#InvestChileTalks
THE POWER
OF DIALOGUE

WEBINAR

TUESDAY
25
AUGUST
09:30 CHILE
15:30 NL

Chile:
Circular Economy & Food Packaging, A Business Opportunity

Chile

Harman Idema, Ambassador, Embassy of the Kingdom of The Netherlands, Santiago de Chile

@HarmanInChile

Chile at a glance

- 18.4 million inhabitants
- Surface area: 756.102 km2 (27 x NL)
- Government: presidential republic with a multi-party system
- Together with Panama richest country (per capita) in Latin-America
- Only OECD country in South America
- Chile = ‘island’

Economy of Chile

- Open economy & solid macro-economic policy
- Land with the highest number of trade agreements: more than 60 with 4,2 billion potential consumers
- Last decades one of the fastest growing economies in the region: growth 2019 1,5%
- ‘Ease of doing business’
- Poverty: from 40% in 2000 -> 8% in 2017
- GDP 2019: USD 282 billion
- Unemployment: 7,0%
- FDI: Netherlands in top 4.
- Inflation: 3%
- Chile springboard for the rest of the continent

Main sectors

Mining

World's main copper producer (32%), nitrate (100%), jodio (58%) and lithium (45%) and the 6th main silver-producer

Salmon

World's 2nd largest producer

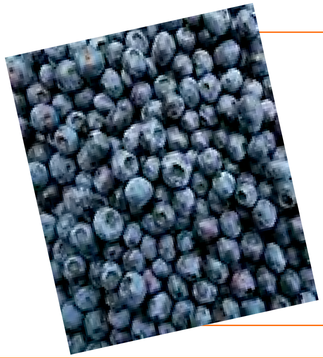
Wine

World's 4th exporter after 3 main European countries

World's 5th largest producer

Agro forestry

Top 10 in cellulose
Market leader in Latin-America

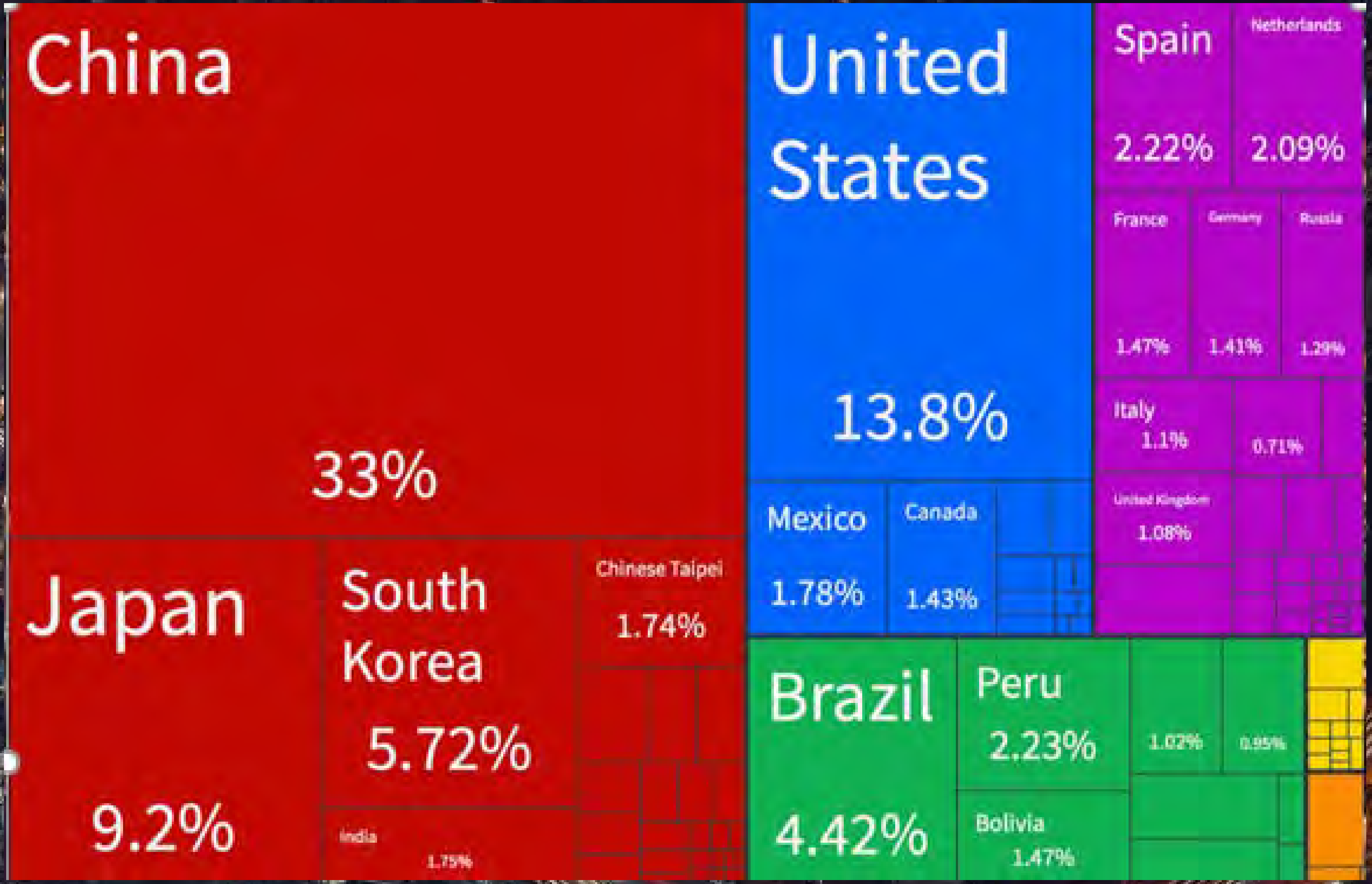


Fruit

Largest exporter worldwide in blue berries, grapes, cherries, and dried apple

Main investors	2017
US	$32.266.000
Canada	$26.961.000
Spain	$22.281.000
Netherlands	$17.931.000
Brazil	$10.038.000

Chilean Export by country



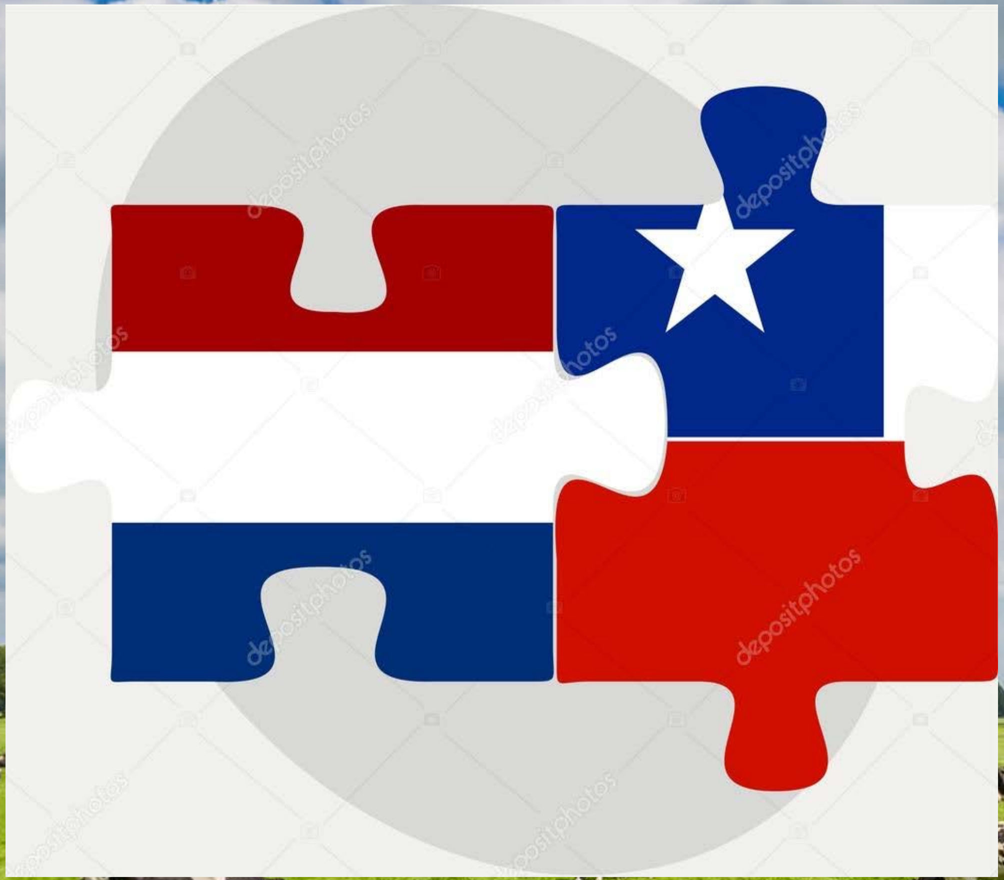
Chile & climate change

- Chile is amongst the top 10 countries that will be most impacted by climate change
- Chile strives to be climate neutral in 2050
- COP25 - ~~cancelled~~
- Together with the Netherlands part of the group that lobbies for more ambition regarding the Paris-agreement
- Interested in circular economy and circular agriculture
- Pandemia, protests -> recession. However climate ambitions still stand, and have even been enhanced.

Functions of the Embassy

1. Consular
2. Bilateral relations & politics
3. Economic diplomacy
4. Climate diplomacy
5. Cultural
6. Human rights

Netherlands



Support for Dutch companies

- Contribute to creating ‘level playing field’
- Direct services: trade questions, sector studies, matchmaking, establish contacts and support with RVO-instruments (subsidies)
- Holland branding
- E-embassy: platform combining trade, consular and economic information and services, in cooperation with Holland House, like webinars, e-trade missions, e-information seminars, e-matchmaking, and more.
- Holland House: a platform for networking, organizes impactful events and delivers services to companies active or interested in commerce between The Netherlands and Chile.
- **STG-EA@minbuza.nl / gerente@hollandhouse.cl**

Gobierno de Chile | Ministerio de Economía, Fomento y Turismo

InvestChile

Chile

Investment opportunities in the latin-american hub

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Cristián Sagal csagal@investchile.gob.cl
Investment Promotion Officer

1. Chile at a glance

GDP 2019	US $282 bn
Exports	US $70 bn (2019) / (US$ 17 bn during T1 2020)
Imports	US $66 bn (2019) / (US$ 15 bn during T1 2020)
Population	18 million
GDP p/capita (PPP)	US $26,000 (#1 in LATAM)
CB Interest rate	0.5%
Inflation 2019	3% (2000-2019: 3.2% average)
FDI	US $15 bn (annual average past 20 years)

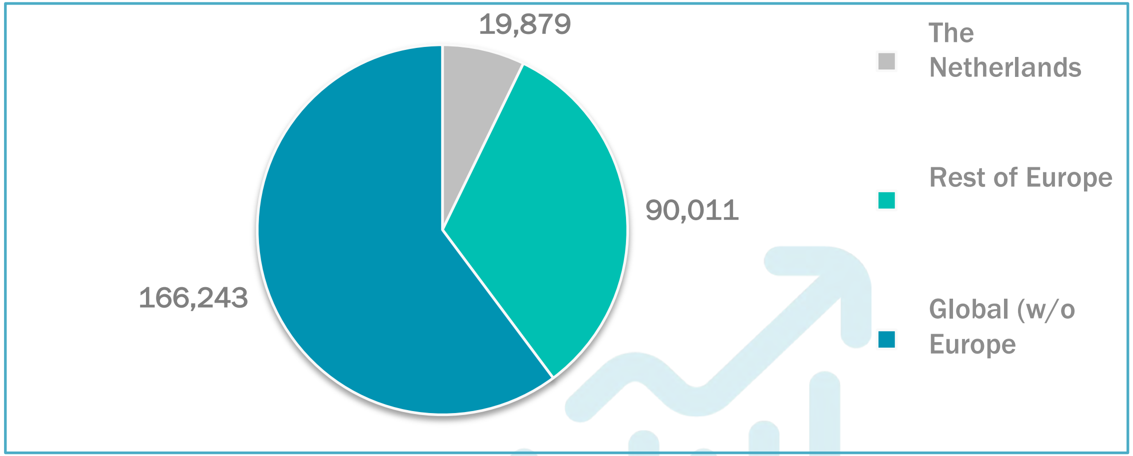
“Small country, **great economy**

Robust Foreign Direct Investment Regime

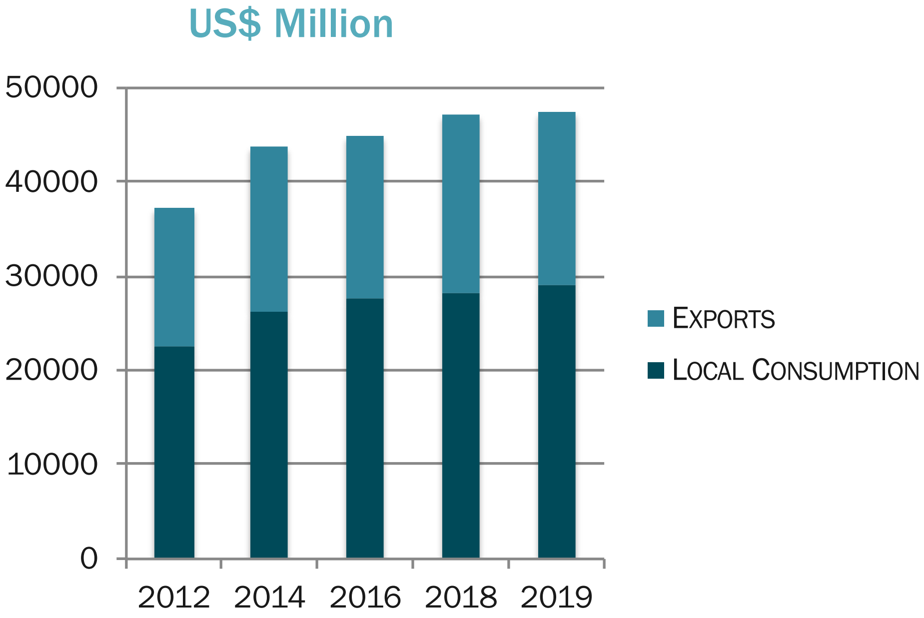
- **Non-Discrimination:** Foreign companies based in Chile enjoy the same rights and responsibilities as Chilean companies in the country (national treatment).
- **Free flow of capital and profits:** National legislation allows the entry and repatriation of capital without cost or constraints beyond procedural formalities.
- **Pro-business environment:** Simple tax structure / Ease to set up companies.

Stock FDI The Netherlands in Chile

USD $19,879 MM
FDI stock from The Netherlands (2018) → 7,2%

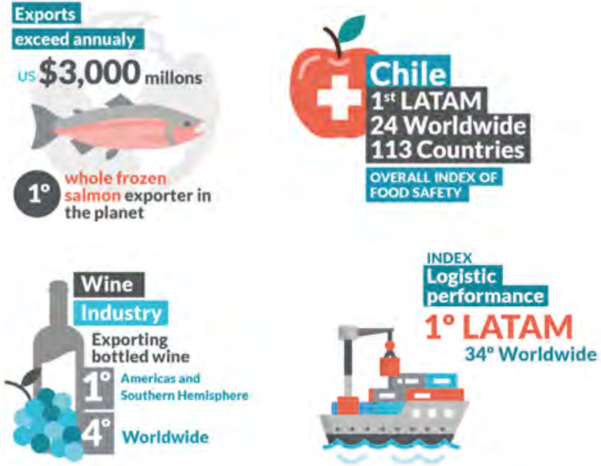


Food Market in Chile

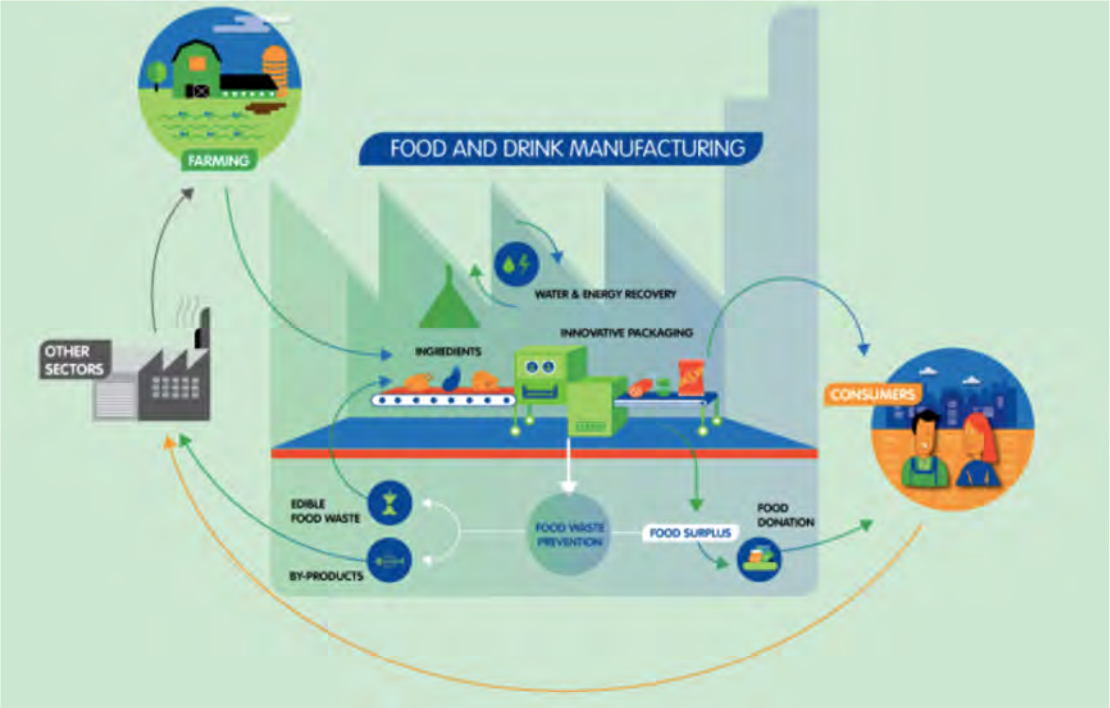


Source: Chile Alimentos

In average 60% is domestic consumption



Chile, heading to be a sustainable country



InvestChile

At every stage of your project:

PROSPECTION — **PRE-INVESTMENT** — **LANDING** — **RE-INVESTMENT**

Free- of-charge specialized services:

KNOWLEDGE

FDI statistics, business opportunity facts & figures, market & sectorial highlights, legal & tax information, reports & studies.

PROMOTION

Investor delegations, B2B meetings,investment roadshows, conferences & workshops.

GUIDANCE

Expert sector managers, contact with key players, site visits, government programs & incentives, public-private portfolios & public tenders.

SUPPORT

Ongoing assistance for landing & expansion, specialized advisory, policy advocacy.

Over 700 companies advised each year! *Find it all with InvestChile!*

Agencia de Promoción de la Inversión Extranjera

InvestChile

#InvestChileTools to power up your business

QR codes are back!

BROCHURE

Our brochure 'Chile, the Place to Build Your Future, as well as, some of the previous tools are available in: Mandarin (*中文), Spanish, Portuguese, Japanese & German.

INVESTOR'S GUIDE

*中文

A complete guide to setting up your business operations.Steps for landing / Incentives for Foreign Investment / Intellectual Property /Tax structure of Chile / Environmental Legislation / Visas and Foreign Citizens /Personal Data legislation / Labour Laws and Social Security.

INVESTCHILE MAP

*中文

This map will guide you to your next business. The energy of the north... the dynamism of the centre... the richness of the south... each Chilean region offers unique investment opportunities.

INVESTMENT PORTFOLIO

This public-private portfolio includes +120 projects in different sectors such us: Infrastructure, tourism, energy & mining.

SCAN & DOWNLOAD

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Ministerio del Medio Ambiente
Gobierno de Chile

CHILE LO HACEMOS TODOS

Towards a Circular Chile

Guillermo González
Head
Circular Economy Office

August 25, 2020

AGENDA

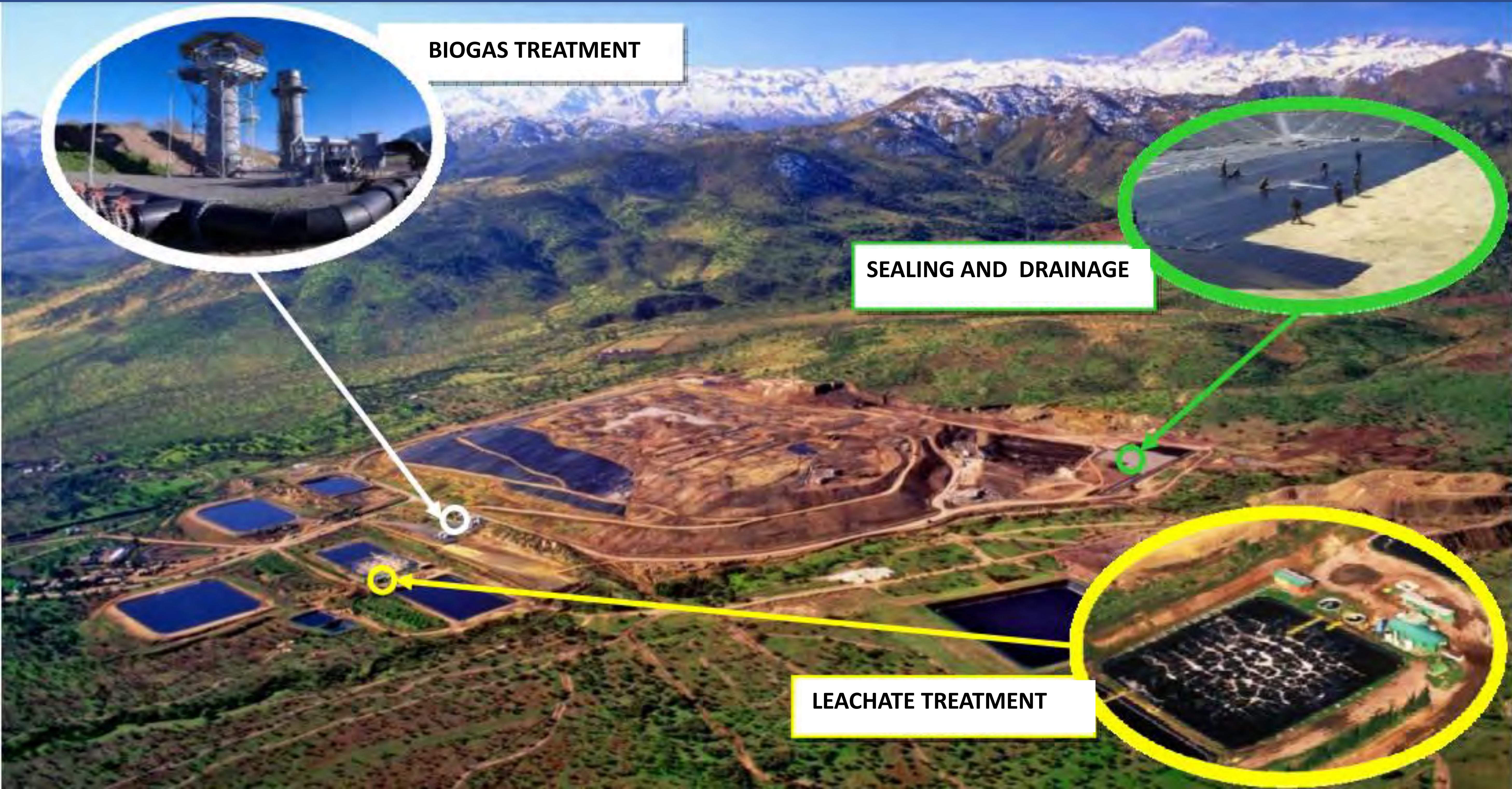
1. The circular economy office
2. Extended producer responsibility
3. Other key regulatory issues
4. Circular economy roadmap

AGENDA

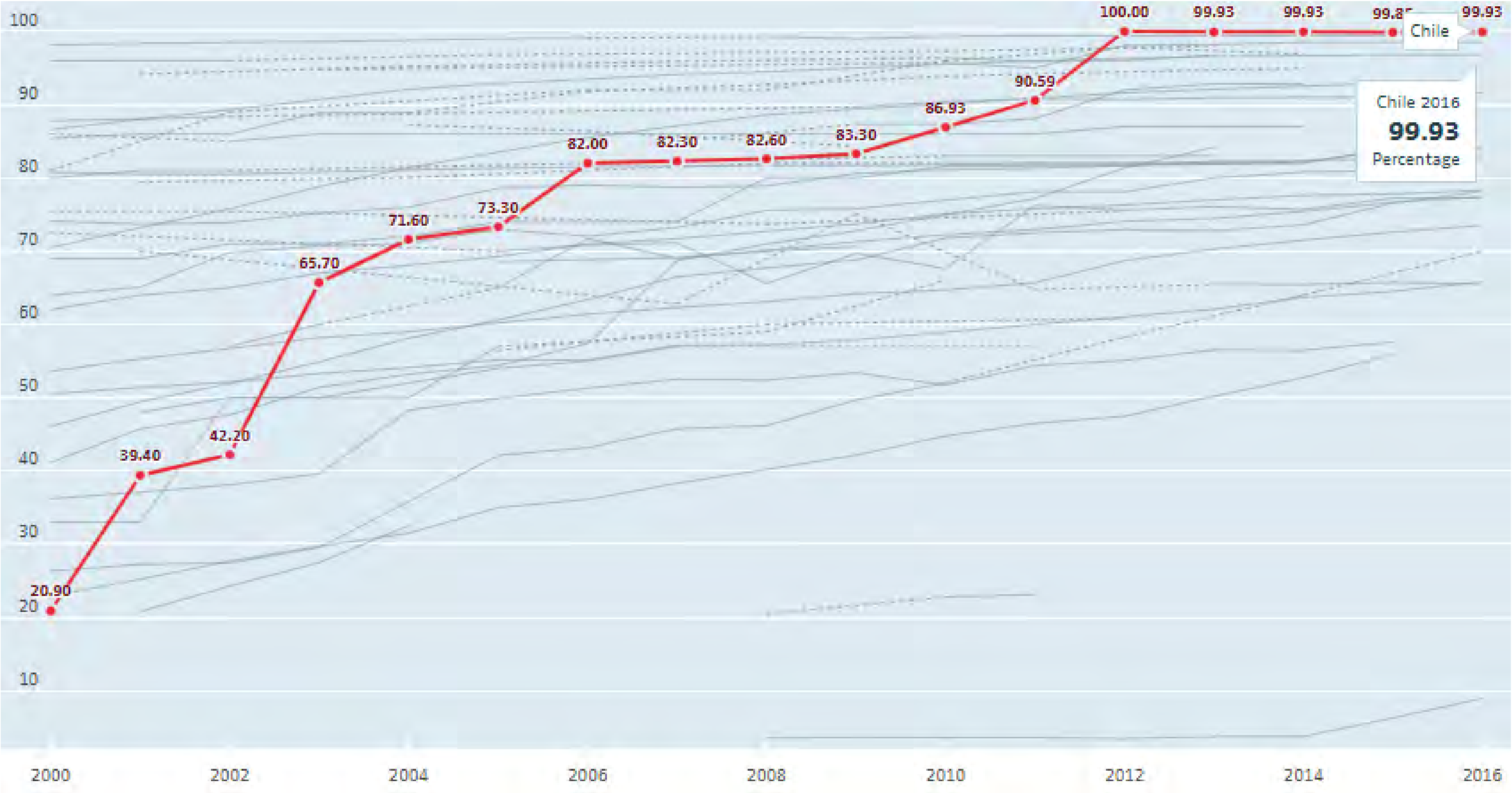
1. **The circular economy office**
2. Extended producer responsibility
3. Other key regulatory issues
4. Circular economy roadmap

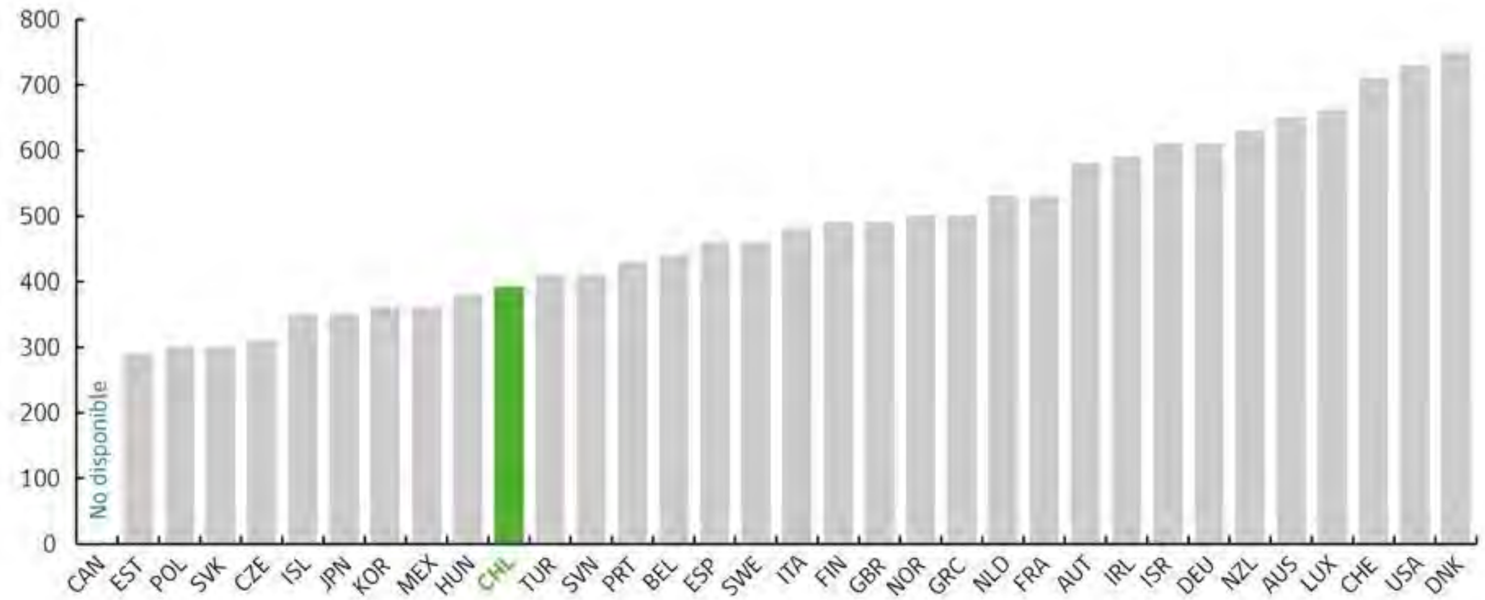
WASTE OFFICE


CIRCULAR ECONOMY
~~WASTE~~
OFFICE


BIOGAS TREATMENT
SEALING AND DRAINAGE
LEACHATE TREATMENT

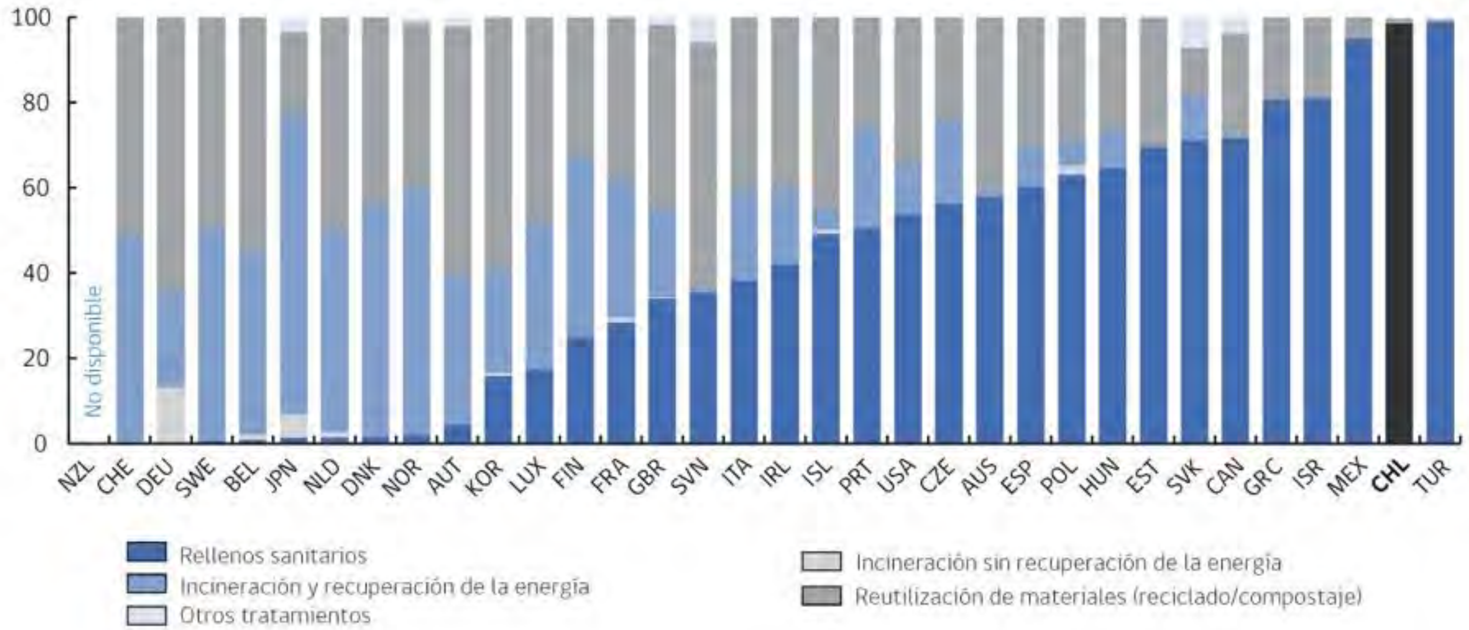
Wastewater treatment in OECD countries





OECD COUNTRIES

Annual municipal solid waste generation (kg per person)



Municipal waste treatment

ENVIRONMENTAL PERFORMANCE REVIEW CHILE 2016 (OCDE)

A GREAT OPPORTUNITY

ENVIRONMENTAL

ECONOMIC

SOCIAL

AGENDA

1. The circular economy office
2. **Extended producer responsibility**
3. Other key regulatory issues
4. Circular economy roadmap


Ley de
Reciclaje
Ministerio del Medio Ambiente

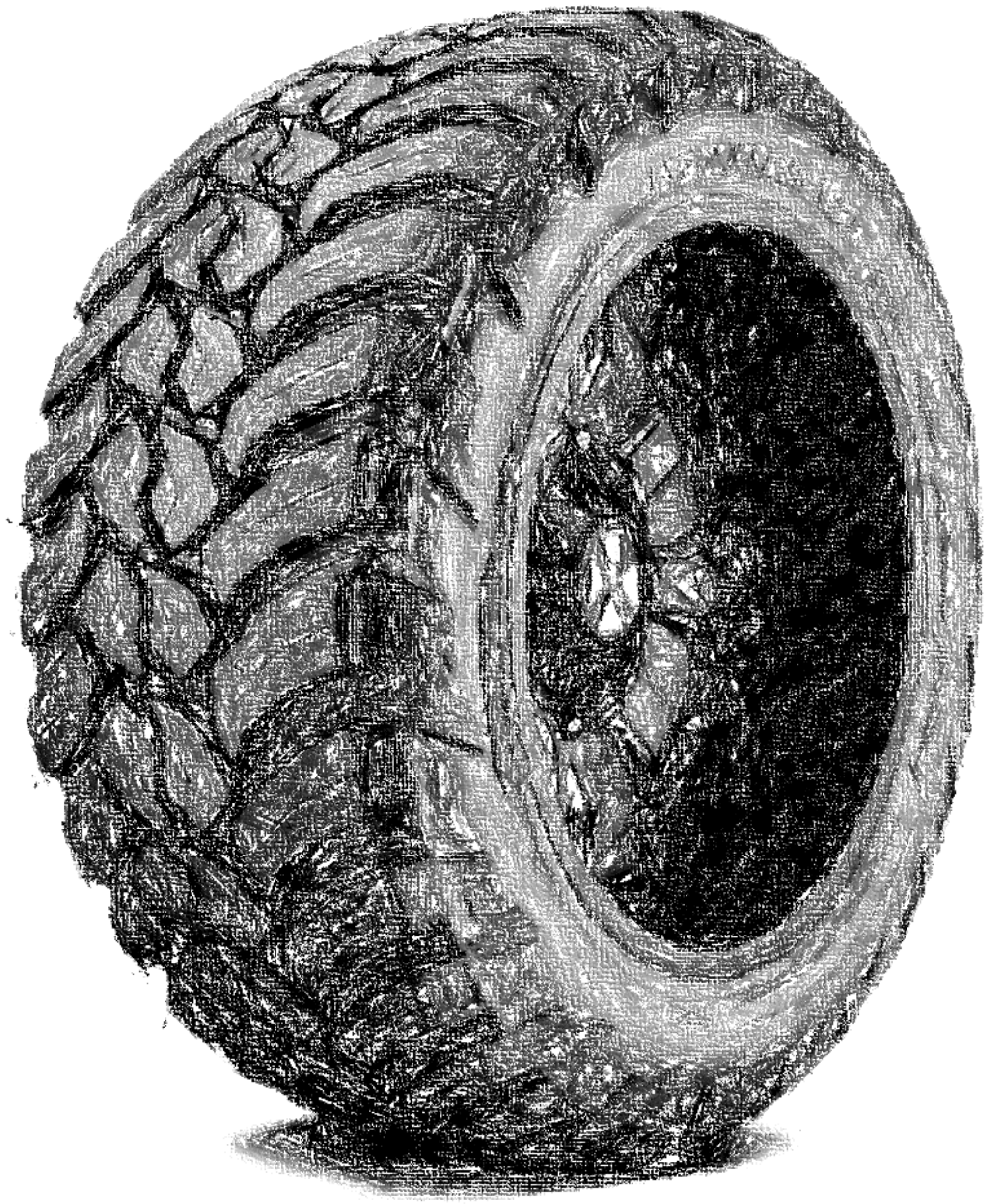
EXTENDED PRODUCER RESPONSIBILITY SCHEME

- Tyres
- Packaging
- Household batteries
- Vehicle batteries
- Lubricant Oils
- Electric and electronical equipment

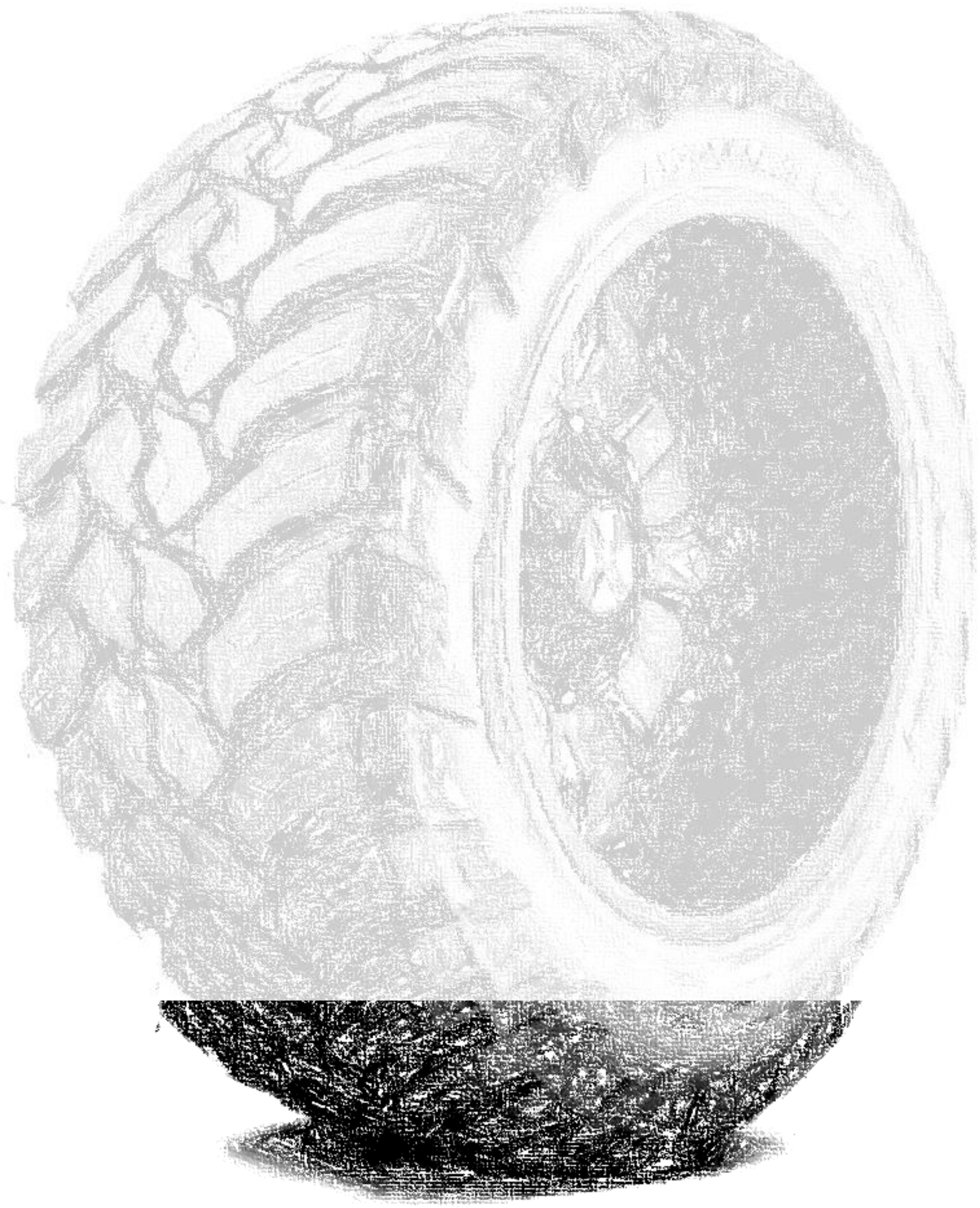
LEGISLATIVE AND REGULATORY TIMELINE

- **Aug 2013** — Bill sent to Congress
- **May 2016** — Law enactec
- **Jan 2018** — Rulemaking initiated
- **Jan 2023** — Regulation comes into force

TARGETS FOR TYRES

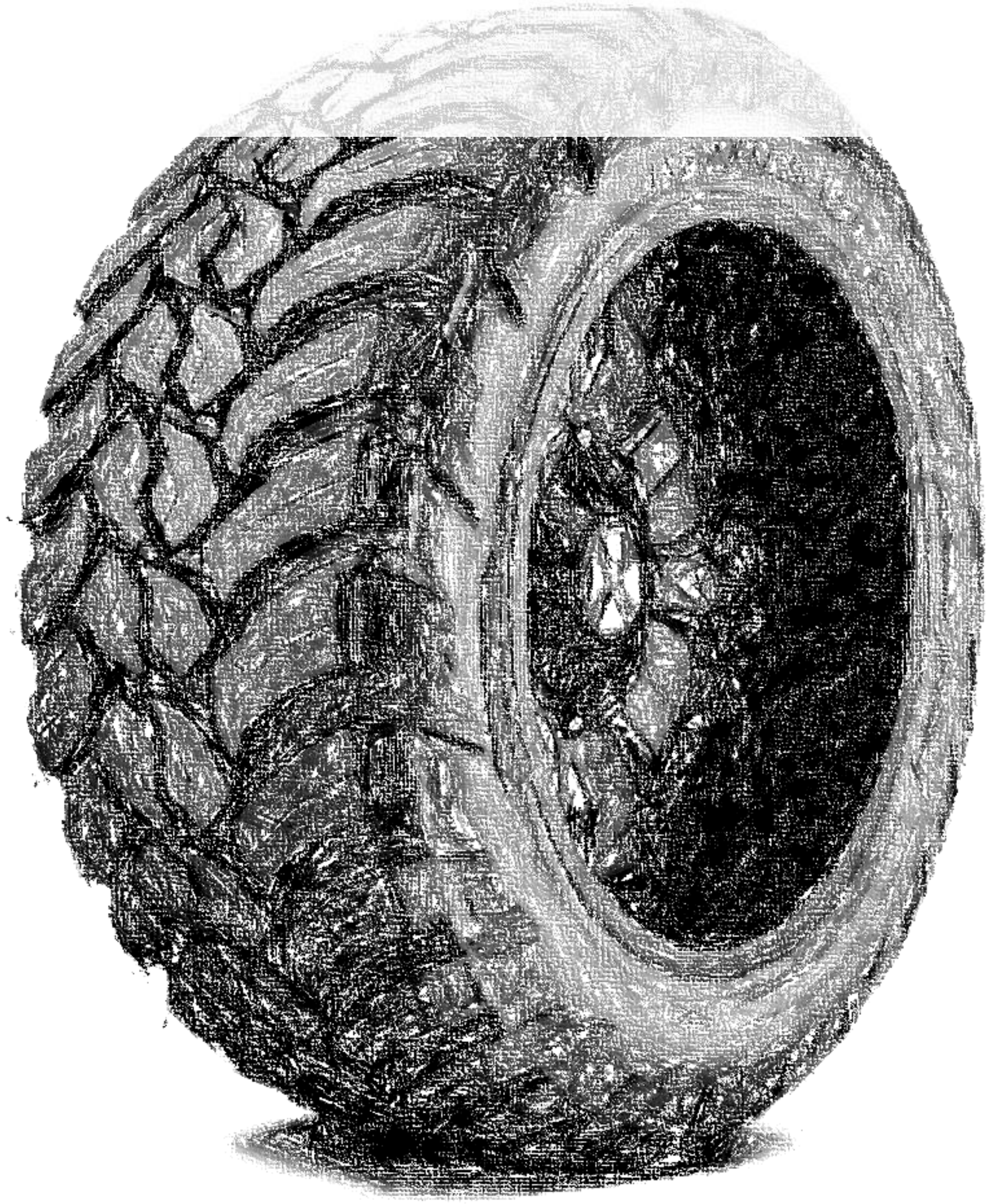


TARGETS FOR TYRES



2018 → 17%

TARGETS FOR TYRES



2029 → 90%

2019 → 17%

TARGETS FOR PACKAGING

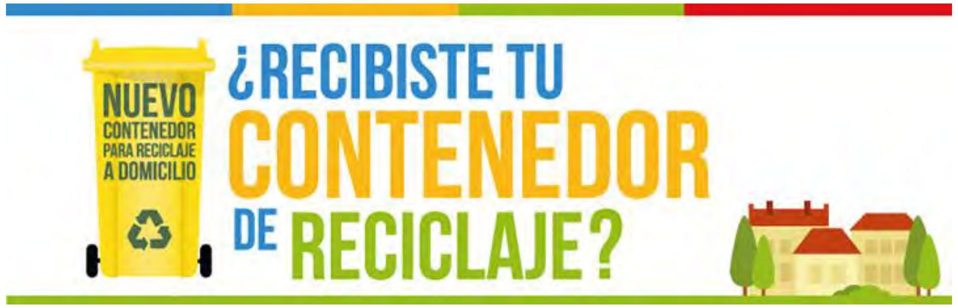
Year	Subcategory				
	Drink cartons	Metal	Paper & cardboard	Plastic	Glass
1	**5%**	**6%**	**5%**	**3%**	**11%**
2	8%	9%	9%	6%	15%
3	11%	12%	14%	8%	19%
4	15%	15%	18%	11%	22%
5	19%	17%	23%	14%	26%
6	23%	21%	28%	17%	31%
7	27%	25%	34%	20%	37%
8	31%	29%	39%	23%	42%
9	36%	32%	45%	27%	47%
10	40%	36%	50%	30%	52%
11	50%	45%	60%	37%	58%
From 12	**60%**	**55%**	**70%**	**45%**	**65%**

Year 1 starts 30 months after rule is published

5x

COVERAGE TARGETS

Year	Households nationwide
1	10%
2	20%
3	30%
4	40%
5	45%
6	50%
7	55%
8	60%
9	65%
10	70%
11	75%
From 12	80%



AGENDA

1. The circular economy office
2. Extended producer responsibility
3. **Other key regulatory issues**
4. Circular economy roadmap

OTHER KEY REGULATORY ISSUES

Organics

Construction

Industrial

Plastics

AGENDA

1. The circular economy office
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3. Other key regulatory issues
4. **Circular economy roadmap**

Looking at 2040

Targets

Min 65% recycling

Max 10% to landfill

Ministerio del Medio Ambiente

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CHILE LO HACEMOS TODOS

FUNDACIÓN CHILE

PLASTICS PACT

CIRCULA EL PLÁSTICO

WWW.CIRCULAELPLASTICO.CL

SOCIOS FUNDADORES

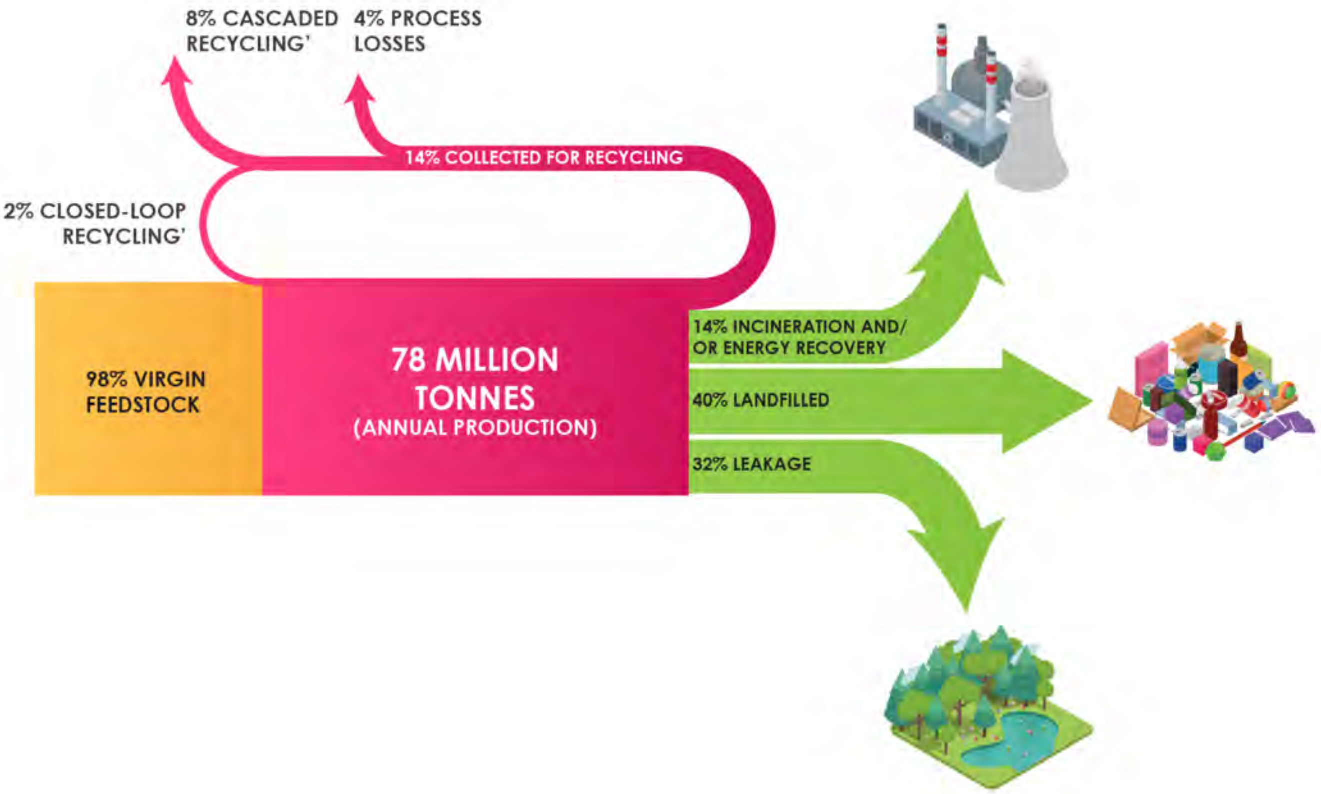
SOCIOS

MEDIA PARTNERS

COLABORADORES

THE CHALLENGE

LINEAR MODEL



2040 outcomes by scenario

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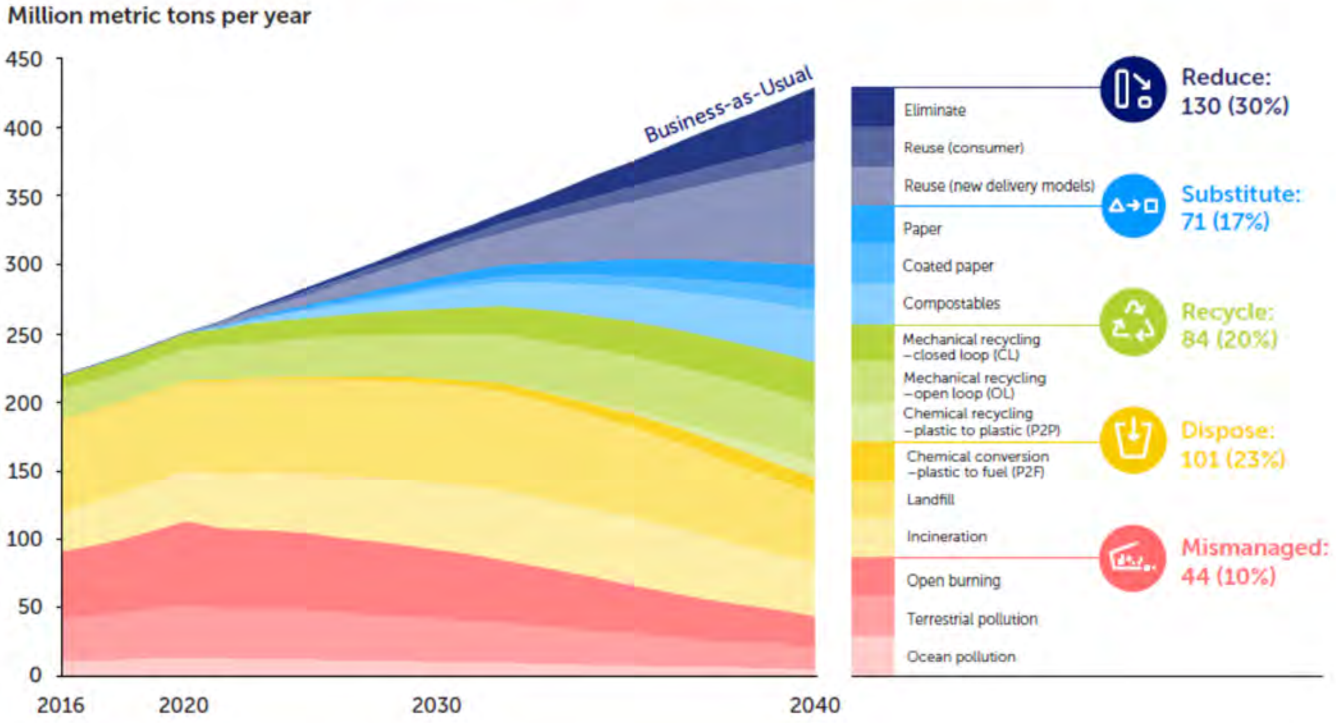
SCENARIO	NET COST[1] (USD billion per year)	OCEAN LEAKAGE[2] (Million tonnes per year)	VIRGIN PLASTIC USAGE[3] (%)	GREENHOUSE GAS EMMISIONS[4] (%)
BUSINESS AS USUAL (BAU) No systems interventions or change in culture/consumer behavior	940	29	100	100
COLLECT AND DISPOSE Maximise increase of collection and safe disposal facilities	920	13	94	85
RECYCLING Maximise increase of collection and recycling capacity	820	18	84	85
REDUCE & SUBSTITUTE Maximise reduction in consumption and substitute for alternatives where possible	780	14	52	80
SYSTEM CHANGE (CIRCULAR ECONOMY APPROACH) Maximise reduction, substitute where possible, and maximise collection and recycling	740	5	45	75

Based on data from Breaking the Plastic Wave study by The Pew Charitable Trusts and SYSTEMIQ (2020)

Figure 16: Plastic fate in the System Change Scenario: a "wedges" analysis

There is a credible path to significantly reduce plastic leakage to the ocean, and it requires all solutions to be implemented concurrently, ambitiously, and starting immediately



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Integrated system change achieves social, environmental, and economic benefits

80% reduction in plastic leakage into the ocean by 2040 relative to BAU

US$70B saving for governments over 20 years relative to BAU

700,000 jobs created by 2040 relative to BAU

25% reduction in annual GHG emissions by 2040 relative to BAU

55% reduction in virgin plastic demand by 2040 relative to BAU

195 million metric tons reduction in other environment leakage (land and atmosphere

Pew Charitable Trusts and Systemic (2020) Breaking the Plastic Wave

Raise the ambition level

The Global Commitment and Plastics Pact network set a clear direction.

However, we recognise we need to raise the ambition level further, for 2025 and beyond.

ELIMINATE

Set absolute (virgin) plastic reduction targets, underpinned by increased efforts on elimination and reuse

INNOVATE

Embark on a well-funded R&D agenda, focused on solutions such as new delivery models and new materials, in particular for flexible plastic and multi-materials (representing 80% of remaining macroplastics leakage into the ocean in 2040)

CIRCULATE

Set up mechanisms to provide stable, recurring funding of collection and recycling where industry pays its fair share, for example through Extended Producer Responsibility (EPR) schemes or equivalent voluntary initiatives

GLOBAL PACT NETWORK

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TARGETS 2025

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Take action to eliminate problematic and unnecessary plastic packaging through redesign, innovation and alternative (reuse) delivery models

100% of plastic packaging is reusable, recyclable or compostable

33% effectively recycled or composted

25% average recycled content across all plastic packaging

Roadmap del Pacto Chileno de los Plásticos

SOLUCIONES LARGO PLAZO

SOLUCIONES MEDIANO PLAZO

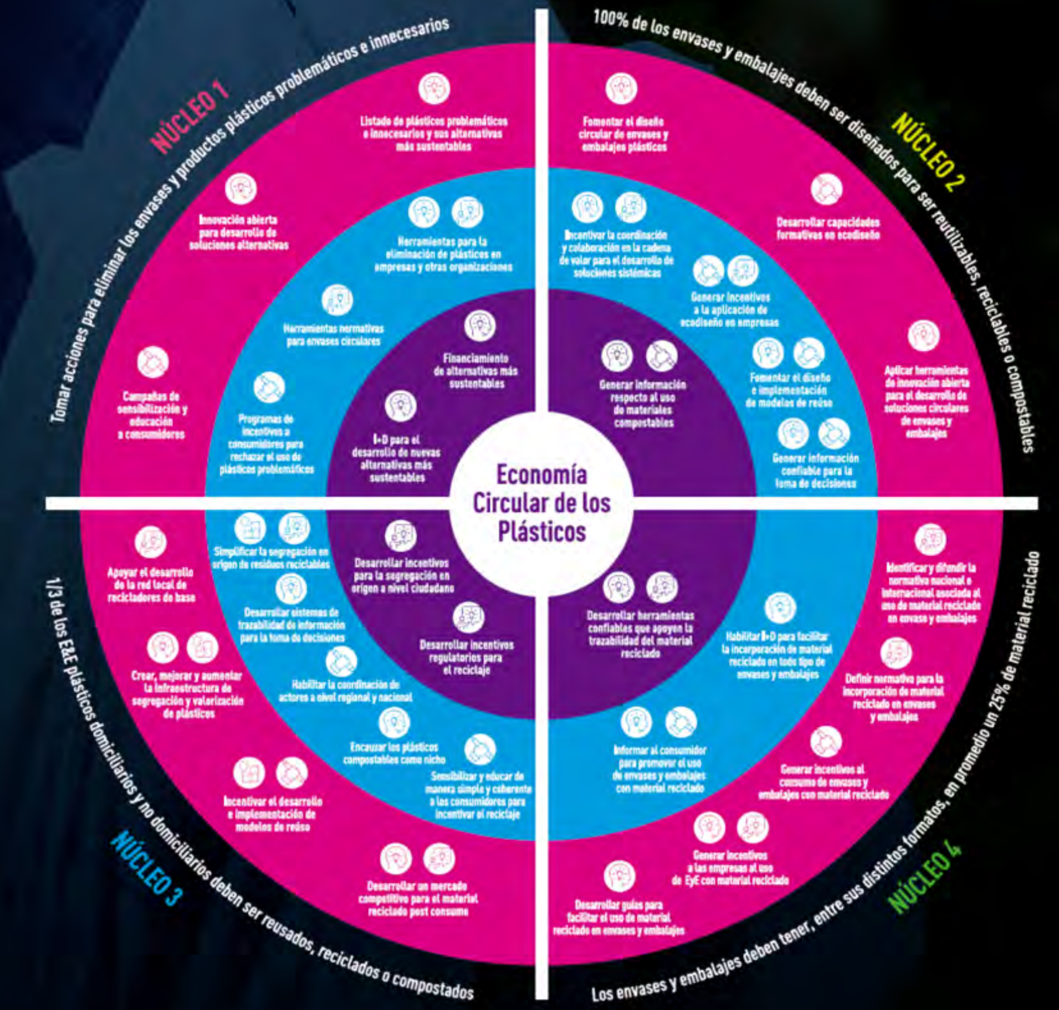
SOLUCIONES CORTO PLAZO

INNOVACIÓN

INFRAESTRUCTURA

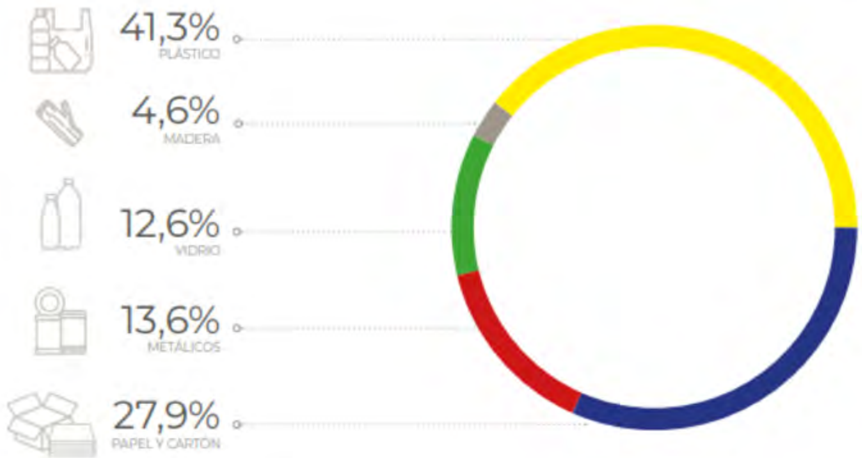
CULTURA

DIÁLOGO



PACKAGING IS A USD 2 BILLION INDUSTRY AND PLASTIC REPRESENTS 41,3%.

FIGURA N° 7
PARTICIPACIÓN POR SUBSECTORES DE ENVASES Y EMBALAJES EN VALOR DE LA PRODUCCIÓN



Fuente: Elaboración propia a partir de datos del Anuario Estadístico 2017 de CENEM (CENEM, 2018)

AND IT IS GROWING…

↑ 7.6% CONSUMPTION

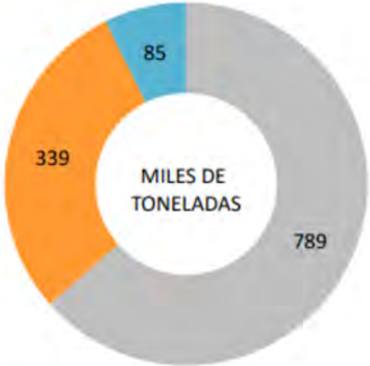
↑ 15.9% IMPORTS

↑ 2.2% EXPORTS

= ↑ NET CONSUMPTION

2018 vs 2017

FUENTE: ASIPLA (2019)



Plastic production 2018

CHILEAN CONTEXT

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PLASTIC PACKAGING

	PUT IN THE MARKET (TON)	INADECUATE MANAGEMENT (TON)	LANDFILLED (TON)	RECYCLED (TON)	
NON - HOUSEHOLD	406.895	-	335.357	71.538	17.5%
HOUSEHOLD	323.776	30.501	278.554	14.721	4.5%
TOTAL	730.671	30.501	613.911	86.259	11.8%

Fuente: Anteproyecto de Decreto Supremo que Establece Metas de Recolección y Valorización y Obligaciones Asociadas de Envases y Embalajes de la Ley REP (Ministerio de Medio Ambiente, 2019)

MAIN PRODUCTION IN CHILE ARE PEBD, PET, PEAD

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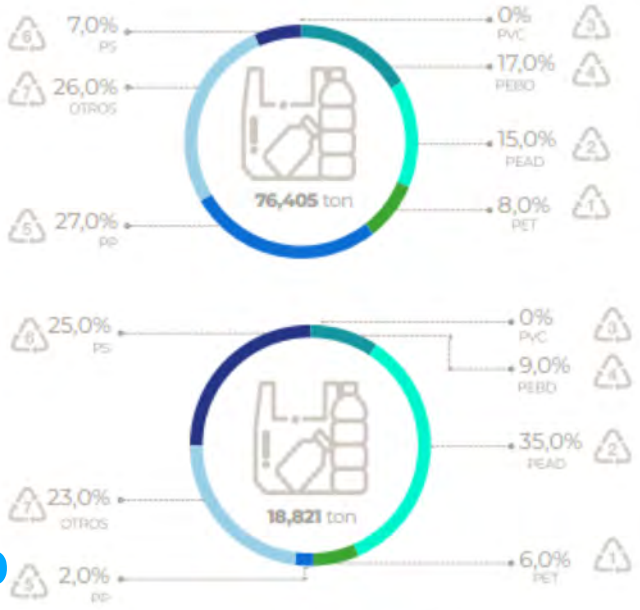
FIGURA N° 9
PRODUCCIÓN DE ENVASES Y EMBALAJES PLÁSTICOS EN CHILE

Fuente: Elaboración propia a partir de datos del Anuario Estadístico 2017 de CENEM (CENEM, 2018)

FIGURA N° 10
IMPORTACIÓN Y EXPORTACIÓN DE ENVASES Y EMBALAJES



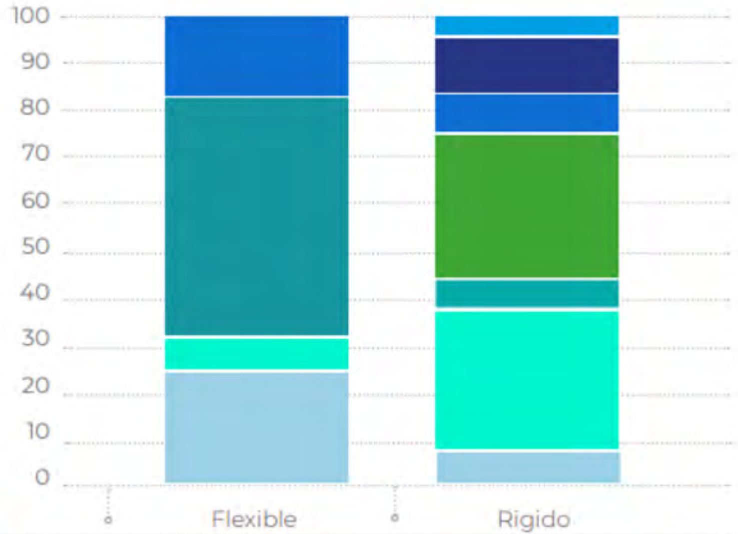
Fuente: Elaboración propia a partir de datos del Anuario Estadístico 2017 de CENEM (CENEM, 2018)

MAIN IMPORTS ARE PP, OTHERS (7), PEBD, PEAD

MAIN EXPORTS ARE PEAD, PS, OTHERS (7)

FIGURA N° 13

CONSUMO APARENTE DIRECTO POR RESINA



	Flexible	Rigido
PVC	-	8.997
PS	-	33.346
PP	37.886	21.537
PET	-	79.097
PEBD	111.844	15.047
PEAD	13.395	74.195
Otros plásticos	53.258	18.683

Fuente: elaboración propia a partir de datos del Estudio de Línea Base 2019 realizado por DICTUC

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MAIN CONSUMPTION IN CHILE

FLEXIBLE 46% , RIGIDS 54%

***Flexibles are usually harder to recycle**

***recycling mecanisms in Chile are mainly for rigids.**

Fuente: Elaboración propia a partir de datos del Anuario Estadístico 2017 de CENEM (CENEM, 2018).

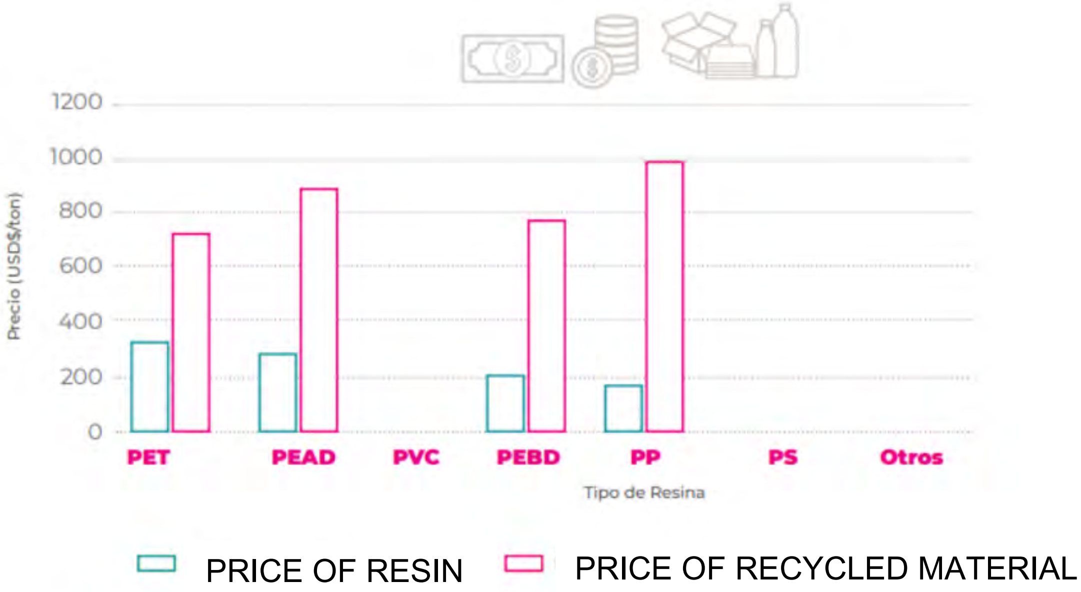
MAIN USERS OF PLASTIC PACKAGING:

1. FOOD
2. BEVERAGES
3. CHEMICAL INDUSTRY
4. AGROINDUSTRY
5. SUPERMARKETS/RETAIL

>50%

FIGURA N° 16

PRICE OF PURCHASE OD THE RESIN VS PRICE OF SALE ON THE RECYCLED RESIN



Fuente: Anteproyecto de Decreto Supremo que Establece Metas de Recolección y Valorización y Obligaciones Asociadas de Envases y Embalajes de la Ley REP (Ministerio de Medio Ambiente, 2019)

SALE PRICE OF RECYCLED MATERIALS

1. PP
2. PEAD
3. PEBD
4. PET

73,92% OF PLASTIC RECYCLED IN CHILE IS PE & PP *Mainly non-household

17,88% IS PET

*Mainly household

INTALLED CAPACITY ALLOWS A 52% INCREASE IN GRINDING AND 43% IN PELLETIZATION

DRIVERS

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EPR LAW

- Recycling targets per material (45% in year 12 for plastics)
- Separate collection coverage obligations (80% in year 12)

Single-use plastics law (in discussion)

- Ban of certain plastic elements in delivery
- Promoting reuse in food establishments
- 25% rPET in bottles by 2025
- Promoting return-schemes

Packaging Eco-labelling

- Measures recyclability and identifies >80% with certification
- Information on how to recycle

MAIN CHALLENGES AND INITIATIVES

CIRCULA EL PLÁSTICO

DESIGN | COLLECTION | SEPARATION / PRE-TREATMENT | RECYCLING | RECYCLATE DEMAND

CHALLENGES	PACT INITIATIVES
Promote reuse models	B2B reuse projects and guidance B2C reuse exploration and collaboration Regional Reuse seminar
Design-out non-recyclables (strategy for flexible and multimaterials)	Design for recyclability guide
Align designs for similar types of products	Industry collaboration agreements
Incorporate more recycled material in new packaging	Guidance for recycled material in packaging Regulatory study on incorporation of recycled material in food packaging
Know when to choose compostables	Compostable guidance
Redesign problematic plastics and eliminate unnecessary packaging	Problematic and unnecessary plastics guide
Innovate in the design of new functionalities, models and materials	Open innovation platform

MAIN CHALLENGES AND INITIATIVES

DESIGN | **COLLECTION** | SEPARATION / PRE-TREATMENT | RECYCLING | RECYCLATE DEMAND

CHALLENGES	PACT INITIATIVES
Increase the coverage of separate waste collection	EPR Law + initiatives to promote recycled material demand (from packaging + other sectors)
Increase the quality of collected recycled materials (decrease rejection)	Citizenship education - Educational programs
Create a strong culture of separation at origin / eliminate the culture of disposability	Public awareness campaigns
Generate an incentive / obligation for separation at source	Campaigns and incentive models for citizens
Solve municipal contracts with waste managers that are long-term and take it to the sanitary landfill, delaying the generation of contracts with recyclers.	Study of regulatory barriers / opportunities to increase the capacity of collection, separation, pre-treatment, recovery.

MAIN CHALLENGES AND INITIATIVES

CIRCULA EL PLÁSTICO

DESIGN | COLLECTION | **SEPARATION / PRE-TREATMENT** | **RECYCLING** | RECYCLATE DEMAND

CHALLENGES	PACT INITIATIVES
Development of automated separation plants (they do not exist today).	Study of regulatory and technological barriers / opportunities to increase the capacity of collection, separation, pre-treatment, recovery. Detailed Plastic Flow study
Development of identification and traceability technologies - Holy Grail	
Recycling capacity gap: beverage cartons, a technology that does not exist in Chile and is very expensive. There is a demand for the cardboard but it does not support the process.	
Investment in new technologies and optimization of processes	

MAIN CHALLENGES AND INITIATIVES

CIRCULA EL PLÁSTICO

DESIGN | COLLECTION | SEPARATION / PRE-TREATMENT | RECYCLING | RECYCLATE DEMAND

CHALLENGES	PACT INITIATIVES
Driving demand from other sectors and in new packaging.	Study of the plastic market in other sectors and potential demand of recycled material.
Gap to recycle PS, it does not exist because it is expensive and there is not a high demand for the recycled material. Transportation becomes very expensive and the process becomes more expensive than the sale price.	PS industry group

OUR GOVERNANCE FOR EXECUTION

GOVERNANCE

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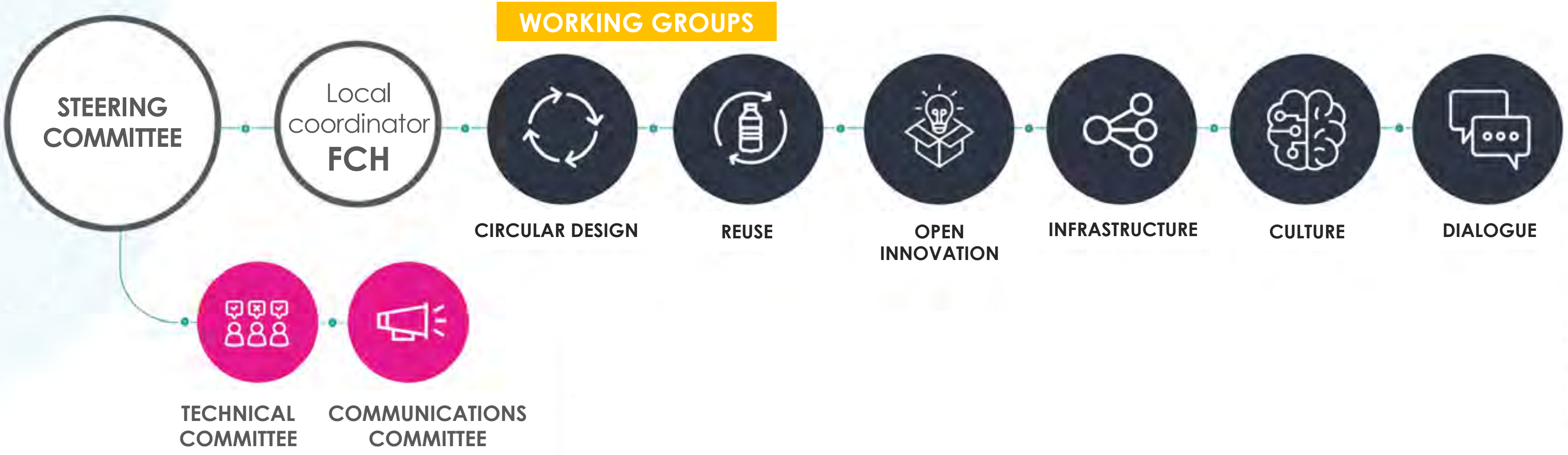
MEMBERS



Chilean Plastics Pact results 2020 - 2021

CIRCULA EL PLÁSTICO

2020 | 2021

S2 (2020)

1. Companies with specific deadlines and goals for the elimination and redesign of the defined list of problematic and unnecessary plastics.
2. Regional seminar on reuse
3. Study of the plastic market in other sectors.
4. Study of regulatory and technological barriers / opportunities to increase the capacity of collection, separation, pre-treatment, recovery.
5. Communication guide to ensure good practices.
6. Circular Economy Capsule on TV Educa Chile
7. Educational campaign in RRSS
8. Study of the national and international regulations associated with the use of recycled material in containers and packaging.
9. Definition of at least 2 design guideline agreements in the industry

S1 (2021)

1. Guide for the use of recycled material in packaging
2. Compostable elements guidance
3. Design for recyclability guide
4. B2B reuse guide and projects
5. Plastics flow study
6. Training for intermediary consumers
7. CE regulatory table launch
8. Guide to home delivery and online shopping
9. Call for entrepreneurship

S2 (2021)

1. Measuring the progress of eliminating problem and unnecessary plastics
2. Ecodesign projects - design guide for recyclability
3. Reuse B2C alliances
4. Instances of attraction to investors
5. Informal recyclers project
6. CE educational programs.
7. Definition of at least 3 design guidelines agreements in the industry.

CIRCULA
EL PLÁSTICO

SOCIOS FUNDADORES

SOCIOS

MEDIA PARTNERS

COLABORADORES

eurochile
FUNDACIÓN EMPRESARIAL

Eurochile Business Foundation

Linnet Solway

25th August 2020

Mission

To **create, promote and strengthen economic, trade and technological cooperation** between **Chilean and European** small and medium enterprises (SMEs) and institutions, and support the **internationalisation** process of SMEs.

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28 April 2016

COMPANIES THAT TOOK PART IN ENVIRONMENTAL BROKERAGE EVENT HELD ABOUT 150 MEETINGS

Forty companies from 14 EU countries, led by Daniel Calleja, director general of Environment of the European Commission, met with 60 Chilean companies in a brokerage event organized by the Eurochile Business Foundation.

About 150 business meetings, at an average of three per company, held a hundred companies from Europe and Chile that participated in the brokerage event organized by the Eurochile Foundation as part of the mission of Circular Economy led by the Environment Director General of the European Commission (EC), Daniel Calleja.

The delegation was visiting Chile to present the project on Circular Economy, a concept that refers to the change in the model of linear economy (produce, use, throwaway) into a circular pattern (produce, use, re-produce), as occurs in nature. Among its activities, the delegation also visited Pablo Badenier, Minister of Environment, with whom they launched the EU-Chile dialogue on Environment. Chile is the first country this mission visited.

"Chile is the first country with which we establish this dialogue on Circular Economy. This is a new model, a paradigm shift. A model based on innovation, entrepreneurship and sustainability, understanding this not only as a

Circular Economy opportunities for EU-Chile cooperation

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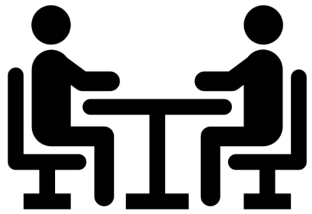
How do we support companies?

enterprise europe network
Business Support on Your Doorstep

International connections and know-how



Brokerage events and business meetings

EU & Chilean public-funded projects

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Next events

enterprise
europe
network

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THANK YOU


#InvestChileTalks
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