as against 6-10% spent by global companies. Only a handful of companies in India develop innovative products, the rest produce generic products
- Spending on R&D needs to be increased to stay competitive in the global market


Thank you.