

# Energy transition and green hydrogen in Chile: Policy, strategic and institutional framework

Bárbara Eguiguren E.

Head of Policy and Strategic Monitoring Unit  
Division of Strategic Planning and Sustainable Development  
Ministry of Energy

# Mid-term consensus building is required

2050

2030

2023

We know **where we're headed...**  
...we're building **how to get there**

# Building State policies

## The relevance of a long-term sectoral vision

### Some country-wide goals



**1st Energy Policy**  
Published in 2015



**1st Update of Energy Policy**  
Published in 2022

**100%**  
Zero emission energy in the electrical sector by 2050

Energy Transition bill

**70%**  
Zero emission fuels in non-electric energy end-uses by 2050

National GH2 Strategy and GH2 Action Plan

**+80%**  
Renewables energies in the electrical sector by 2030

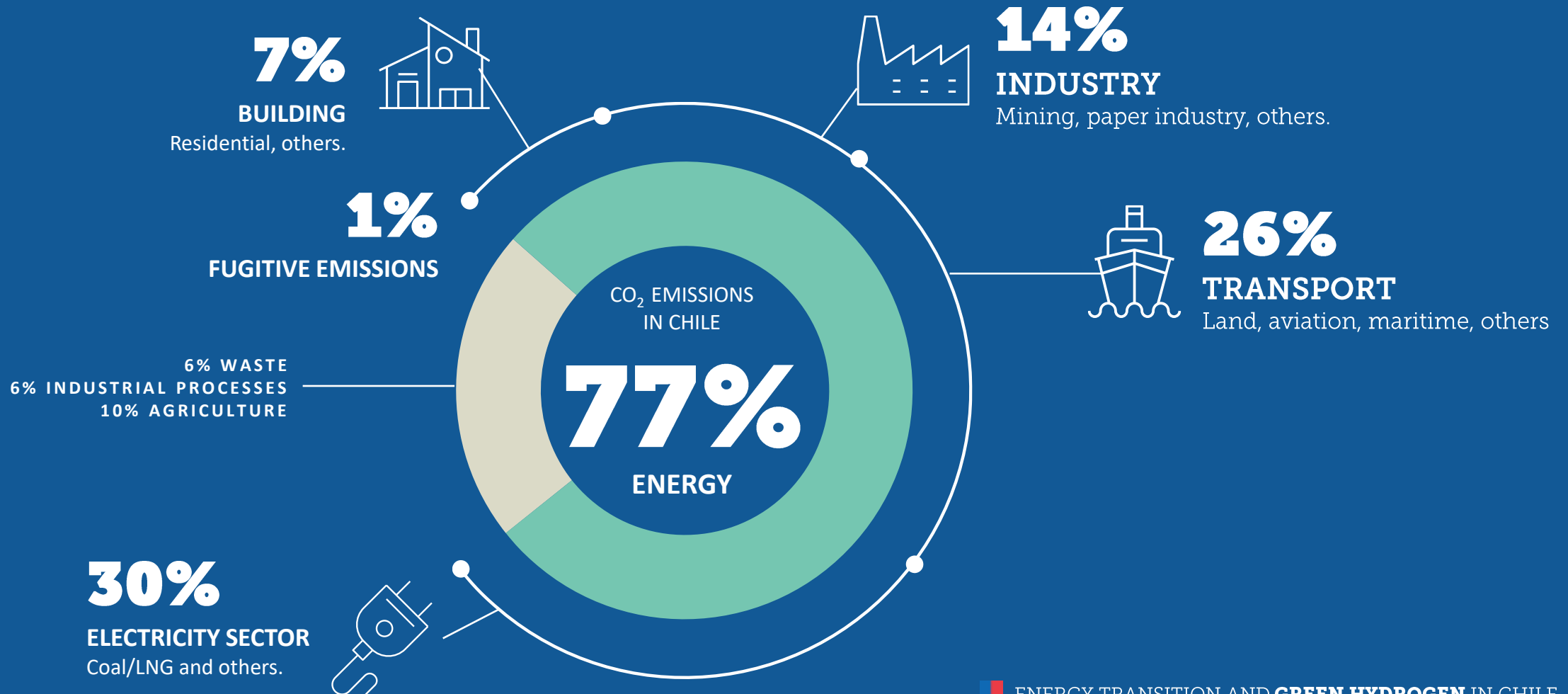
Renewables promotion bill  
Decarbonization plan

**+2 GW**  
On storage projects by 2030

Energy Transition bill and associated regulation

# Reducing GHG emissions

## A legal mandate to be a carbon neutral country





# CARBON NEUTRAL AND RESILIENT COUNTRY IN 2050

From the international commitment to legal mandate

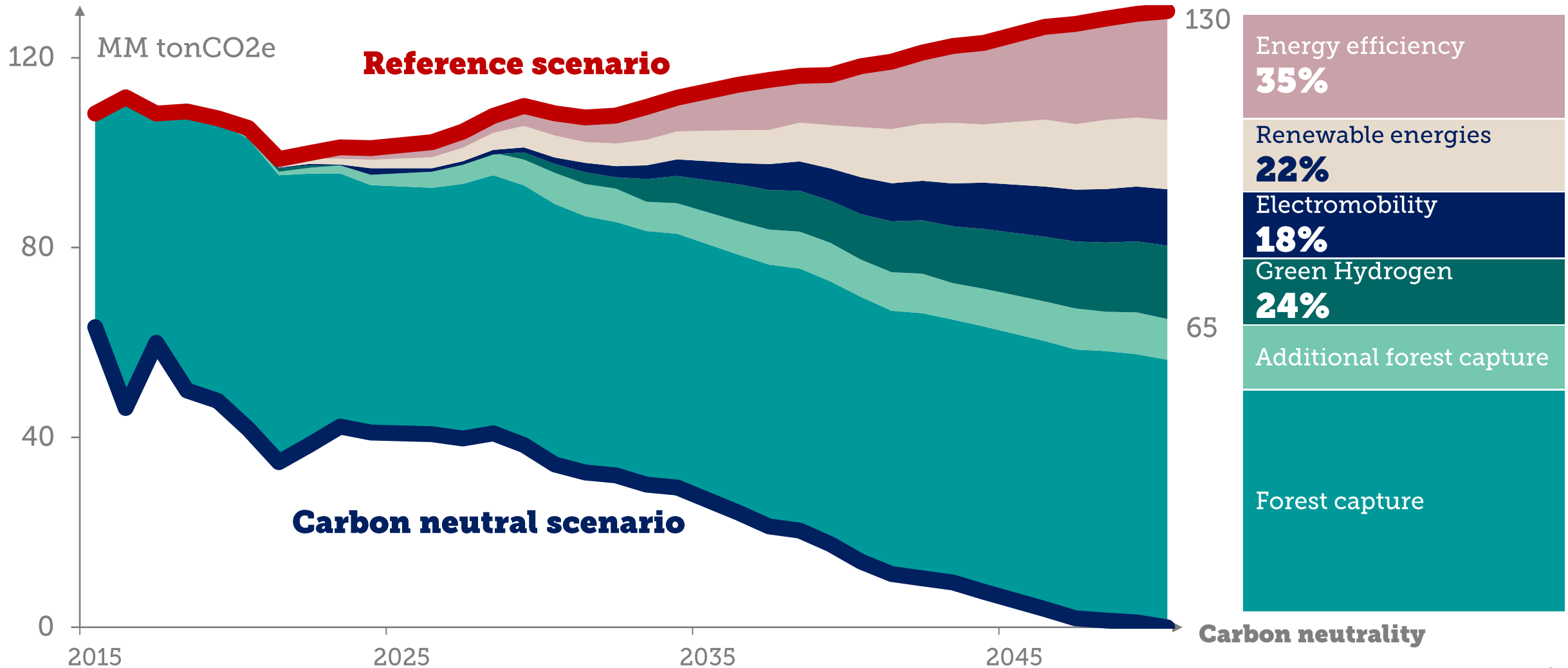
Energy: **76%** of the greenhouse  
gas emissions of the country

Main sector in the mitigation and  
adaptation to the climate crisis

Climate Change Framework Law:  
**Chile will be carbon neutral and  
resilient before 2050**

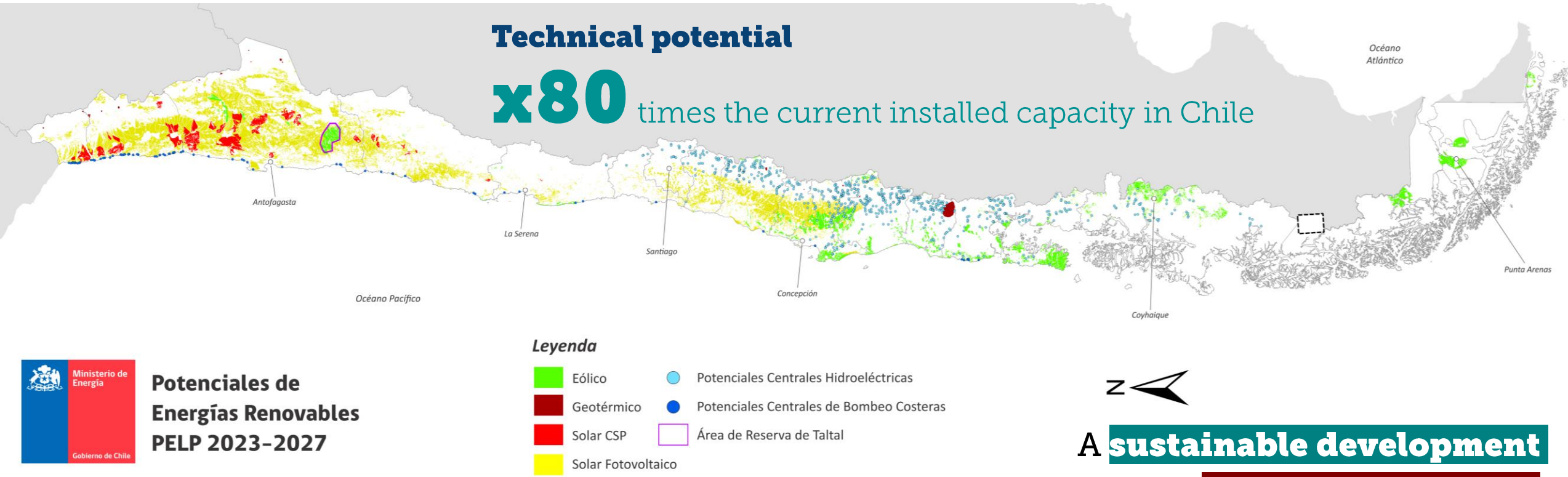


# Carbon Neutrality Plan

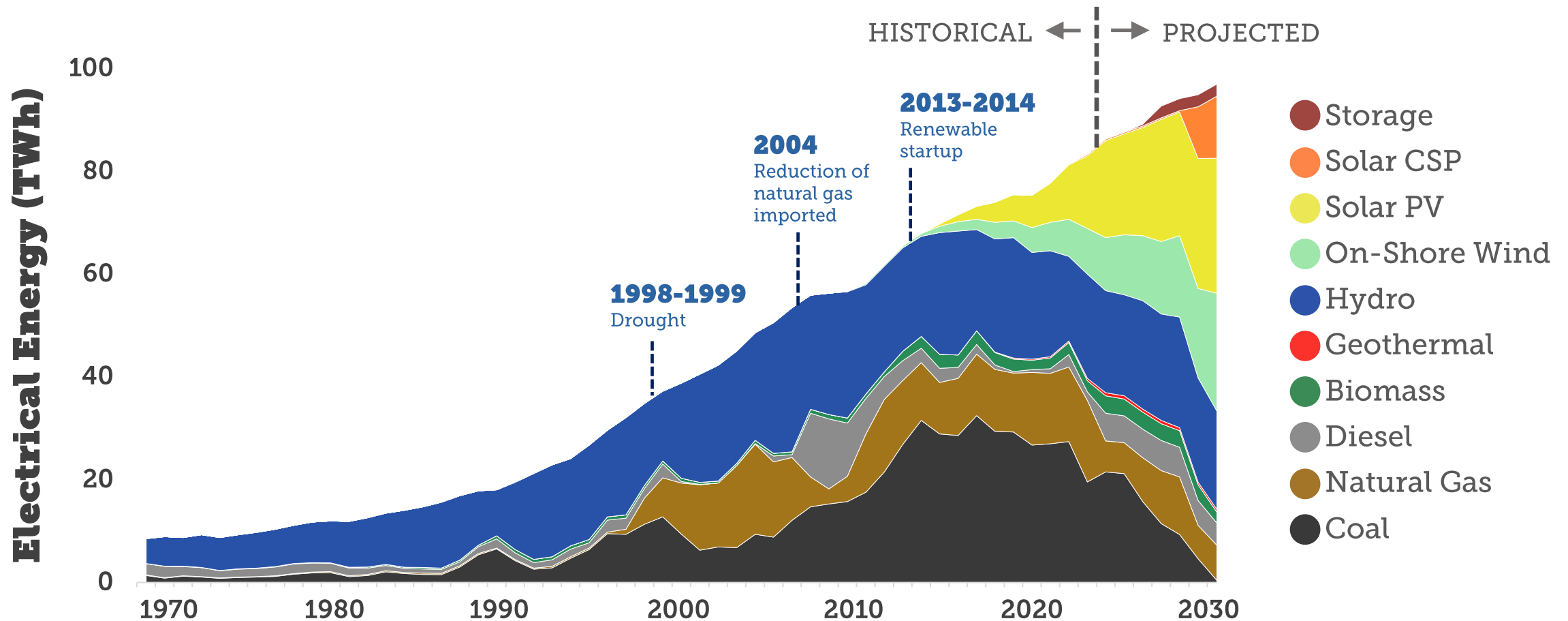


# Renewable energies

One of the best potentials in the world



# Evolution and projection of the electrical sector





# Commitment and legal mandate

## A carbon neutral and resilient country by 2050

### Major actions to achieve carbon neutrality:

- Energy efficiency **35%**
- Renewable energies **22%**
- Electromobility **18%**
- **Green Hydrogen** **24%**

### ACCELERATED DECARBONIZATION

Enabling measure:  
Withdrawal of coal-fired power plant

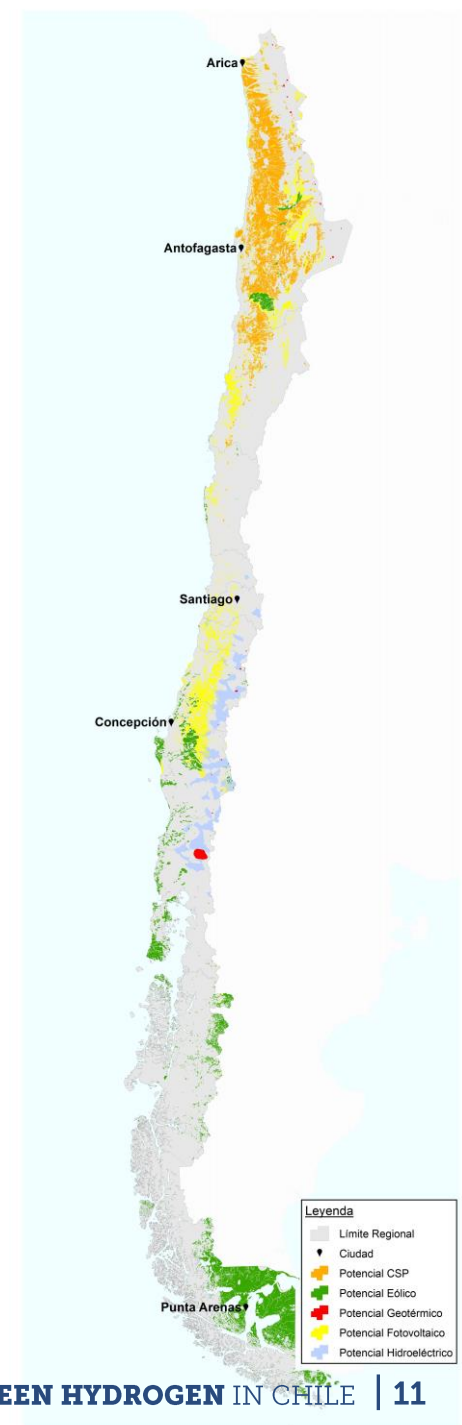


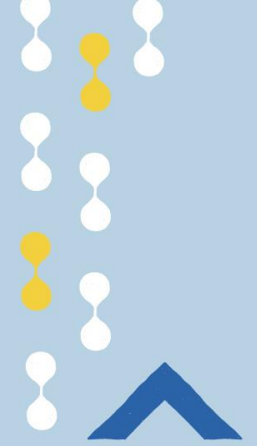
Enabling condition:  
High renewable energy potential

Opportunity for a new green industry

### GH2 and derivatives:

key energy vector for energy decarbonization





# 2

## Hydrogen and Derivates

*Accelerating Green Hydrogen and Derivates Deployment in Chile for contributing to carbon neutral global commitment*

# Chile's green hydrogen approach

**5**  
BUSD

Top 1  
Investment on  
green hydrogen  
in Latin America

**5**  
GW

Electrolysis  
capacity under  
construction and  
operation

**200**  
kton/year

Production in  
at least two  
hydrogen valleys

**by 2025**

**2020**

**National Green  
Hydrogen Strategy**

**2022**

**GH2 Interministerial  
committee**

**2023**

**GH2 Action  
Plan 2023-2030**

**Path towards the  
sustainable  
development of GH2**

# National GH2 Strategy



# GH2 Action Plan



## Objective of the Plan

Define a roadmap between 2023 and 2030 that allows the **deployment** of a sustainable green hydrogen industry and its derivatives, through **coordinated actions** between the different government institutions and related agencies

## Specific objectives

- Incorporate the **sustainability dimensions** to the Action Plan
- Organize the **actions of State agencies** that have an impact on GH2 industry (developed, in development or programmed).
- **Prioritize actions / Identify new actions**
- **Define roles and responsibilities**

## Participatory process

**Interministerial Roundtables**  
GH2 Interministerial Committee

**Citizen Workshops** and public consultation

**Strategic Committee**

**Advisor Council**  
GH2 Interministerial Committee



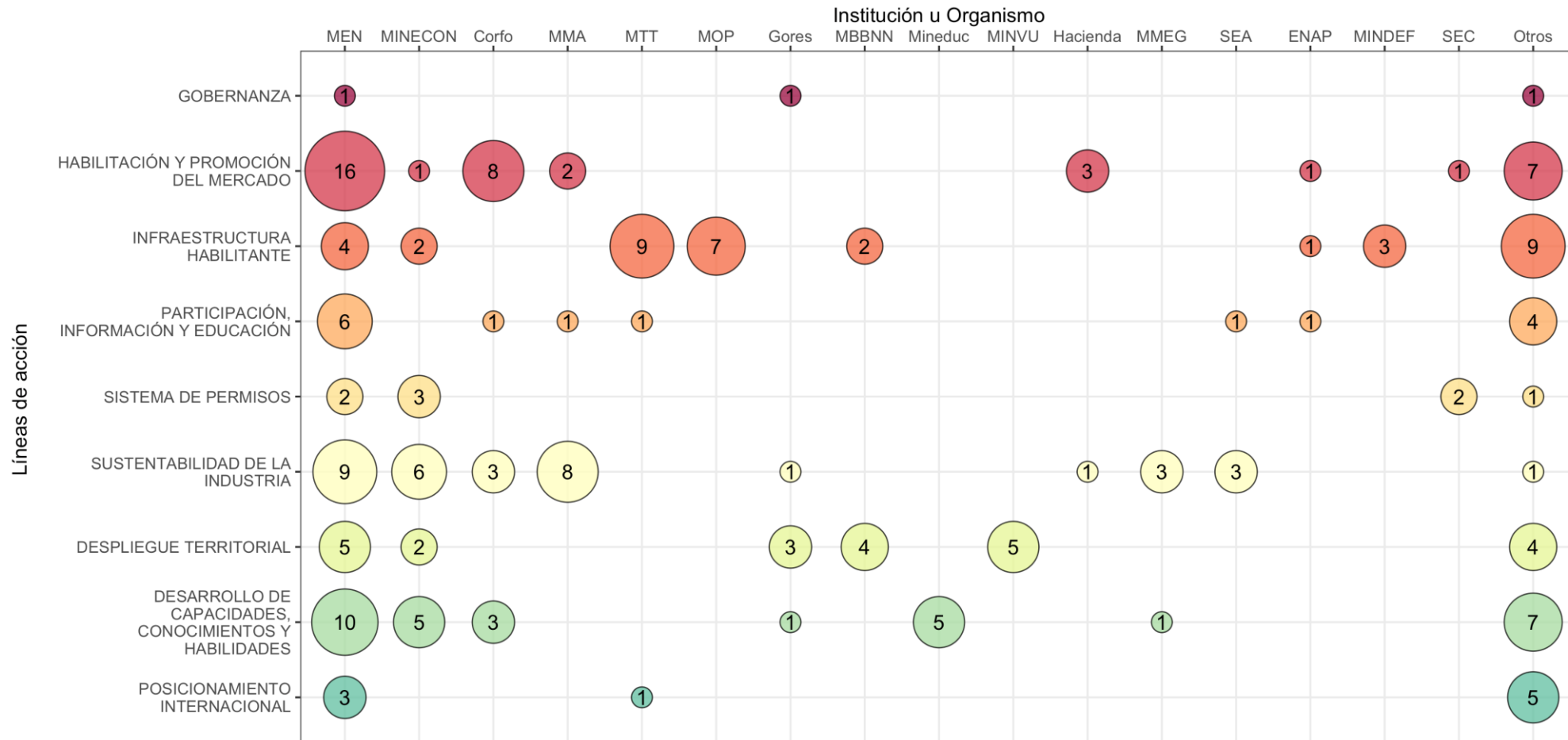
# A GH2 Action Plan with a state vision

## STRATEGIC COMMITTEE

Strategic Committee aims to provide **strategic and policy orientations, with broad consensus** among participants, to constitute a high-level framework for the Green Hydrogen Action Plan and build a political discourse that communicates, nationally and internationally, the country's hydrogen guidelines.



# Responsible public services



➔ **Need for a strategic and a detailed monitoring (PMO)**



# Green H2 Governance

## Green Hydrogen Industry Development Committee

(Resolución N° 60, 22 de junio de 2022)

### Executive Secretariat

Functions established in Resolución Exenta N°60 /2022

Management of the different instances of the Committee, promotion programs, among others.

### Ministry of Energy

Develops strategy and action plans (Decreto Ley 2224), consistent with the National Energy Policy.

Management control (PMO); coordination and strategic monitoring of the GH2 Strategy and Action Plan.

### Regional Governments

Local implementation  
(Roadmaps – agreements)

### Interministerial Council

Chairman: Minister of Energy  
Vice-Chairman: Vice-Chairman of Corfo

### Technical Board

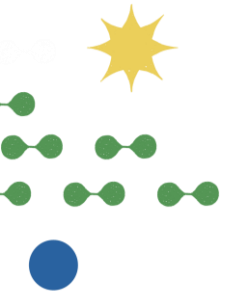
Chairman: Ministry of Energy  
Vice-Chairman: Corfo

### Advisor Council

Advises the Technical Board, Interministerial Council and the Executive Secretariat

### High representation committee

Political and territorial representation



# Time windows for action this decade

**2023 - 2026**

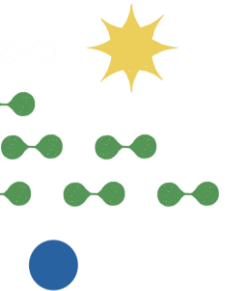
**2026 - 2030**

**Investment signals,  
standards, ammonia  
and off-takers**

First movers and shared risks

**Productive  
chaining and  
decarbonization**

Towards green markets and  
industry consolidation



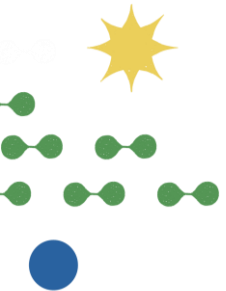
# Time windows for action this decade

GH2 Action Plan  
2023-2030



**Key actions**





# Time windows for action this decade

GH2 Action Plan  
2023-2030

2020

2023

2026

2030+

Investment signals,  
standards, ammonia  
and off-takers

Productive chaining  
and decarbonization

Consolidation

National GH2  
Strategy

Energy cost  
Institutional strengthening  
Permitting  
Tax and financial incentives  
Public environmental baselines

National GH2 Strategy  
Updating considering  
Industrial Policy

**Enabling infrastructure** (desalination plants,  
ports, eletrolyzers, CCS and DAC, electrical  
lines)

e.g. ENAP's Enabling  
Infrastructure Plan

(i.e. ammonia as fuel)

Positioning  
Local demand

Voluntary agreements  
Demand aggregation  
Governance

Territorial planning  
Updating norms  
Law requirements  
Certification

Electrical conversion and use in  
isolated areas

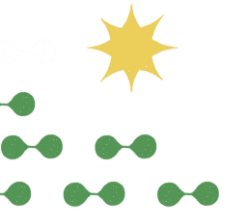
Public information and participation

Human capital

Green markets

Performance indicators  
(environmental, life quality, etc)

## Key actions



# Time windows for action this decade

GH2 Action Plan  
2023-2030

2020

2023

2026

2030+

Investment signals,  
standards, ammonia  
and off-takers

Productive chaining  
and decarbonization

Consolidation

National GH2  
Strategy

Energy cost  
Institutional strengthening  
Permitting

Tax and financial incentives

e.g. Corfo  
programs

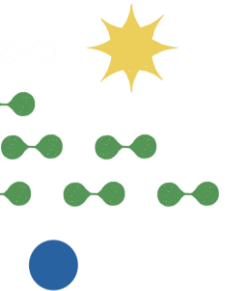
Environmental baselines  
Infrastructure (desalination plants,  
pumps, CCS and DAC, electrical

Regulations path (i.e. ammonia as fuel)  
Standards  
International positioning  
Promotion to local demand  
Voluntary agreements  
Demand aggregation  
Governance

National GH2 Strategy  
Updating considering  
Industrial Policy

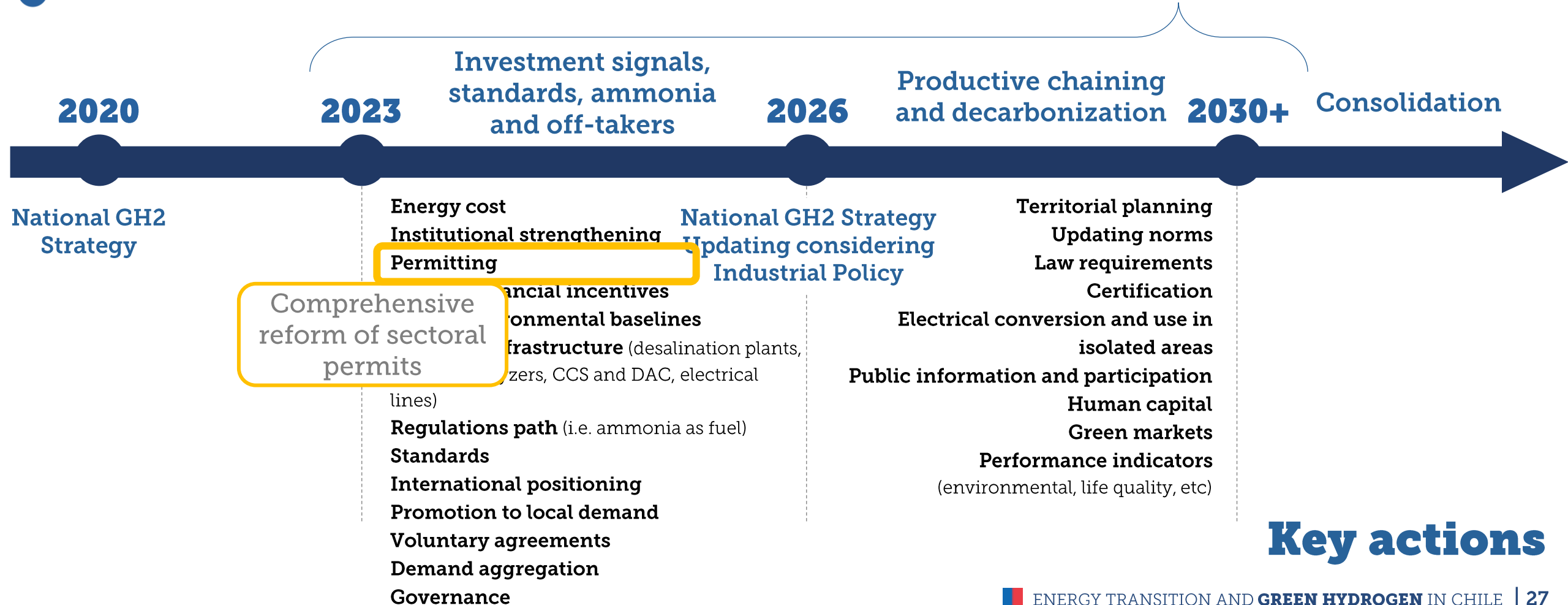
Territorial planning  
Updating norms  
Law requirements  
Certification  
Electrical conversion and use in  
isolated areas  
Public information and participation  
Human capital  
Green markets  
Performance indicators  
(environmental, life quality, etc)

**Key actions**

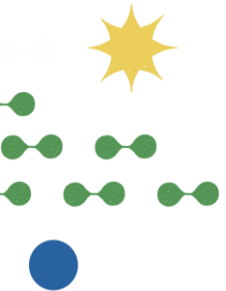


# Time windows for action this decade

GH2 Action Plan  
2023-2030



**Key actions**



# Time windows for action this decade

GH2 Action Plan  
2023-2030

2020

2023

2026

2030+

Investment signals,  
standards, ammonia  
and off-takers

Productive chaining  
and decarbonization

Consolidation

National GH2  
Strategy

Energy cost  
Institutional strengthening  
Permitting  
Tax and financial incentives  
Public environmental baselines  
Enabling infrastructure (desalination plants, ports, electrolyzers, CCS and DAC, electrical lines)

National GH2 Strategy  
Updating considering  
Industrial Policy

Territorial planning  
Updating norms  
Law requirements  
Certification  
Electrical conversion and use in isolated areas  
Public information and participation  
Human capital  
Green markets  
Performance indicators (environmental, life quality, etc)

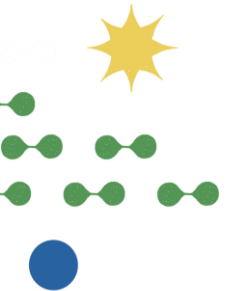
e.g. Voluntary early participation agreements

path (i.e. ammonia as fuel)

al positioning  
to local demand

Voluntary agreements  
Demand aggregation  
Governance

## Key actions



# Time windows for action this decade

GH2 Action Plan 2023-2030

2020

2023

2026

2030+

Investment signals, standards, ammonia and off-takers

Productive chaining and decarbonization

Consolidation

National GH2 Strategy

- Energy cost
- Institutional strengthening
- Permitting
- Tax and financial incentives
- Public environmental baselines
- Enabling infrastructure (desalination plants, ports, eletrolyzers, CCS and DAC, electrical lines)
- Regulations path (i.e. ammonia as fuel)
- Standards
- International positioning
- Promotion to local demand
- Voluntary agreements
- Demand aggregation
- Governance

National GH2 Strategy Updating considering Industrial Policy

- Territorial planning
- Updating norms
- Law requirements
- Certification

Electrical conversion and use in isolated areas

Public information and participation

e.g. GH2 Explorer

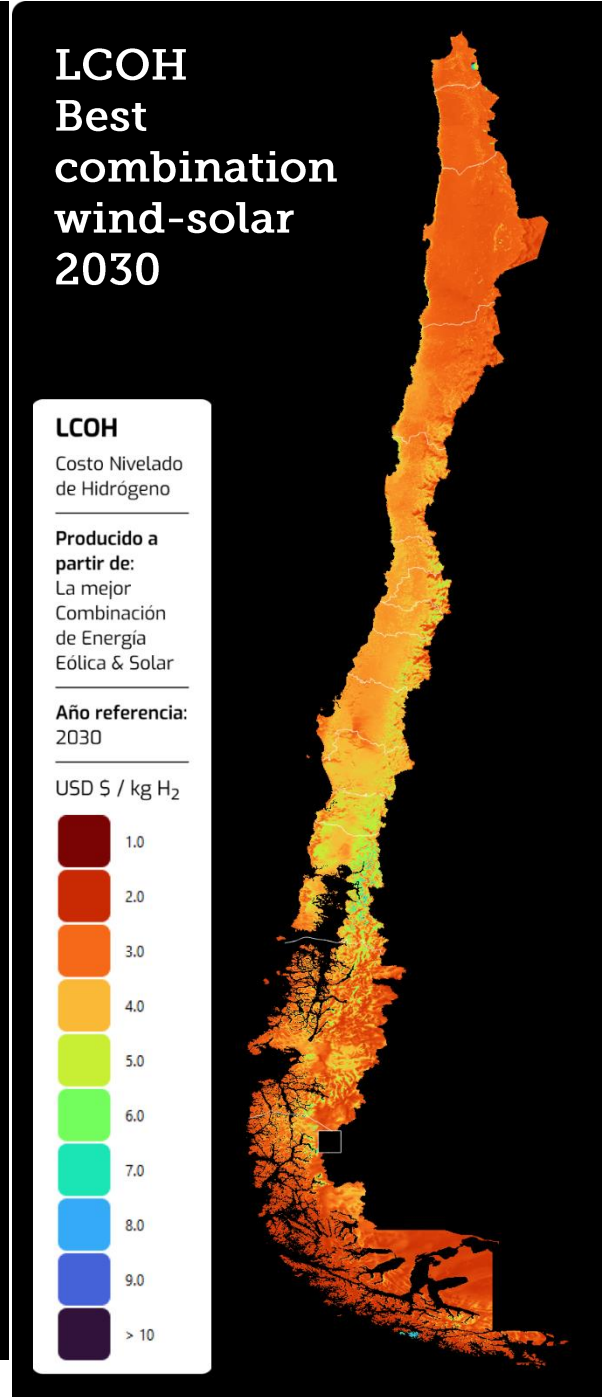
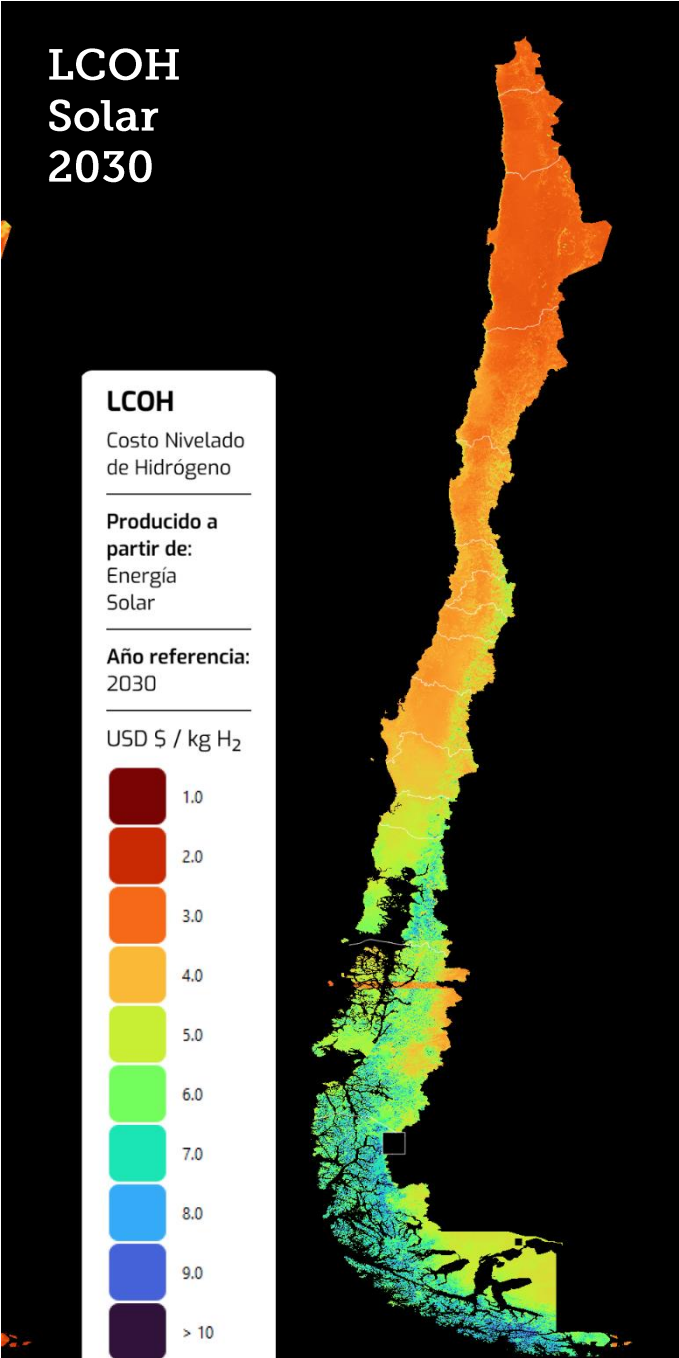
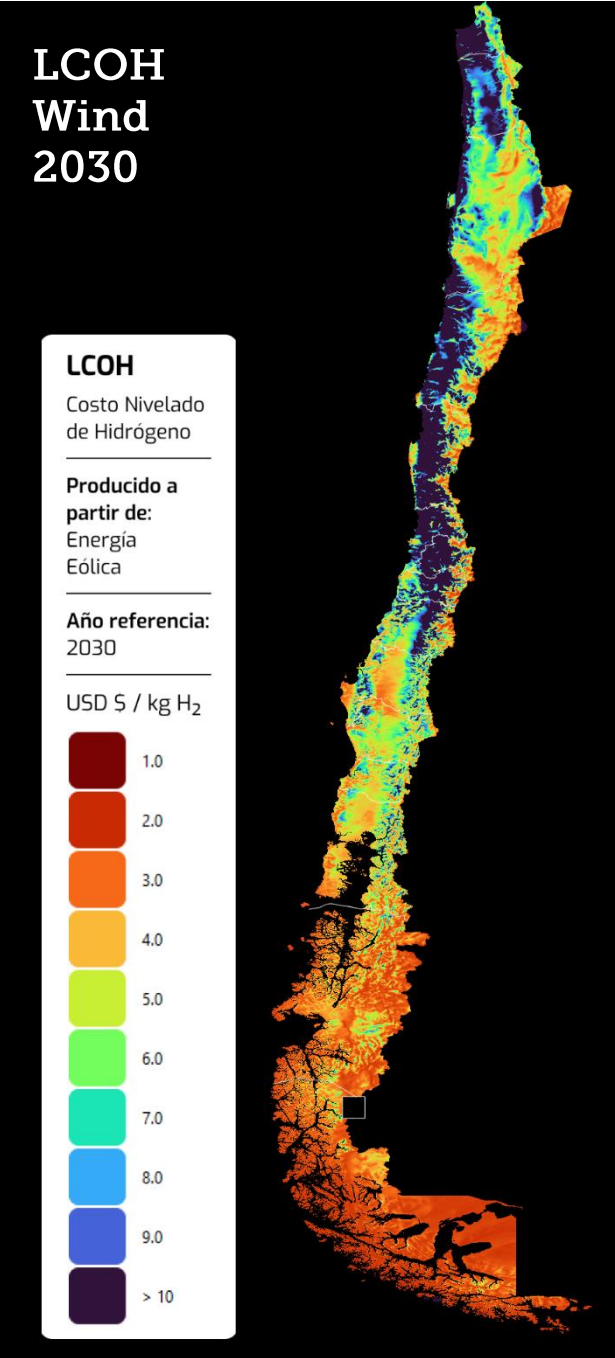
(e)

## Key actions



# New Hydrogen explorer

... coming soon





Ministerio de  
Energía

Gobierno de Chile

<https://www.planhidrogenoverde.cl/>

Bárbara Eguiguren E.  
beguiguren@minenergia.cl