



“Drop the Million”

Sdom site annual Carbon footprint ~ 1 million tons of CO2 equivalent



Green Sdom project

ICL Hydrogen Valley

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Taking on the Carbon Footprint of the largest industrial site in Israel (~1M t/y)



Energy Efficiency

Energy Conservation



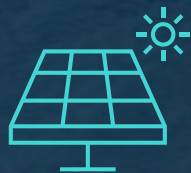
Transition to
Renewable Energy





Green
Sdom

ICL Sdom Hydrogen Valley



1,000 MWp
(2,000,000 MWh)



Hydrogen

~ 30-40 K ton
Per Annum



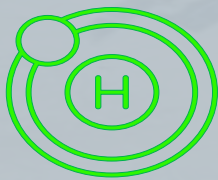
Storage

Electrical Storage
Thermal Storage
Other Storage



Direct consumption

~ 150 MWe
~ 150 MWq



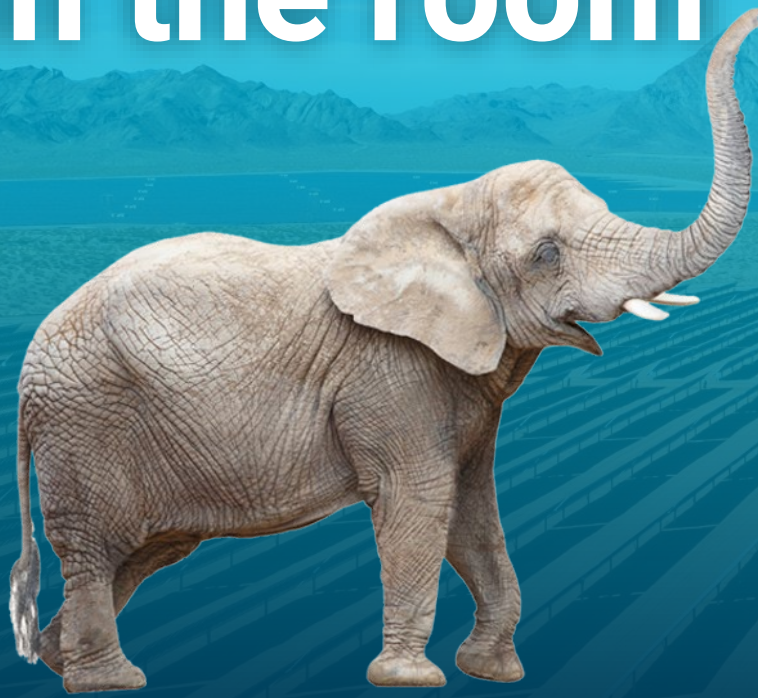
Hydrogen properties

- ✓ Fuel
- ✓ Medium/long term E storage medium
- ✓ Raw material for fertilizers



Green Hydrogen as Fuel for Energy Generation

The elephant
in the room



Large Scale
Storage

Sdom Hydrogen Valley main challenge



- Storage of thousands of tons of H₂ (for 24/7 @365 operation)
- Cost of storage
 - Cylinders \$ 200-400 / kg
 - Salt Caverns \$ 0.4-0.6 / kg

Large scale H₂ storage effort

Local (tactical)

National (Strategic)



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Thank You



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Sdom