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“Building Alliances For The Development Of Green Hydrogen at Santiago Airport (SCL)”

Session 8: Building Partnerships for a Sustainable Future

Presentation overview

01

Nuevo Pudahuel and its role
in the sustainable
development of SCL

02

Building a roadmap for green
hydrogen development at
SCL

03

Next steps for green
hydrogen development at
SCL

04

Conclusions of the process
(in progress)

01

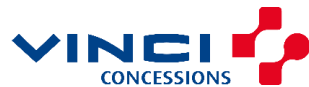
Nuevo Pudahuel and its role in the sustainable development of SCL



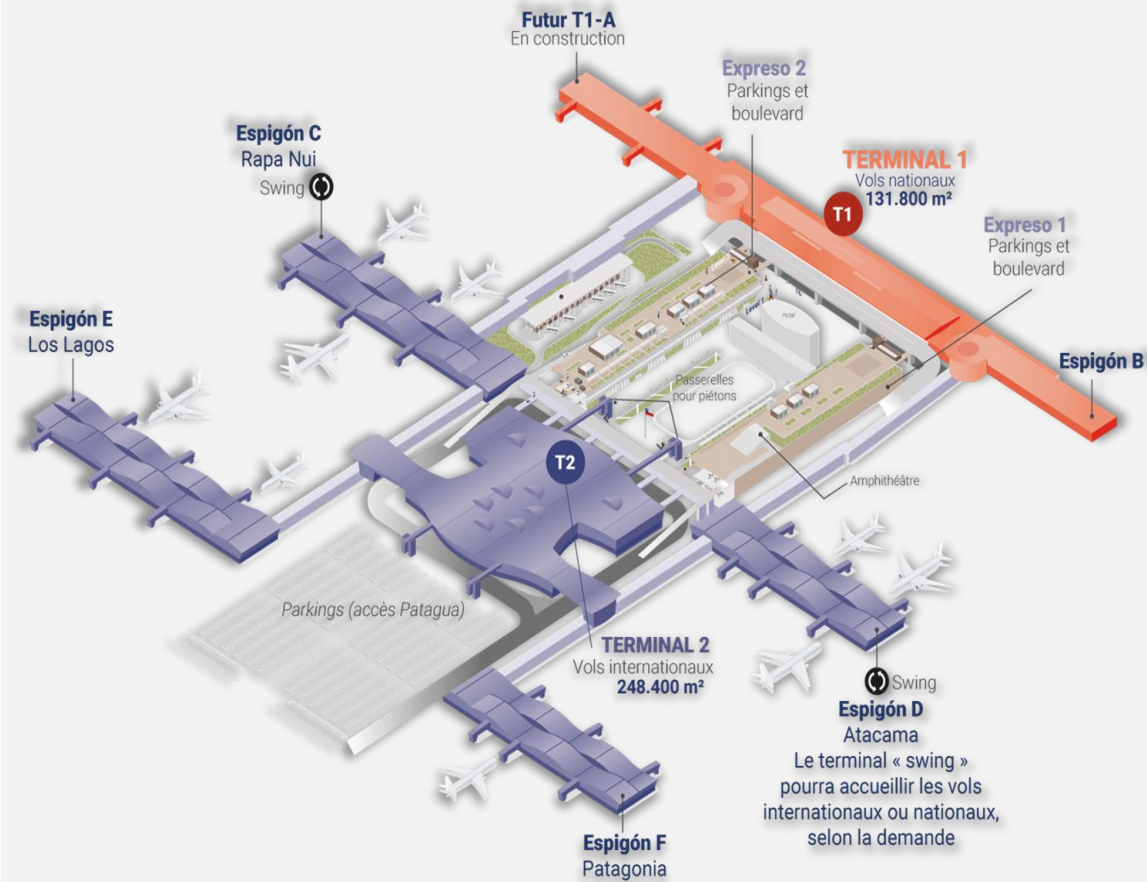
Nuevo Pudahuel – Santiago Airport Concessionaire

- Concession company in charge of the operation of SCL from 2015 to 2035
- We carry out the construction of the new International Terminal (T2), inaugurated in February 2022
- Three leading shareholders in airport operations with a network of more than 100 airports globally

NUEVO PUDAHUEL



- We are preparing the energy transition and neutrality for the year 2050 at SCL



- USD 900 million (expansion investment)
- 6 years of construction (2016 to 2021)
- 38 million passengers per year (MPAX) T1+T2 capacity
- 362,700 m2 area T1+T2
- 67 Boarding Bridges (PBB)
- 6,000 public parking spaces

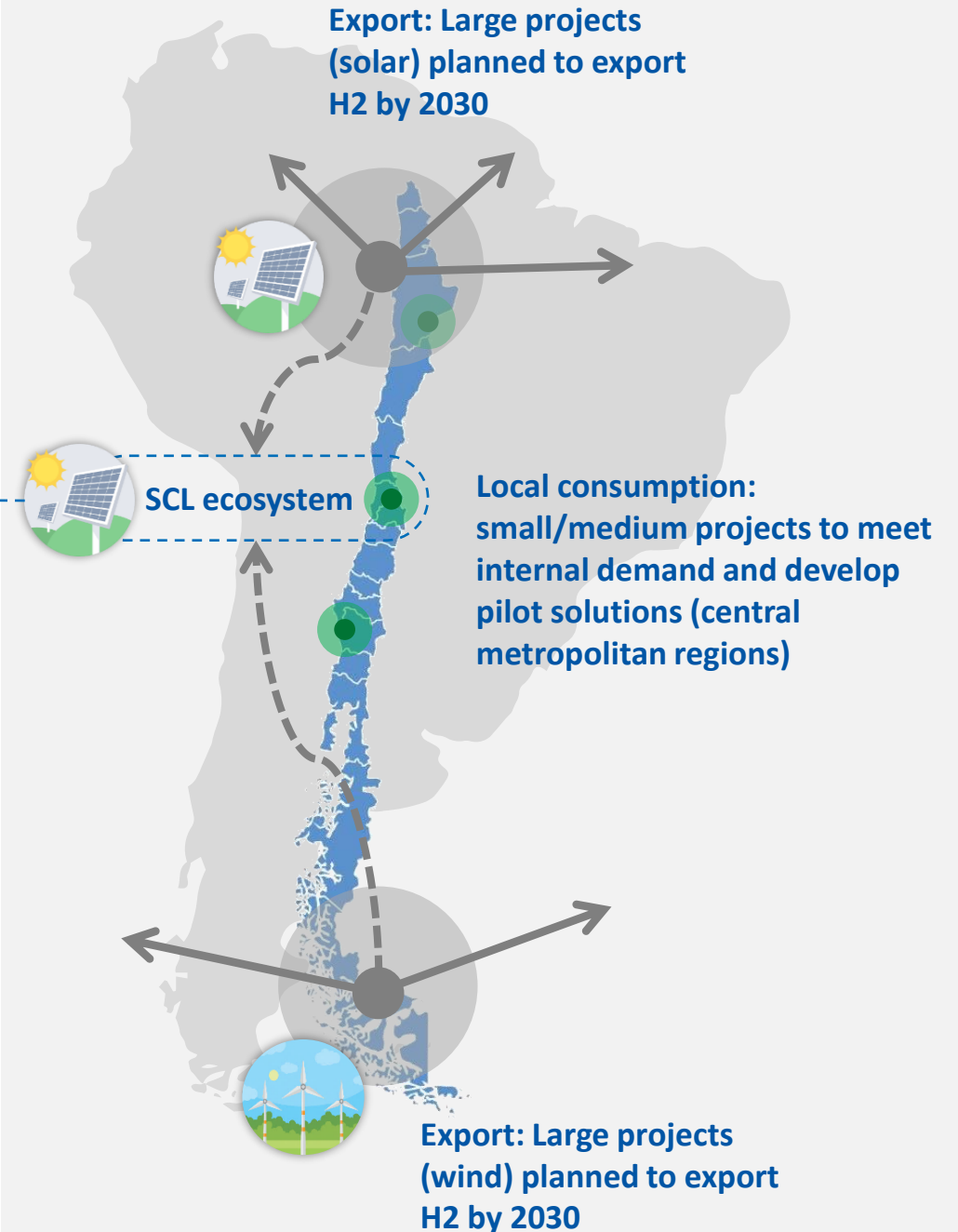
Preparing the energy transition in Chile and SCL

Potential of more than 1,800 GW (equivalent to 70 times Chile's demand) from renewable sources*

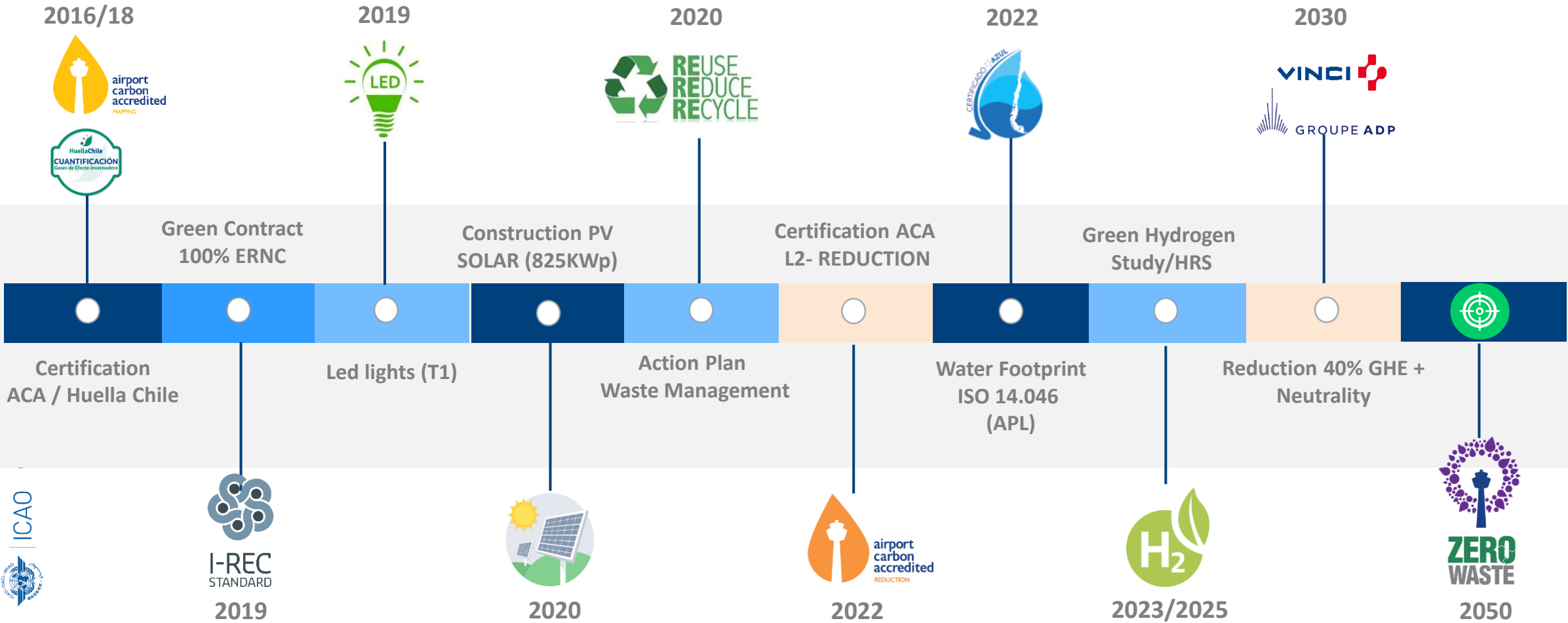


1. Route 68: Easy access to Valparaíso port
2. Pudahuel: Main distribution center in Santiago.
3. Quilicura: Important logistic center
4. Route 5: Easy access to the north.

*: Source: Estrategia Hidrogeno Verde, año 2020 <https://energia.gob.cl/h2/Estrategia>

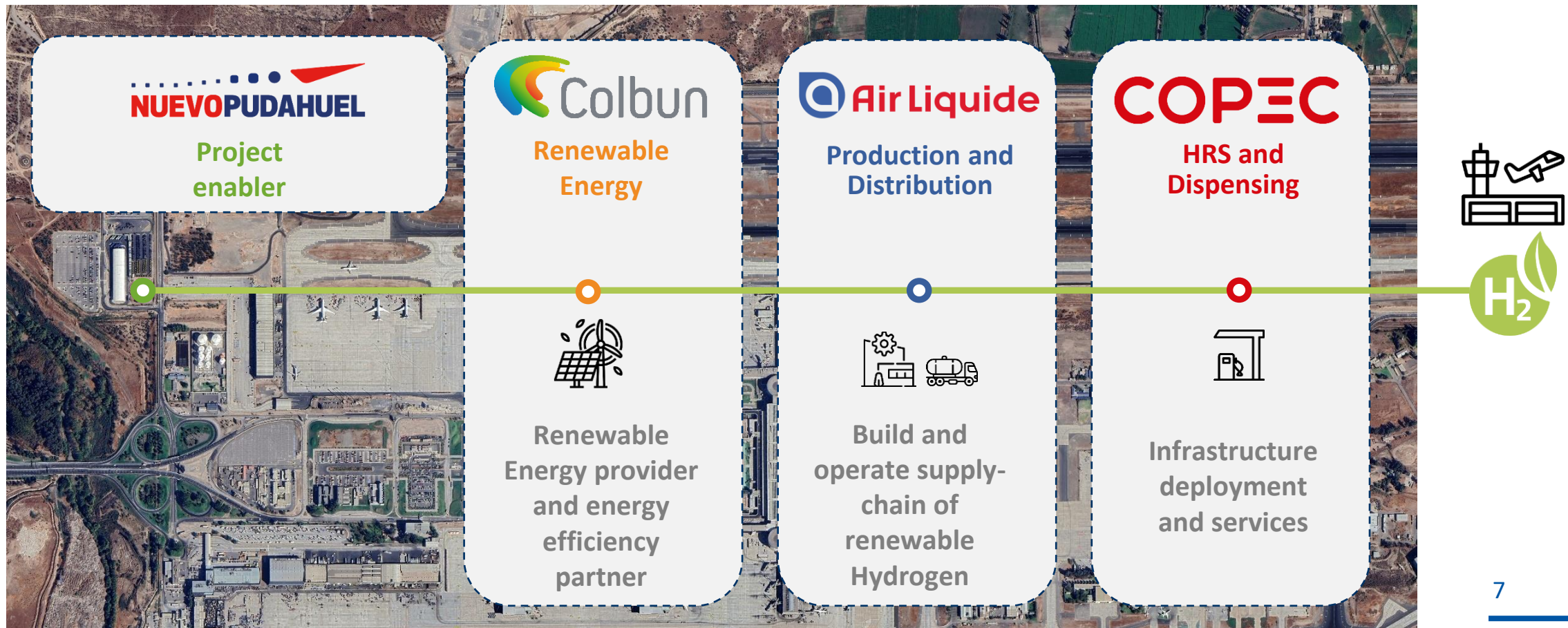


Building an ecosystem of environmental collaboration at SCL



Alliance for the development of green hydrogen at SCL

Main actors (SCL – Green Hydrogen Consortium)



02

Building a roadmap for green hydrogen development at SCL



Actors for the development of green hydrogen at SCL

A development approach based on 4 areas



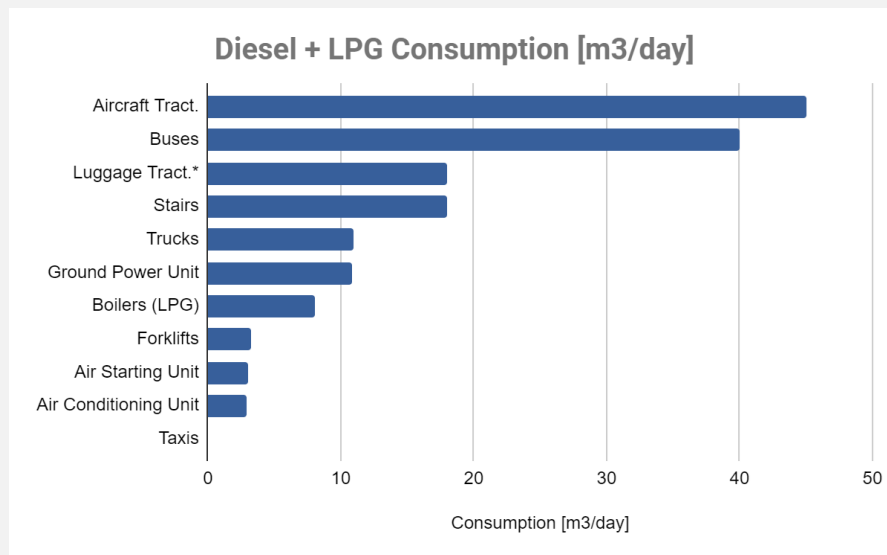
Potential analysis for replacement (H2 conversion)

Ground equipment consumption

Energy consumption and potential H2 conversion (diesel/LPG to H2)

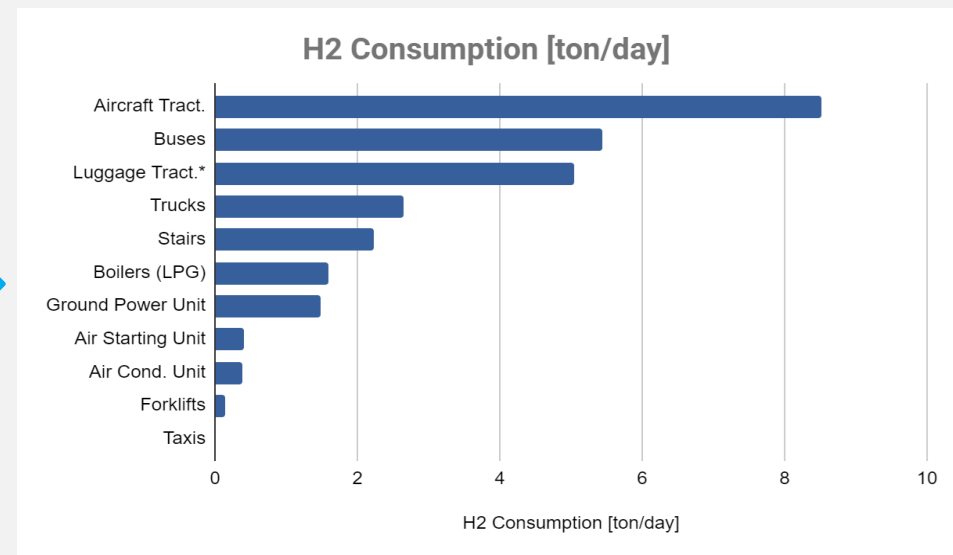
Based on the survey, as well as the associated energy consumption for each of the equipments at SCL, the total consumption was quantified, as well as an eventual changeover to H2.

Total Energy Consumption (Diesel + LPG)



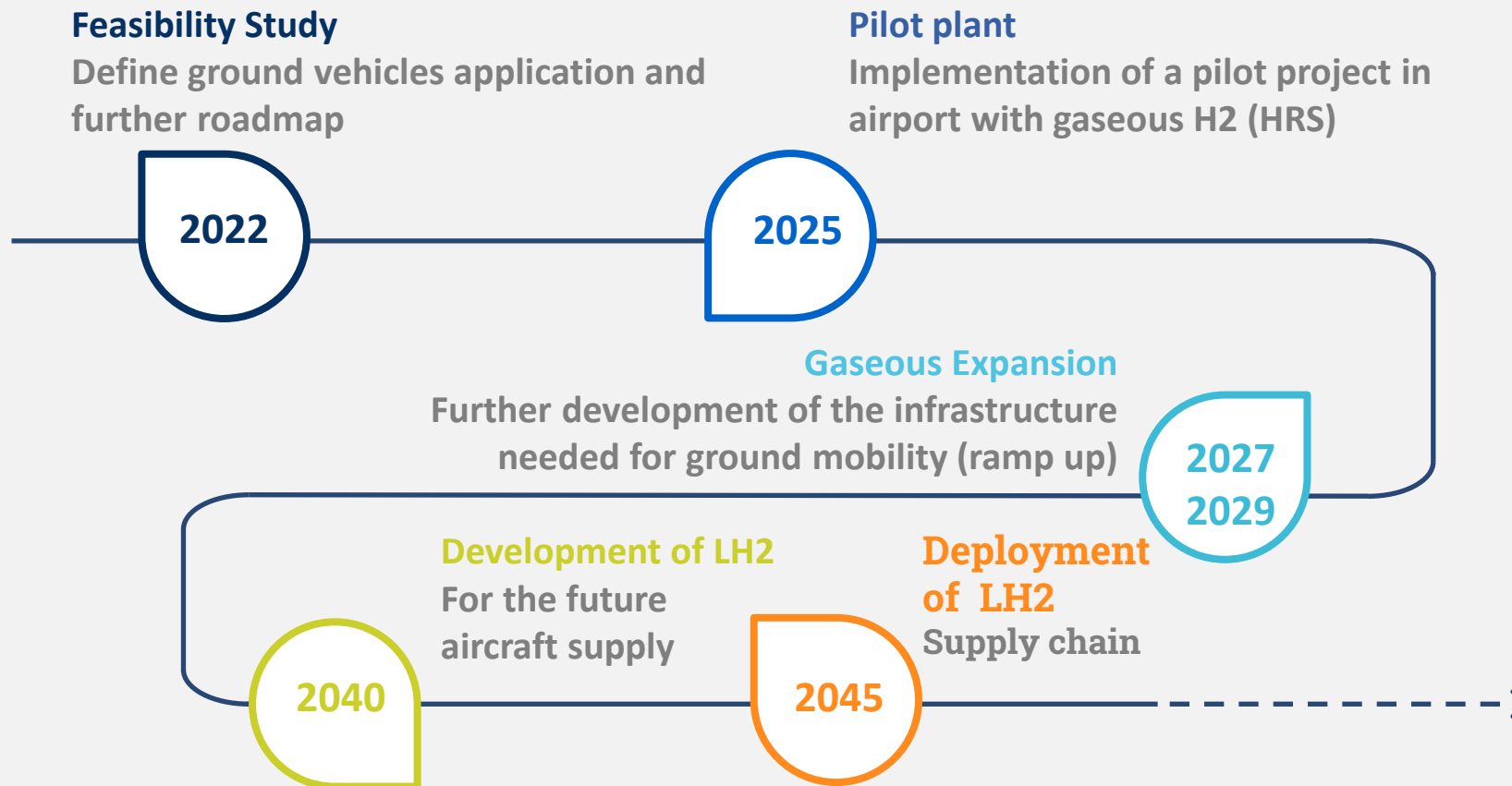
Total Consumption: 151 m3/day

Potential H2 Changeover



Total Consumption: 29 tn/day

Our green hydrogen roadmap at SCL

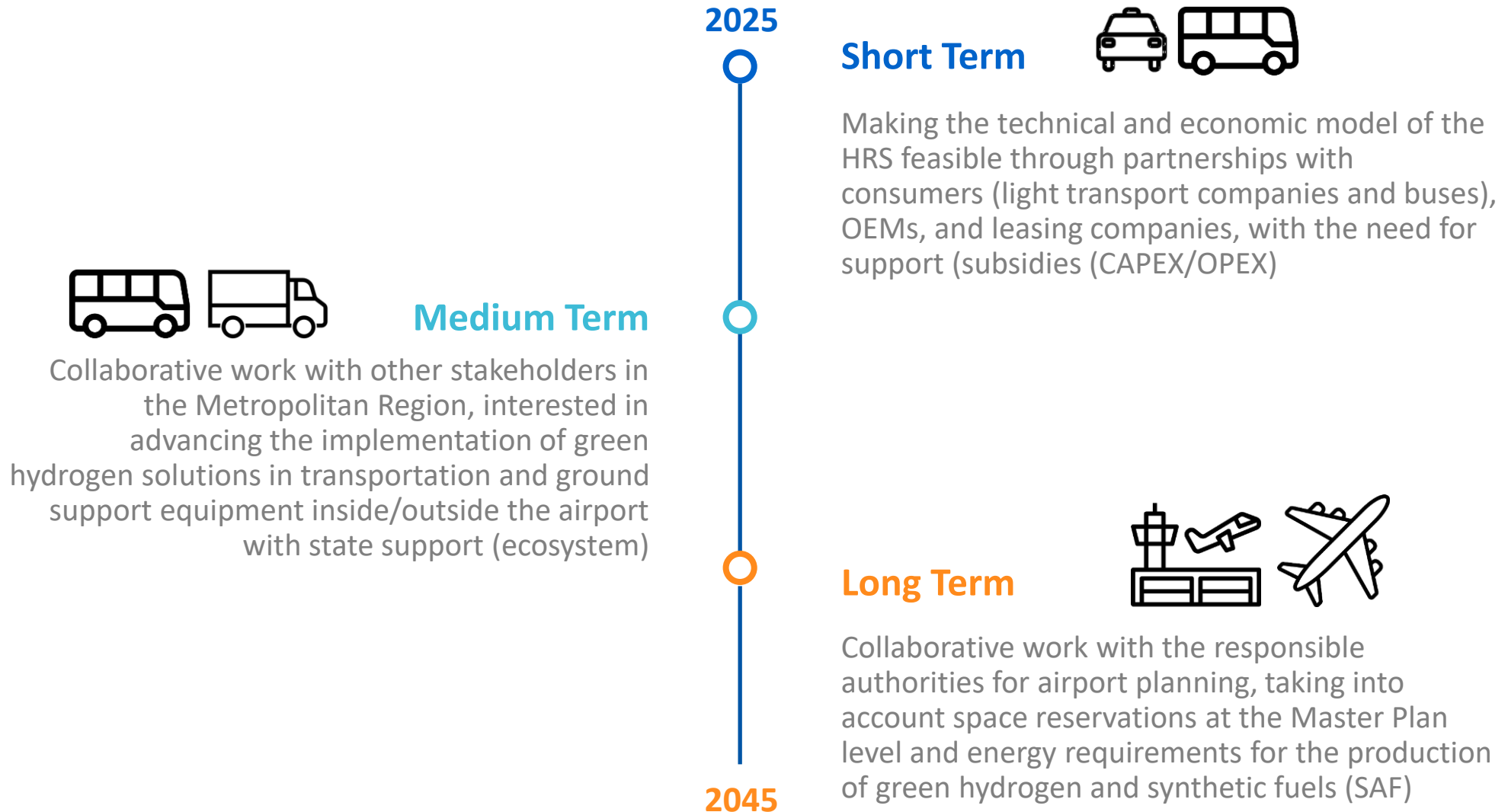


03

Next steps for green hydrogen development at SCL



Jointly supporting the green hydrogen at SCL



Next steps for the development of green hydrogen at SCL

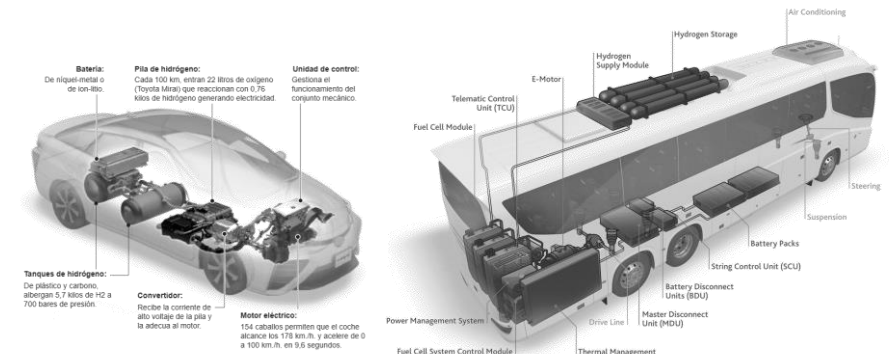
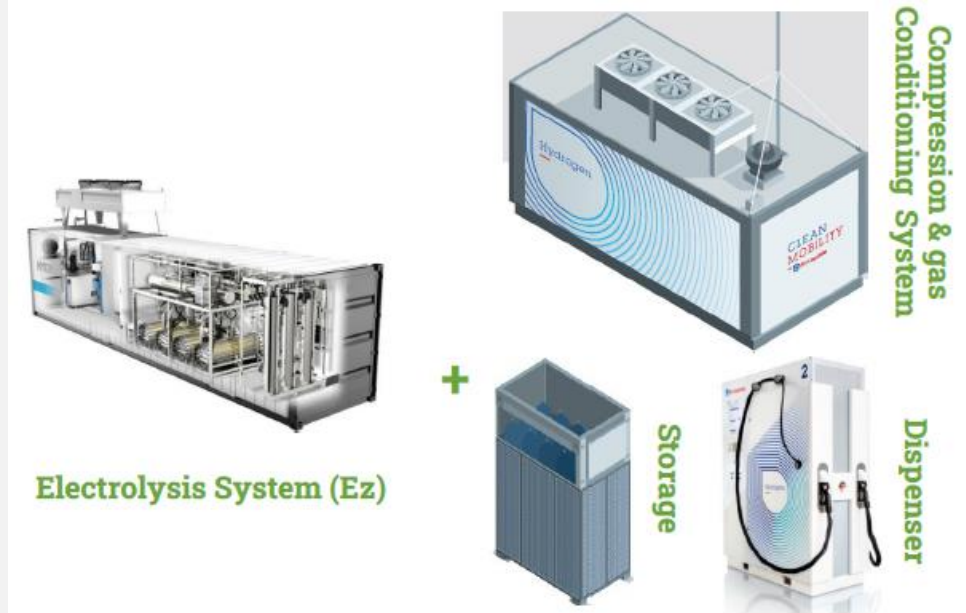
HRS Current Configuration

- H2 Production: Approx. 200 kg/day with a 500 kW electrolyser
- H2 Refueling: 90-120 kg/day for cars @700 bars, **additional 70-90 kg/day for buses @350**

Next Steps in 2024

- **Expand project demand by identifying additional fleet operators (buses/taxis and others)**
- Confirm collaboration with vehicle OEMs and optimize electricity supply solution (GH2 cost reduction)
- Engage with public authorities for support and share identified gaps (public/private collaboration)
- Finalize the HRS layout (confirm design/execution/operation time – approx. 18 months)

Electrolyzer plus Hydrogen Refueling Station



04

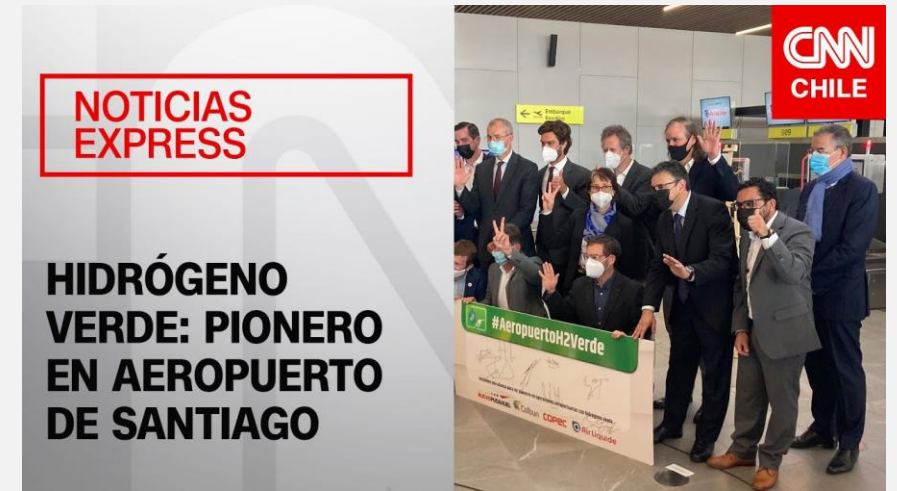
Conclusions of the process (in progress)



Conclusions of the joint work process

How to collaboratively advance in the development of green hydrogen at airports

- 1 Active participation of airports in the establishment of alliances (MOUs)
- 2 Avoid technological dependence and support different alternatives towards neutrality
- 3 Support progressive and constant implementation as a path to neutrality
- 4 Plan surface requirements and equipment for green hydrogen (Airport Master Plans)
- 5 Be part of the technical and economic analysis, support assistance requirements (CAPEX/OPEX subsidies)



Thank You

