Circular Economy: National Strategic Program

Submitted by: Chile
Circular Economy: National Strategic Program

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Chile at a glance

- **25** International trade agreements and double taxation treaties signed with 64 countries.
- **200,000** Highly specialized workers.
- **1st Regional Ranking** in Renewable energy investment.
- **1st Regional Ranking** in Solar energy generation.
- **22.8 million** number of active mobile phones.
- **125.4** units for every 100 people.
- **Chile #1 Worldwide** in Renewable energy investment & Solar Generation.
- **Chile #1 LatAm** in Food Security Index 2020.
- **Chile #1** in Logistic Performance 2019.
- **Chile in the Region**
  - #1 Business Environment Ranking EIU 2020 - 2024
  - #1 Most Competitive Country IDM 2020
  - #1 Economic Freedom Heritage Foundation 2020

*Source: Various sources referenced in the document.*
Chile at a glance

Main sectors

**Mining**
- World’s principal producer of copper (28%), nitrates (100%), iodine (58%) and lithium (54%) and the sixth largest silver producer

**Salmon**
- World’s 2nd Largest producer
- 6.0 million people market

**Forest**
- Top 10 in roundwood and pulpwood
- Leader in LatAm

**Wine**
- World’s 4th exporter after the 3 main European players
- World’s 5th Largest producer
- 16.9 million people drink a glass of Chilean wine

**Fruits**
- The world’s biggest exporter:
  - Fresh blueberries
  - Fresh table grapes
  - Fresh cherries
  - Prunes
  - Dehydrated apples
Our mission is to improve the competitiveness and the productive diversification of the country by encouraging investment, innovation and entrepreneurship, strengthening in addition the human capital and technological capabilities to achieve a sustainable and territorially balanced development.

Chilean Economic Development Agency – Ministry of Economy (since 1939)

- Innovation grants
- R&D tax incentive
- Seed Capital
- Incubators
- Co-Works
- Start Up Chile
- Guarantees for access to bank financing x SMEs
- PE & VC Funds
- Early Stage VC Funds
- Smart Specialization programs
- Labor skills
- SMEs programs
- Technology centres
- R&D Consortiums
- Technical school innovation capabilities
- Open Innovation Program
FOCUS 2022-2026

1. Financing for Development
2. Entrepreneurship, Innovation and Promotion
3. New Industrial Policy

Sustainability, Gender Equality and Territorial Development
WHY A CIRCULAR ECONOMY ROADMAP FOR CHILE?

A COUNTRY WITH A RECYCLING SECTOR JUST BEGINNING TO TAKE OFF

A COUNTRY THAT GENERATES EACH TIME MORE SOLID HOUSEHOLD WASTE PER INHABITANT

<table>
<thead>
<tr>
<th>Country</th>
<th>2000 kg/hab</th>
<th>2018 kg/hab</th>
<th>Rate %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chile</td>
<td>295</td>
<td>441*</td>
<td>+49%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>598</td>
<td>516</td>
<td>-14%</td>
</tr>
<tr>
<td>Spain</td>
<td>649</td>
<td>476</td>
<td>-27%</td>
</tr>
<tr>
<td>Hungary</td>
<td>445</td>
<td>384</td>
<td>-14%</td>
</tr>
<tr>
<td>Japan</td>
<td>430</td>
<td>336</td>
<td>-22%</td>
</tr>
</tbody>
</table>
ROADMAP TO A CIRCULAR ECONOMY CHILE 2040

The vision is that by the year 2040, the circular economy will play a key role in a sustainable path that is sustainable, fair and participatory, and pays people at the center.
HOW DID WE GET TO THIS ROADMAP?
VISION

A COUNTRY WHERE NOTHING GETS WASTED AND EVERYTHING IS TRANSFORMED FOR THE CARE OF LIFE
<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>2030 GOAL</th>
<th>2040 GOAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Goal: Generation of green jobs</td>
<td>100,000 new jobs</td>
<td>180,000 new jobs</td>
</tr>
<tr>
<td>2nd Goal: Generation of municipal solid waste per capita</td>
<td>Decrease of 10%</td>
<td>Decrease of 25%</td>
</tr>
<tr>
<td>3rd Goal: Total waste generation per GDP</td>
<td>Decrease of 15%</td>
<td>Decrease of 30%</td>
</tr>
<tr>
<td>4th Goal: Material productivity</td>
<td>Increase of 30%</td>
<td>Increase of 60%</td>
</tr>
<tr>
<td>5th Goal: General recycling rate</td>
<td>Increase to 40%</td>
<td>Increase to 75%</td>
</tr>
<tr>
<td>6th Goal: Recycling rate of municipal solid waste</td>
<td>Increase to 30%</td>
<td>Increase to 65%</td>
</tr>
<tr>
<td>7th Goal: Recover of sites affected by illegal dumping</td>
<td>Recover of 50%</td>
<td>Recover of 90%</td>
</tr>
</tbody>
</table>
Strategic Axes of the Roadmap

**Circular Innovation**
Creativity for the transition to production systems with low socio-environmental impact throughout life cycles.

**Circular Culture**
Transparent information and comprehensive education for a conscious society that cares for its environment.

**Circular Regulation**
Towards a regulatory framework that recognizes the potential of the circular economy and facilitates its implementation.

**Circular Territories**
Sustainable local development compatible with the visions and vocations of each territory.
How do we are implementing the Circular Economy Roadmap?

NATIONAL STRATEGICS PROGRAMS

VISION OF VALUE

Public-Private Governance

Multilevel coordination

Long term Roadmap
Chile has the opportunity to foster a new industry

Development of new products, services and circular technologies throughout the territory

Entrepreneurship Support and Business with local production = territorial impact.

¿Why a Circular Economy Strategic Program?
To reduce technology and competitiveness gaps in strategic sectors of our economy

Gather stakeholders with shared vision

To work with innovation ecosystems through industries challenges in each region

To develop circular value chains into territories
<table>
<thead>
<tr>
<th>Axis</th>
<th>Programa Transforma Monitoring</th>
<th>Programa Transforma Mobilize</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INNOVATION</strong></td>
<td>![Light Bulb Icon]</td>
<td>![Light Bulb Icon]</td>
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<tr>
<td><strong>CULTURE</strong></td>
<td>![Bicycle Icon]</td>
<td>![Bicycle Icon]</td>
</tr>
<tr>
<td><strong>REGULATION</strong></td>
<td>![Leaf Icon]</td>
<td>![Leaf Icon]</td>
</tr>
<tr>
<td><strong>TERRITORIES</strong></td>
<td>![Location Icon]</td>
<td>![Location Icon]</td>
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- **INNOVATION**: 27 initiatives (all within the roadmap)
- **CULTURE**: 14 initiatives
Accelerate the transition towards the circular economy in Chile, promoting sustainable development in the territories based on linkage opportunities between the industry and the ecosystem of innovation and entrepreneurship.
Private-Public initiatives for the development of a sustainable industry and Circular Economy

✓ Innovation
  ✓ Open Innovation Program 2 Calls – Circular Economy in Construction and Food Sectors
  ✓ Platform Innova Impacta and EcolImpacta Corfo
  ✓ Technology Center: Circular Economy – Electromobility - Clean Technologies (Lithium)
  ✓ Mining Tailing Recovering Consortia

✓ Territories
  ✓ Clean Production Agreement
  ✓ Green Hydrogen Strategic Plan
  ✓ Regional Innovation Strategic Plan: Focus Circular Economy

✓ Culture & Education
  ✓ Diploma course: Eco-design for the new Producer Extent Responsibility Law; Agroindustry Waste Management Normative and Techniques & Economy circular for Changes Leaders

Around $260 MMUSD
10 years Public Fund
Innovation

Open Innovation Call Challenge
HOW DO WE AVOID THE LOSS OF RESOURCES IN CONSTRUCTION AND NEGATIVE EXTERNALITIES?

Relazes con Alor
Consortia

Territories

Economía Circular
y modelos de negocio circulares

Strategia Regional de Desarrollo

Hydrogen
H₂
zero emission

ACUERDO DE PRODUCCIÓN LIMPIA
APL
1. Bottom-Up Projects from Territories and Shared Vision

2. Build public-private projects with clear challenges

3. Promote collaborative innovation and Industrial Symbiosis

4. Public – Private Coordination towards resolve gap for inclusive economic recovery (Mesas Ejecutivas)
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