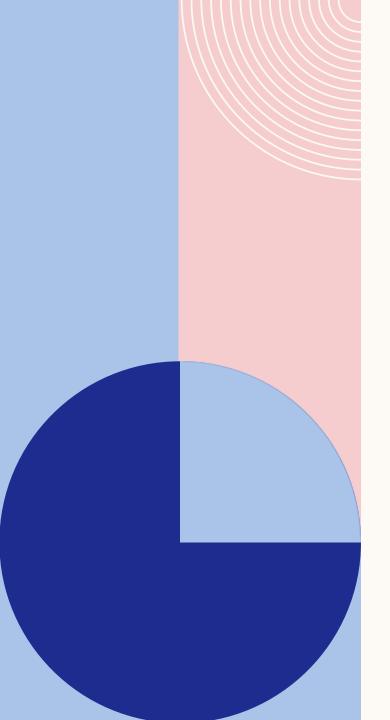
CHEM CONNECT 2022

CREATING A ROBUST ECOSYSTEM

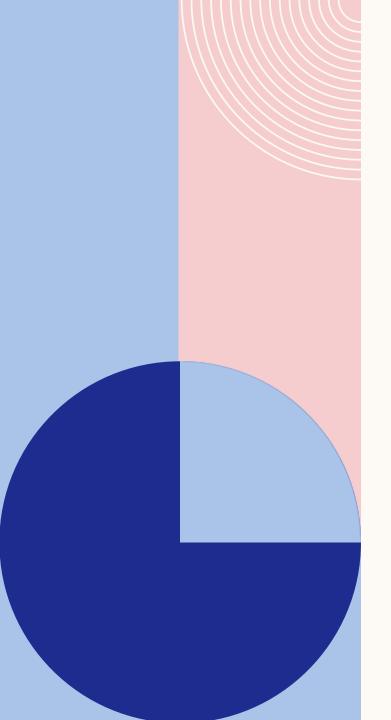
CHEMICALS LOGISTICS -GAP AREAS AND OPPORTUNITIES

SHEKHAR KHANOLKAR



LOGISTICS & SUPPLY CHAIN -- SOME OF THE KEY STAKEHOLDERS

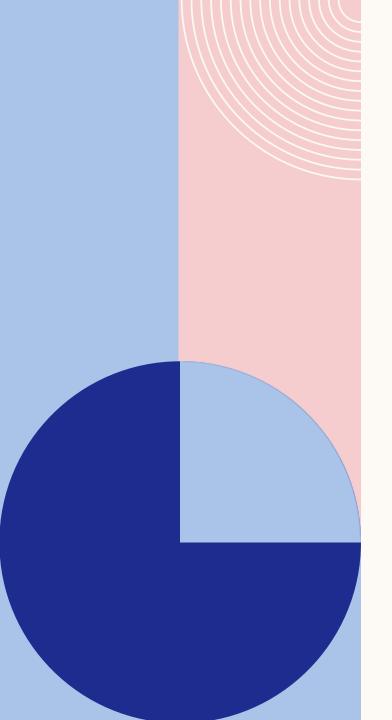
- Goods manufacturers (Mfg. industry)
- Transportation (Logistics providers)
- > Ports / Roads/Railways infrastructure (Government & private operators)
- Warehousing



SAFE AND EFFICIENT LOGISTICS – AREAS WHICH NEED ATTENTION AND ACTION

| > | Goods | manufacturers | (Mfg. | industry) |) |
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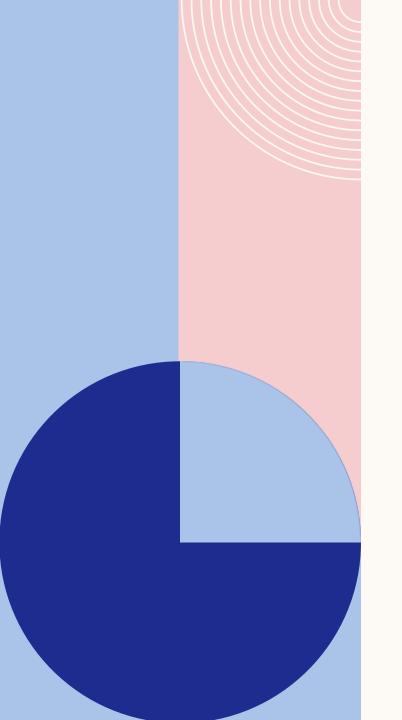
- ☐ Recognise inward and outward transportation as a key function within SCM
- ☐ Emphasis on transport safety from both the suppliers and internal stakeholders
- ☐ Do not accept non road worthy trucks/tankers and avoid shortcuts.
- ☐ Create internal systems and processes to reduce TOT for transporters
- ☐ Good working conditions for drivers/cleaners etc within the premises
- ☐ Continual training /educating/motivating drivers for defensive driving
- ☐ Reward transporters (with better rates/preferences) who bring in automation and safe practices to encourage such behaviour.
- ☐ Learning from global best practices.



SAFE AND EFFICIENT LOGISTICS – AREAS WHICH NEED ATTENTION AND ACTION

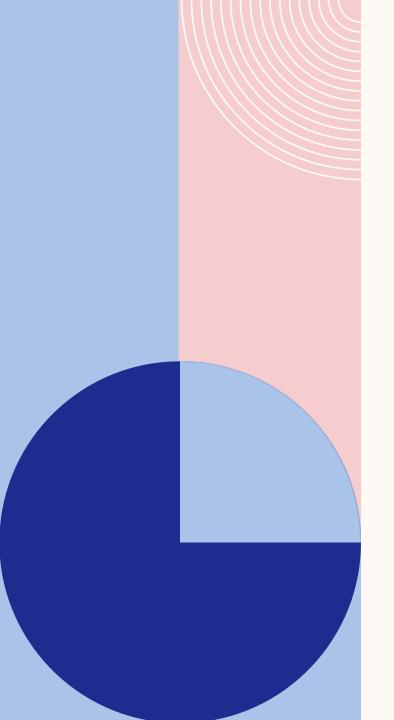
Transporters (Logistics providers)

- □ Recognise that transportation is not moving goods from point A to Point B alone. The safety of material, drivers and community around the route is your responsibility.
- ☐ Understand the characteristics of products you are transporting. Will give you a better understanding of hazards and emergency response.
- ☐ Better working conditions for drivers. Reward for safe driving
- ☐ Invest in automation e.g. vehicle tracking
- ☐ Better maintained vehicles give better ROI over a longer period.
- ☐ Compliance in terms of road regulations, safe transportation has to be 100%



SAFE AND EFFICIENT LOGISTICS – AREAS WHICH NEED ATTENTION AND ACTION

- Government and other private infra providers
- ☐ Integrated road, rail and port transportation management where multimodal transportation is needed from interior of the country
- ☐ Storage facility at the ports at affordable and reliable cost structure. Faster TAT.
- ☐ Increased usage of coastal movement from west to east and other way round
- ☐ Underutilized many major and most minor ports around Indian coast due to lack of supporting infra.
- ☐ Safer road and roadside infrastructure for transporters
- ☐ Strong coordination between various authorities like state Governments, road and rail authorities, container depots, rail wagons, emergency response and other governance structure. Use of AI,ML and other digital ways. ELOG.
- ☐ Encouraging chemical transportation by underground pipeline by creating a detailed protocol and administratively supported at industry cluster levels and cross country level where ever needed.



SAFE AND EFFICIENT LOGISTICS – AREAS WHICH NEED ATTENTION AND ACTIONS

> Warehousing

- □ Recognise that Warehousing is a critical component of efficient supply chain and a key service provider between the transporter and customers.
- □ Horses for the courses. Infrastructure must be developed appropriate for the commodity being stored.
- ☐ Knowledge about the properties of the products stored and trained to handle in packing/repacking and also emergencies like fire, leakages etc.
- □ Invest in automation stock records, invoicing, safety, loading unloading etc
- Opportunity in building viable cold chain.

Opportunities and way forward

- ➤ Each of this gap area presents an opportunity for stakeholders and other associated industries to expand the size of the pie and at the same time to reduce the cost of logistics.
- Investment in digitalization, AI ML etc will allow you to improve reliability of operations, reduces wastages and helps safer and faster transportation.
- ➤ Benchmarking with global standards and development of additional skill sets for safer logistics and transportation.
- Overall reduction in transportation time not only saves fuel(cost) and other costs but also reduces the capital blocked.
- Integrated multimodal transportation with matching infra will make us more competitive in the domestic and intranational market which will further increase the size of the logistics pie.
- Way forward for all the stakeholders is to work together to create an efficient, safe and optimized logistics.

THANK YOU