



SOLVAY & Karneet Enterprises (INDIA) Pvt Ltd (KEIPL)

Introduction



Agenda



Solvay Overview

- Capacities, Supply Chain System
- Quality
- Logistics

About KEIPL & Solvay Partnership



Capacities, Supply Chain System



Our Benefits



- 🌸 Solvay is a global leader in Soda Solvay[®] using two different processes: the traditional Solvay ammonia process and the refining of natural Trona (or sesquicarbonate)
- 🌸 Offering both natural and synthetic - Dense and Light - Soda Ash
- 🌸 Providing safety of supply through global network of plants
- 🌸 Having a unique global reach thanks to logistics networks



Capacities, Supply Chain System

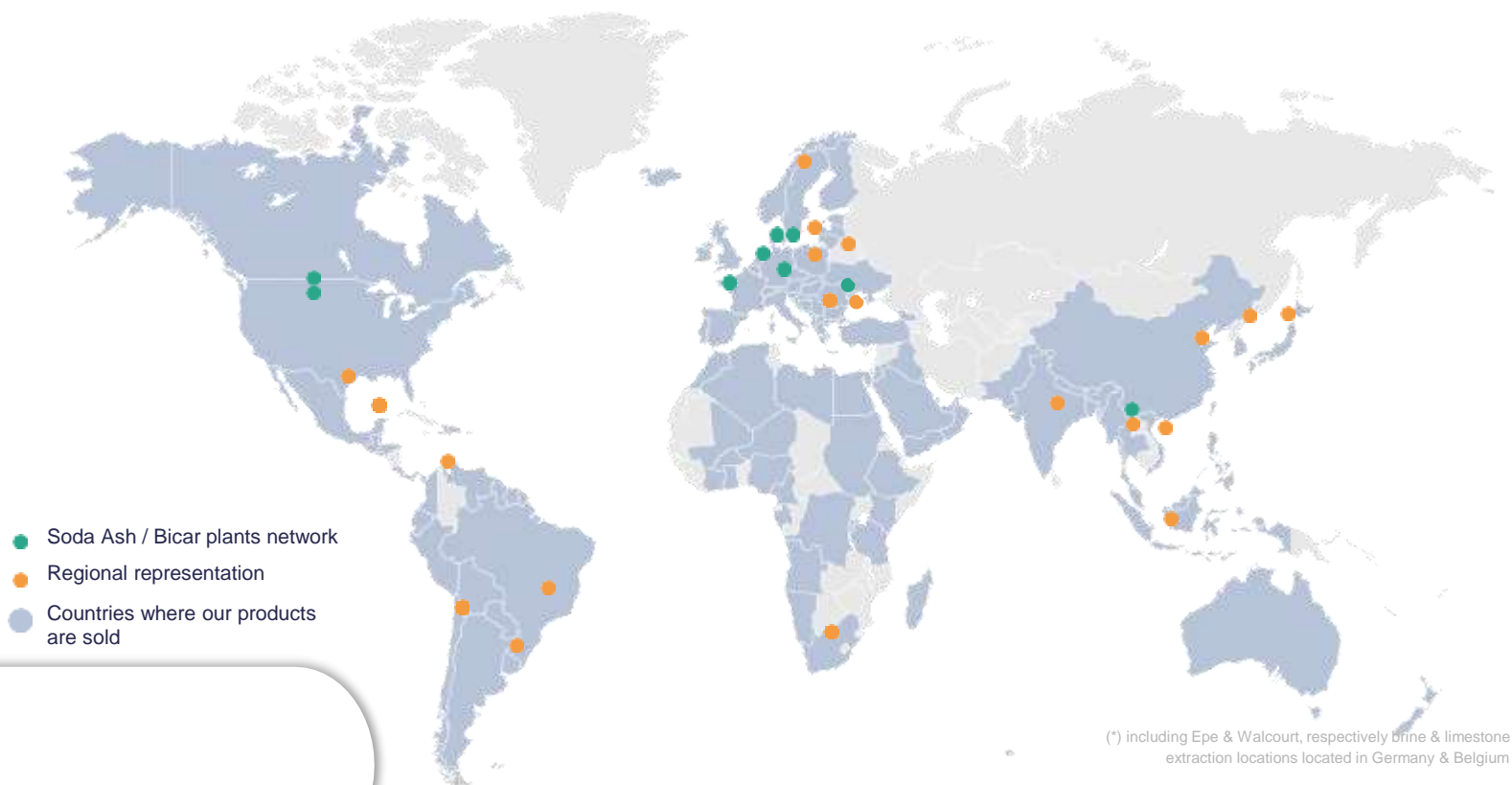


- 🌸 Combined Solvay Soda Ash capacity is nearly 7.5 Million Tons
- 🌸 Eleven plants in different locations
- 🌸 Solvay's global supply chain capability benefits from multiple sourcing opportunities
- 🌸 Natural Soda Ash capacity at USA is 2.8 Million Tons
- 🌸 Serving customers, both across Europe, the USA, and, specifically in many export destinations

Source-Solvay and other news media



SOLVAY SA&D : A global network of plants to better serve our customers



€2.2 billion
2022 net sales



11
production sites *



3 R&I centers Brussels,
Dombasle and Torrelavega



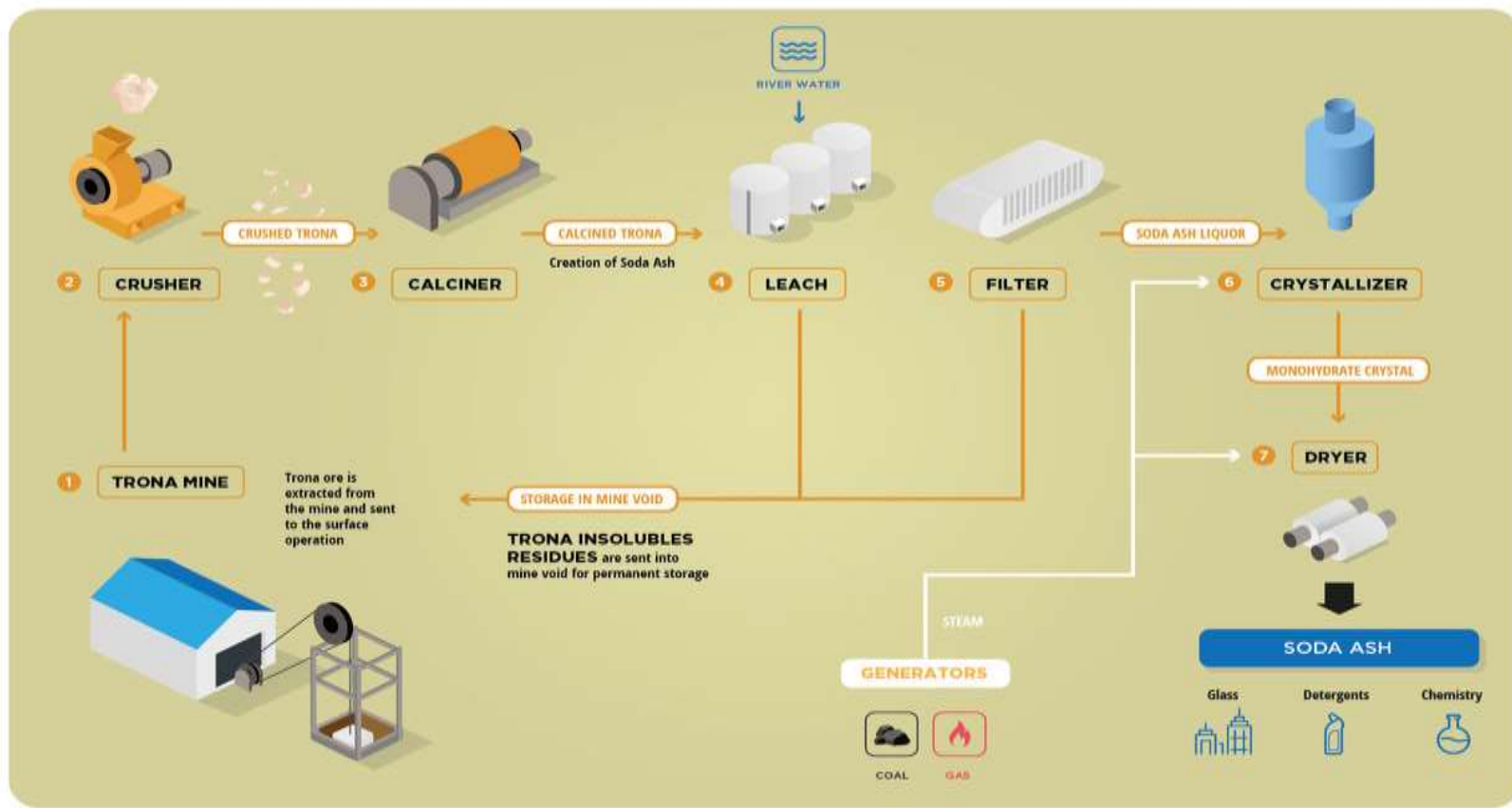
3,200
Employees



TRONA Based Mono Process



TRONA BASED MONO PROCESS





Spotlight on Solvay

Trona operations in Wyoming (USA)



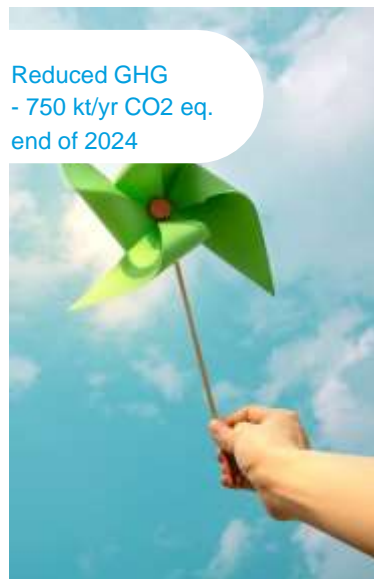
Capacity

Increased capacity
+600 kt/yr Soda Ash
end of 2024



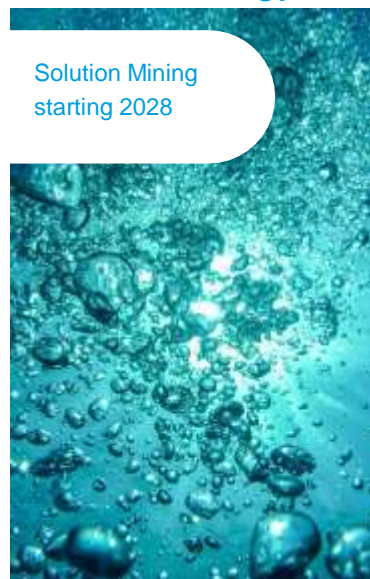
Climate

Reduced GHG
- 750 kt/yr CO₂ eq.
end of 2024



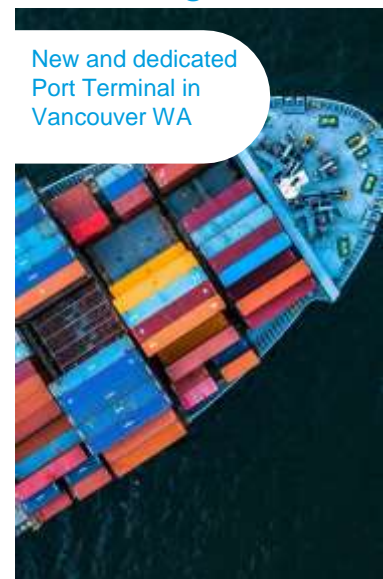
Technology

Solution Mining
starting 2028



Logistics

New and dedicated
Port Terminal in
Vancouver WA





The world needs Trona AND Solvay process

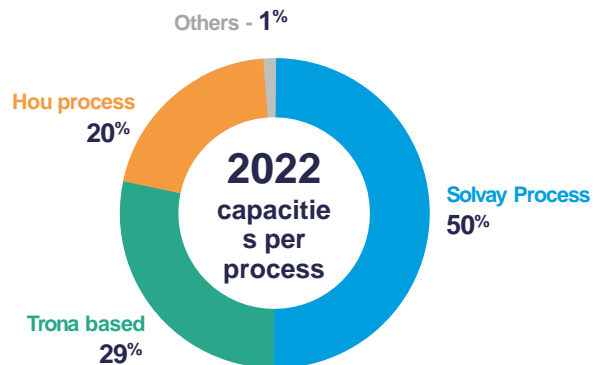


Main Trona Deposits

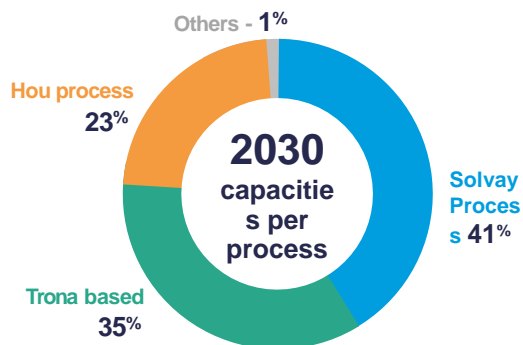


Trona deposits in USA

2022



2030



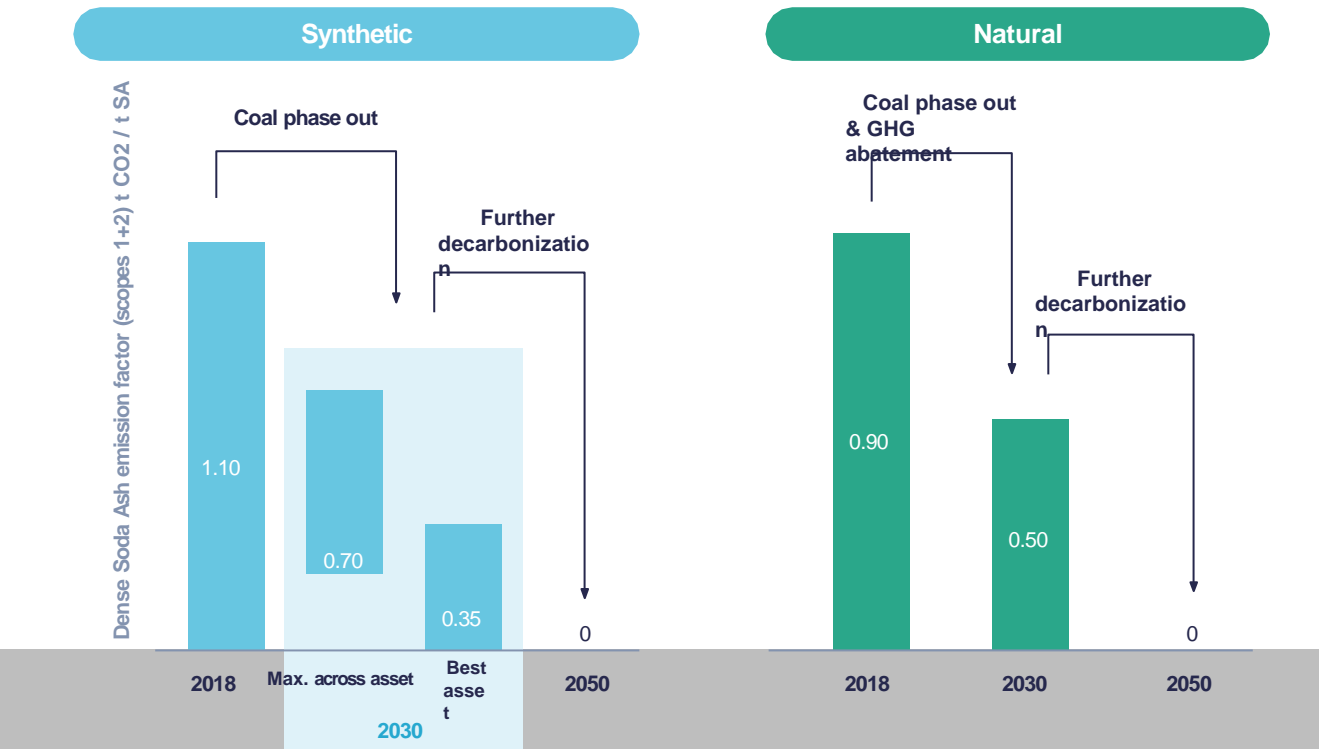
63% of the expected **new** capacity by 2030 will be from natural process
27% from HOU process (China mostly), subject to the ammonium chloride market

Sources: CMA and Solvay internal market intelligence

Source-Solvay



Clear path towards carbon neutrality by 2050



Source: Company data

30% emission reduction committed and planned by 2030 through full coal phase out

Path to full carbon neutrality by 2050

- Elimination of process emissions (30% reduction)
- Full shift towards decarbonized energy (40% reduction)



Quality



Natural – Solvay Soda Ash Dense



- 🌸 The dense grade has a bulk density of ~1 t per m³ and a Particle-Median-Diameter (D50) of 300 to 500 microns.
- 🌸 Solvay Soda Ash Dense is the grade preferred for glass manufacture because its granular properties make it widely dust-free and reduce the risks of segregation during transport and handling



Soda Solvay Dense



 CAS Number- 497-19-8

Soda Ash - Soda Solvay[®] DENSE, Sodium carbonate, Solvay soda ash, neutral sodium carbonate, ammonia soda, carbonated soda, Carbonic acid disodium salt



Quality and Chemical Properties



	<u>Total Alkali</u> <u>Content (as</u> <u>Na₂CO₃) %</u>	<u>Chloride Content (as</u> <u>Na₂Cl) %</u>	<u>Fe Content (as Fe)</u> <u>%</u>
Typical Synthetic Process*	99.2 - 99.3	0.30 - 0.70	0.003 – 0.004
Typical SOLVAY Natural Soda Ash	99.8	0.03	0.0005

- **Synthetic-process sodium chloride levels are 10 to 20 X higher than Solvay natural soda ash impacting furnace and mold life**
- **SOLVAY soda ash assay is higher and more consistent with Green River as a single source vs. many different synthetic-process plants**
- **SOLVAY Natural soda ash iron content and overall impurities are lower providing advantages to many chemical processes**

* High-purity
dense



Logistics



Logistics



🌸 Solvay, a global leader in the soda ash market, and **VBT**, a bulk commodity shipping and logistics expert partnership to collaborate on the redevelopment of Terminal 2, Berth 7 at the Port of Vancouver USA, in Washington state

🌸 The newly designed terminal will have the capability to annually process more than 2.5 million tons of soda ash



About KEIPL & Solvay Partnership



About KEIPL & Solvay Partnership



- 🌸 KEIPL is only Exclusive Distributor for PAN India for – Solvay Bulk Soda Ash Dense
- 🌸 Solvay and KEIPL strategic partnership will help Indian customers
- 🌸 KEIPL -The first Soda Ash Dense from USA, cleared in India
- 🌸 Experience of handling more than 700 KT of Dense Soda Ash from USA –providing end to end solutions
- 🌸 Warehouses at 8 different locations in India



Solvay and KEIPL are ready to deliver
best Soda Ash Dense for Indian Market.

For any enquiries please contact

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Thank You