

SMART LOGISTICS: DATA DRIVEN EFFICIENCY & SUSTAINABILTY

HACKZURICH 2023





THE CHALLENGE





OUR OBJECTIVES





SUPERCHARGE NEGOTIATION POWER

- Identify synergy / collaboration
 opportunities internally and with
 other industries
- ✓ Use data-driven insights & develop out-of the box ideas:
 - minimize empty trip reduce costs
 - maximize resource utilization

✓ Develop forward-thinking solutions that lower the environmental impact of transportation by reducing CO2 emissions

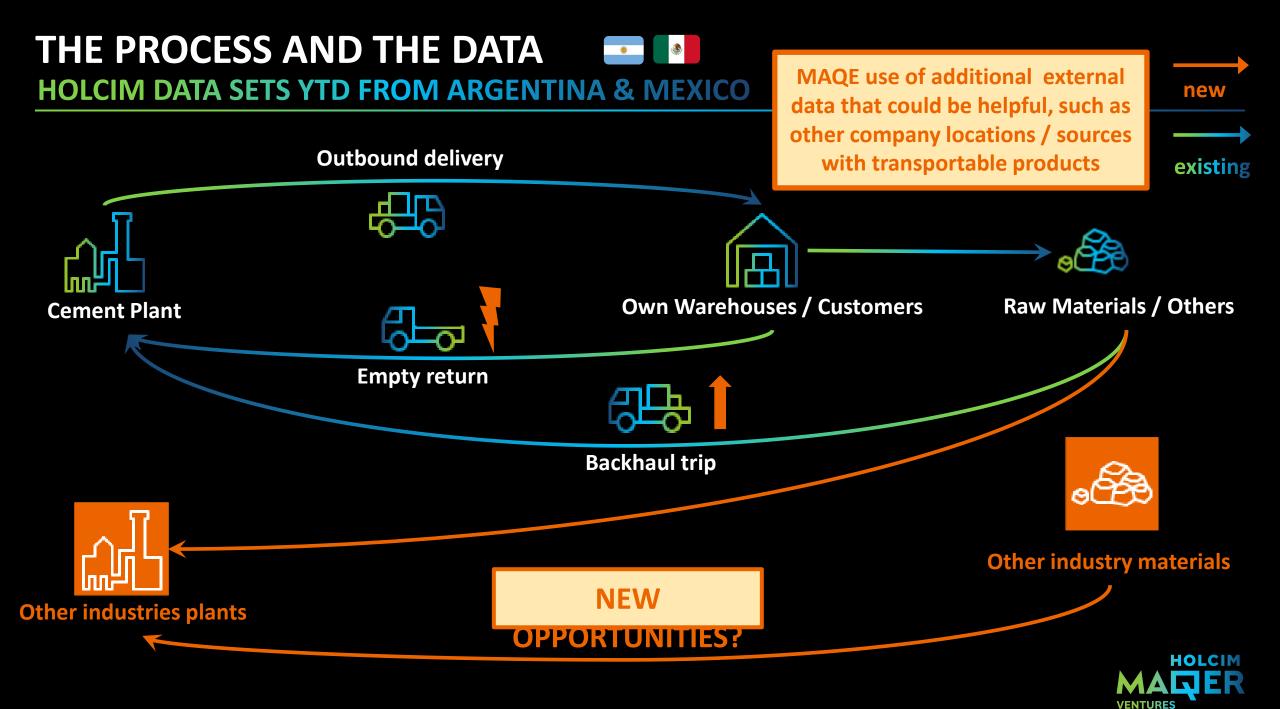
- ✓ Leverage data-driven intelligence to support optimized rate negotiation
- ✓ Craft strategies aligning with market dynamics / operational realities to strike win-win deals with transport partners



WHAT CEMENT ACTUALLY IS







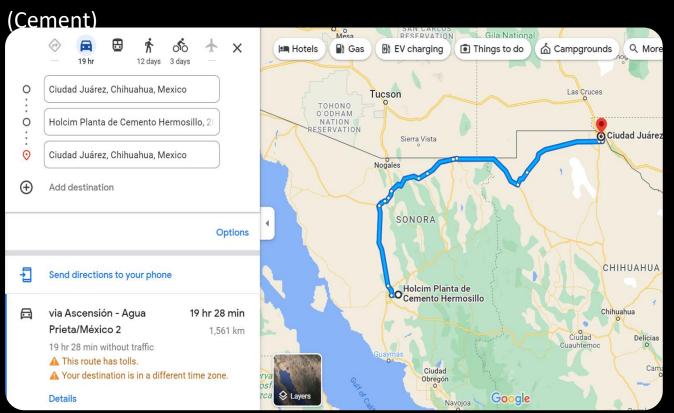
BACKHAULING

SYNERGIES IDENTIFIED IN MEXICO BETWEEN CEMENT AND

TIRE CHIP

ROUTE 1: Ciudad Juárez - Hermosillo Plant Holcim (Tire Chip)

ROUTE 2: Hermosillo Plant Holcim - Ciudad Juárez Holcim DC



MULTIBOX TRAILER



KEY FIGURES

24k tons transported per year (100% backhauling)
\$ CHF -840k per year

CO2 BENEFITS

-34% kg CO2 per ton transported

-318 tons CO2



BACKHAULING

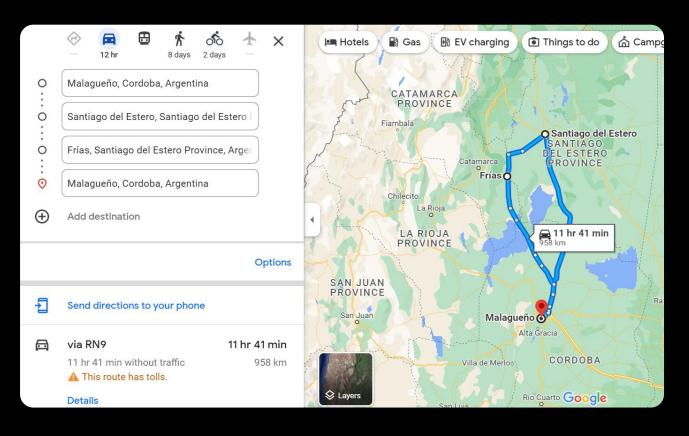
SYNERGIES IDENTIFIED IN ARGENTINA BETWEEN CEMENT



AND GYPSUM

ROUTE 1: Malagueño - Santiago del Estéro (Cement)

ROUTE 2: Frías - Malagueño (Gypsum)



MULTIBOX TRAILER



KEY FIGURES

120k tons transported per year (100% backhauling)

\$ USD -6.88 per ton transported

\$ USD -412k per year

CO2 BENEFITS

-34% kg CO2 per ton transported

-925 tons CO2



TYPES OF TRUCKS



MULTIBOX TRAILER

- Can be used for palletized and bulk materials
- ✓ Opens on the side
- Lifts both vertically and horizontally



FLATBED TRUCK WITH RAILING

- ✓ Can be used for palletized and bulk materials
- ✓ Lifts horizontally
- ✓ Railings can be folded to load and unload.



LIMITATIONS

POSSIBLE PRODUCTS FOR TRANSPORTATION

- only dry or palletized products
- bulk materials that can be transported in flatbed trailers with rails

BACKHAULING OPPORTUNITIES

• Not necessary to achieve 100% backhauling (example: Holcim can have a route that transports 10,000 tons per month and match it with a backhauling opportunity for 70% of the return trips with 7,000 tons)



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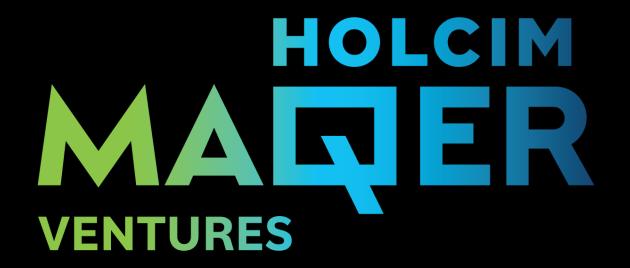
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POWERED BY



USEFUL INFOS

Questions about the challenge? Want to interact?

Join us onsite at the Holcim MAQER booth and virtual via

discord: <u>01-holcim-maqer</u>

Useful links

Holcim Group: https://www.holcim.com/

Holcim Mexico: https://www.holcim.com.mx/

Holcim Argentina: https://www.holcim.com.ar/

Holcim MAQER Ventures: https://holcimmagerventures.com/

https://www.youtube.com/watch?v=YxHbAh1IKo8

Data - USB Stick

Password to access the data will be shared in the discord channel

