



APEC Clean and Low-Carbon Hydrogen (CLCH) Policy Convention

# GREEN HYDROGEN POLICY IN CHILE

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**GOVERNMENT OF CHILE**



# Agenda

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Chile

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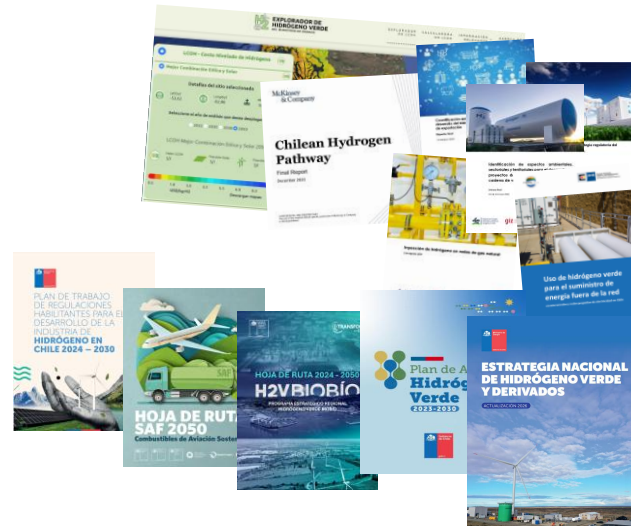
04

Looking forward



# THE GREEN HYDROGEN CONTEXT IN CHILE

# A State Policy



In 2020, Chile became a regional pioneer by launching its Green Hydrogen Strategy, marking the beginning of a State policy to promote the production and use of green hydrogen and its derivatives. Since then, Chile has developed a solid institutional framework and a set of policies and instruments that enable it to adapt to dynamic markets and position itself as a reliable and predictable energy partner in a challenging geopolitical context.

Building on the progress achieved in recent years, Chile now seeks to consolidate this industry, leveraging its renewable energy potential and stable institutions through a long-term public policy vision that transcends political cycles and aims to generate regional development and tangible benefits for people.



## CHILE'S RENEWABLE POTENTIAL FOR GREEN HYDROGEN

The highest solar radiation on the planet in the Atacama Desert, combined with the strong, steady winds in the southern regions of Chile, enable average capacity factors of 35% for bifacial photovoltaic systems and 60% for onshore wind turbines standing 120 meters tall.

Chile can produce green hydrogen at globally competitive prices thanks to the low cost at which we can generate renewable energy. Chile has undergone a significant deployment of clean energy technologies in recent years, facing challenges such as their integration into the landscape and waste management, both during the construction phase and throughout the projects' lifecycle,<sup>1</sup> thereby gaining key experience for the competitiveness of the green hydrogen industry.

Installed solar and  
wind capacity by  
2025

**18,6 GW**

94 times the capacity  
of 2012

Storage systems in  
operation as of 2025

**8,5 GW**

Chile's Energy Policy's  
goal of reaching 6 GW by  
2050 is expected to be met  
by 2026

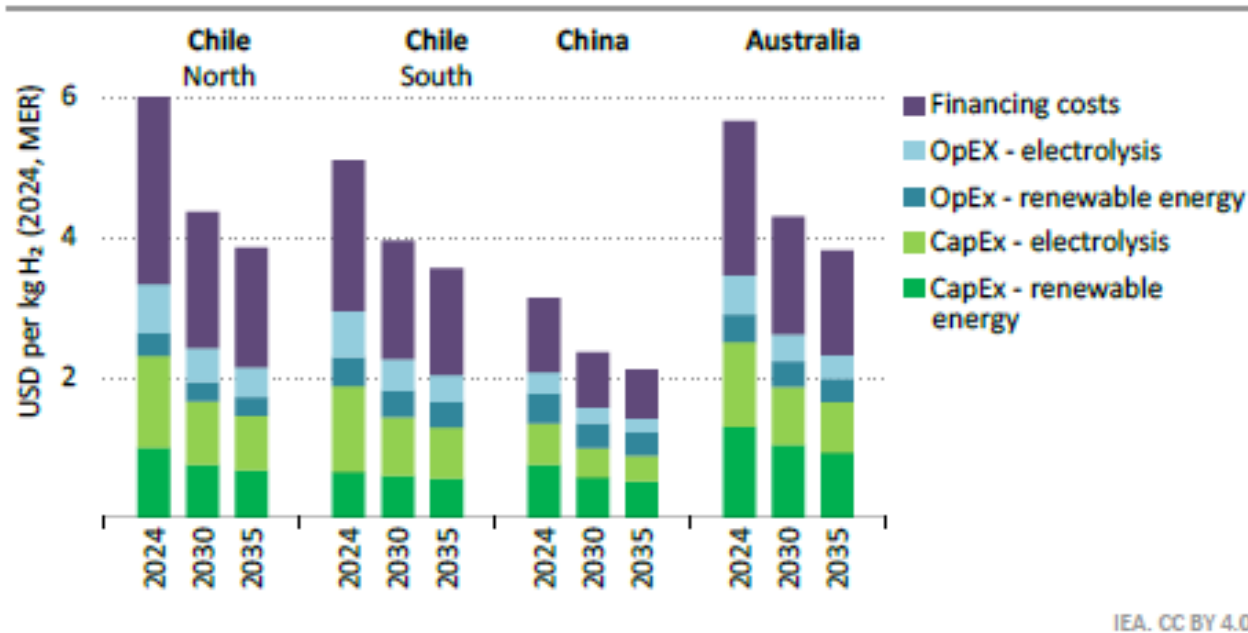
**ELECTRICITY GENERATION 2025**

**65.6%**

Renewable generation + storage



# OUR COMPETITIVENESS



*In Chile, high financing and electrolyser costs dominate production costs; lowering CapEx cuts investment and financing expenses, significantly reducing overall costs*

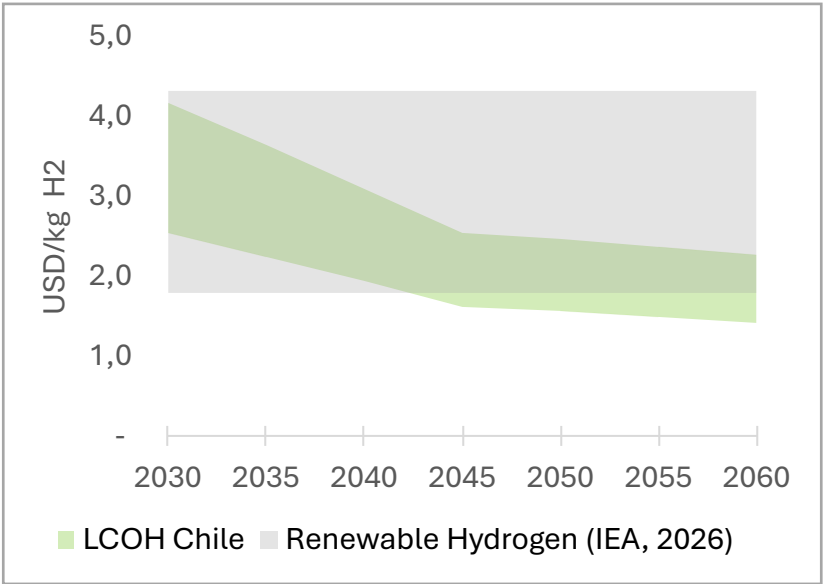
According to the International Energy Agency, **by 2030 Chile is projected to achieve a levelized cost of less than \$4 per kilogram of green hydrogen**, placing us at the lower end of the global cost curve and maintaining our competitive advantage over most producers.

Overall competitiveness with other countries in Latin America, Australia, or the Middle East will depend on factors specific to each project, such as the cost of capital, local engineering, procurement, and construction (EPC) costs, and financing terms, among others. In addition, access to port and logistics infrastructure will be a determining factor. Having an efficient logistics system will be key to translating our comparative advantages into highly competitive prices

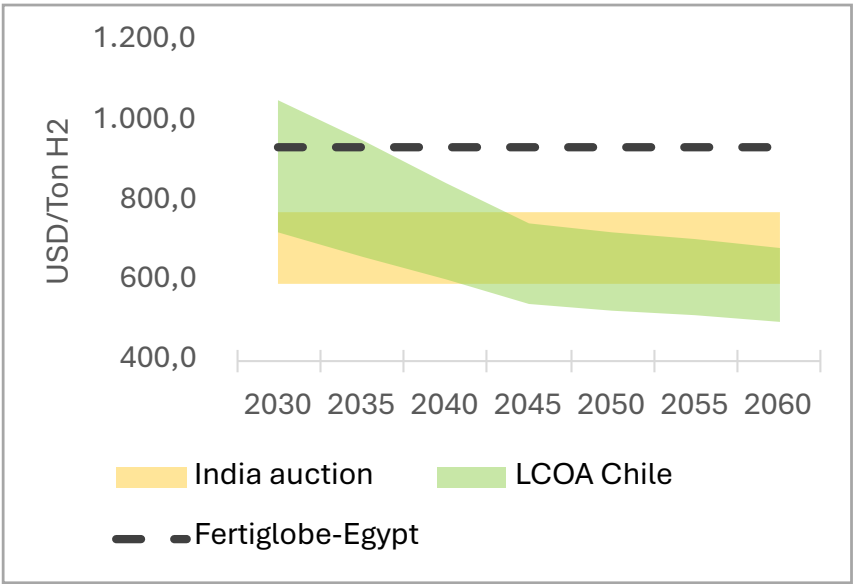
# GLOBALLY COMPETITIVE PRODUCTION COSTS OVER THE COMING YEARS

Green hydrogen and its derivatives are projected to become competitive with grey hydrogen and other fossil-based alternatives, gradually and over the medium to long term

(A) Comparison of the projected levelized cost of green hydrogen production (LCOH) for Chile and the cost of grey hydrogen



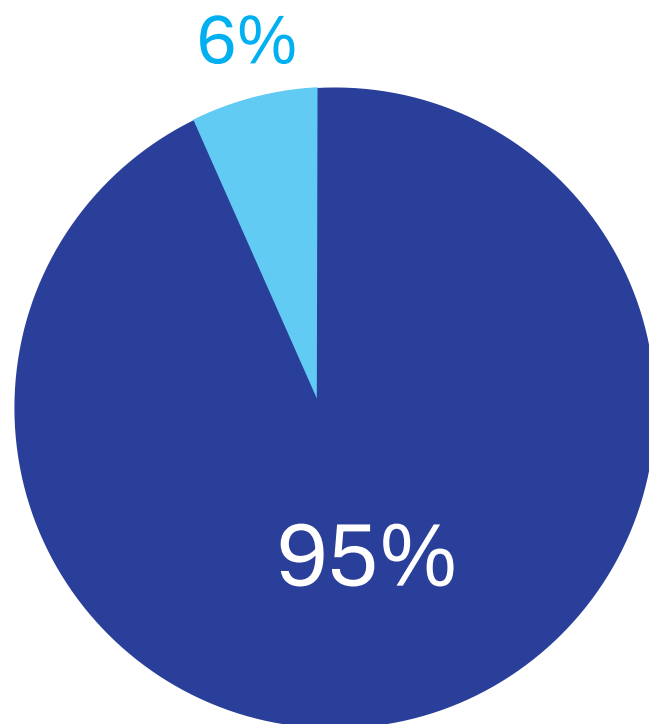
(B) Comparison of the projected levelized cost of green ammonia production (LCOA) for Chile and international prices



<sup>1</sup> Non-renewable hydrogen refers to hydrogen produced from fossil energy sources (natural gas, coal) through processes that emit large amounts of carbon dioxide into the atmosphere, such as methane reforming or gasification.



## PROJECTIONS OF CHILE'S PARTICIPATION IN INTERNATIONAL TRADE

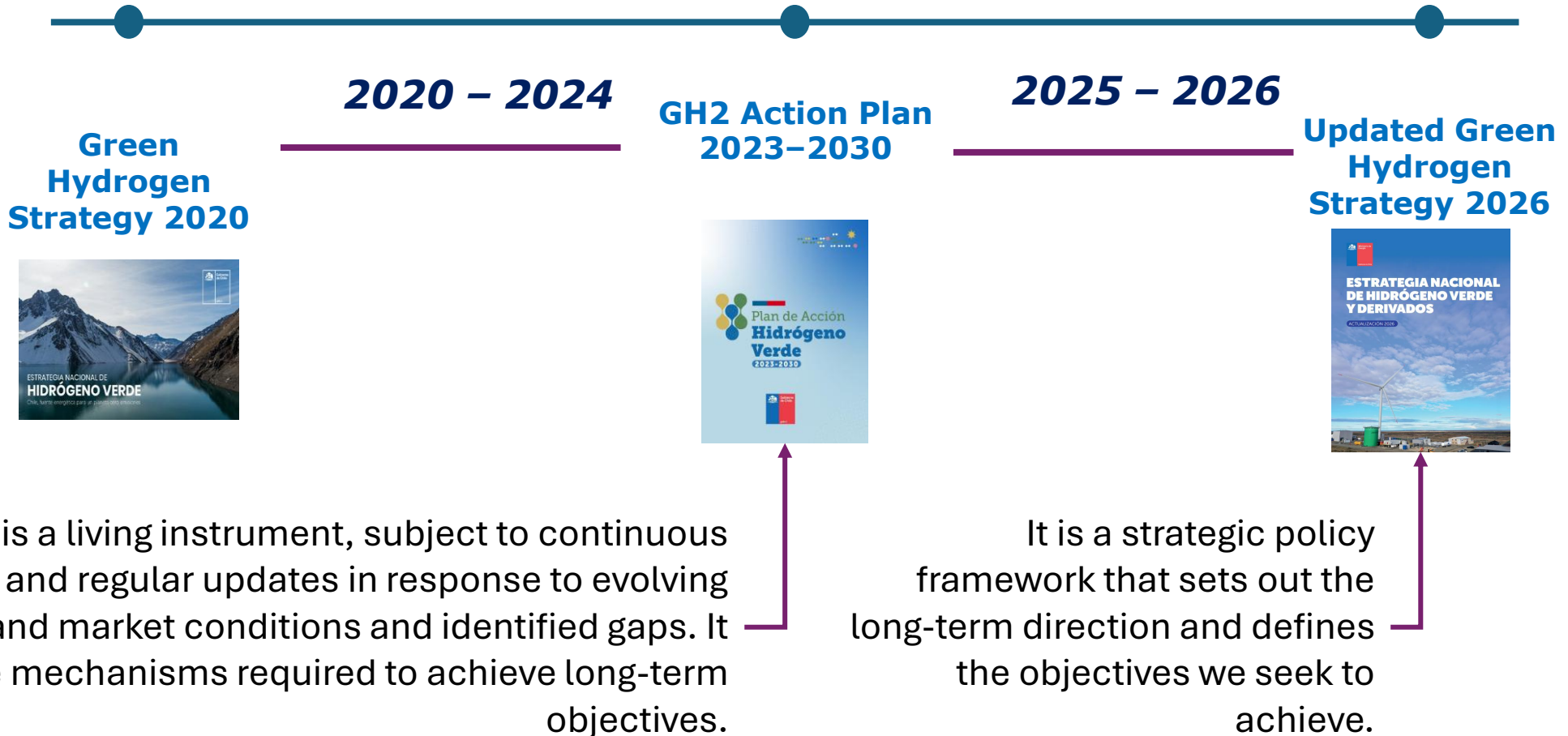


Global interregional trade in green hydrogen equivalent could reach 55 million tonnes by 2050, representing around USD 200 billion. According to the IEA, this would account for approximately 28% of the total low-emissions hydrogen and derivatives market.

In this scenario, Chile could represent more than **6% of total international trade** volume, playing a key role in the decarbonization of maritime and aviation transport.

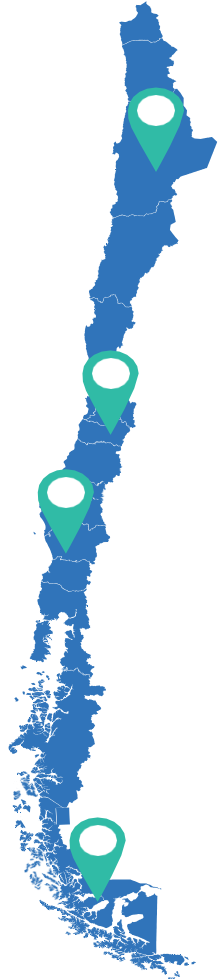


# CHILE'S MAIN POLICY INSTRUMENTS FOR GREEN HYDROGEN





## GREEN HYDROGEN PROYECTS IN CHILE



Chile has made substantial progress in building its green hydrogen industry, with large-scale projects under development, strong public financing tools, and growing operational capacity. Efforts focus on developing skills, advancing regulation, enabling regional and territorial integration, and strengthening infrastructure and permitting frameworks. The industry is increasingly decentralized, spans multiple regions, and is supported by international cooperation, positioning Chile as an emerging global leader in green hydrogen.

- 936 MW ez environmental permitting issued: 260 Kton/year → USD 3.02 bn ( $10^9$ )
- 7,092 MW under environmental permitting review: 4.337 kton/year → USD 27.83 bn ( $10^9$ )



# THE UPDATED CHILEAN GREEN HYDROGEN STRATEGY

## UPDATED GREEN HYDROGEN STRATEGY 2026



To ensure continuity with the 2020 Strategy, this update is structured around four medium- and long-term strategic orientation components, designed to guide the State's role in the development of this emerging industry.

This update defines strategic priorities, critical issues, milestones, and targets to guide and underpin short- and medium-term actions, thereby enabling the industrial deployment of green hydrogen and its derivatives under economically, socially, and environmentally sustainable conditions.



# THE STRATEGY IN ONE PAGE

## FOCUS AREA



Domestic demand and decarbonization



New Export Sector and International Positioning



Governance for the Sustainable Development of the Green Hydrogen Industry and Local Value

1. Operational tools and mechanisms (financial or otherwise) to close cost gaps with fossil fuels
2. Domestic suppliers across the value chain
3. Enabling regulatory frameworks
4. An operational certification system
5. Shared port and logistics infrastructure in at least two regions
6. Consolidation of interregional industrial hubs for domestic demand and value chains
7. Industry adoption of sustainable use of desalinated and/or recycled water
8. Implementation of 10 programs for higher education and technical-vocational institutions
9. At least two industrial-scale projects reaching Final Investment Decision (FID)

## GOALS

## KEY ISSUES

- Production costs
- Permits and regulations
- Economic incentives
- Human capital
- International positioning
- Infrastructure and logistics
- Transparency and participation

..... **2035** .....

**2050**

100-200  
kt/year  
H2V eq

Domestic demand

300-700  
kt/year  
H2V eq.

Exports

2.000-3.500  
kt/year  
H2V eq.

Total production

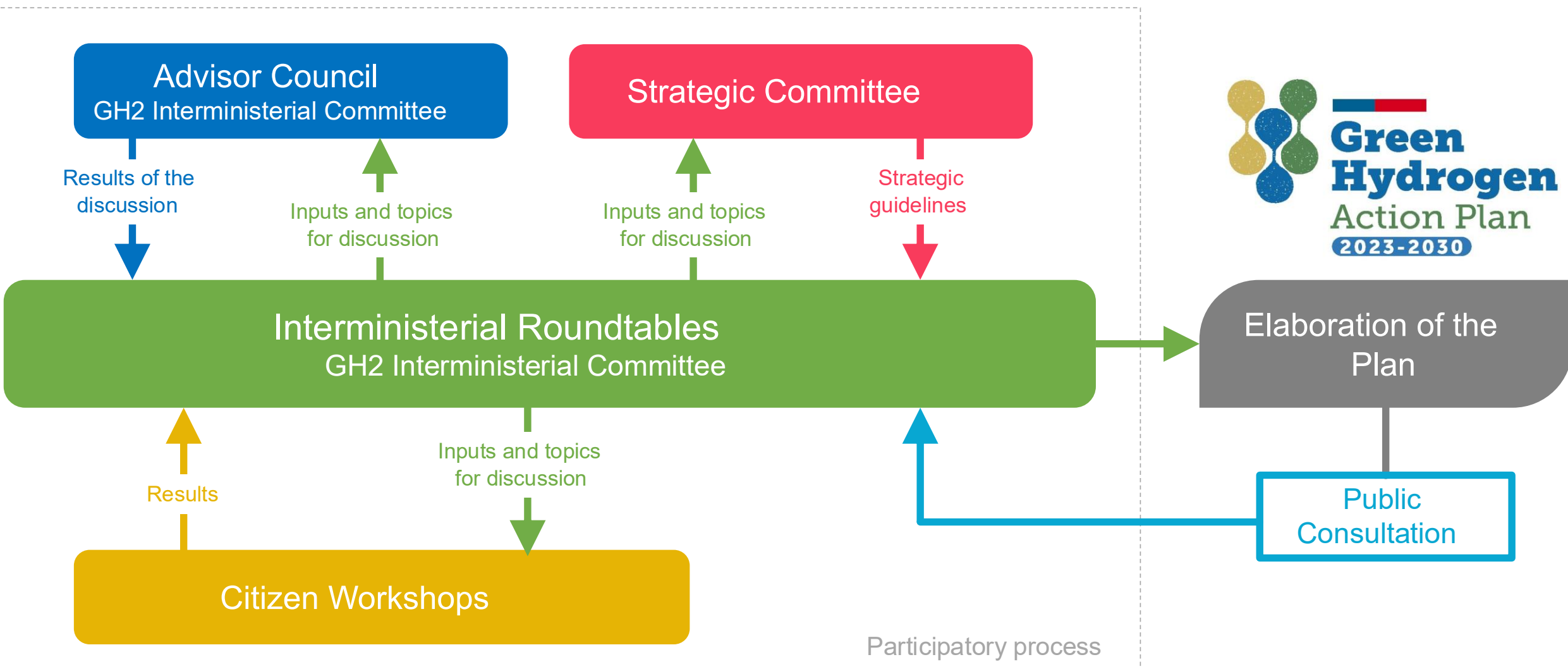


Green  
Hydrogen  
Action Plan

2023-2030

# GREEN HYDROGEN ACTION PLAN

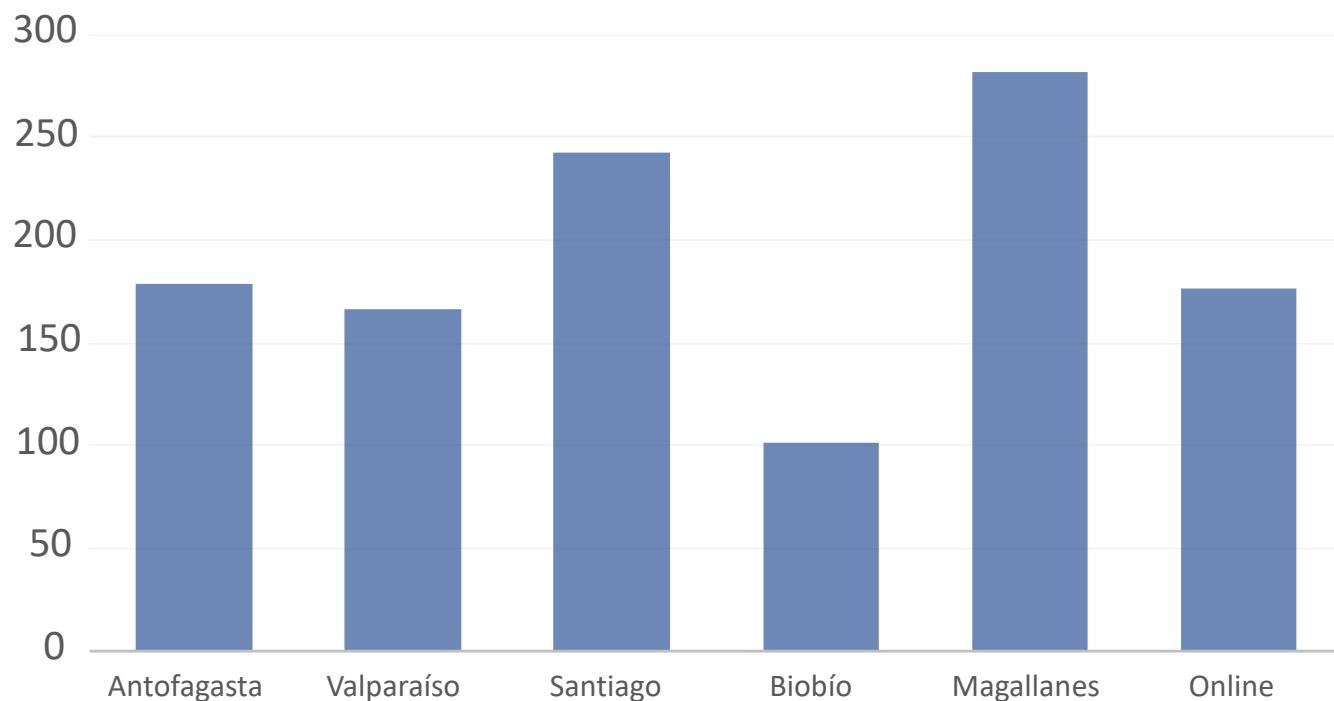
# GH2 ACTION PLAN PARTICIPATORY PROCESS



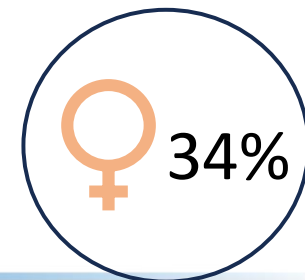


# CITIZEN WORKSHOPS

Participation in key regions for the Green Industry development

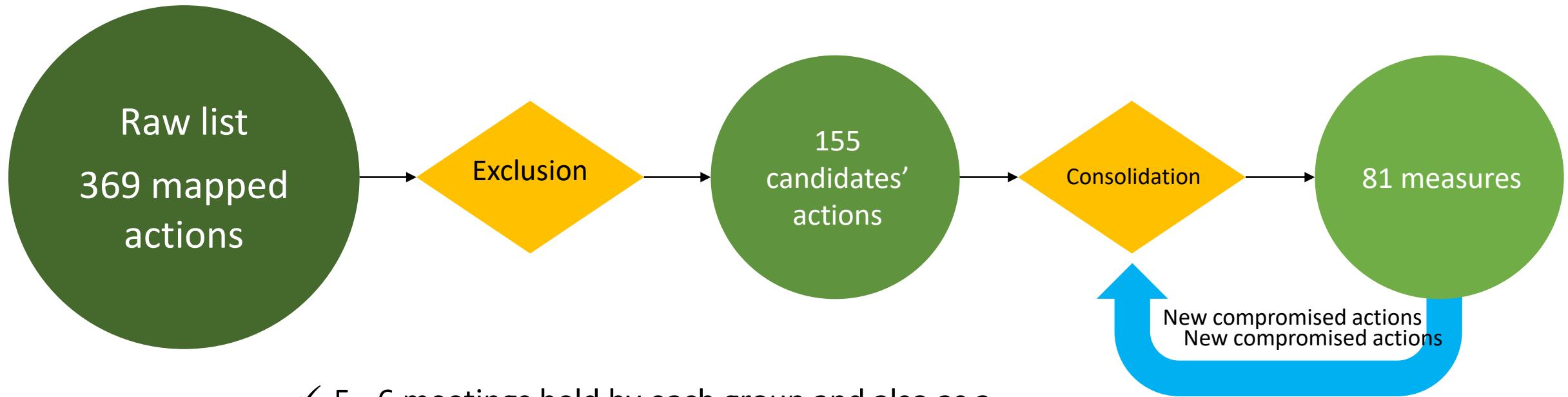


- ✓ + 2,300 registered
- ✓ Workshops in 5 regions: Antofagasta, Valparaíso, Santiago, Biobío and Magallanes.
- ✓ 5 public hearings + 15 workshops
- ✓ Approximately 1,150 people participated
- ✓ 34% private sector, 28% public sector, 20% civil society, 18% academia





# INTERMINISTERIAL ROUNDTABLES



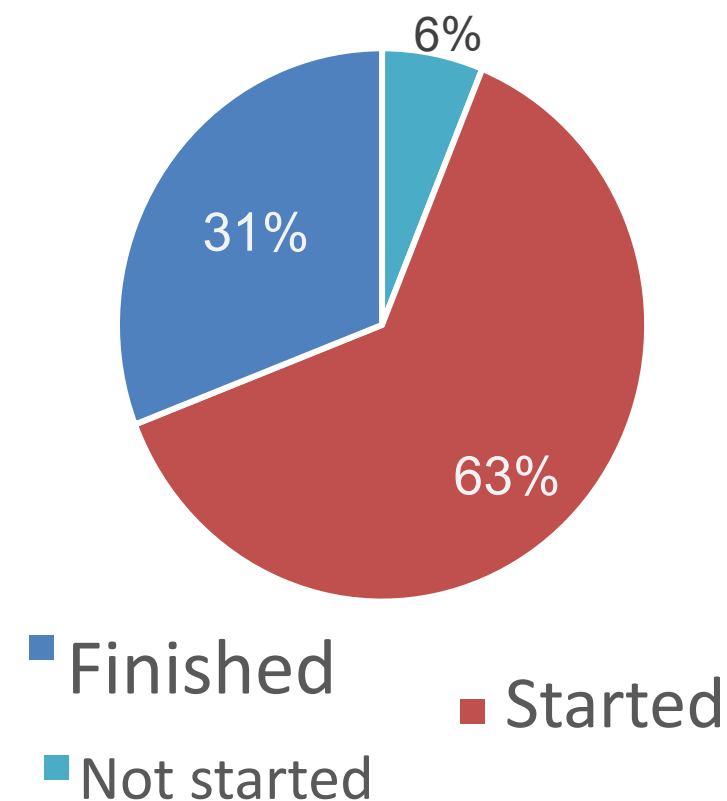
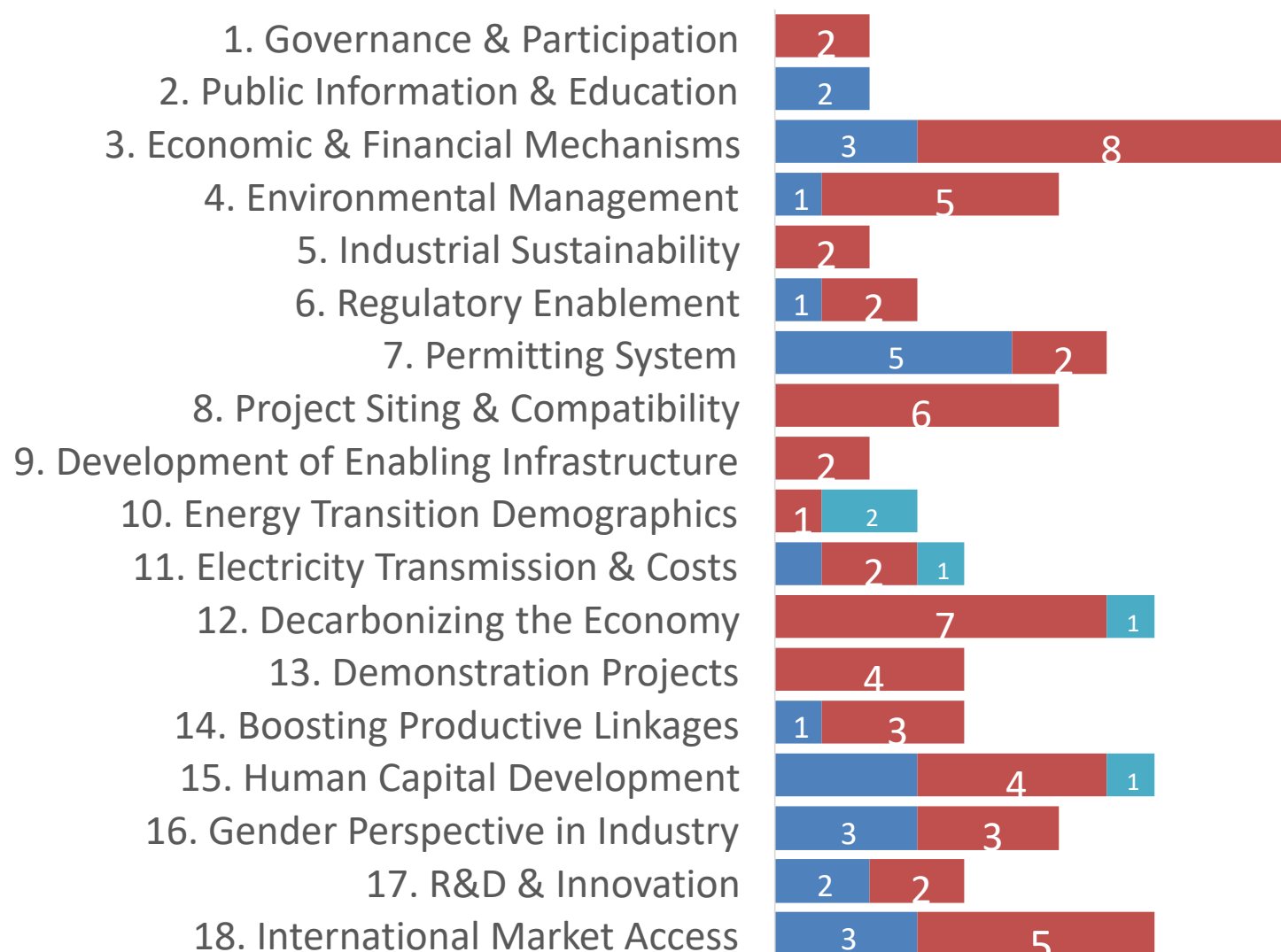
- ✓ 5 - 6 meetings held by each group and also as a whole.
- ✓ We raised about 200 sectoral initiatives
- ✓ Identified 51 critical issues
- ✓ Bilateral work with each counterpart



Public  
consultation

# IMPLEMENTATION & MONITORING

Line of Actions





## SOME MILESTONES

- ✓ Finish of regional GH2 roadmap in Biobio
- ✓ Launch of Green Hydrogen Explorer platform
- ✓ Developing of public environmental baselines
- ✓ Launch the enabling regulatory work plan for GH2
- ✓ Reform of sectoral permits Bill
- ✓ Finish Integrated planning study of GH2 infrastructure
- ✓ Finish Study of social evaluation methodologies for projects associated with GH2
- ✓ Submission of maritime concession for Laredo Pier in Magallanes Region (ENAP, *Chile's Oil Company*)



# Key Takeaways

- **Resources → Competitiveness:** World-class renewable resources enable production costs below USD 1.50/kg, contingent on efficient logistics and affordable financing.
- **Strategy → Action:** 174 milestones underway, with regulatory processes advancing and a strong focus on international certification. **Project Pipeline:** 8 GW, USD 30 billion in investment, spanning 5 regions, with scaling already underway. **Scaling Path:** From 400–900 kt/year to 2–3.5 million kt/year → prioritize domestic demand while international offtake markets mature. **Adaptive Governance:** A flexible, formal mechanism linked to the Strategy enables timely adjustment of milestones and actions, ensuring responsiveness to industry evolution and alignment with available resources.
- **Evolve to an Adaptive Governance:** A flexible, formal mechanism linked to the Strategy enables timely adjustment of milestones and actions, ensuring responsiveness to industry evolution and alignment with available resources.



# THANK YOU



**GOVERNMENT OF CHILE**