



De macro a micro: digitalización y sostenibilidad

Miguel Varela, CEO de **TEIMAS**

@varelamiguelou

miguel.varela@teimas.com



Calentamiento global

Nations Unies

Conférence sur les Changements Climatiques 2015

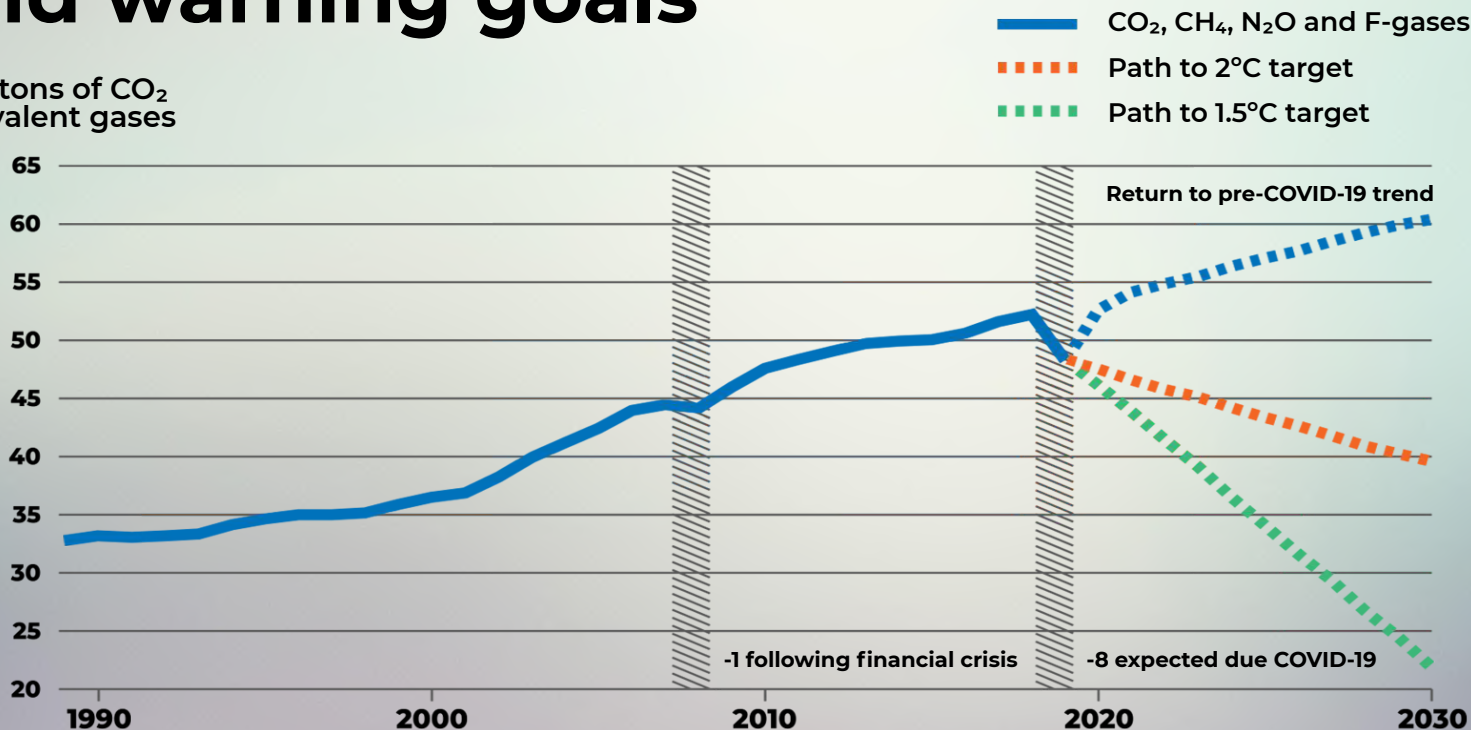
COP21/CMP11

Paris France



Global emissions and warning goals

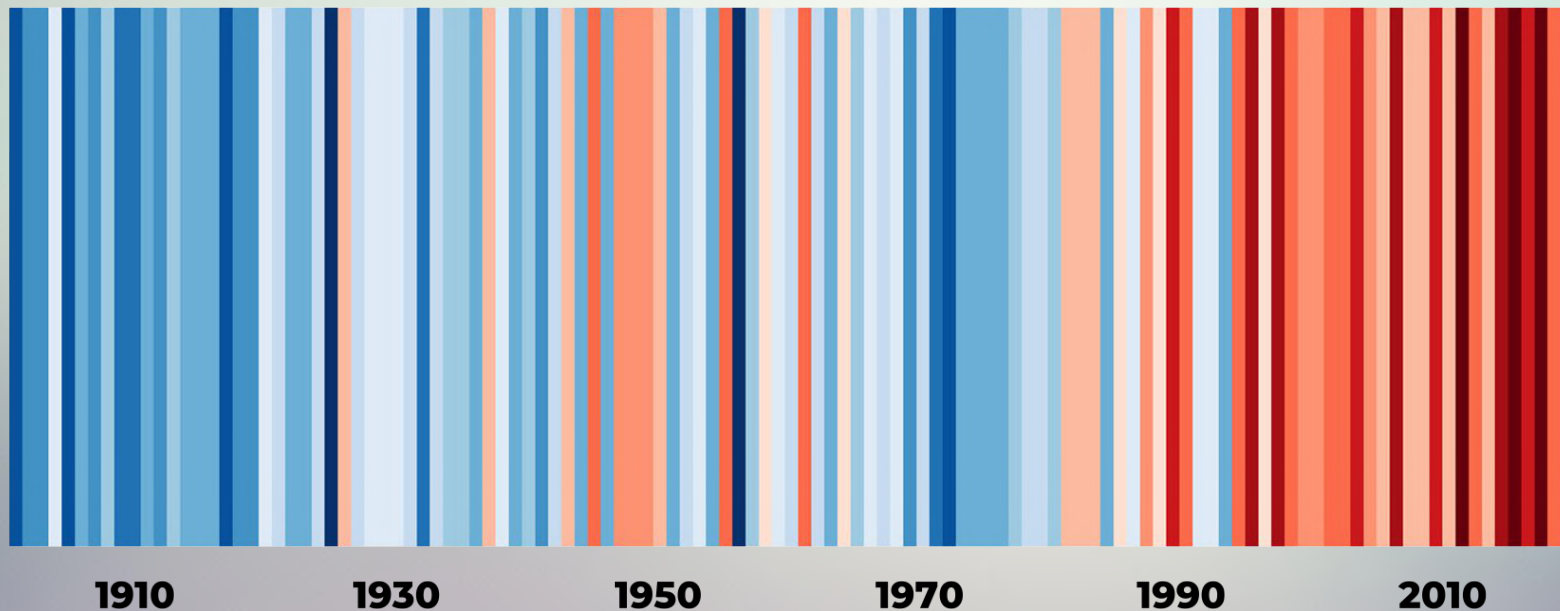
Gigatons of CO₂ equivalent gases



Sources: PBL (Netherlands Environmental Assessment Agency), 2019. Climate and Energy Outlook 2019. UNCTAD 2020 "COVID-19's economic fallout will long outlive the health crisis, report warns". Nov. 2020






+1.2°C

Aumento temperatura en España (1901 - 2019)








Sources: <https://showyourstripes.info> Berkeley Earth, NOAA, UK Met Office, MeteoSwiss, DWD, SMHI, UoR, Meteo France & ZAMG.

Top Risks by likelihood

-  1 Extreme weather
-  2 Climate action failure
-  3 Human environmental damage
-  4 Infectious diseases
-  5 Biodiversity loss

 Environmental  Societal  Geopolitical

Top Risks by impact

-  1 Infectious diseases
-  2 Climate action failure
-  3 Weapons of mass destruction
-  4 Biodiversity loss
-  5 Natural resource crisis

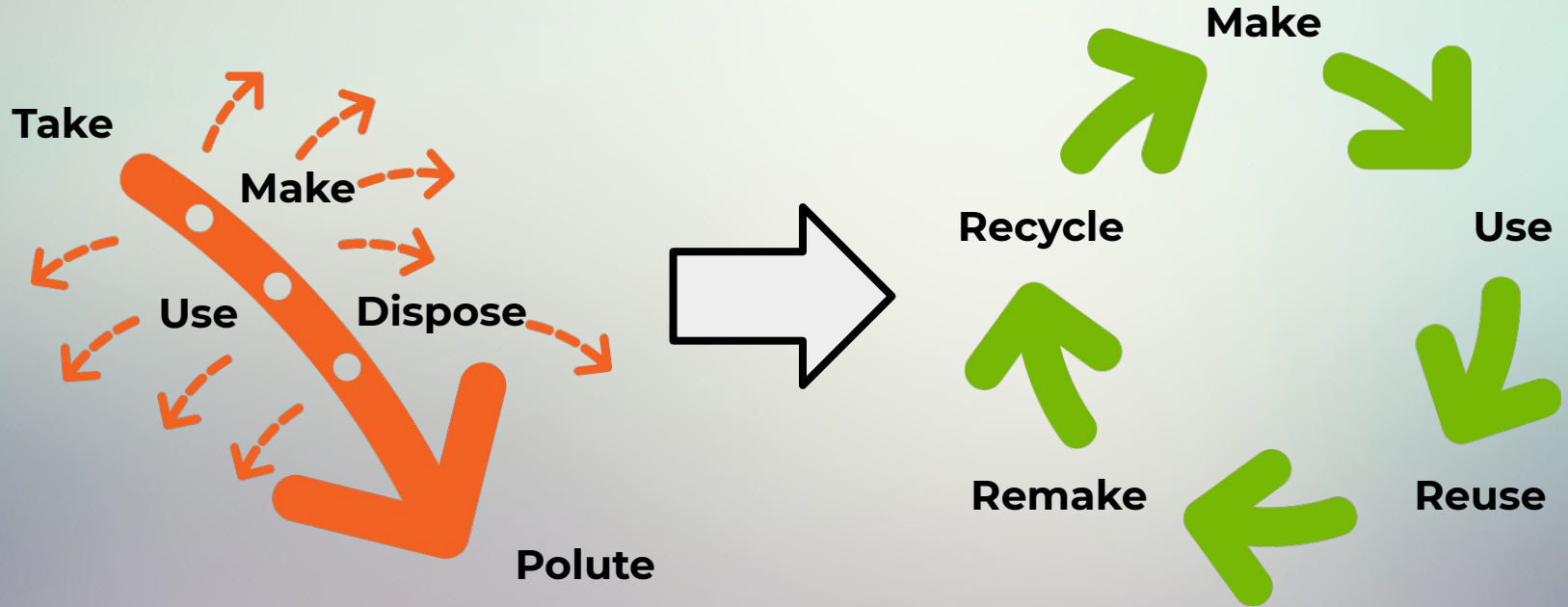


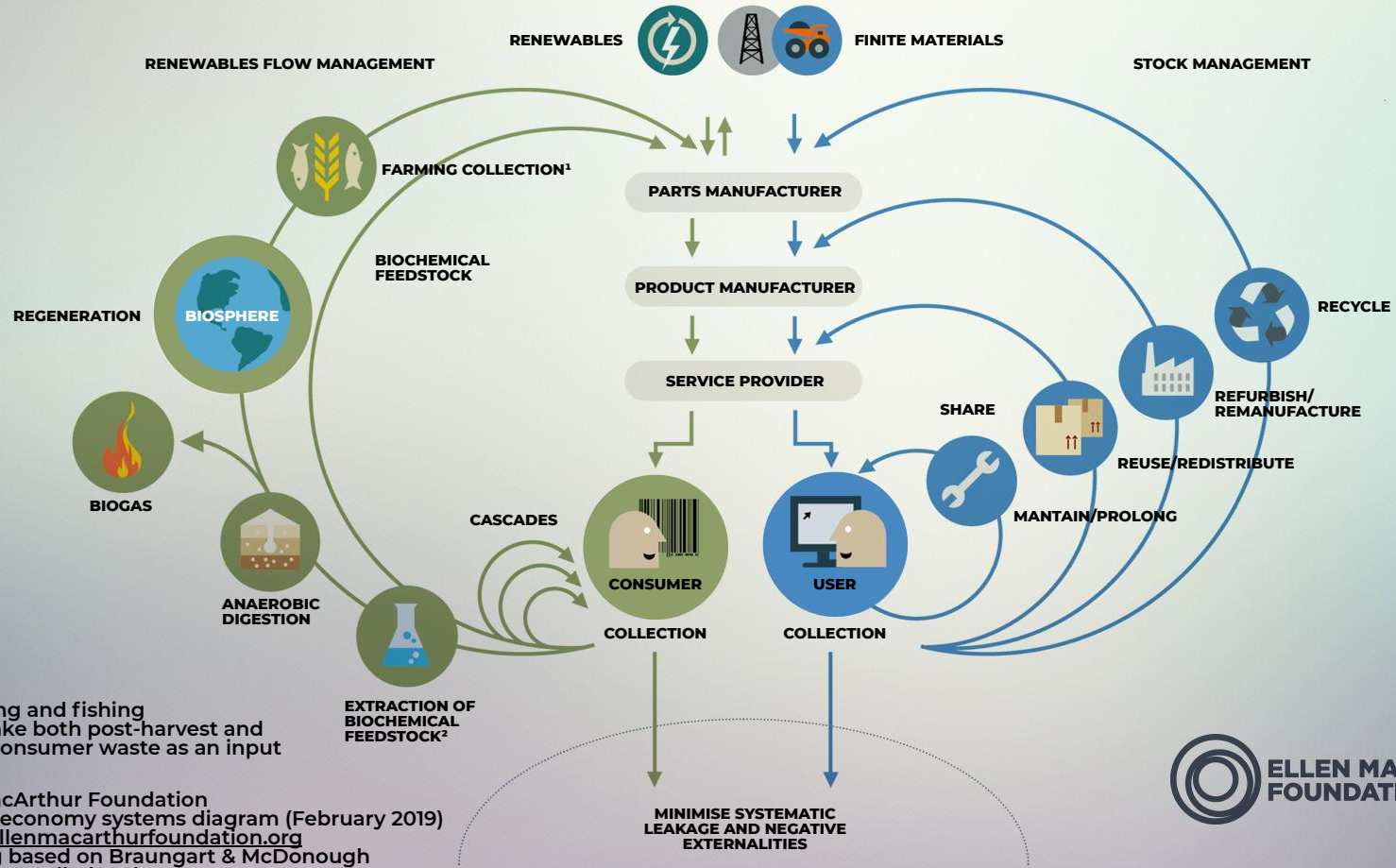
Economía Circular

A woman with short dark hair, wearing a dark grey long-sleeved top and a watch, is speaking on a stage. She is gesturing with her hands and holding a small black device. The background is a large screen showing a white sailboat with a red sail and the text 'www.ellen.com' and 'B&Q' on it. The text 'Ellen MacArthur' is overlaid on the image in white.

Ellen
MacArthur

De economía lineal a circular



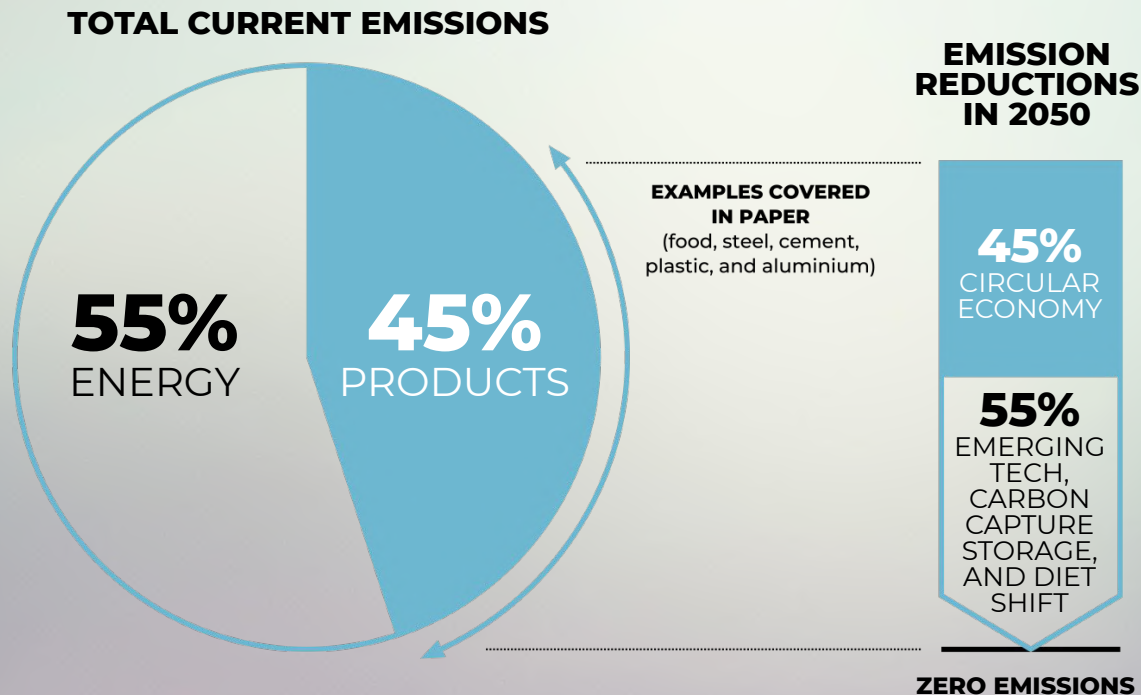


- 1 Hunting and fishing
- 2 Can take both post-harvest and post-consumer waste as an input

Source:
 Ellen MacArthur Foundation
 Circular economy systems diagram (February 2019)
<https://ellenmacarthurfoundation.org>
 Drawing based on Braungart & McDonough
 Cradle to Cradle (C2C)



How the circular economy tackles climate change



Source: Completing the picture. How the circular economy tackles climate change.
Ellen MacArthur Foundation

Moverse a una economía circular verdadera contribuye a los objetivos de desarrollo globales



...y a estos 9 en particular





Recursos y residuos



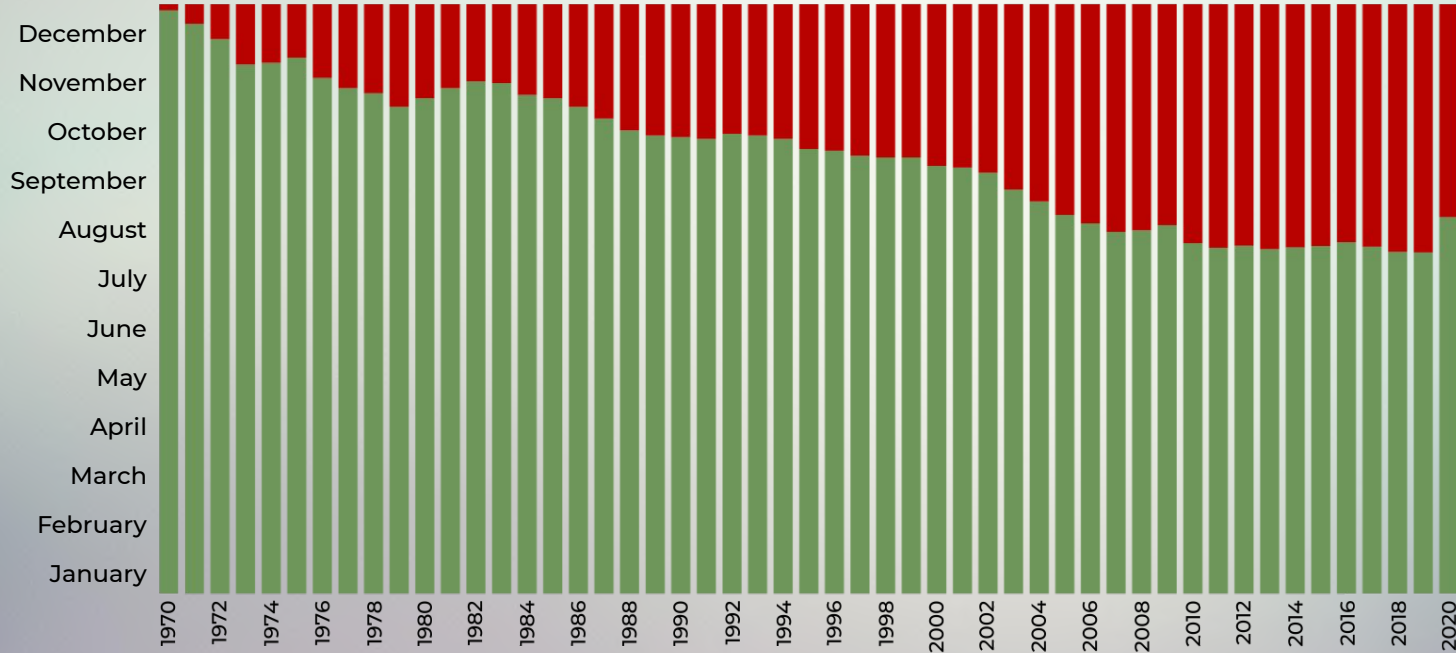
1970: 1 Earth



EARTH
OVERSHOOT
DAY



2020: 1.6 Earths



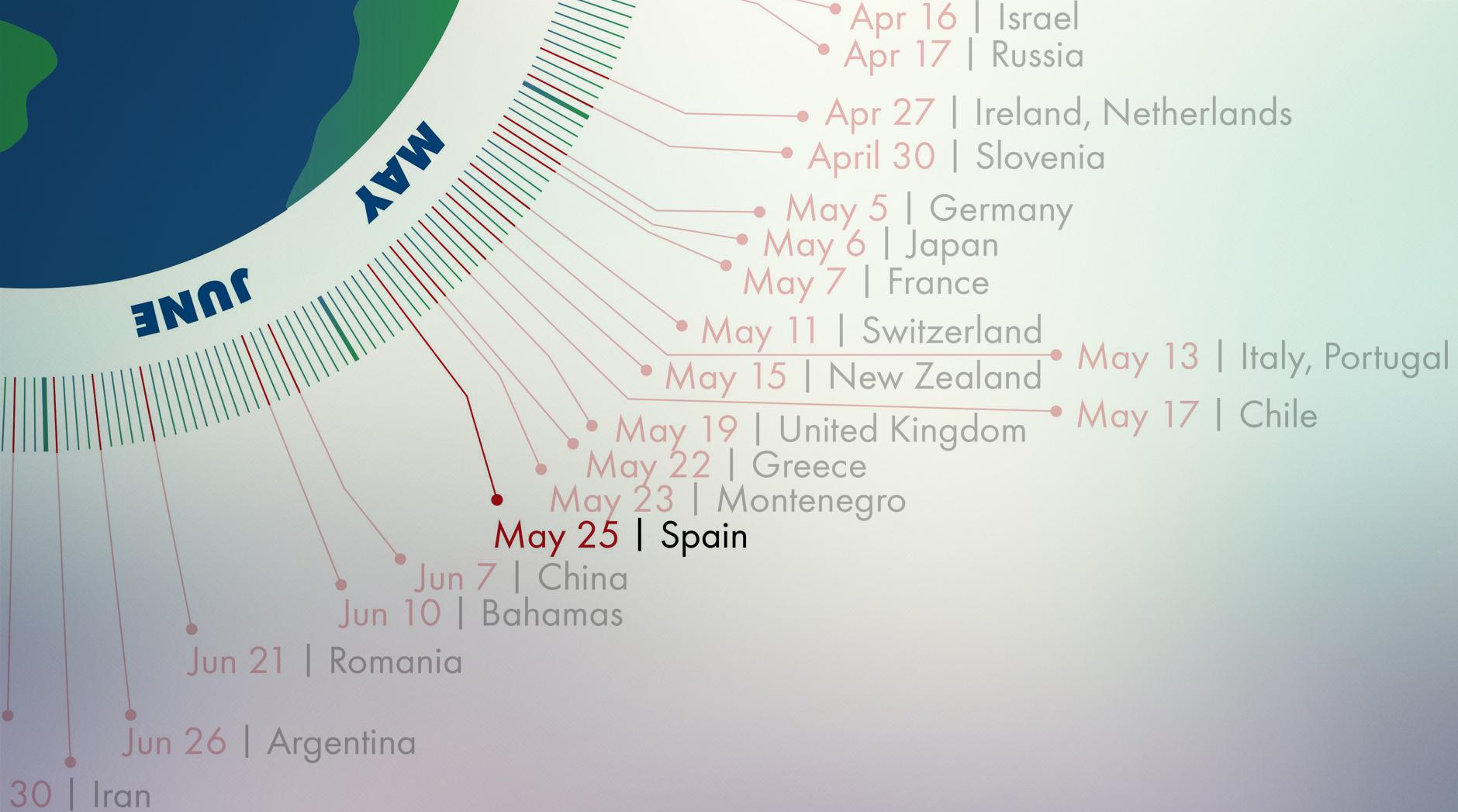
Country Overshoot Days 2021

When would Earth Overshoot Day land if the world's population lived like...



Source: National Footprint and Biocapacity Accounts, 2021 Edition
data.footprintnetwork.org





#EUTaxonomy: 9 principios de la EC (9 R's)

Refuse

Rethink

Reduce

Re-use

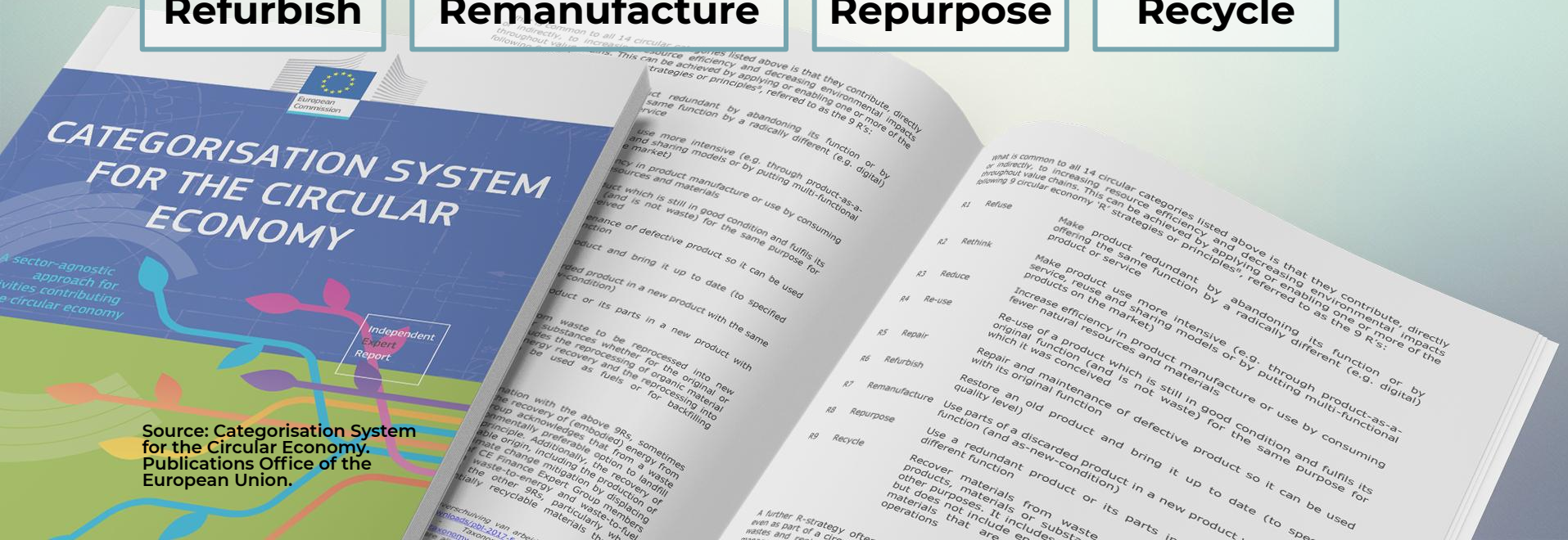
Repair

Refurbish

Remanufacture

Repurpose

Recycle



Source: Categorisation System
for the Circular Economy.
Publications Office of the
European Union.

EU Jerarquía de residuos





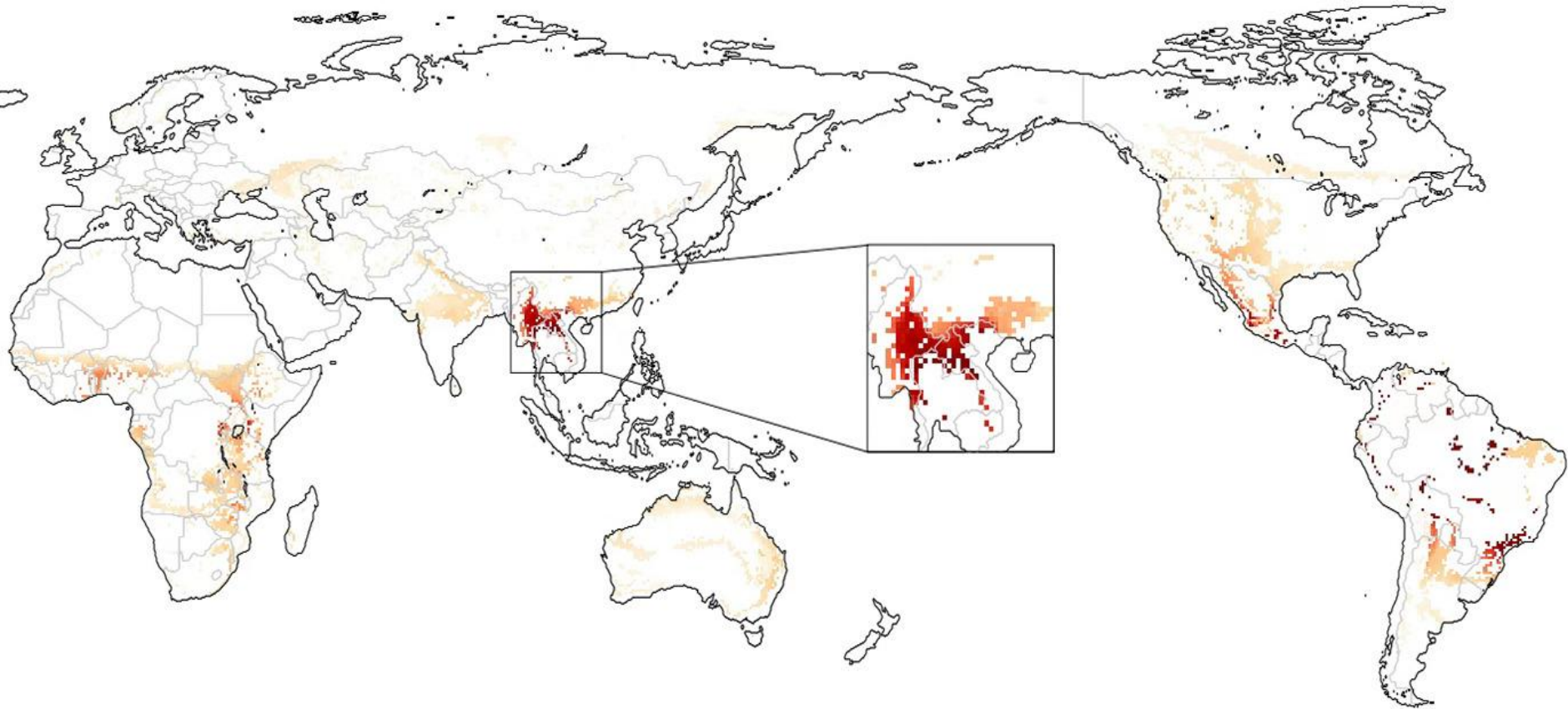
Vertido provoca emisión de gases de efecto invernadero



Recursos y residuos

Economía Circular

Calentamiento global



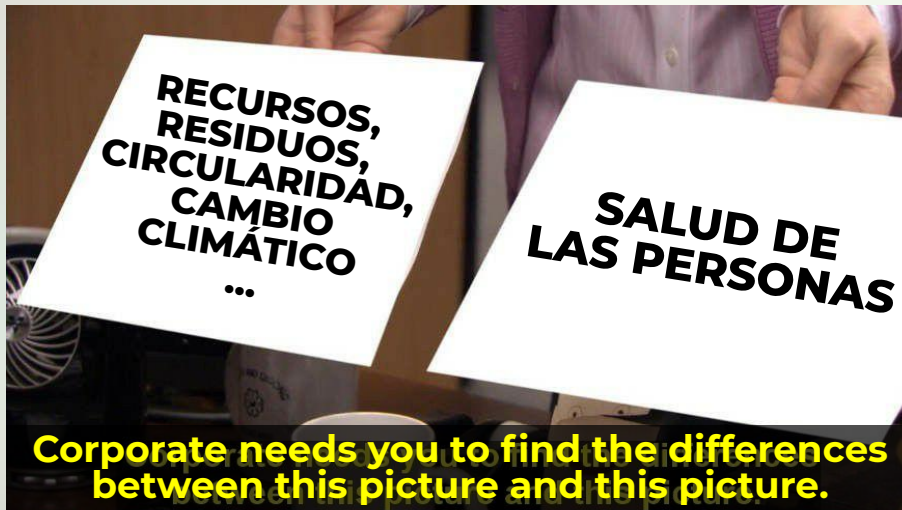
Climate change-driven increase in local bat species richness since the early 20th century

An aerial photograph showing a vast expanse of parched, cracked earth. The ground is a light tan color, heavily fissured with a network of dark, irregular cracks that form a complex, web-like pattern across the entire frame. The lighting is bright, casting soft shadows that emphasize the depth of the cracks.

**El calentamiento global mata a
250 mil personas al año (OMS)**



**26 millones de refugiados
climáticos al año (ACNUR)**







CLIMATE
NEUTRAL
2050 

**Ursula
von der Leyen**



Ley del Clima Europea


European Commission

The European Climate Law

March 2020
#EUGreenDeal

The European Climate Law will transform political promises into a binding legal obligation, and send a strong political signal to our partners and business. It will write our climate neutrality target for 2050 into law, and propose the path to get there. It will give European citizens and businesses the predictability, transparency and accountability which they need for this collective transformation.

What is included in the European Climate Law?

- ▶ An EU-wide legal target for climate neutrality by 2050 that binds the EU institutions and national governments. 
- ▶ Creating a predictable business environment for industry and investors, with the pace of emission reductions mapped out from 2030 to 2050, showing them what needs to be done, and at what speed. 
- ▶ A process to include in the Climate Law the updated 2050 emissions reduction target. 
- ▶ A mechanism for keeping everybody on track – with regular reporting on progress and tools to catch up if anyone falls behind. 
- ▶ A focus on the effective transition towards a fair and prosperous society, with a modern, resource efficient and competitive economy. 
- ▶ A renewed focus on adapting to the impacts of climate change to strengthen Europe's resilience, including for its vulnerable communities. 



EU Plan de Acción de EC



Circular Economy Action Plan

For a cleaner and more competitive Europe



Empowering consumers and public buyers is a key building block of the Circular Economy Action Plan. To enhance the participation of consumers in the circular economy, the Commission will propose a revision of EU consumer law to ensure that **consumers receive trustworthy information on products at the point of sale**, including on their **lifetime** and on the **availability of spare parts and repair manuals**. The Commission will also consider **strengthening consumer protection against green washing and premature obsolescence**, and for information tools.

The Commission will work towards **establishing a new "right to repair"** and consider **new material rights for consumers** for instance as regards availability of spare parts in order to **guarantee** the requirements for **sustainability** and for information tools.

The Commission will also propose that **companies substantiate their environmental claims** using Product Environmental Footprint methods. The Commission will test the integration of these methods in more circular products. The Commission will explore possible changes also in the context of the **Environmental Footprint** methods. The Commission will test the integration of these methods and include more systematically durability, recyclability and recycled content in the EU

Public authorities' purchasing power represents **14%** of EU GDP

Public purchasing power represents 14% of EU GDP. This is a powerful driver of the demand for sustainable products. The Commission will propose a **strong green public procurement (GPP)** framework. This potential, the Commission will propose **sectoral green public procurement and phase in legislation to monitor the uptake of green public procurement**. Furthermore, the Commission will **strengthen administrative systems** without creating unjustified administrative burdens. Furthermore, the Commission will **build capacity** building with guidance, training and **public buyers to encourage public buyers to buy green**. Furthermore, the Commission will **encourage public buyers to buy green** by building capacity building with guidance, training and **public buyers to encourage public buyers to buy green**.

2.3. Circularity in production processes

Circularity is an essential part of a wider transformation of industry towards climate-neutrality and long-term competitiveness. It can deliver substantial material savings throughout value chains and production processes, generate extra value and unlock economic opportunities. In synergy with the objectives laid out in the Industrial Strategy¹⁴, the Commission will enable greater circularity in industry by:

- 1 assessing options for further promoting circularity in industrial processes in the context of the review of the **Industrial Emissions Directive**¹⁵, including the integration of circular economy practices in upcoming Best Available Techniques reference documents;
- 2 facilitating industrial symbiosis by developing an **industry-led reporting and certification system**, supporting Best Available Techniques reference documents;
- 3 supporting the **sustainable and circular bio-based sector** through the implementation of the **and enabling the implementation of industrial symbiosis**;
- 4 supporting the **sustainable and circular bio-based sector** through the implementation of the **and enabling the implementation of industrial symbiosis**;
- 5 promoting the use of **digital technologies for tracking, tracing and mapping of resources**, **and enabling the implementation of industrial symbiosis**;
- 6 promoting the uptake of green technologies through a system of solid verification by **registering the EU Environmental Technology Verification scheme** as an EU certification mark.

The new **SME Strategy**¹⁶ will foster circular industrial collaboration among SMEs building on training, advice under the **Enterprise Europe Network** on cluster collaboration, and on knowledge transfer via the **European Resource Efficiency Knowledge Centre**.



¹⁴ COM(2020) 102.
¹⁵ Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution control) and amending Directive 2004/108/EC, Directive 2008/101/EC and Council Directive 2003/105/EC.
¹⁶ COM(2020) 103.

#EUGreenDeal



**A CLIMATE
NEUTRAL
CONTINENT
BY 2050
#GREENDEAL**

- ✓ Digitalización.
- ✓ Descarbonización.



TEIMas

Desde 2008 desarrollamos **soluciones tecnológicas**
para la gestión inteligente de los residuos,
la economía circular y la sostenibilidad.

TEIMAS Empresa tecnológica especializada en residuos

2010

Lanzamos el portal **Gestores de Residuos**

2011

Lanzamos **Teixo** para empresas gestoras de residuos

2019

Lanzamos **ZERØ** para grandes empresas productoras.

2020

Nueva marca: **TEIMAS**
Nueva sede.

2008

Fundamos

teimas
desenvolvimento

2015

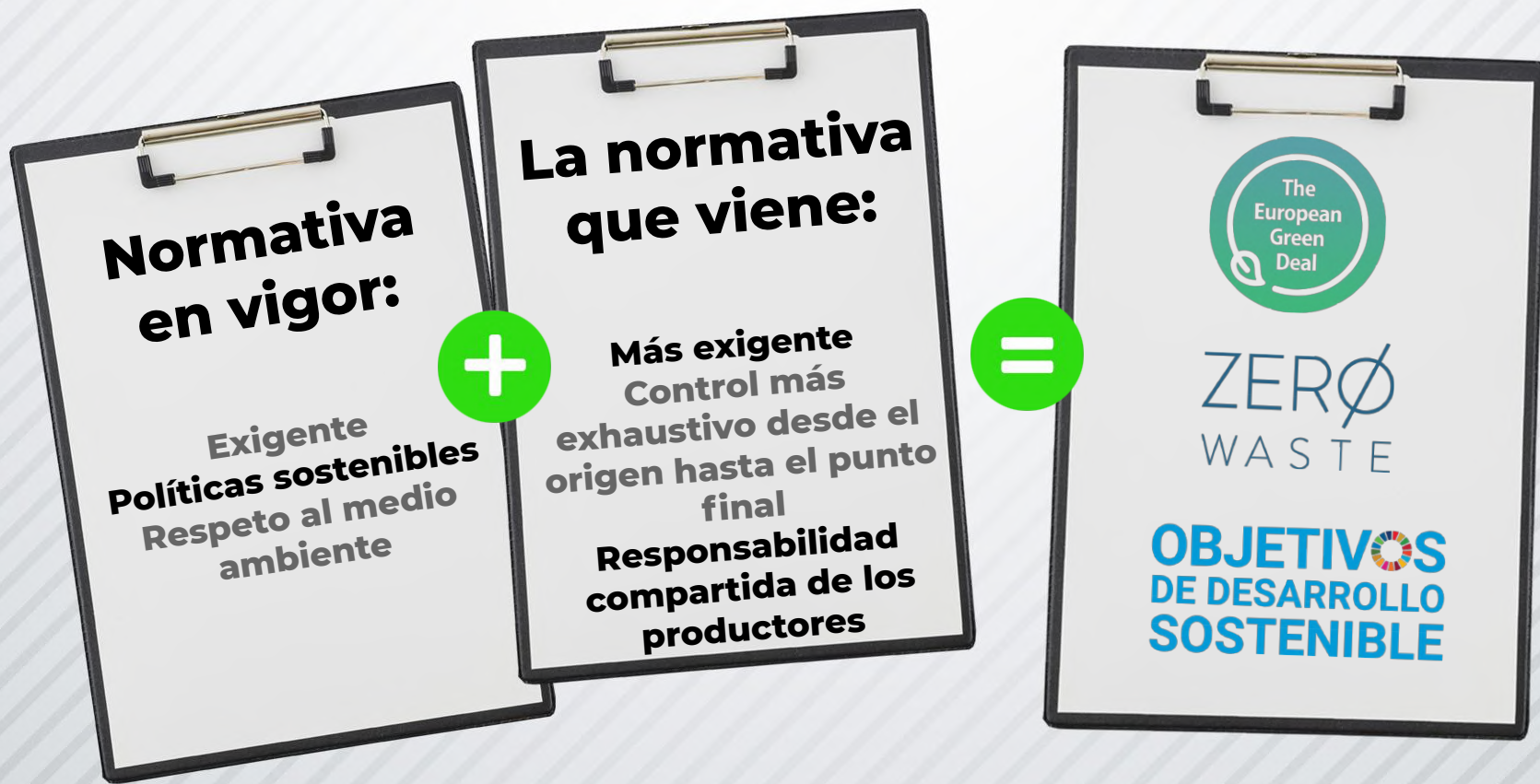
Presentamos **TropaVerde** a la ciudadanía.

2017

Presentamos **GReTel** para Telefónica.

Trabajamos ya con más de 400 gestores y 10 empresas cotizadas en bolsa.

La gestión de los residuos es cada vez más estricta.



ANTES.

Excel y papeles. Costes,
errores e ineficiencias.
Riesgo regulatorio (compliance).
Mala calidad del dato.
Responsabilidad.



AHORA.

Software cloud especializado.
Ventaja competitiva.
Reporting ágil e
Inteligencia de negocio.
Compromiso corporativo.





Usuario

Contraseña

Entrar

[¿No tiene una cuenta? Regístrese hoy.](#) [¿No puede acceder a su cuenta?](#)

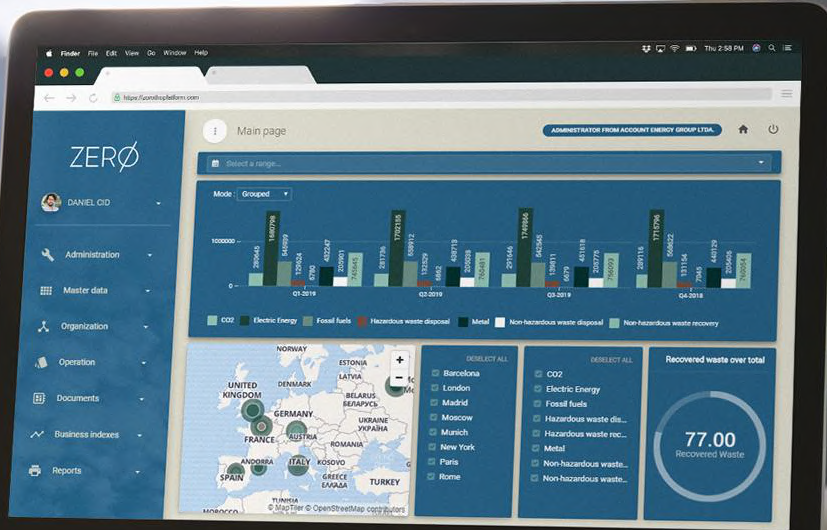




teixo 



La gestión inteligente de residuos empieza aquí





ZERØ

DANIEL CID

Administration

Master data

Organization

Operation

Internal movements

Documents

A blue-toned graphic representing blockchain technology. It features a network of glowing blue nodes connected by lines, overlaid on a background of binary code (0s and 1s). Several cylindrical blocks, resembling data blocks or coins, are arranged in a chain, with binary code also visible on their surfaces.

Blockchain

A photograph of a sandy beach. A large, hand-drawn smiley face ':D' is etched into the sand. The smiley face is composed of two curved lines for eyes and a simple 'D' shape for a mouth. The sand is light-colored and the lighting creates soft shadows.

Huella de Carbono

Your Company:

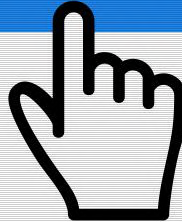
Core sustainability ×

Waste ×

Coherence ×

Integrity ×

GO DIGITAL



Gracias!



Miguel Varela, CEO de TEIMAS



@varelamiguelou



miguel.varela@teimas.com