



Global Leadership in Natural Soda Ash

Sinan SOLAKLAR | CİNER GROUP

Vice President, Glass & Chemical Group

2016 - Lisbon, Portugal

Ciner Group aims at being
the biggest group in Turkey
and contributes to the economical, social and cultural
development and future of Turkey.

50.000 labour force
50 educational institute

GROUP OVERVIEW

Energy and Mining

Park Thermic

Park Technique

Park Electric

Silopi Electric

Park Wholesale Electric

Konya Iğın Electric



Glass and Chemicals

ETİ Soda

Ciner Resouces LP

Kazan Soda Electric

Park Cam



Media

Ciner Publishing Holding

Haberturk Newspaper

Ciner Media Investments

HaberTurk Newspapering and
Printing

C Production Film Industry

Haberturk

Bloomberg HT

Show TV HT



Navigation

Ciner Navigation

Ciner Ship

Park Navigation



MILESTONE



1978

CİNER GROUP

Ciner
Group

Park
Elektrik

Park
Teknik

Eti
Soda

Park
Termik

Park
Elektrik

Ciner
Media

Eti Soda
Silopi Elektrik

Ciner
Shipping

Kazan
Soda

Park
Cam

Silopi Elektrik
Park Cam
Ciner Resources LP



1978

1994

1995

1998

1999

2003

2007

2009

2010

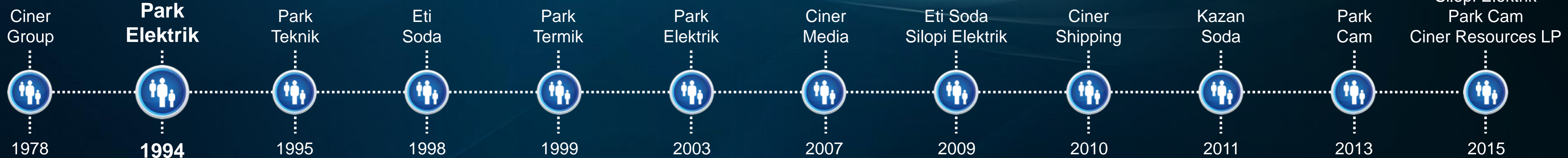
2011

2013

2015

1994

PARK ELEKTRİK



1995

PARK TEKNİK

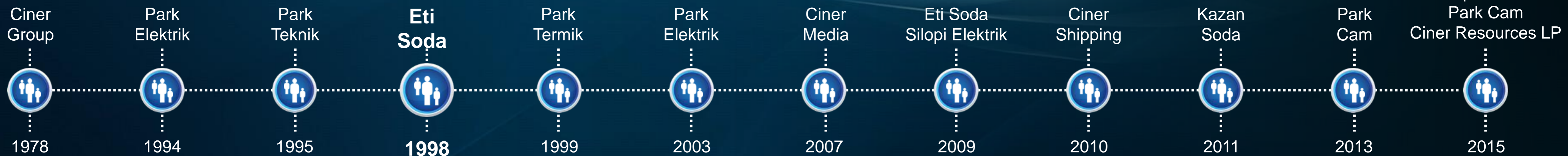


MILESTONE



1998

ETİ SODA



1999

PARK TERMİK

Purchase of state-owned
620 MW Cayirhan Coal Power Plant



2003

PARK ELEKTRİK

Siirt Copper Mine & Ore Concentrator



MILESTONE



2007

CİNER MEDIA



MILESTONE



2009

ETİ SODA

1 M Ton/yr Soda Ash Plant

SİLOPI ELEKTRİK

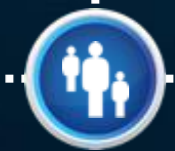
135 MW Asphaltite Fired Power Plant

Ciner Group



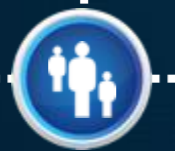
1978

Park Elektrik



1994

Park Teknik



1995

Eti Soda



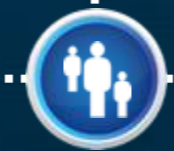
1998

Park Termik



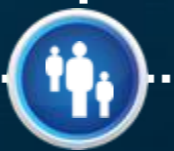
1999

Park Elektrik



2003

Ciner Media



2007

Eti Soda
Silopi Elektrik



2009

Ciner Shipping



2010

Kazan Soda



2011

Park Cam



2013

Silopi Elektrik
Park Cam
Ciner Resources LP



2015

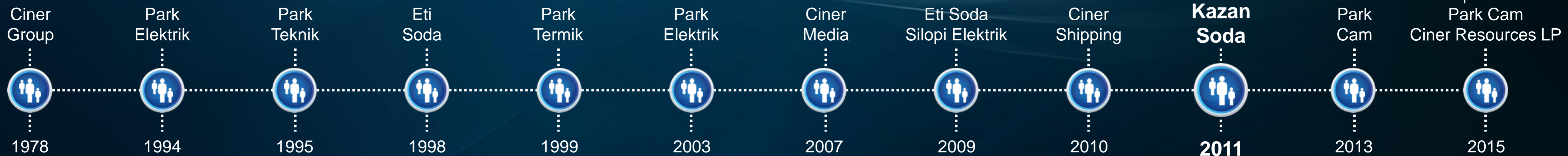
2010

CINER SHIPPING



2011

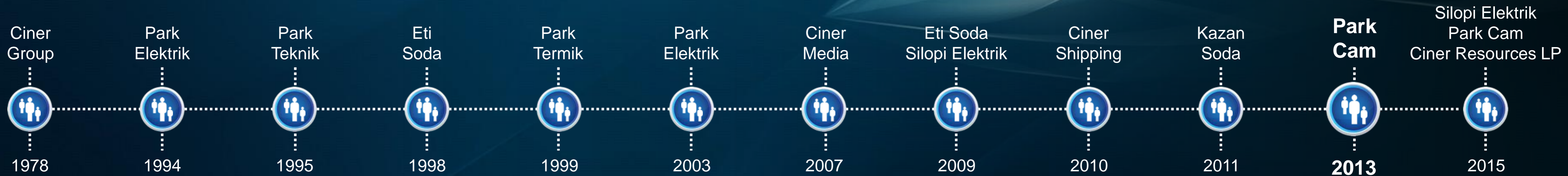
KAZAN SODA



2013

PARK CAM

1st Unit



2015

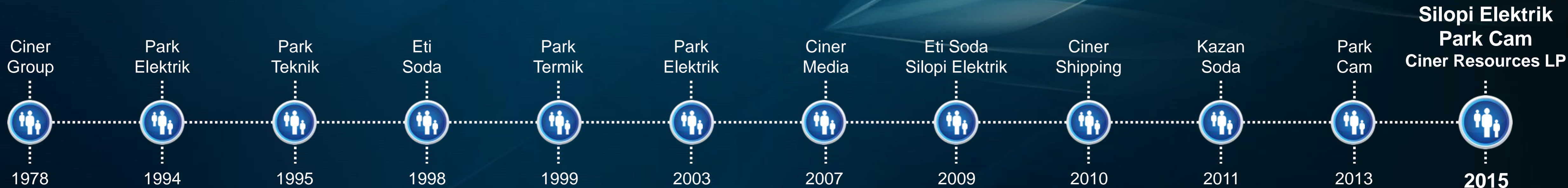
SİLOPI ELEKTRİK

- 135 MW 2nd Unit
- 135 MW 3th Unit
- Asphaltite Fired Power Plant

PARK CAM

- 2nd Unit

CİNER RESOURCES LP



SUBSTANTIAL TRONA DEPOSITS IN TURKEY



SUBSTANTIAL TRONA DEPOSITS IN TURKEY

ETİ SODA

Currently known total resources
c. 245 Mt trona

Existing resources sufficient for
c. 30 years of production

KAZAN SODA

Currently known total resources
c. 1,600 Mt trona

Existing resources sufficient for
c. 40 years of production

INVESTMENT HIGHLIGHTS



Substantial trona deposits

Experienced Management team to develop, operate and grow

Direct customer access providing clear route to market

Strong financial profile

Proximity to large and growing soda ash markets, underpinned by strong fundamentals

High quality production based on natural trona

World-class sustainable soda ash producer with growth and leadership perspective

NATURAL SODA ASH HISTORY IN TURKEY

2009



Cogeneration & Process
Plant Completed & Start-up

2010



Sustainable production
at the ultimate capacity

2011



Kazan Trona Site acquired
by Ciner Group

NATURAL SODA ASH HISTORY IN TURKEY

2014



Eti Soda capacity expansion
& Kazan Soda investments
commenced

2017



Eti Soda capacity **1.7 M Ton**
Kazan Soda capacity **1.7 M Ton**

2018



Kazan Soda capacity
2.7 M Ton

ETİ SODA: KEY OPERATIONAL AND INFRASTRUCTURE HIGHLIGHTS

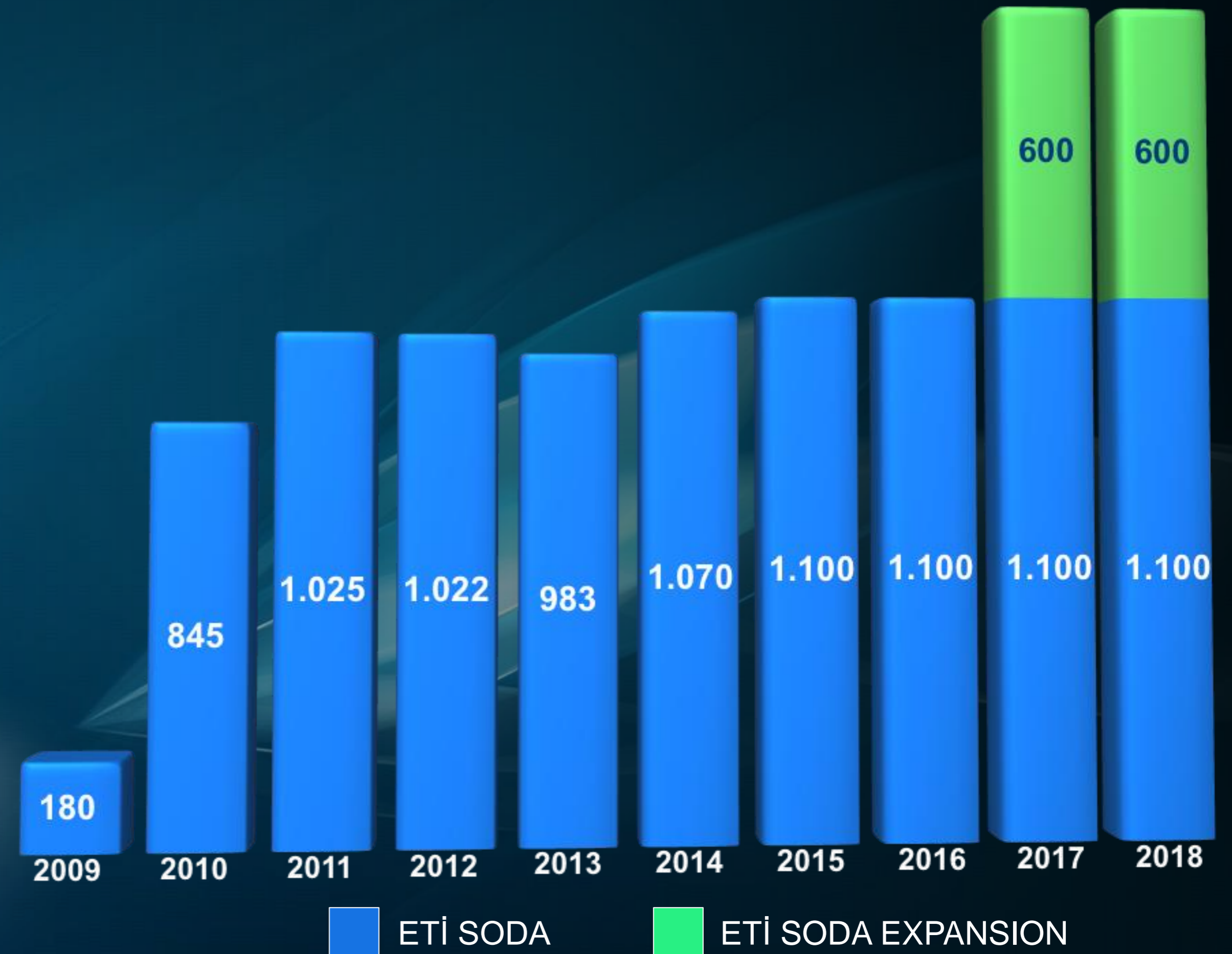
Soda Ash Plant

Planned nameplate capacity of 1.7mt/year (fully developed by 2017)

- 3 soda ash production lines of 500kt capacity each
- 2 sodium bicarbonate line of 100kt capacity each



Evolution of Production Capacity (kt/year)



KAZAN SODA: KEY OPERATIONAL AND INFRASTRUCTURE HIGHLIGHTS

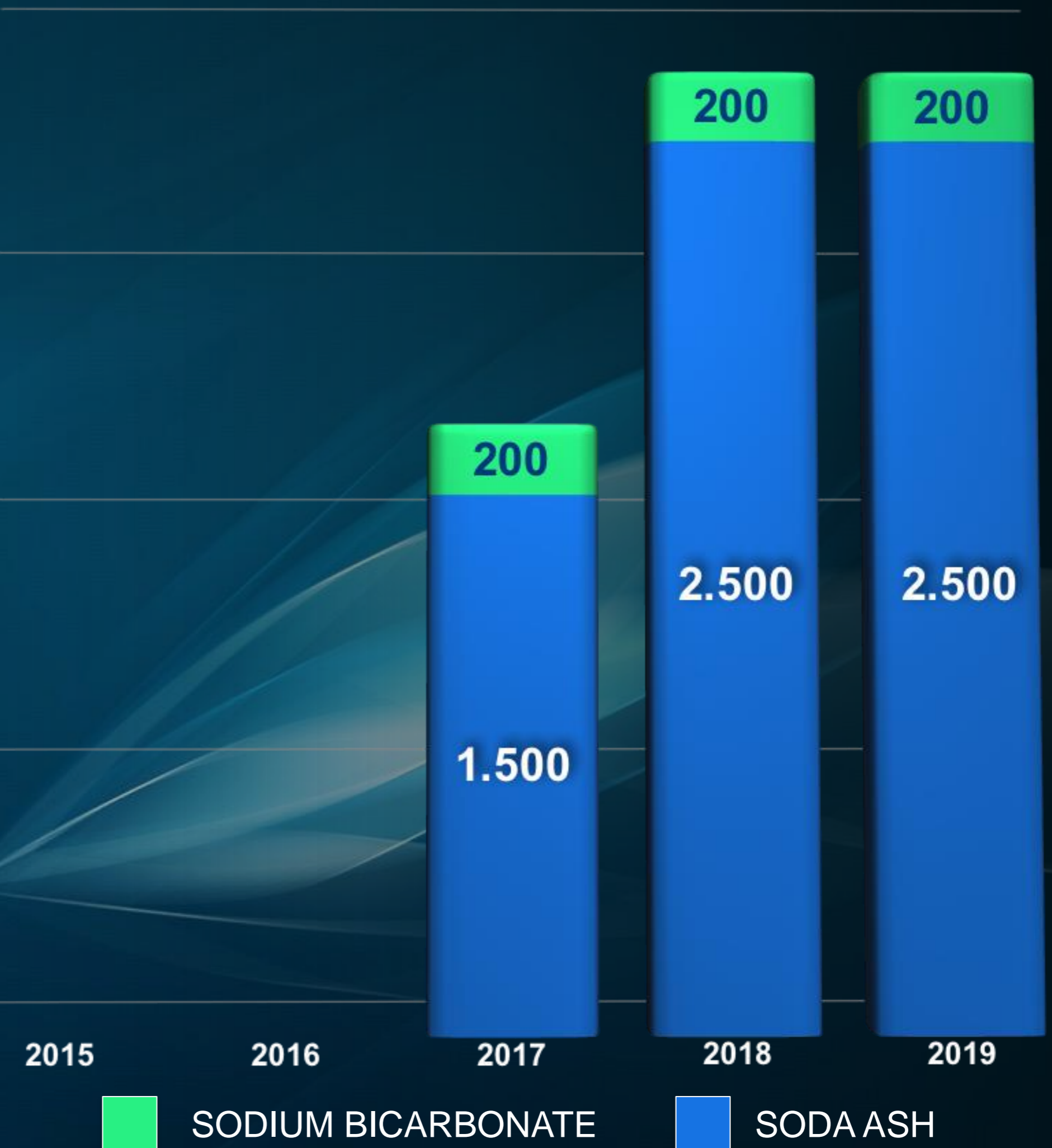
Soda Ash Plant

Planned nameplate capacity of 2.7mt/year (fully developed by 2018)

- 5 soda ash production lines of 500kt capacity each
- 2 sodium bicarbonate line of 100kt capacity each

Similar engineering/set-up as for Eti Soda

Evolution of Production Capacity (kt/year)



KEY HIGHLIGHTS & TOTAL PRODUCTION



Relatively new, fully established soda ash player

75% of production exported (primarily to Europe)

Successfully operates the only natural soda ash plant in Europe

Significant expansion program underway

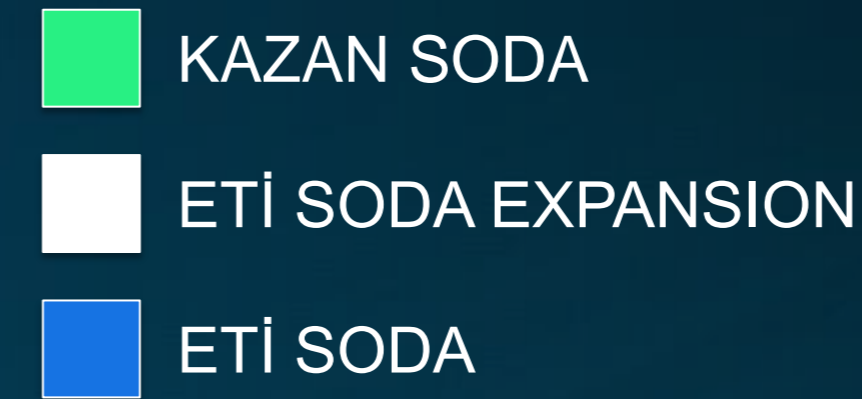
Biggest investor in natural soda ash

Kazan Soda Production

- Production start in 2017 as 1,7 million tons
- Final capacity in 2018 as 2,7 million tons

**Kazan + Eti Soda
Total Production**
2018 as 4,4 million tons

Production Profile (kt/year)



ETİ SODA/KAZAN SODA LOGISTICS-PORT FACILITIES AND INVESTMENTS

ETİ SODA

Transportation & port storage and loading facilities provided by Denmar

- 90 dedicated silo trailers & 70 new silo trailers. Total 160 silo trailers.
- Derince port facilities: 3 silos of 4 kt each
- Stationary and mobile loading equipment providing flexibility and speed
- 700 mt/hr bulk loading capacity

Derince port facilities will be upgraded base case transportation by truck

- Rail connection under construction
- 215 dedicated silo trailers
- Derince port facilities: 3 soda silos x 15 kt
- 6 kt sodium bicarbonate silos
- 4,000 m² port warehouse
- 1,500 mt/hr bulk loading capacity

KAZAN SODA

ETİ SODA EXPANSION PROGRAM - 3RD PRODUCTION LINE



Very cost-efficient

Off-the-shelf design at minimal cost

Key future milestones

EPC contractor (2014)

Project financing (2014)

Commence construction (2015)

Commission and ramp-up during (2017)



ETİ SODA EXPANSION PROGRAM - 3RD PRODUCTION LINE



GENERAL VIEW OF THE PLANT: KAZAN SODA



GENERAL VIEW OF THE PLANT: KAZAN SODA



CINER RESOURCES LP - AT A GLANCE



NYSE symbol: CINR

Core Values

- Safety Excellence
- Leadership, Integrity, Commitment, Respect

Ownership

- Ciner is the General Partner of Ciner Resources LP
- Ciner Resources LP is controlling entity of soda ash asset

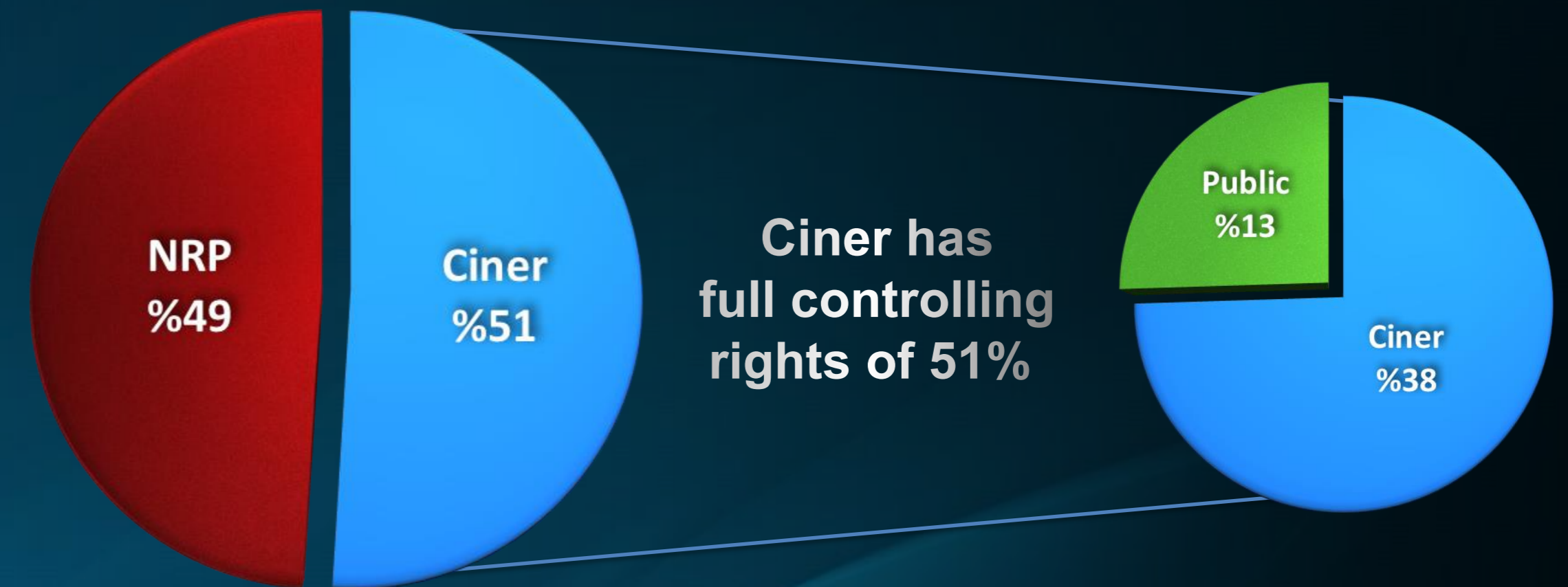
Fixed-distribution Master Limited Partnership (MLP)

- IPO in September 2013
- MLP's are publicly traded partnerships focused on natural resources
- Share price traded based on cash flow yield

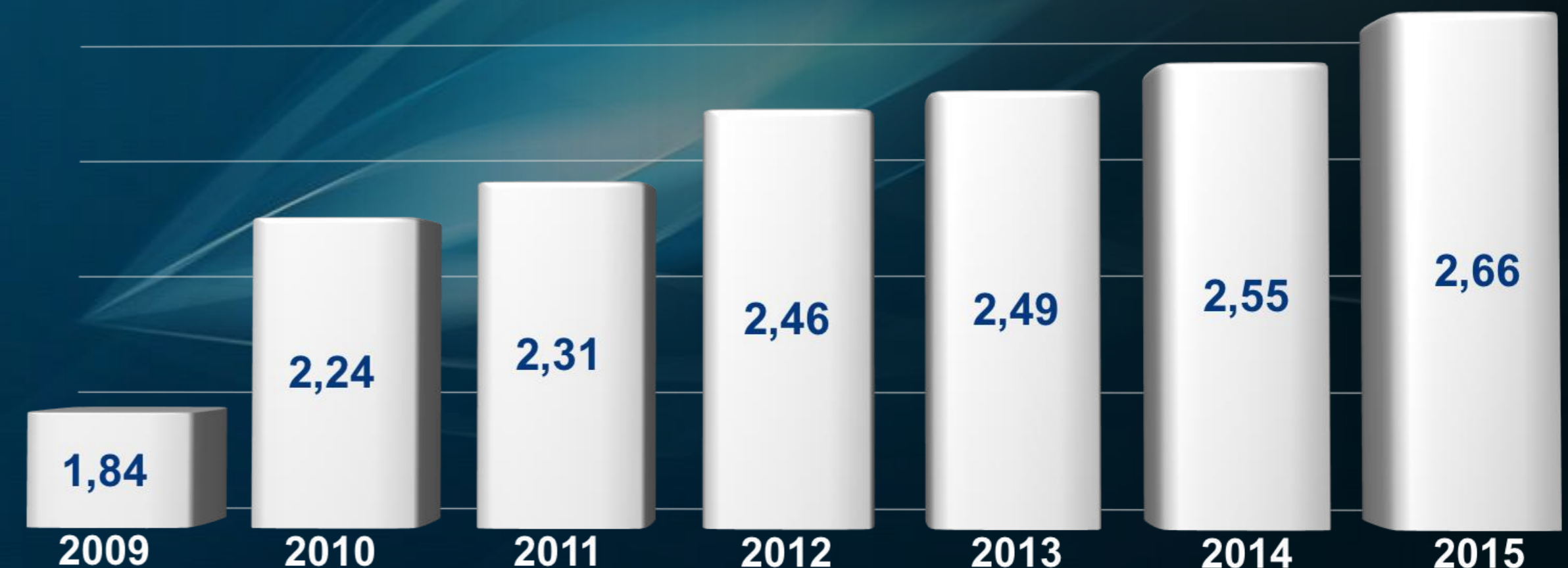
~475 employees

2015 Revenue: \$486 MM

Organization Ownership



Soda Ash Volume Sold (millions of ST)



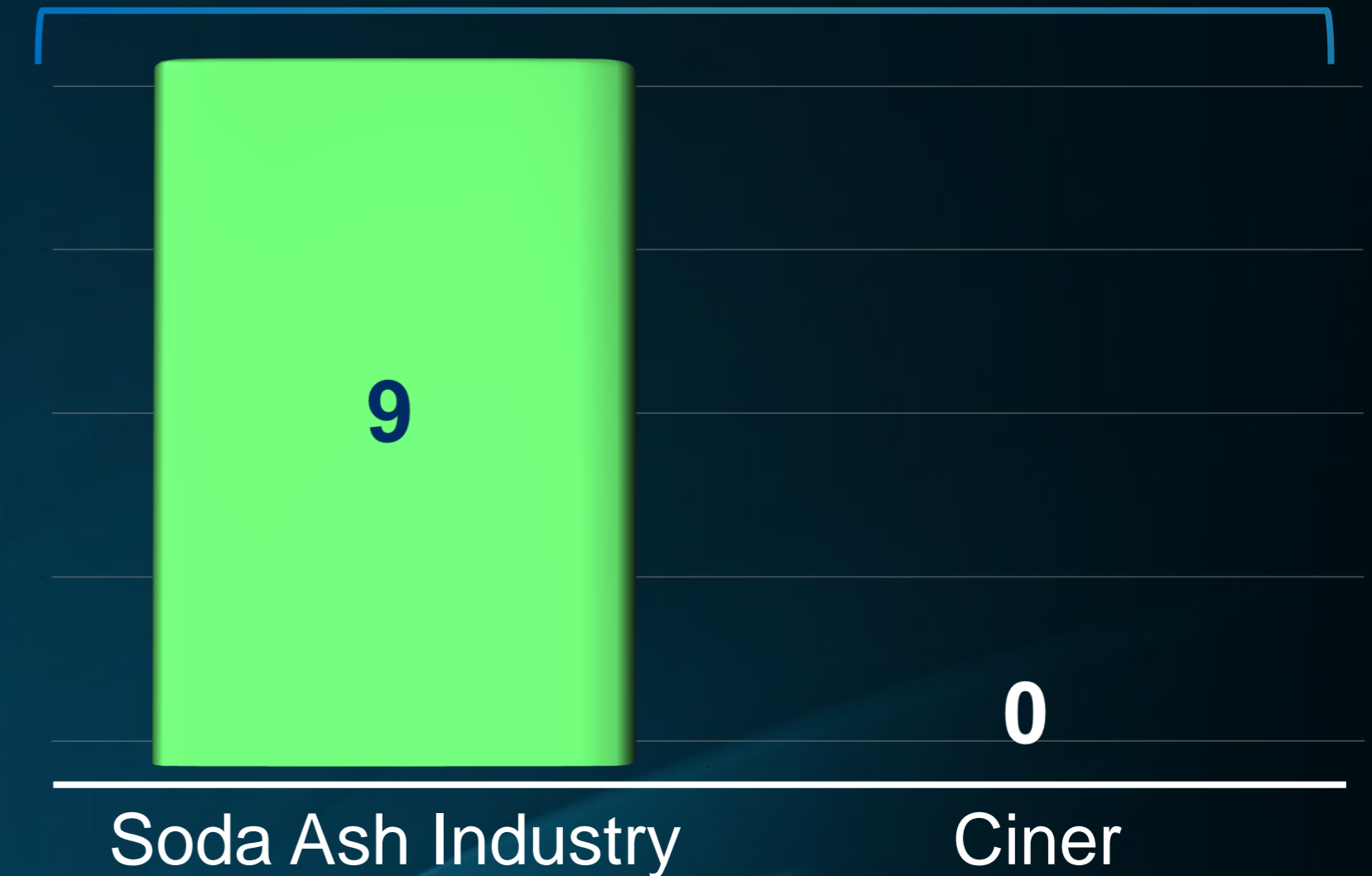
SAFETY IS A VALUE, NOT JUST A PRIORITY



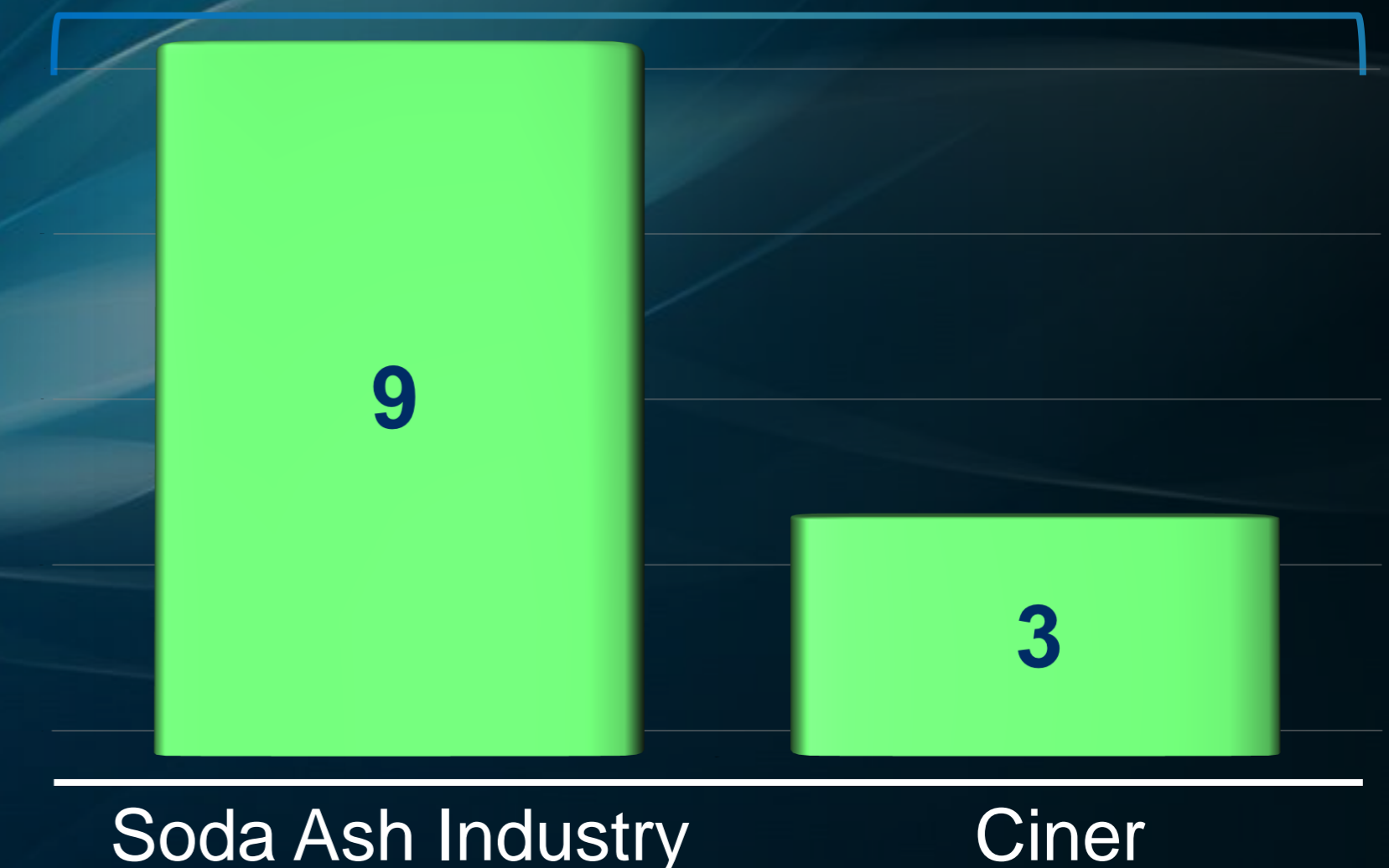
It's how we do business, it's who we are

- 2015 Wyoming Governor's Safety Award
 - Ciner is the first underground mine ever to win this award
- IMA-NA/ MSHA Top Safety Achievement Award (National) – 4 times
- State Mine Inspector Award (Large Category) sponsored by the Wyoming Mining Association - over 25 times in the history of the award
- Wyoming Mining Association Safe Sam Award – 3 times
- 7 National Mine Rescue Team Championships
- 3 International Surface Rescue Team Championships

Lost Time Accidents



Recordable Accidents

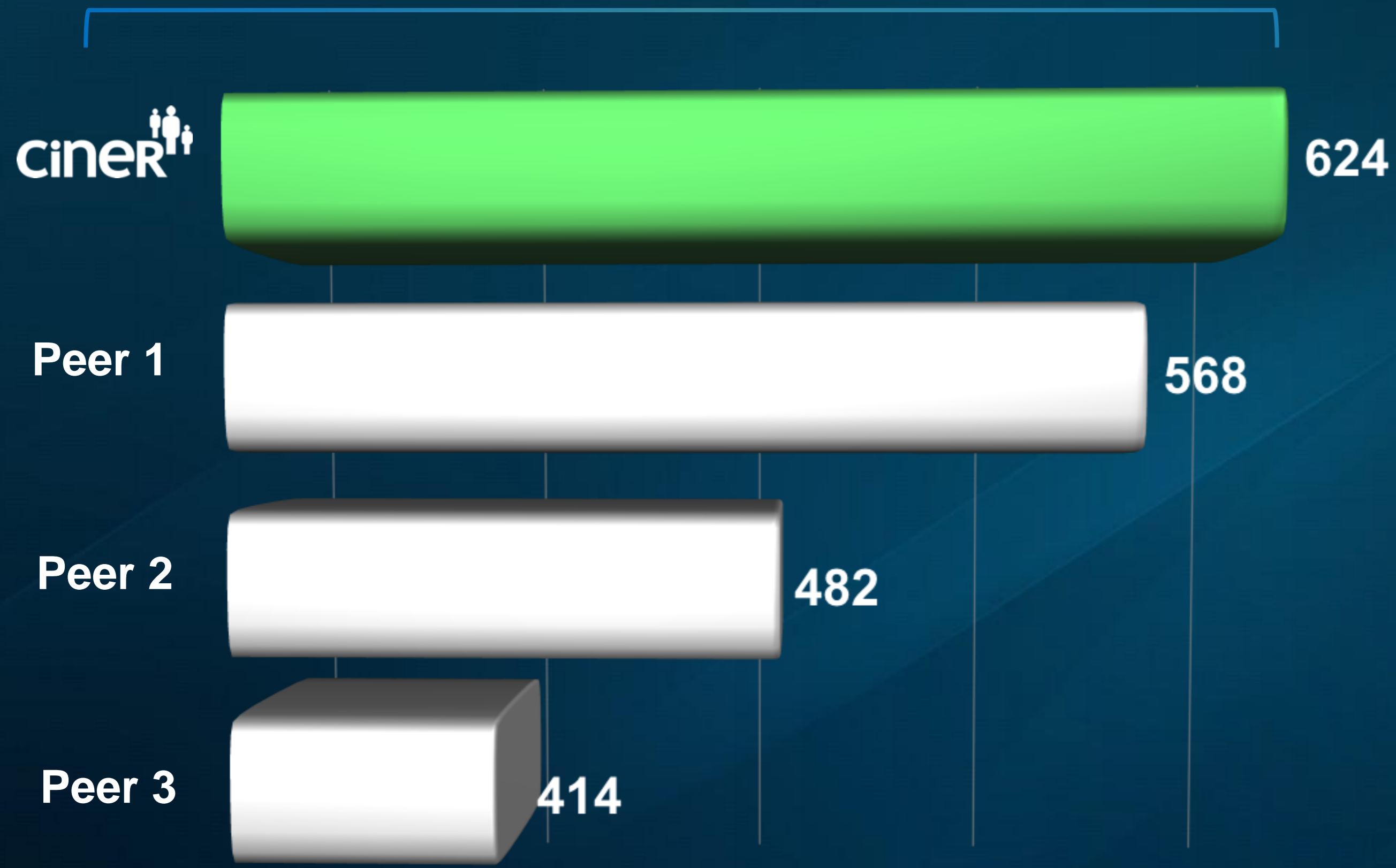


MOST EFFICIENT SODA ASH PRODUCER IN GREEN RIVER BASIN

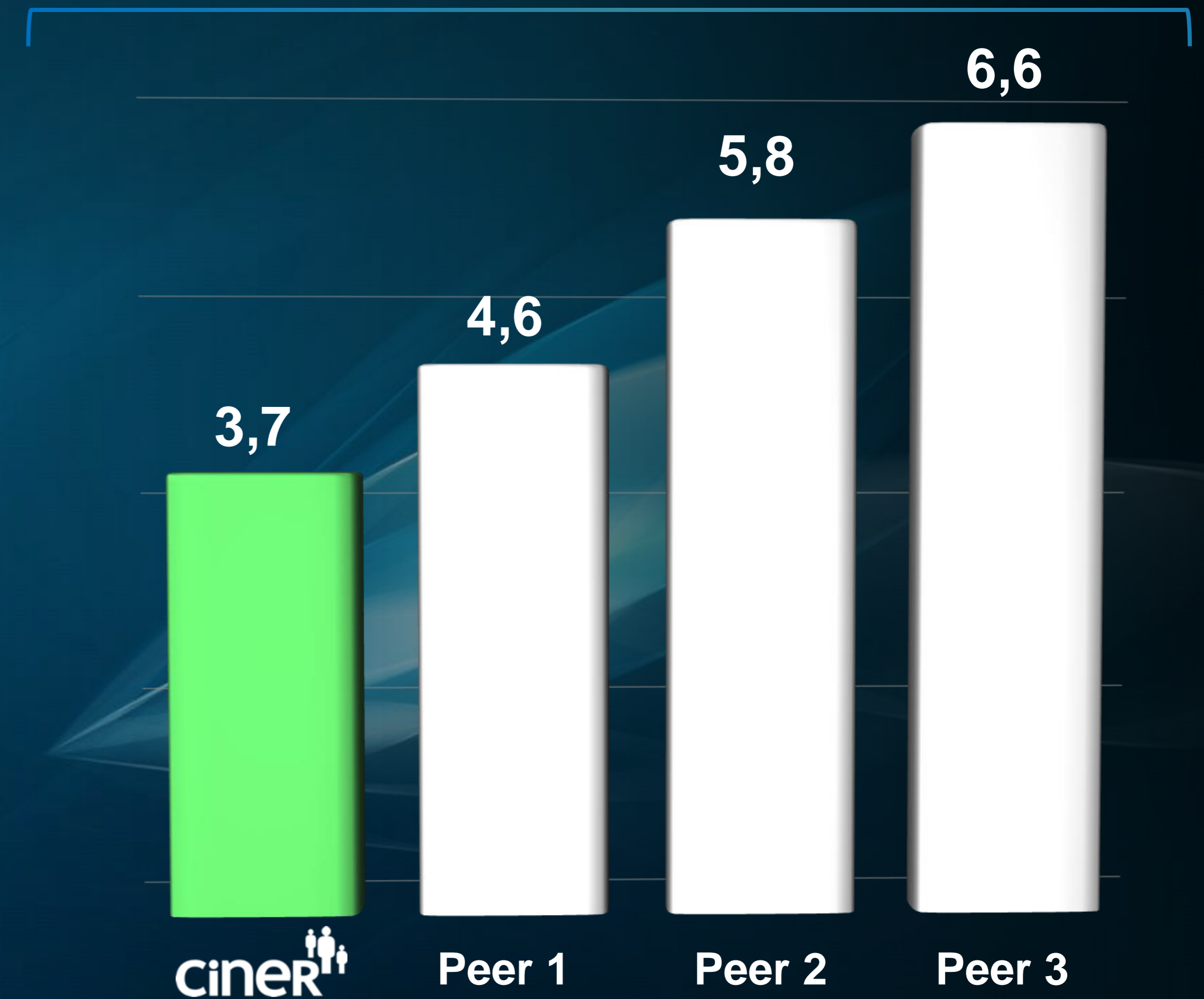


High productivity combined with lower energy consumption

Production Per Employee (x10 ST, 2015)



Green River's Most Energy Efficient Producer (MMBtu/ton, 2015)



Source: State of Wyoming Mining Report, Wyoming Department of Environmental Quality. Annual Report State Inspector of Mines of Wyoming. Bessemer Wyoming estimates.

ADVANTAGED TRONA BED AND FACILITY LAYOUT



Pond Network Lowers Ore to Ash Ratio

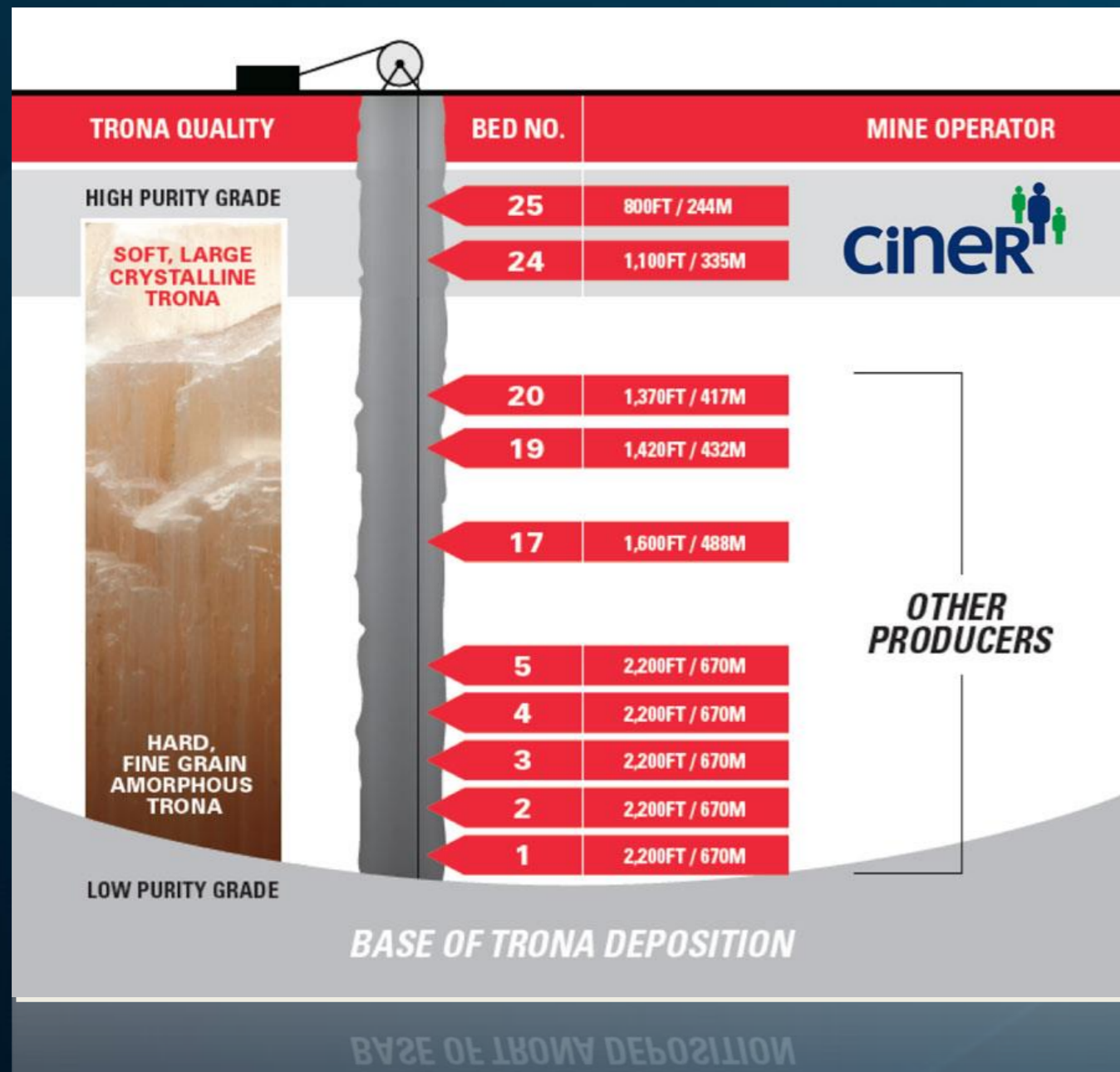
Beds 24 & 25 (closest to surface) are the key for lower manufacturing costs as lower halite impurities and shallow beds are conducive to efficient mining

Ponds enable Ciner to recover soda ash via deca rehydration otherwise lost in processing Trona

Wider pond surface area and a unique pond network facilitate the minimization of soda ash lost in processing Trona

Technological innovation enables Ciner to be more cost efficient

Schematic Section – Green River Basin



Ore to Ash Ratio⁽¹⁾



(1) Amount of short tons of Trona ore required to produce one short ton of soda ash/liquor

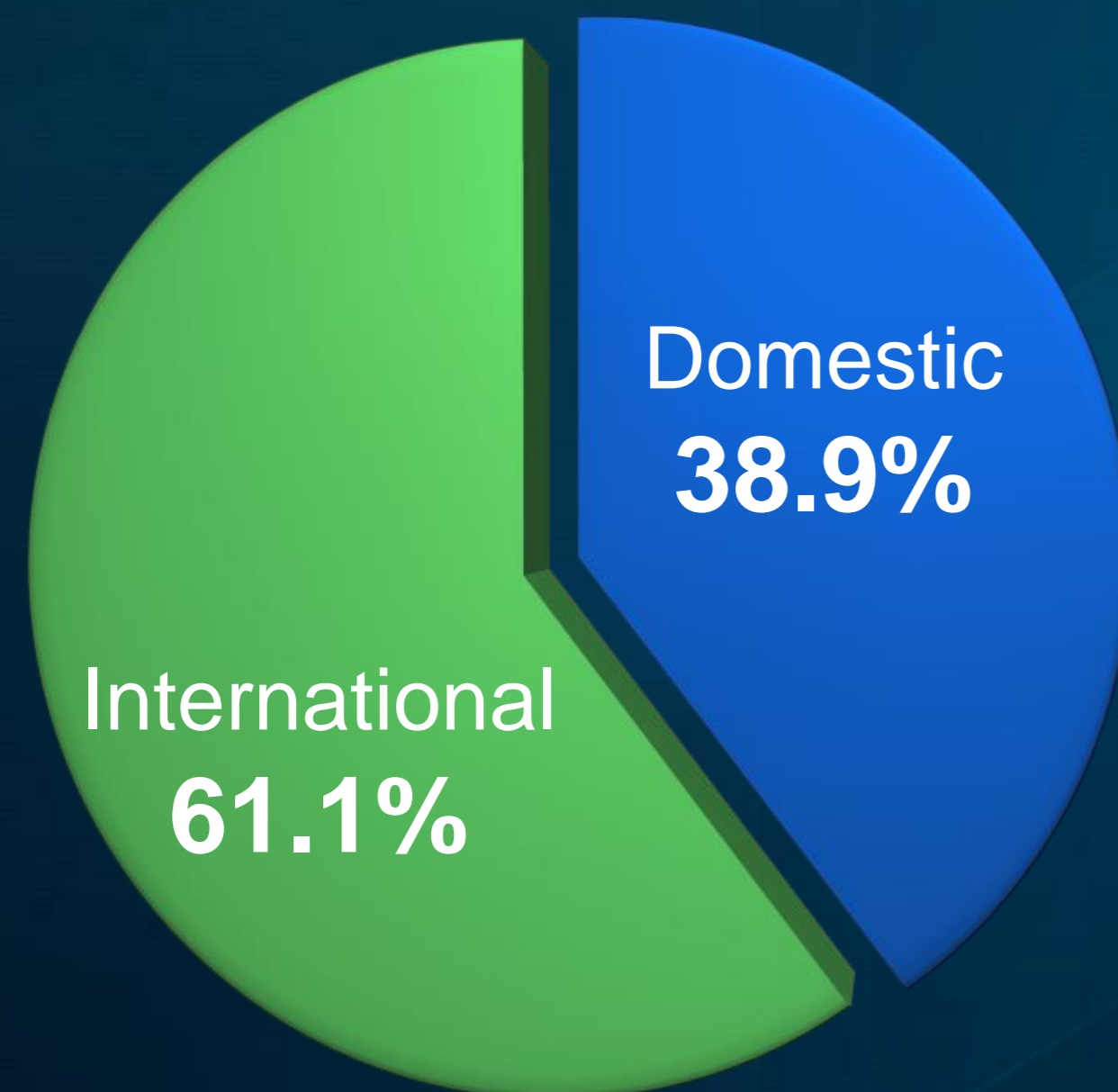
Grow Distribution for Shareholders

- Aggressive focus on continuous improvement
- Continue debottlenecking plant to 3MM tons by 2019
- Pursue accretive acquisitions

Optimize Ciner Group Ownership to Enhance Global Position

- US sales through the domestic commercial team
- Collaboration in US, Canada, Western Europe and South Africa with Ciner Group
- Continue global sales in remaining regions through ANSAC

2015 Sales Allocation



Sales Territories



PROVEN OPERATOR & DEVELOPER OF TRONA-BASED NATURAL SODA ASH – SUBSTANTIAL FUTURE GROWTH PROFILE



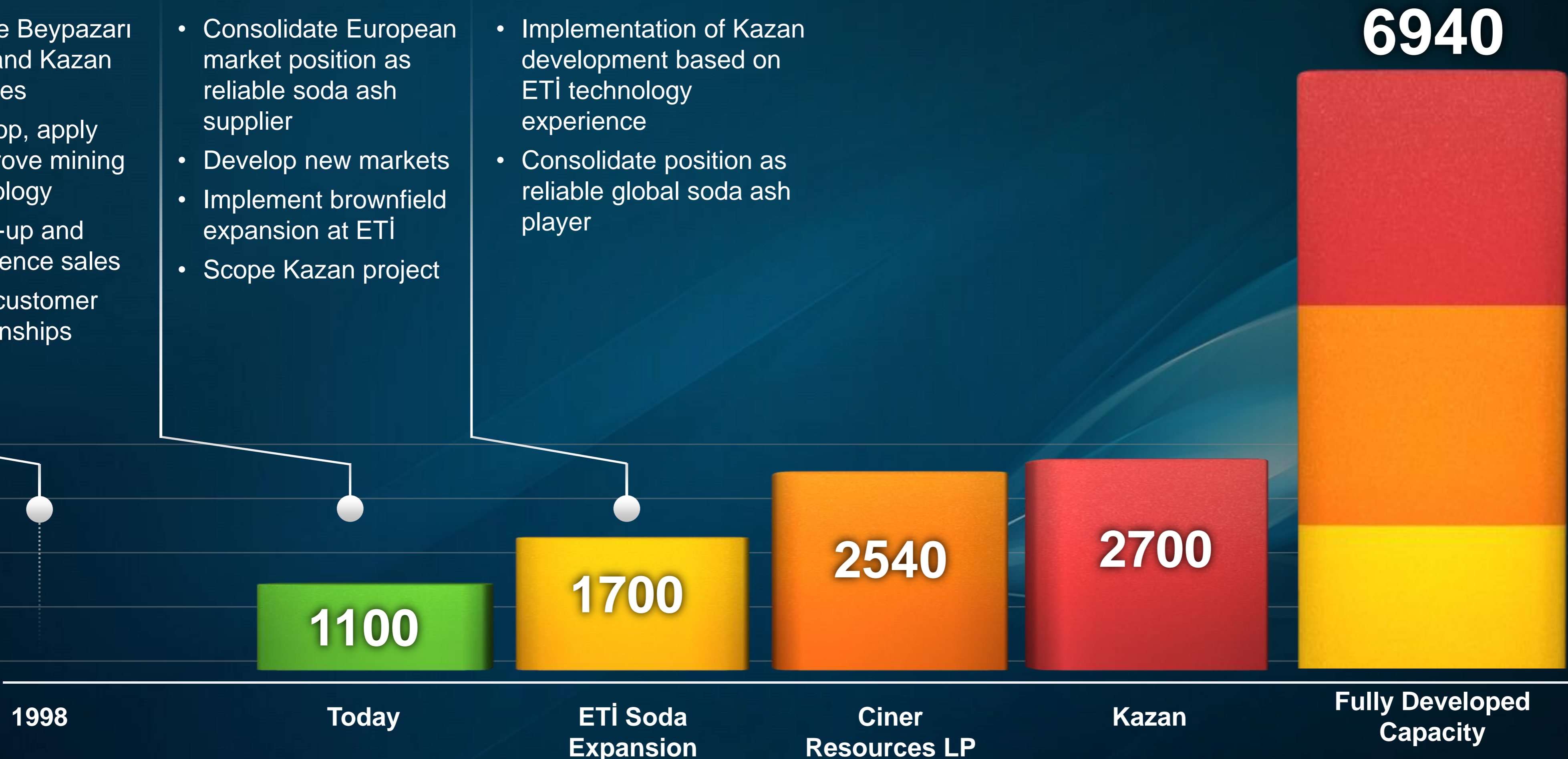
Credible developer, operator and market participant

Leverage existing know-how and experience to drive growth

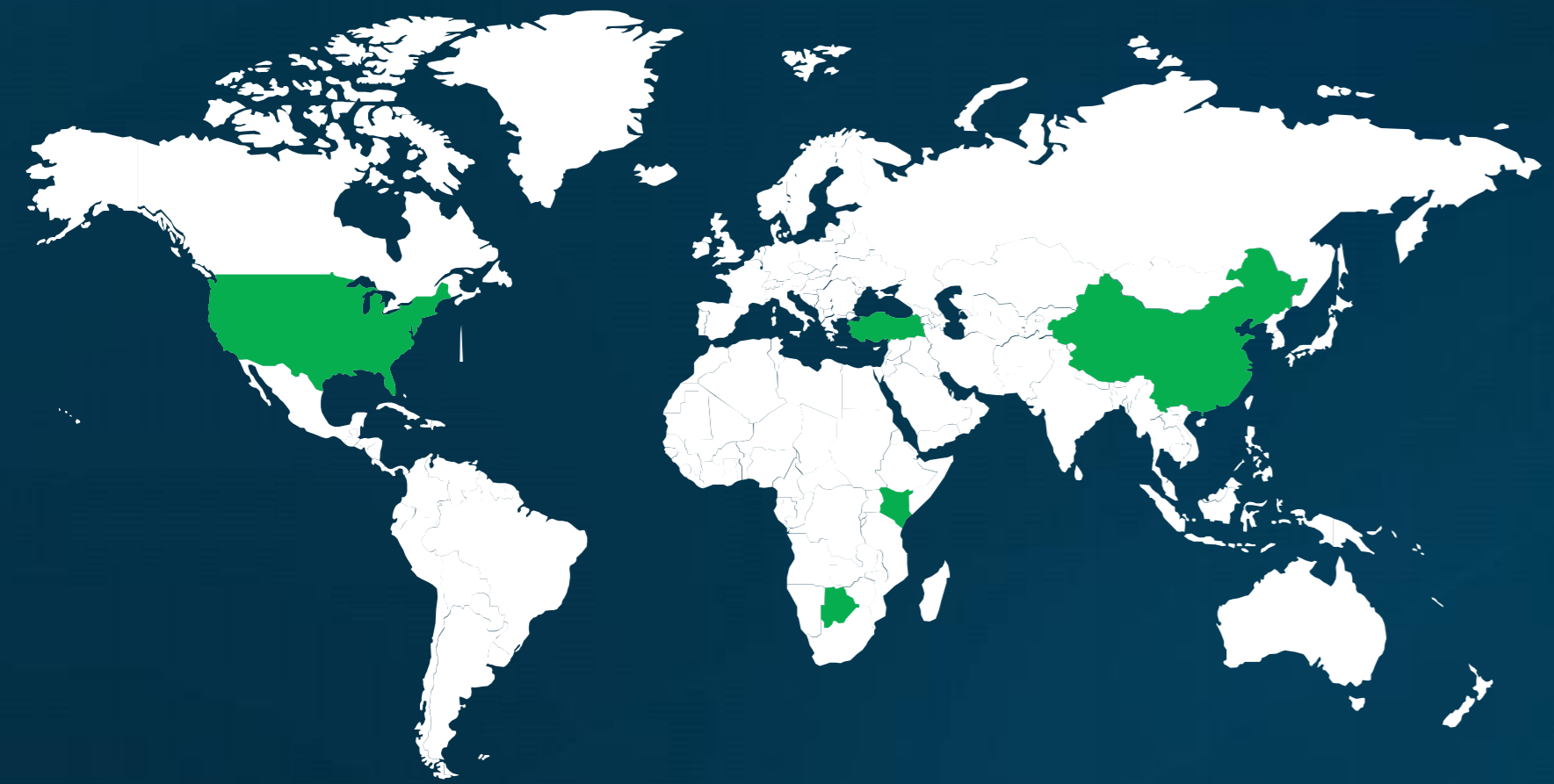
- Secure Beypazari / ETİ and Kazan reserves
- Develop, apply and prove mining technology
- Ramp-up and commence sales
- Build customer relationships

- Consolidate European market position as reliable soda ash supplier
- Develop new markets
- Implement brownfield expansion at ETİ
- Scope Kazan project

- Implementation of Kazan development based on ETİ technology experience
- Consolidate position as reliable global soda ash player



CONSOLIDATED NATURAL SODA ASH MANUFACTURER BASE



Known Trona reserves for Natural soda ash production

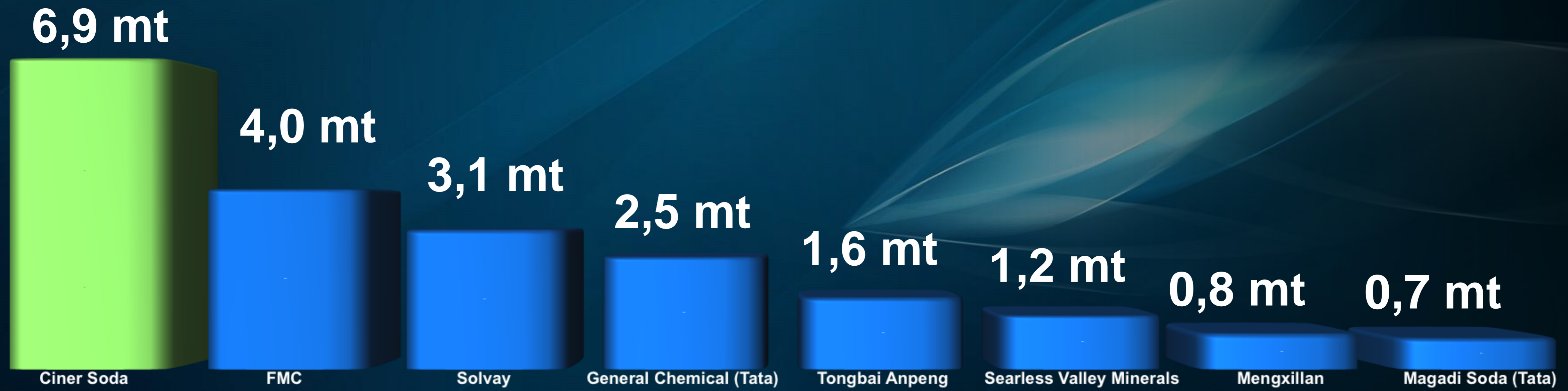
Limited number of trona/Natural soda ash reserves known:

- Wyoming (US); Beypazarı, Kazan (Turkey); Magadi, Kenya and Botswana (Africa); Mongolia, Henan (Asia)

Natural soda ash with distinct advantages: significantly lower costs, higher quality and environmentally friendly production

- Production of dense soda ash in one step
- Lower consumables, incl. energy, water
- Lower waste production,
- Lower CO2 emission,

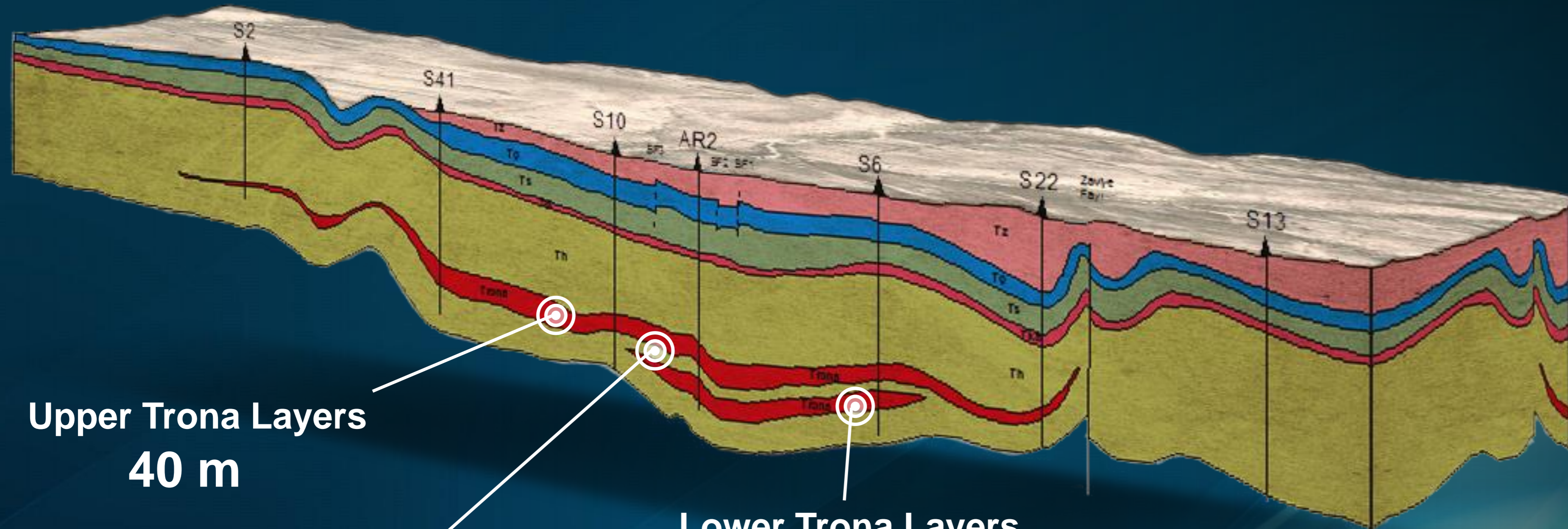
Natural Soda Ash effective capacity by company (2015 and forecasted 2018)



MINE RESERVES



BEYPAZARI TRONA DEPOSIT - GEOLOGY



AQUIFER 1

AQUIFER 2

Upper Trona Layers
40 m

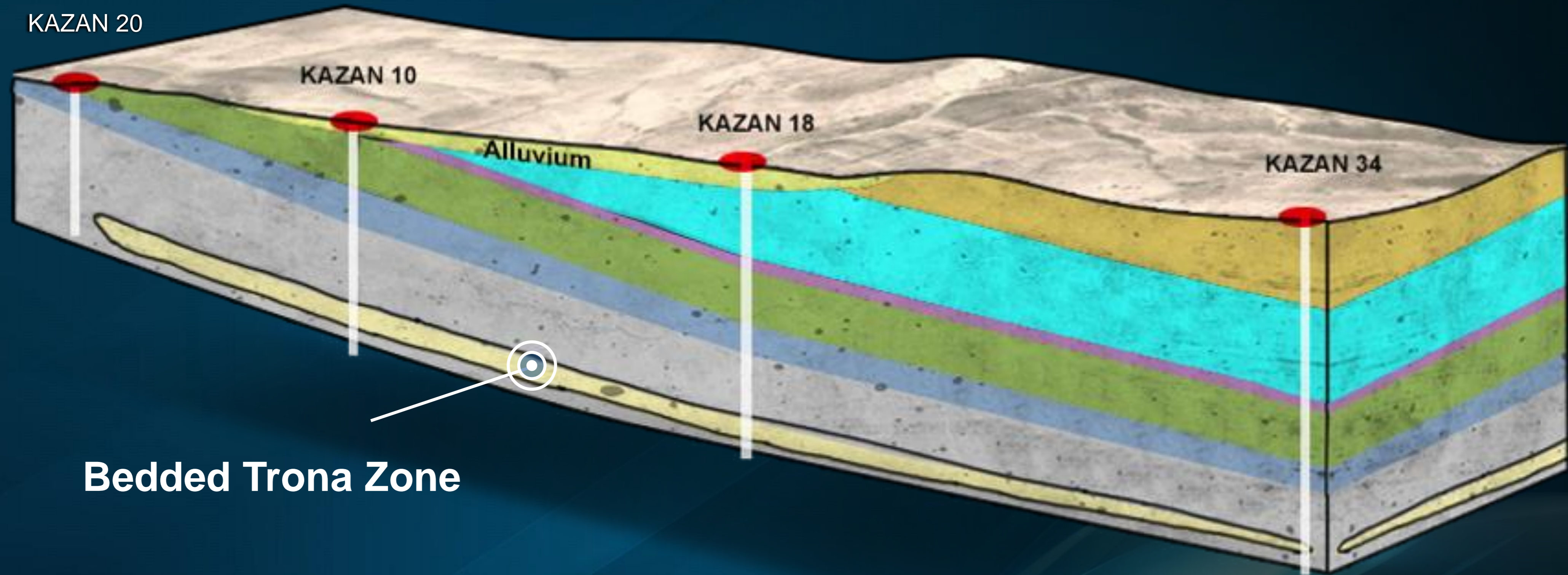
Sterile Zone
25 m

Lower Trona Layers
40 m

$\text{Na}_2\text{CO}_3 \cdot \text{NaHCO}_3 \cdot 2\text{H}_2\text{O}$

- Trona seem grade: ~84%
- Interburden trona grade: ~16%
- Depth: 220m to 480m

KAZAN SODA: GEOLOGY OF THE DEPOSIT



Bedded Trona Zone

$\text{Na}_2\text{CO}_3 \cdot \text{NaHCO}_3 \cdot 2\text{H}_2\text{O}$

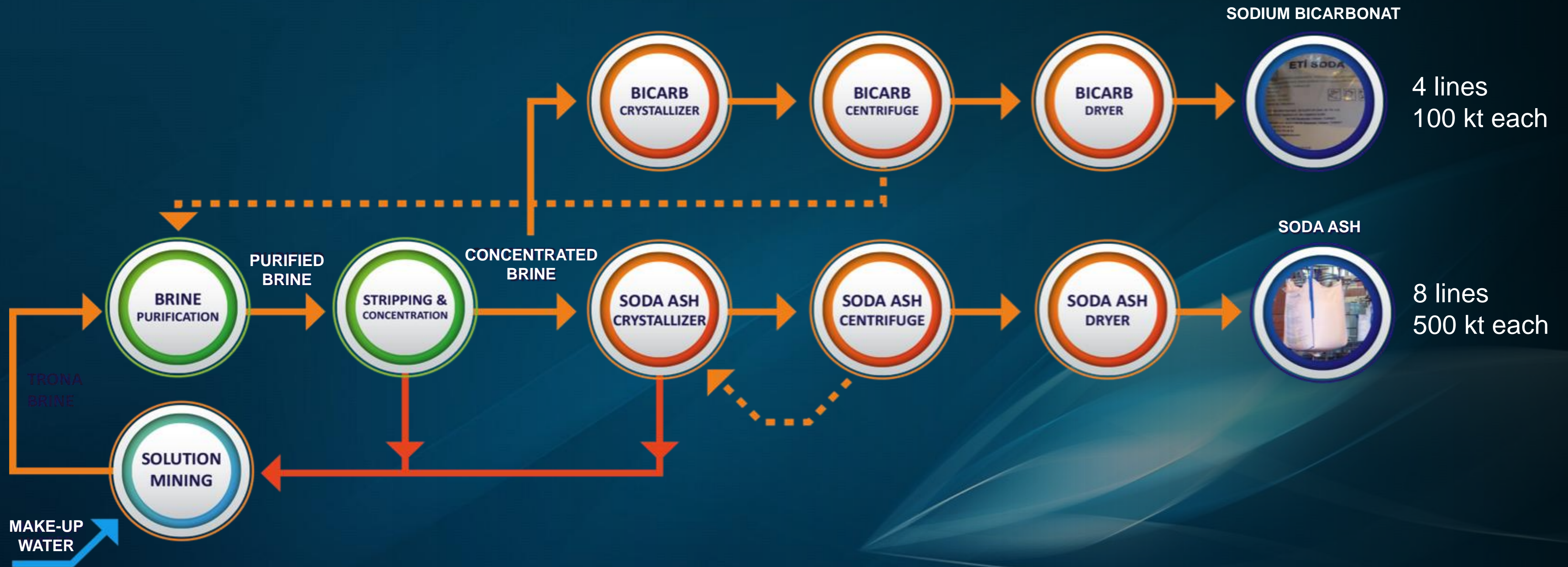
- Trona seem grade: ~44%
- Depth: ~650m



V037A

NATURAL SODA ASH PRODUCTION PROCESS

Nameplate capacity of 4.4 mt/year by 2019



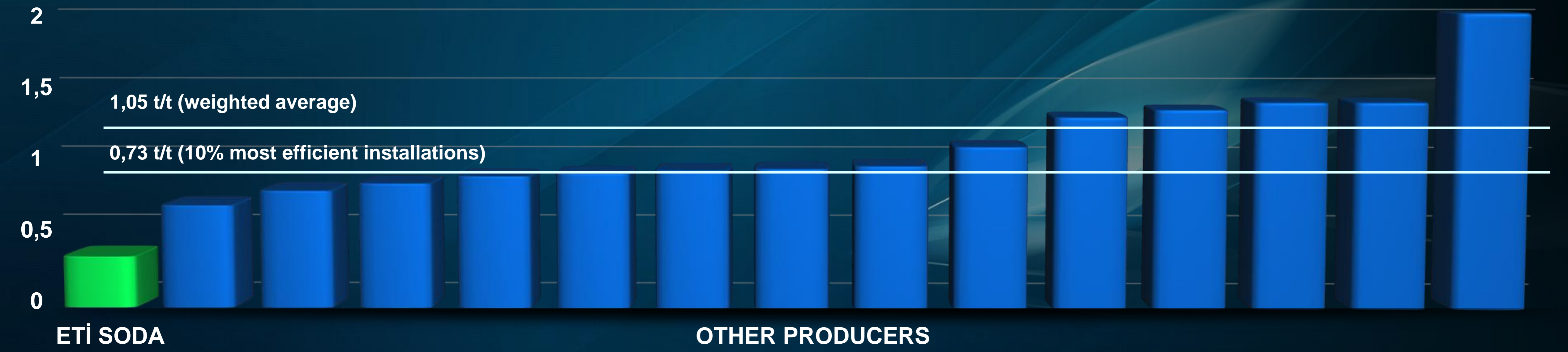
NATURAL SODA ASH PRODUCTION



NATURAL vs SYNTHETIC PRODUCTION



	Water Usage	Steam Consumption	Waste	Emission
Natural Soda	2 m ³ /t.soda	0,7 t/t.soda	0,25 m ³ /t.soda (purge)	0,35 tCO ₂ /t.soda
Synthetic Soda	12 m ³ /t.soda	3,5 t/t.soda	9 m ³ /t.soda (CaCl ₂) 500 kg/t.soda (solid)	1 tCO ₂ /t.soda



EXPORT



ciner 

Thank You