

ŞİŞECAM

US NATURAL SODA ASH INVESTMENT

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Transaction Details



Taking control of 8m tons of soda ash capacity



We are taking another decisive step forward, given the expected dramatic change in our industry driven by ESG theme;

- 1. Acquire 60% of Ciner Resources* (2.5m ton up and running natural soda sites) for \$300m** (effective stake: ~23%)
- 2. Acquire 60% stake in 2.7m ton Atlantic natural soda project & increase our stake in 2.7m ton Pacific natural soda project to 60% for \$150m** in total

This move is also an integral part of our long-term growth ambition in the U.S. glass market

Following these transactions,

- 1. We will own the lowest-cost soda capacity in the U.S., where >90% of global low-cost natural soda capacity is based
- 2. We will be operating ~40% of the global planned expansions until 2026
- 3. Net debt / EBITDA to peak ~2x in 2024
- 4. We are going to sustain net long FX position in the B/S (ringfence the debt raised for investments in the US)
- 5. Hard currency revenue share to reach ~70% beyond 2026 on a continuous basis

^{* 74%} interest owner in Ciner Resources (Listed in the U.S. with CINR ticker) which is holding 51% interest in Ciner Wyoming USA

^{**} USD 450 Million includes all expenses related to the transactions and business development on the condition to execute the payment following the deal closing

Acquiring ~\$1.1bn consolidated EBITDA (2028E) for 5.2x



U.S. operations* consolidated figures -\$bn- (for 100% stake)	2022E-2028E Cumulative	2028E
Revenues	10.0	2.6
EBITDA	3.5	1.1
EBITDA Margin	35%	41%
nvestment CAPEX	4.0	-
Sisecam total equity injection (including acquisition)	0.9	-
FCF	-3.3	0.8
FCF/EBITDA Conversion	-	~70%

Deal multiple calculation for Sisecam's effective stake in the U.S.	\$bn (u stated)	nless otherwise
28E EBITDA in the U.S.	1.1	
Sisecam stake adjusted 28E EBITDA (60% for Atlantic/Pacific, 23% for Ciner Wyoming)	0.6	(A)
2022-28 total investments in the U.S.	4.0	
Sisecam stake adj. total investments (60% for Atlantic/Pacific)	2.4	(B)
Acquisition Value	0.45	(C)
Ciner Resources Net Debt	0.15	
Sisecam portion in Ciner Resources Net Debt (44%)	0.1	(D)
Total EV for Sisecam	2.95	(E = B + C + D)
Deal Multiple (EV/28E EBITDA)	5.2x	(F = E/A)

- We plan to invest ~\$4bn to develop Atlantic/Pacific sites with 80/20 Debt/Equity
- Once all the sites to be fully operational in 2027-2028; we expect to generate ~\$1 to 1.2bn EBITDA in the U.S. with 70% FCF conversion
- On our business plan, the multiple (EV / 28E EBITDA) for the entire transaction is 5x
- We believe this is very attractive since our <u>chemical peers with similar CoE profile trade close to 8x on average**</u>
- Number of factors (freight, energy, ANSAC transition, etc.) weighed negatively on profitability recently. This distorts near-term multiple analyses.
 We expect the industry to fully normalize in 2023

^{*} We will provide more granular information in mid-2022 on KPIs and financials. There might be revisions on our baseline scenario

^{**} Bloomberg, 1-yr forward-looking EV/EBITDA for Solvay and Genesis, last 12m average

Aiming to create \$1.0 - \$1.5 bn value from Atlantic/Pacific



\$bn (unless otherwise stated)	
Atlantic/Pacific total NPV	3.0 – 4.7
Stakes subject to the acquisition	60% for Atlantic and 10% for Pacific
NPV of stakes subject to the acquisition	1.1 – 1.7
Acquisition Price	0.15
Net Value Creation	1.0 – 1.5

~\$4bn total investment

\$3.0bn - **\$4.7bn** NPV

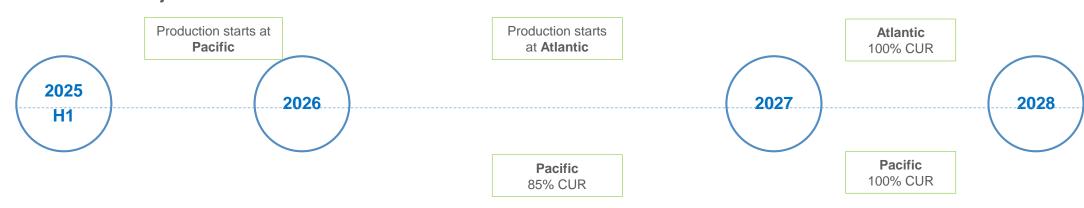
80/20Debt/Equity

12% - 15% project IRR

10-12 years pay-back

3.0% - 5.5%Cost of Debt

Atlantic/Pacific Projects Timeline



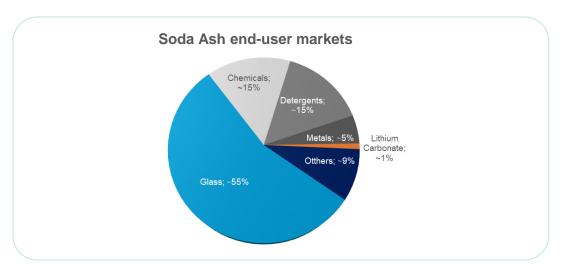
Transaction Rationale

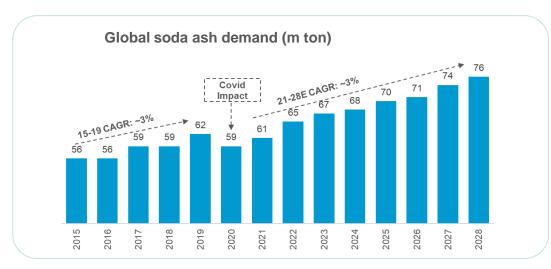


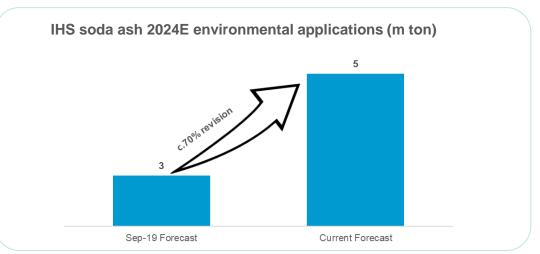
Soda ash demand grows ~3% p.a.



- Secular demand growth of ~3% p.a. thanks to the resilience of soda consumed sectors
- The demand for environmental applications (such as lithium, solar panel and flue glass) is growing ~8x faster
- IHS revised 2024E soda ash environmental applications demand forecast by ~70% to 5m tons from 3m tons (2019).
- Accordingly, ~7% of total soda ash demand in 2024E is expected to come from environmental applications





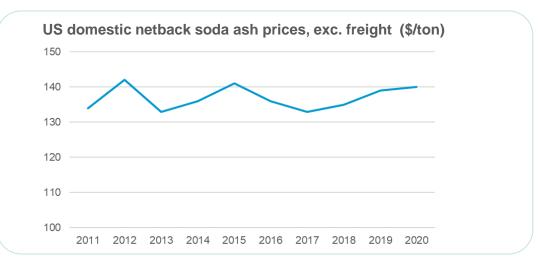


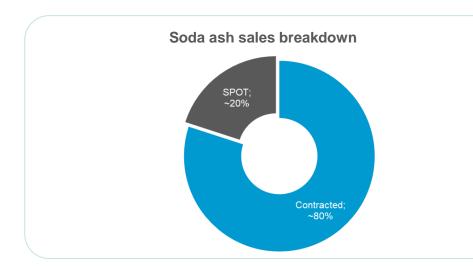
Source: IHS. Sisecam

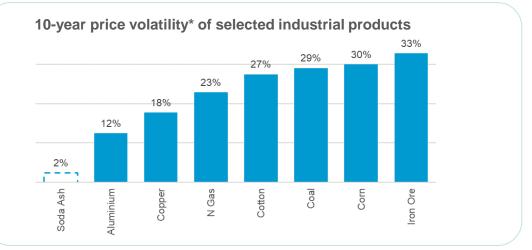
Soda prices have been visible, predictable and stable



- Price volatility in soda ash is very low. Over the past ten years, soda ash prices oscillated in a 7% range in the U.S
- ~80% of the soda capacity is sold with pre-agreed prices at the beginning of the year, while the remaining ~20% portion is sold with SPOT prices during the year
- Hence, total output and top-line is predictable







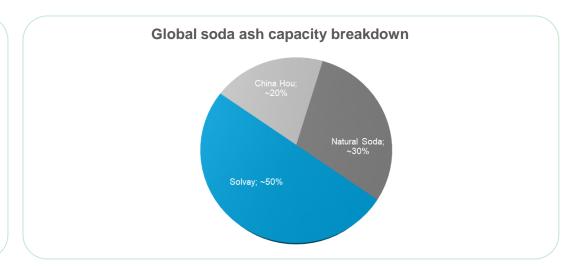
Source: Market research reports, Sisecam, Bloomberg

^{*} standard deviation / average annual prices

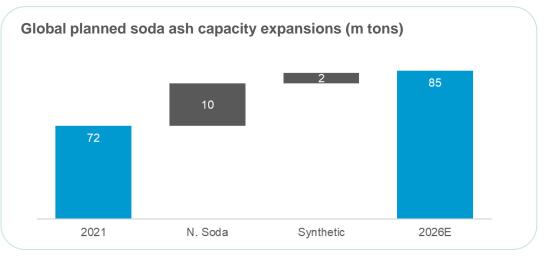
ESG led structural shift to natural soda



- Of the planned global capacity expansions until 2026, >80% is natural soda
- Production related CO2 intensity in natural soda is ~70% lower vs. synthetic, while energy usage is ~60% and water usage is ~85% lower
- We are taking a decisive position based on our view on how new ESG theme will dramatically change our sector
- We think the inefficient, old, small-scaled synthetic plants (including China Hou sites) are unlikely to remain competitive going forward and eventually lose market share against natural soda



Natural soda vs. synthetic production			
	Natural	Solvay Process	China Hou
RAW Material	Trona Ore	Salt, Limestone & Ammonia	Salt, Limestone & Carbon Dioxide
By-products	None	Calcium Chloride (Waste)	Ammonina Chloride (co- product)
Energy Usage	3-6 MMBtu/ton	9-13 MMBtu/ton	9-13 MMBtu/ton
Water usage	1.5 - 2.0 ton	10 - 15 tonn	10 - 15 tonn
CO2 Emm. Factor	~0,4	~1,1	~1,1

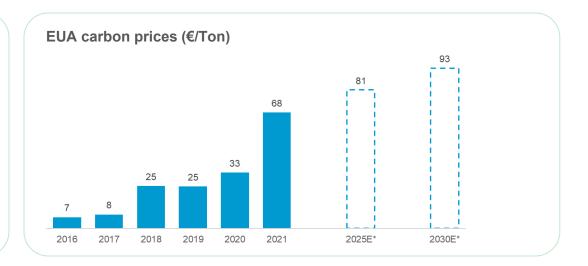


Source: Market research reports, company annual reports, Sisecam

Significant upside potential to the prices



- Carbon prices increased ~8x since 2017. Extreme forecasts (€120/ton) suggest ~75% increase until 2025 (Avg. forecast: €81/ton)
- Avg. synthetic soda producer to bear €14/ton carbon tax (~15% of unit cost) in 2025 with current estimates. This goes up to €45/ton in extreme forecasts for the highest carbon intensity producers
- IHS foresees US soda ash prices to increase 23% to \$197/ton in 2022 (2021: \$160/ton). Carbon taxes renders further upside potential to the soda ash prices going forward
- Rising carbon taxes do not only increase production costs in EU, but also limit any potential capacity expansion in synthetic soda



Cash cost index by production type (indexed=100; exc. carbon taxes)

	Natural		Synthetic	
	US Solution	US Gallery	Turkey	EU
Cash production cost	100	154	190	228
Energy	36	40	115	136
Labour	27	55	9	18
Tax/Royalty	18	20	0	0
Others	18	39	66	74

Estimated carbon tax cost for synthetic producers in EU (€/ton)

€/Ton (unless otherwise stated)	2025E	
EU-ETS Benchmark Carbon Intensity (x)	0.75	(A)
Average Producer Carbon Intensity (x)	0.93	(B)
Average Producer Carbon Spread (x)	0.18	(C= B-A)
Estimated Carbon Price	81	(D)
Estimated Carbon Tax	14	$(E = C \times D)$

Source: Bloomberg, Sisecam

^{*} Average estimate of multiple independent firms

We are a strategic soda ash producer/investor

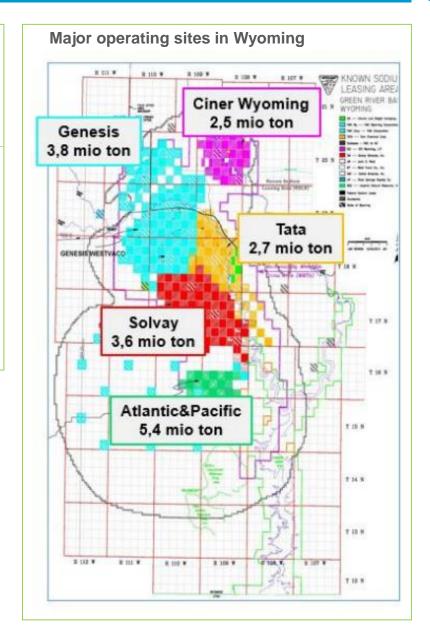


- We are a strategic soda ash producer/investor and must be in the heart of the natural soda business. We joined forces with Ciner 2 years ago with this vision
- We have learned and verified the sites over the time. These are not new projects for Sisecam
- It takes too much time and effort to receive production license for trona mines in the U.S. We eliminate all the processes and hurdles with these transactions
- Wyoming is a unique place where >90% of global natural soda ash capacity is located. We must be here to become a world-class soda ash producer
- Ciner Wyoming has >40 years reserve life whereas Atlantic/Pacific sites have >60 years
- Ciner Wyoming is operating with gallery mining method while Atlantic/Pacific sites will be operated with solution technology. Hence, unit production cost in Atlantic/Pacific to be ~35% lower than Ciner Wyoming mainly due to lower labor costs (same output with half headcount)
- Atlantic/Pacific sites will utilize co-generation plant, water treatment facilities and rail infrastructure of Ciner Wyoming, leading sizable synergies*
- Ciner Wyoming owns also 1m ton expansion license

Cost index by asset (indexed=100)

	Atlantic / Pacific	Ciner Wyoming
Cash production cost	100	154
Energy	36	40
Labour	27	55
Tax/Royalty	18	20
Others	18	39

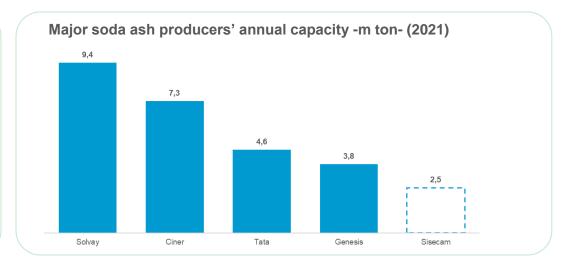
^{*} We will provide more granular information in mid-2022 on synergies. At the initial stage, the size of the synergies is projected to exceed 5% of the total investment budget of the sites

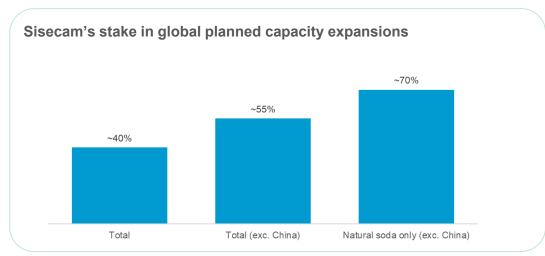


We are set to become largest soda producer in the world



- We will manage ~40% of the global planned new capacities (inc. expansions) until 2026. Excl. China, we will operate ~70% of the global new natural soda capacities (inc. expansions) until 2026
- Current production capacity will increase above 10m tons with the inclusion of new capacities under control
- We will be one of the key players in the industry with +10% global market share





Source: Market research reports, company annual reports, Sisecam

Key Assumptions



Key Assumptions



Sales Volume

- Atlantic: 100% CUR to be reached in 2027-2028
- Pacific: 100% CUR to be reached in 2027-2028

Pricing

- U.S. domestic prices are expected to increase 5% 7% CAGR from 2022 to 2026 (from \$155 \$165/ton in 2022 to \$190 \$215/ton in 2026)
- Export prices are projected to remain \$10 \$15/ton below domestic prices
- From 2026 and onwards, we pencil-in 2% price CAGR into our model
- We assume 20-30 / 70-80 domestic/export breakdown throughout our forecast horizon

Unit Costs

• We project Atlantic/Pacific's unit cost to remain 30% - 40% below Ciner Wyoming once they reach 100% CUR in 2027-2028

CAPEX & Working Capital

- \$600m \$700m CAPEX for Atlantic/Pacific (cumulative) in every 6-7 years for the new wells and drilling activities
- Working Capital / Revenues is foreseen at ~20%

Appendix



Accounting Principles



Ciner Wyoming (Ciner Resources)

- Financial investment
- Control established
- Effective control: 22.64%
- Full consolidation, minority to be accounted

Atlantic & Pacific

- Joint arrangement
- Joint control established
- Parties with joint control have rights to the assets and liabilities of the arrangement with percantage of shares
- 60% of assets-liabilities, revenue and expenses will be consolidated

Projected Shareholder Structure in the U.S.



