Ensuring Sustainable Soda Ash Supply

Security of Supply • Environmental Impact • Transparency
Soda Ash

- **Life’s “invisible ingredient”** - the 10th most consumed commodity globally, critical to every-day life

- **~2 million tonnes growth** in global demand every year (~3% pa)

- **Sustains energy transition** – more than 75% of new demand is in “green” categories

- **Very limited synthetic capacity additions** based on current technology – mainly due to environmental impact constraints(1)

- **The future is “natural”** – trona-based production in Wyoming

- **The future is solution-extraction** – driven by technical and environmental factors

Notes: (1) Other than synthetic production projects in Kazakhstan and Saudi Arabia, and projects in China to replace older synthetic capacity that is being closed.
Global Demand Growth (million mtpa)

- Average 2014-2019: 58
- 2021: 63
- 2022: 65
- 2030: 83

Global Utilisation Rate
- 88%
- 89%
- 93%
- 95%

2030 Supply-Demand GAP (million mtpa)
- 4 million mtpa GAP by 2030

Announced Capacity Additions & closures (million mtpa)

<table>
<thead>
<tr>
<th>Region</th>
<th>Operator</th>
<th>Capacity Δ</th>
<th>Prod’n Type</th>
<th>Anticipated Start</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demand</td>
<td></td>
<td>-19.6</td>
<td>Natural</td>
<td></td>
</tr>
<tr>
<td>Growth</td>
<td></td>
<td>+15.6</td>
<td>Natural</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>+15.6 million mtpa</td>
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</tbody>
</table>

Notes:
1. Assumes Berun starts production in late 2023, with progressive ramp up during 2024 and 2025, and full capacity in 2028. (2) Kazan Soda efficiency improvements of +0.1 mtpa, expansion of +0.3 mtpa by mid 2023, with new Unit 6 at +0.6 mtpa during 2025. (3) Pacific is an early stage greenfield development project with production anticipated to start in 2022. Owned 60% & operated by Sisecam and 40% owned by WE Soda with each party responsible for the sales & marketing of its proportionate share of production.
We Deliver: Security of supply

- ~5 million mtpa supply today – from Eti Soda and Kazan Soda
- The only producer to add ~4 million mtpa production capacity in the last 5 years
- Invested ~$2 billion in the last 10 years
- All natural, all solution-extraction – with the lowest environmental impact
- Export focused
- Proven, reliable supply chain – with global access delivering to over 70 countries
- New export & logistics facilities in Europe and US West Coast

Eti Soda: ~1 million mtpa expansion
Kazan Soda: ~3 million mtpa

Production • Logistics • Supply Chain
ANNOUNCING: Project West

- **New greenfield project** located near Green River, Wyoming

- **~3 million mtpa initial production capacity** – and scalable over time to meet growing global demand

- **Export focused**, using new US West Coast export facilities under development

- **Targeting production before 2030**

- **Solution-extraction** – targeting the largest deep trona beds

- **Using up to 100% renewable energy** – solar, wind, solar steam, targeting carbon neutral\(^{(1)}\)

- **100% WE Soda**

Together with existing projects\(^{(2)}\), we plan to invest ~$4 billion and add over 6 million mtpa new capacity by 2030

Note: (1) Targeting 100% renewable energy sourcing during summer months, although likely to be 50-75% throughout the entire operating year. (2) Existing projects include ~1 million mtpa debottlenecking, efficiency improvement and expansion projects at Kazan Soda and ~2.2 million mtpa proportionate share of production from our 40% interest in the Pacific project.
**Emissions**

~65% less CO₂  
Vs. Solvay Process EU Avg.(1)/(4)

**Water**

~76% less water  
Vs. Solvay Process EU Avg(3)/(4)

**Waste**

No liquid waste  
Almost no solid waste(8)

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**Notes:**  
(1) Based on Scope 1, 2 and 3 mt CO₂ per mt soda ash for 2020.  
(2) Energy intensity defined as Scope 1 MMBtu of energy consumed per mt of soda ash production.  
(3) Water intensity defined as mt of all process, boiler and cooling water used per mt of production.  
(4) Calculated as the simple average of Eti Soda and Kazan Soda compared with the simple average of EU-based Solvay process production methods using a variety of fuel sources (Solvay Process EU Avg.).  
(5) Solvay Process EU Avg. calculated as the simple average of all EU-based Solvay process production methods using a variety of fuel sources, excluding Biomass.  
(6) Includes sodium bicarbonate production.  
(7) Excludes ammonium chloride production.  
(8) All insoluble materials are left underground.
We Deliver: Further emission reductions

**Scope 1 & 2 Reduction Drivers**
- Optimisation & expansion with no additional utilities
- Bicarbonate balance recycling CO₂
- Renewable energy sourcing PV solar, wind & steam – including Project West
- Reducing waste

**Scope 3 Reduction Drivers**
- Maximising bulk
- Rail transportation from Kazan
- Ocean shipping optimisation with larger vessels and regional hubs
- Raw material supply chain using lower emission suppliers

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**Our Current Targets**

WE Soda Group: Net Zero by 2050\(^{(1)}\)

Scope 1 & 2 intensity: 10% reduction in next 5 years\(^{(1)}\)

Absolute Scope 3: 15% reduction in next 5 years\(^{(1)}\)

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Note: (1) Science-based targets as disclosed in the CDP 2022 Climate Change report submitted by Eli Soda and Kazan Soda.
Source: Morningstar Sustainalytics. Note: (1) Based on the Corporate ESG Assessment performed by Morningstar Sustainalytics dated 6 June 2022 for Kew Soda Ltd (the parent company and 100% owner of WE Soda Ltd) which received a score of 16.1, which places the WE Soda Group in the “low” risk category. (2) As of 6 June 2022, the score of 16.1 would place the WE Soda Group as having the best ESG Risk Rating score in the global commodity chemicals subsector as defined by Morningstar Sustainalytics (1st out of 227 companies), the best score amongst leading soda ash producers (including Solvay, Ciech, Sisecam, Tata Chemicals & Genesisenergy) and the 7th best score in the global chemicals sector as defined by Morningstar Sustainalytics (7th out of 464 companies). (3) All scores based on Morningstar Sustainalytics website with the exception of WE Soda Group (Kew Soda Ltd).
We believe greater transparency will deliver a “better” product for our customers – and create value for all soda ash industry participants – from producers to consumers.

**Soda Ash Industry Ecosystem**

**Key Benefits of Transparency**

1. Enable and support sustainable business models
2. Build trust and strengthen relationships with customers
3. Incentivise industry-wide sustainability transition
4. Meet growing customer – and consumer - demands on informed purchase decisions
5. Drive “value” for low carbon / high sustainability products
6. Support compliance with upcoming DPP legislation
ANNOUNCING: “Connexsa”

“Connexsa” is a *blockchain-based* ecosystem developed by We Soda to provide sustainability metrics from producers to customers – and ultimately to individual consumers – delivering data transparency and traceability across the soda ash industry.

**“Connexsa” Ecosystem**

- **Traceability**
  - Full traceability
  - All upstream raw materials

- **Decentralised**
  - Trusted blockchain ecosystem
  - Decentralized governance

- **Encryption Security**
  - Highly encrypted data
  - Blockchain based “wallet” access

- **Esg Assurance**
  - ESG data tracking platform
  - Incorporating all stakeholders from soda ash industry

- **ESG Assurance**
  - ESG assurance partner
  - To oversee, monitor & certificate ESG outcomes

- **Regulation Ready**
  - Flow of information via Digital Product Passports
  - Compliant with upcoming regulations

**Project Timeline**

- **PoC completed**
  - 2022 Q3

- **MVP developed & tested with value chain participants**
  - Q1 / Q2 2023

- **Inclusion of Soda Ash industry players to create industry-wide ecosystem**
  - Q3 2023
We are Soda!

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