

Inédit

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The importance of the life cycle view

Within the framework of the project: Piloting Transitions
Serie 1.0, Piloting sustainable and digital transitions for the
Textile and Fashion ecosystem.

May 9 2024

inédit

The background of the image is a photograph of a courtyard. On the left, there are large green plants in terracotta pots. In the center, a paved path leads towards a building with a series of arches. The building has a warm, reddish-brown facade. On the right, there are more plants and a balcony with a metal railing. The overall atmosphere is bright and sunny.

inedit

We design circular and sustainable solutions for a better future.

We work to ensure that companies incorporate sustainability into the design of their products and services, into their business strategy, and transform their business model to align with the goals of decarbonization and efficient use of resources.

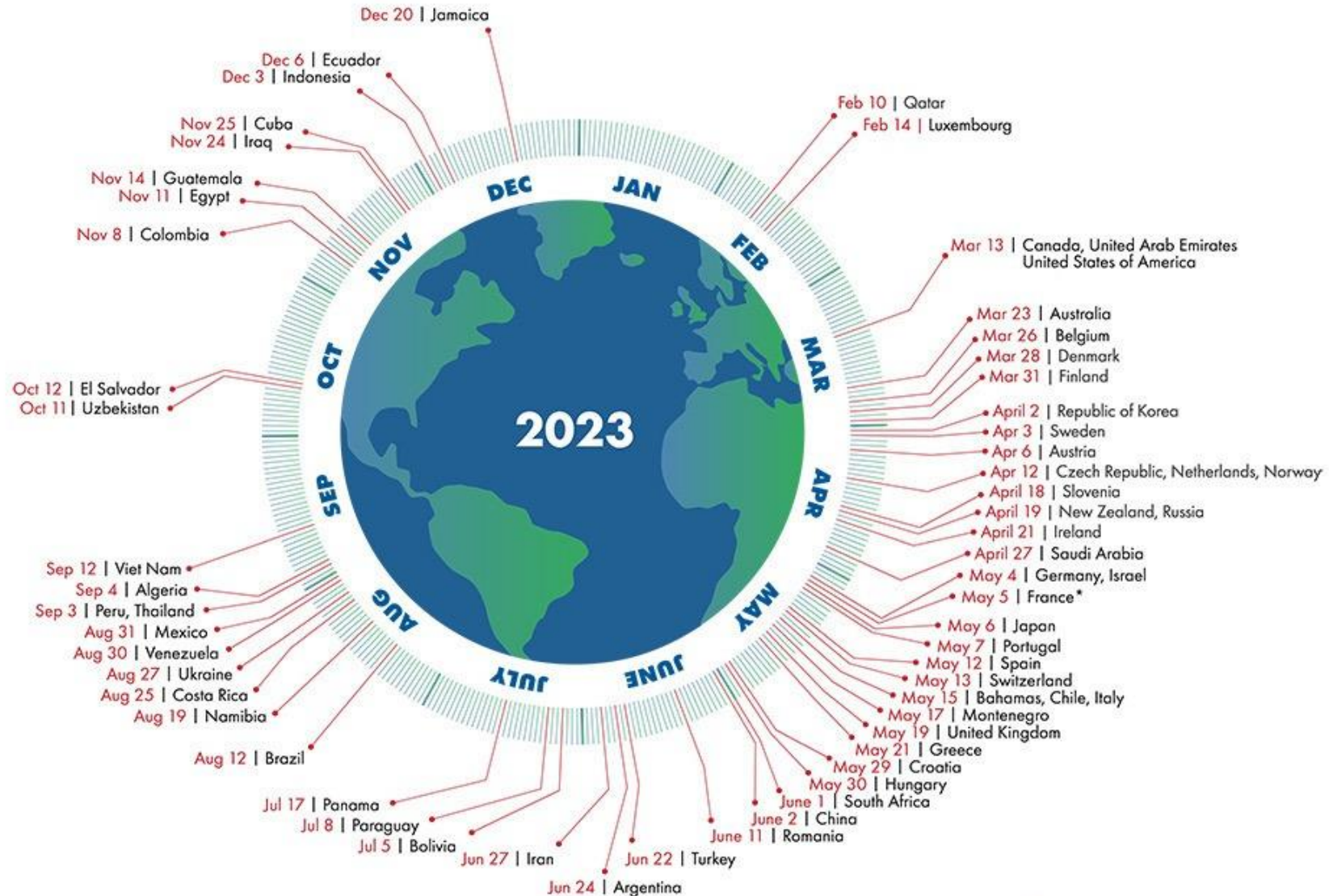
What is happening?

Earth Excess Day?

Country Overshoot Day

Country Overshoot Days 2023

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



For a full list of countries, visit overshootday.org/country-overshoot-days.

*French Overshoot Day based on nowcasted data. See overshootday.org/france.

Source: National Footprint and Biocapacity Accounts, 2022 Edition
data.footprintnetwork.org





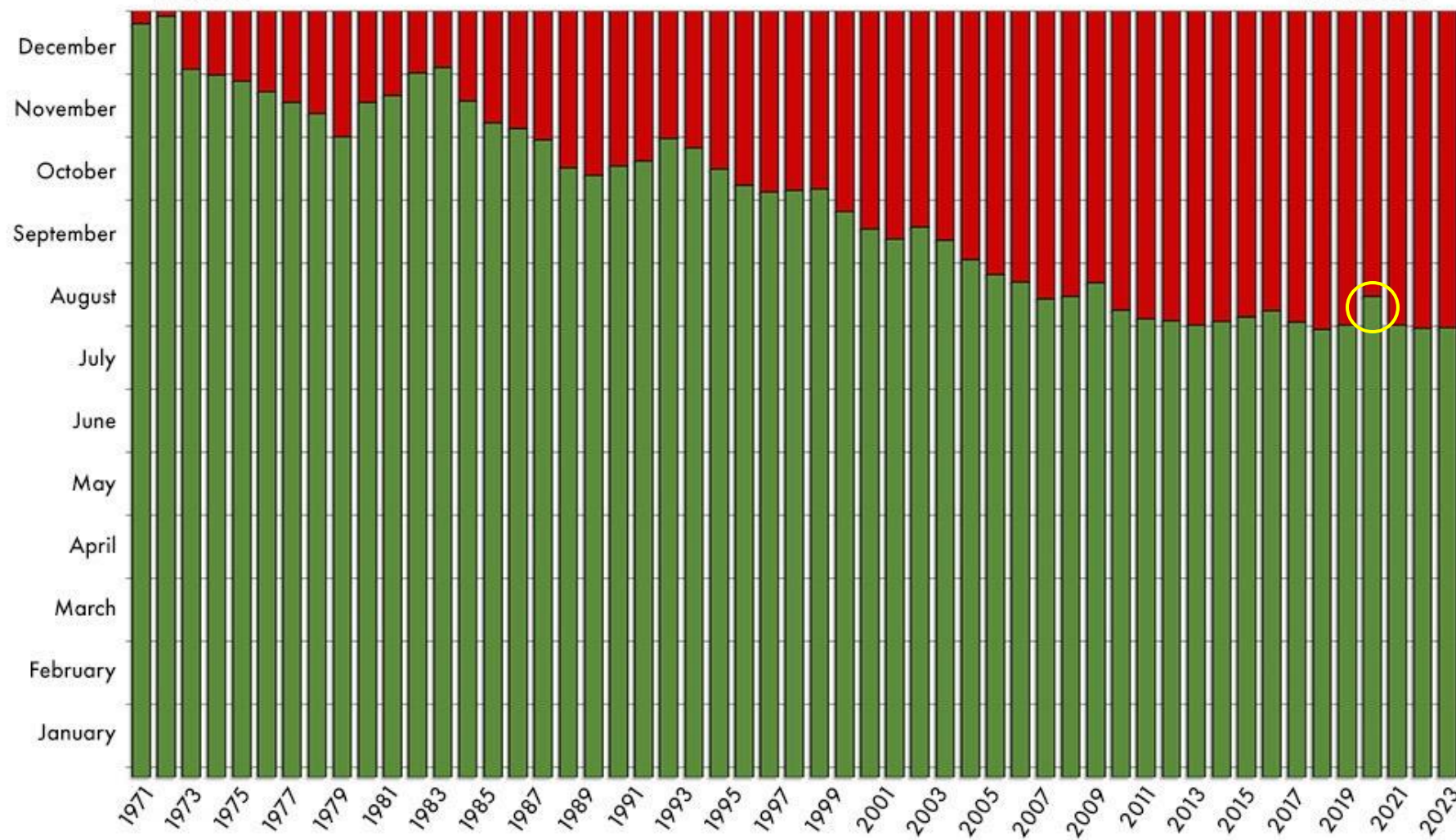
1 Earth

Earth Overshoot Day

1971 - 2023

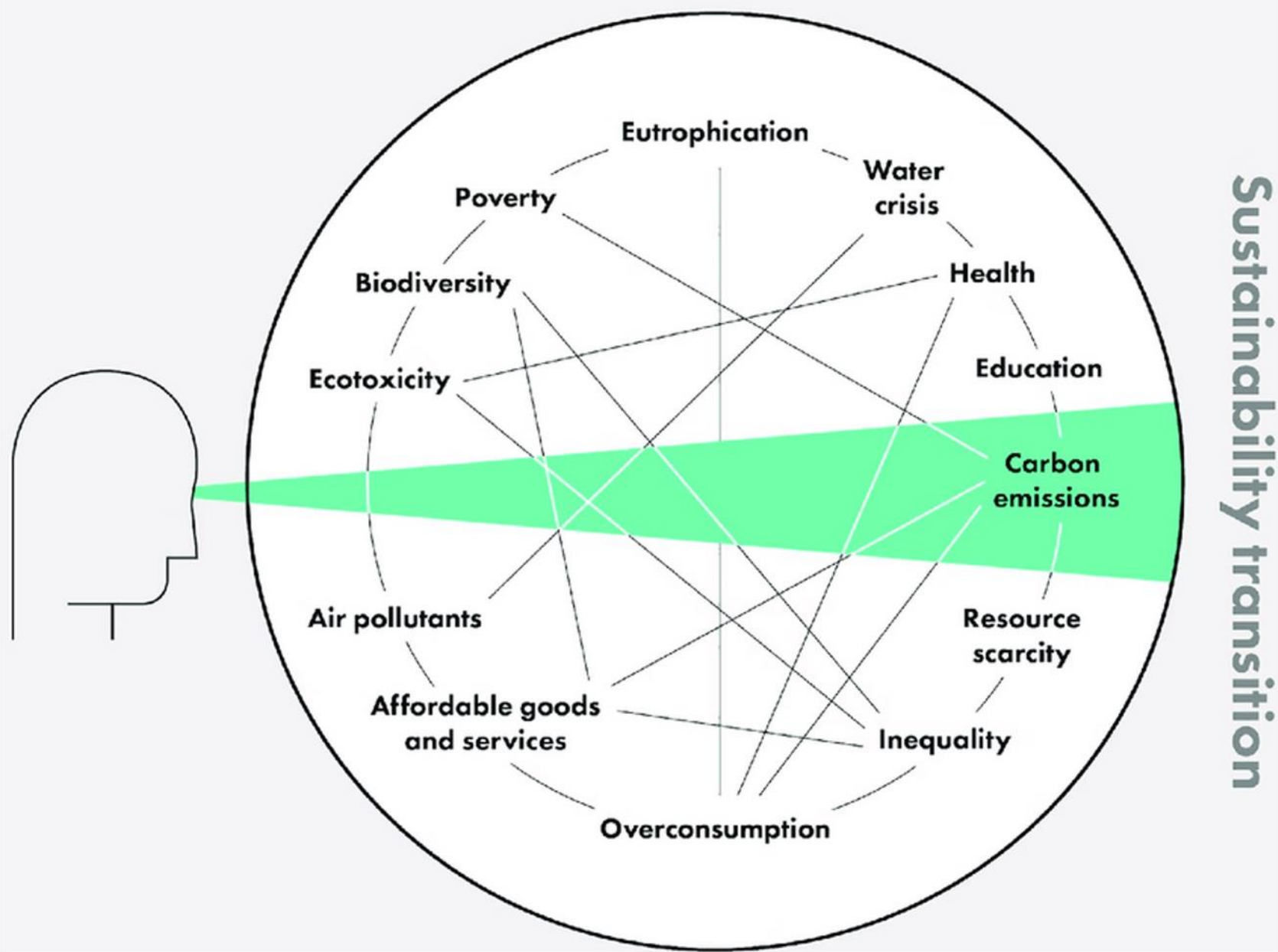


1.7 Earths



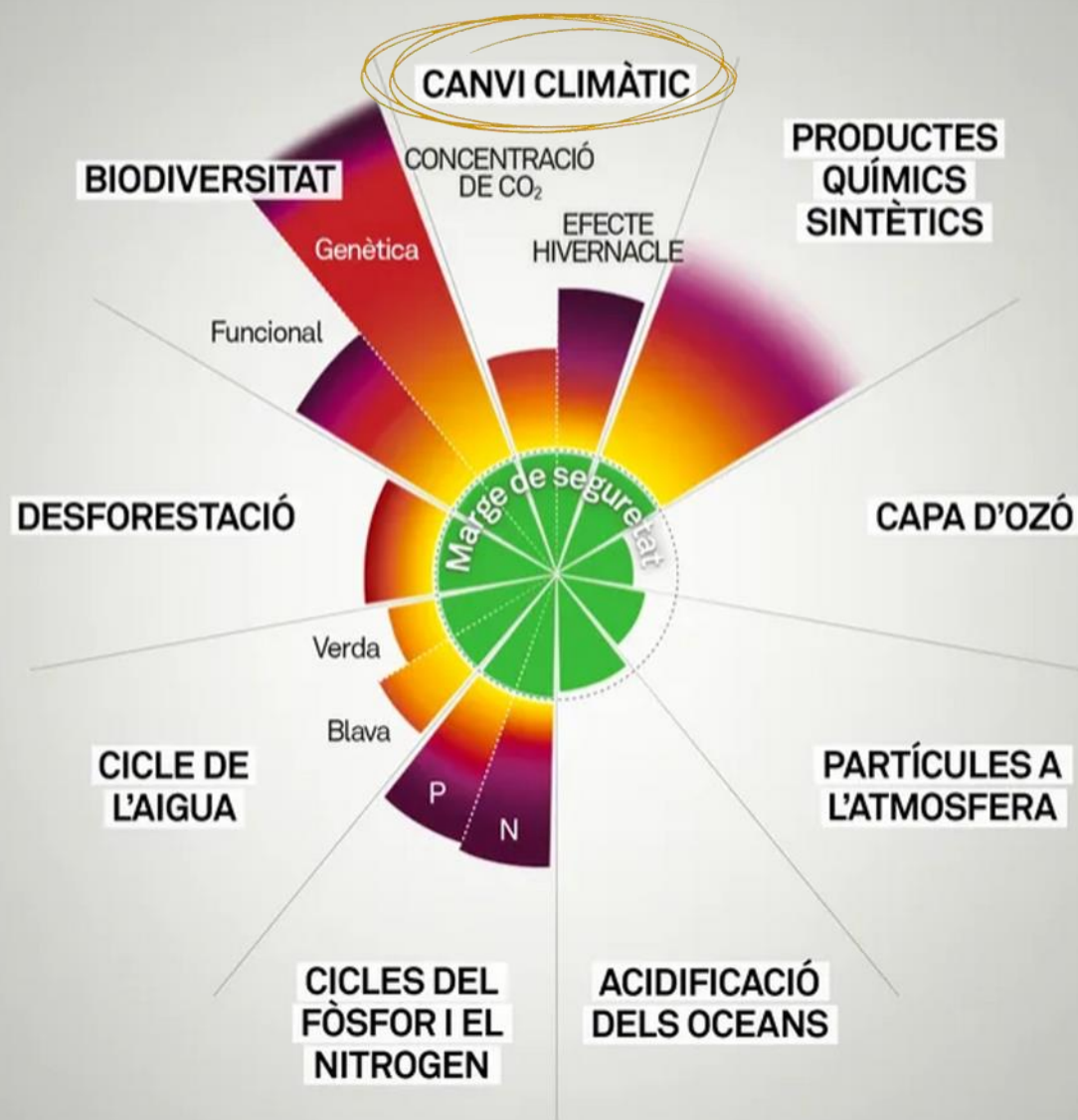
Planetary boundaries?

Carbon tunnel vision

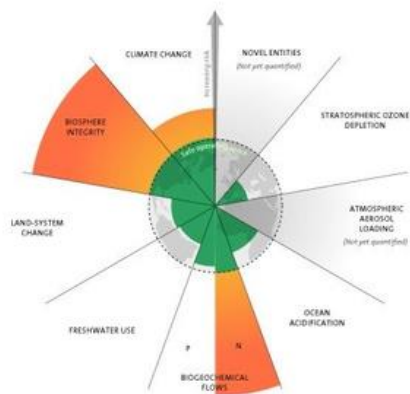


6 DELS 9 GRANS LÍMITS PLANETARIS SUPERATS

324.cat

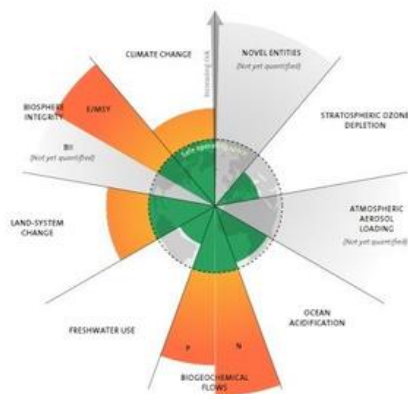


2009



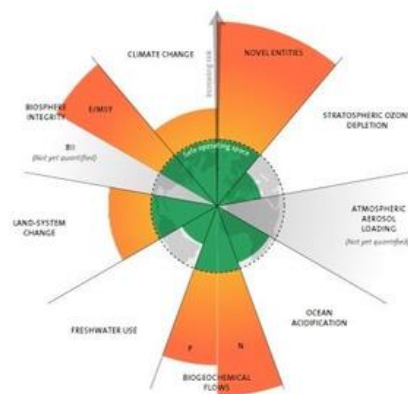
3 boundaries crossed

2015



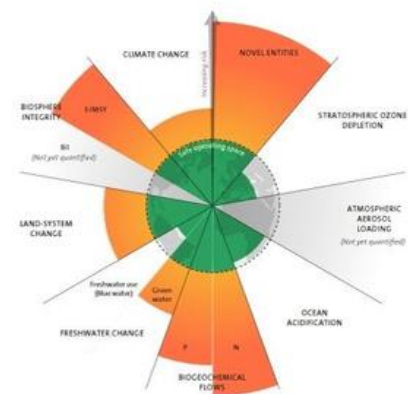
4 boundaries crossed

2022



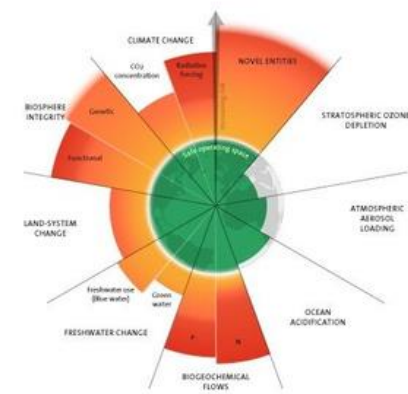
5 boundaries crossed

2022



6 boundaries crossed

2023



6 boundaries crossed

Sustanaible

Sustainable

Etymology: from sustain. 1.Adjective. That can be sustained, endured or tolerated.

Sustain

4.Verb. That an action or state can continue for a period of time without changing.

Synonym: maintain.

To sustain the current model, the
economy must grow by 3.4%
annually.

How do we make this happen on a planet that is not growing and with finite resources?

404

Page not foud



324

ÚLTIMA HORA

The consumption of materials has been fundamental to increasing the standard of living in the last century, but we have reached an unprecedented point in history:

The consumption of materials has been fundamental to increasing the standard of living in the last century, but we have reached an unprecedented point in history:

"The continuous and accelerated consumption of materials in rich countries no longer guarantees an improvement in people's well-being"

Alerta ante el posible colapso de la gran corriente oceánica del Atlántico: qué significa y qué implicaciones podría tener

- El 97% de los peces migratorios están en grave riesgo de extinción
- La contaminación por nitratos agrava la escasez de agua potable en 2.000 regiones del planeta



LA VANGUARDIA

CRISIS LOGÍSTICA Y CAMBIO CLIMÁTICO

Las restricciones del canal de Panamá por sequía ponen en jaque el comercio mundial

V

+

- El coste del transporte marítimo se disparará un 50% si se desvían las rutas de los contenedores por el cabo de Hornos

IMPACTE | CANVI CLIMÀTIC

El drama humà del canvi climàtic: 70.000 morts per calor a Europa en un estiu

Un estudi d'ISGlobal estima que la mortalitat de l'estiu del 2022 va ser pitjor de la calculada inicialment

- La mortalitat per calor es multiplicarà per quatre en els pròxims 30 anys
- Test | Contribueixes a lluitar contra la sequera a Catalunya?

f

X

M

🔔

🕒



L'estiu de 2022 va ser el més càlid a Europa | AndresGarciaM / iStock



El govern ja contempla portar aigua en vaixell al juny si la sequera persisteix



Ni carxofes ni cireres? El futur complicat que deixa la sequera al Baix Llobregat

El cambio climático está provocando un aumento de la inflación en las economías europeas y países como España son de los que más tienen que perder.

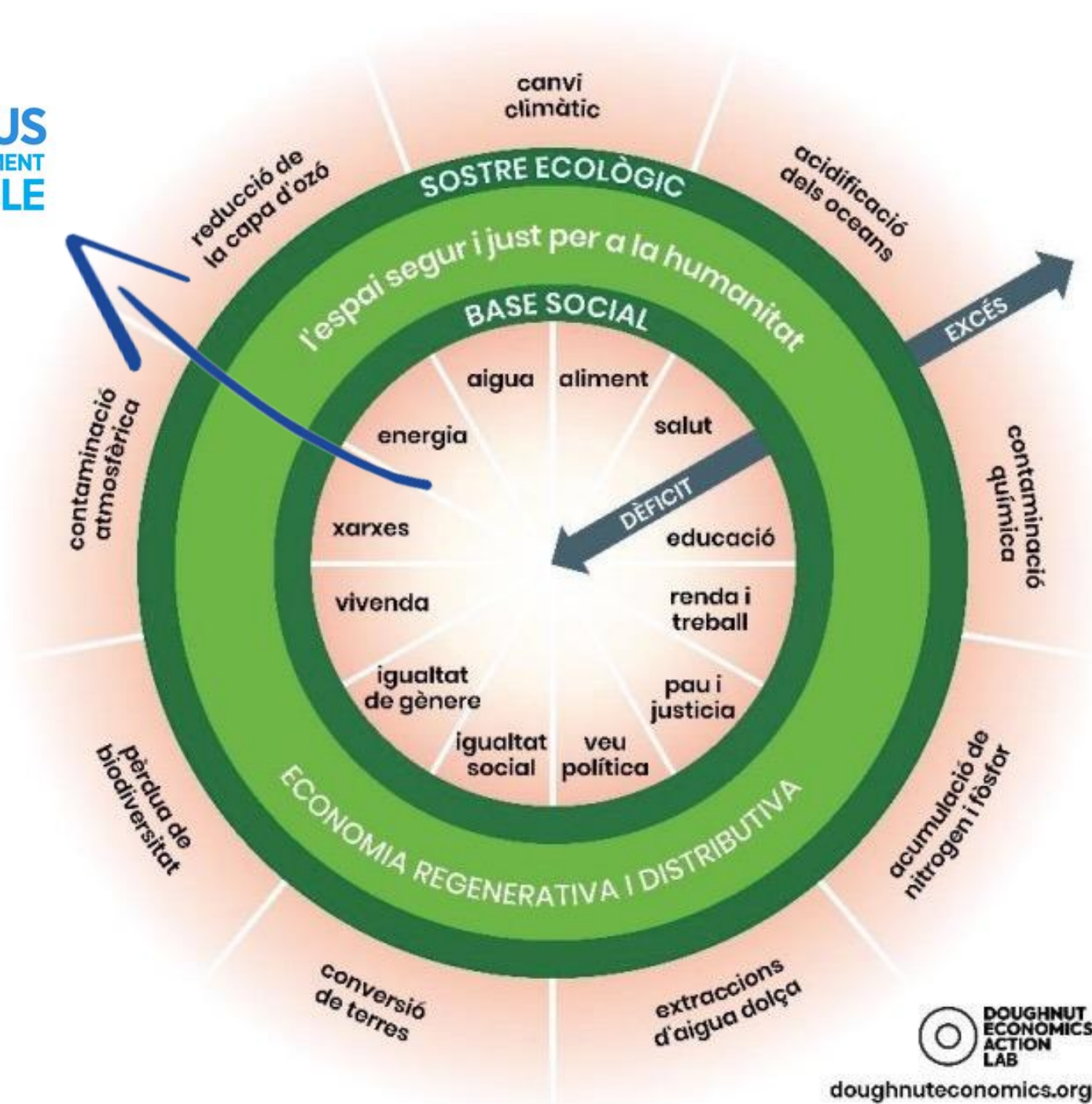
El calentamiento global llega a la inflación por los canales siguientes:

- Destrozo en las cosechas, lo que implica un aumento del precio de los alimentos.
- Una mayor y más gravosa demande de energía por los cambios meteorológicos, lo que supone un aumento del precio en los costes de producción industrial y de los recibos domésticos de luz y gas.
- Un transporte menos asequible por tierra, mar y aire, que encarece los costes de producción y lleva a precios más caros de los desplazamientos particulares.
- Unas materias primas más difíciles de obtener, como el cobre o el litio, que se pagan a precio de oro en los mercados internacionales.

How do we achieve global
well-being within the
planetary boundaries?



OBJECTIUS
DE DESENVOLUPAMENT
SOSTENIBLE



doughnuteconomics.org

BUILD COUNTRIES

Low-income countries should **INCREASE** their consumption of materials to meet the needs of their populations.

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GROW COUNTRIES

Middle-income countries should **STABILIZE** their consumption of materials by improving current well-being.

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SHIFT COUNTRIES

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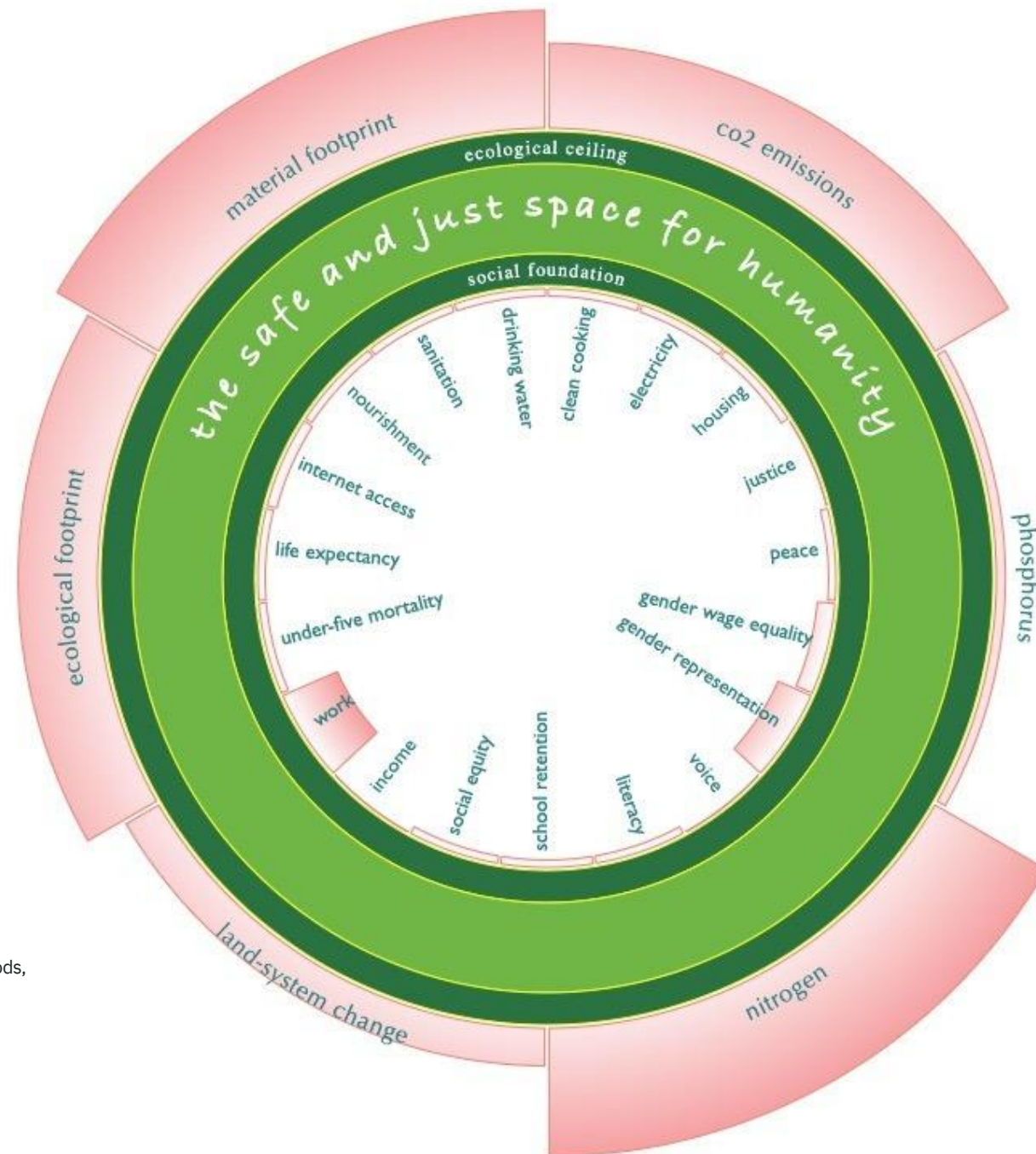
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Circular Economy ⚡



How are we doing?



All data used in this visualization is estimated. The date of gathering, estimation methods, and quality varies between countries. This visualization serves as a quick reference to approximate where countries fall on the doughnut spectrum.

Credit for Doughnut Economy concept: Kate Raworth and Christian Guthier. CC-BY-SA 4.0

Credit for data: World Bank, UNICEF, ILOSTAT and University of Leeds

Last updated: 2022-08-27

Compiled and developed by: Felix Surjadaja

3x

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The volume of discussions, debates and articles about the concept has almost tripled in the last 5 years.

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-21%

But global circularity is still in decline.

The share of secondary materials consumed by the global economy has decreased from 9.1% in 2018 to 7.2% in 2023, a drop of 21% in 5 years.

**ZERO
WASTE**

RECYCLING



Some of our most pressing challenges are extremely complex systemic challenges.

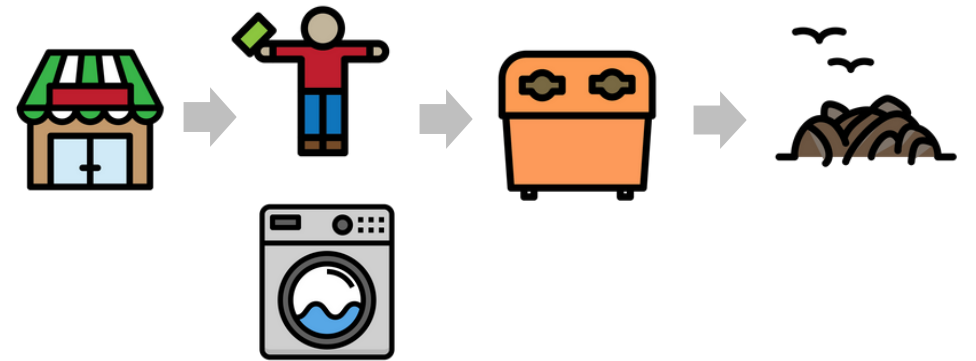
We cannot understand these systemic challenges if we do not know what their elements are and do not understand how they interact with each other to produce certain dynamics and behaviors.

If we don't understand the problem,
we can't reach the solution.

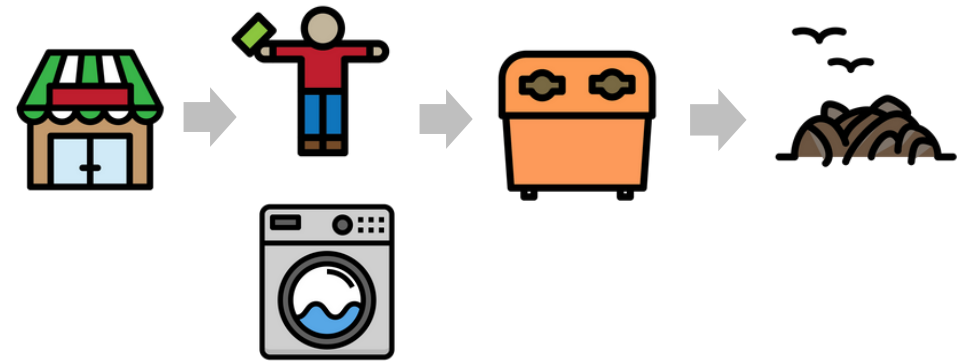
Let's understand the
problem, let's talk about
Systemic Vision.

Let's understand the
problem, let's talk about
Life Cycle.

LIFE CYCLE PERSPECTIVE



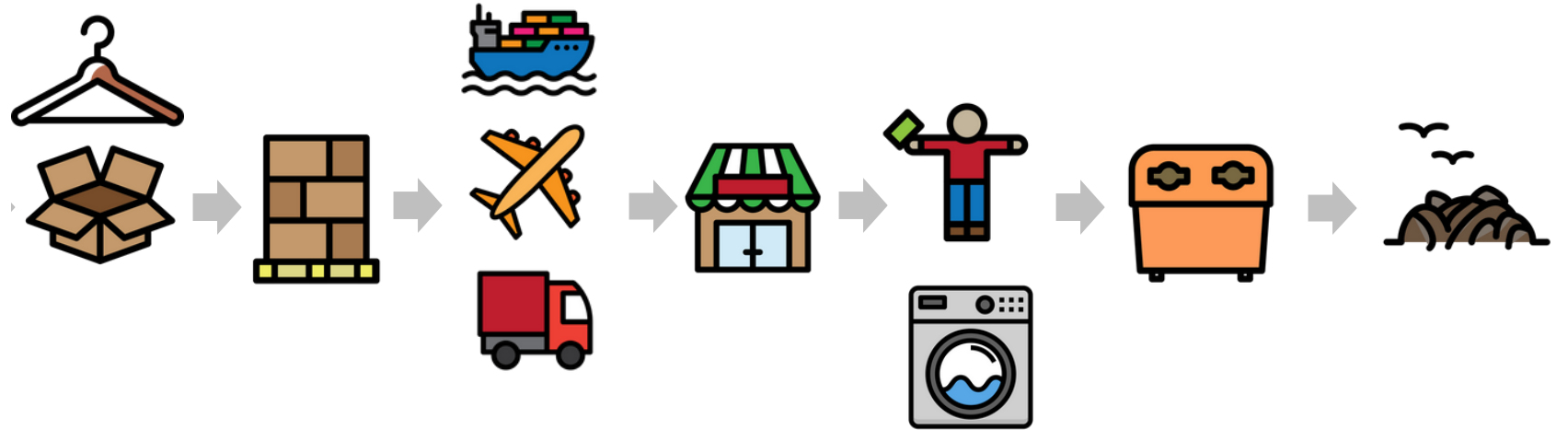
LIFE CYCLE PERSPECTIVE



5-

10%

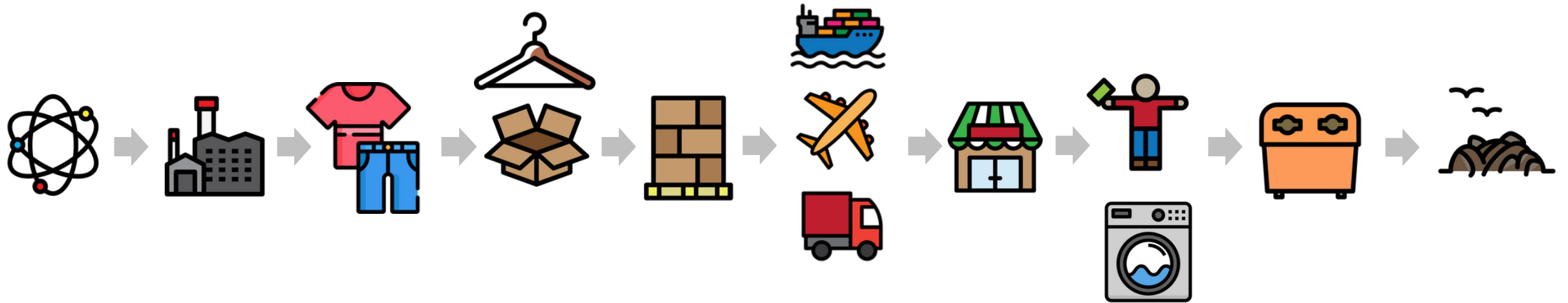
LIFE CYCLE PERSPECTIVE



**10-
20%**

**5-
10%**

LIFE CYCLE PERSPECTIVE



**75-
90%**

**5-
10%**

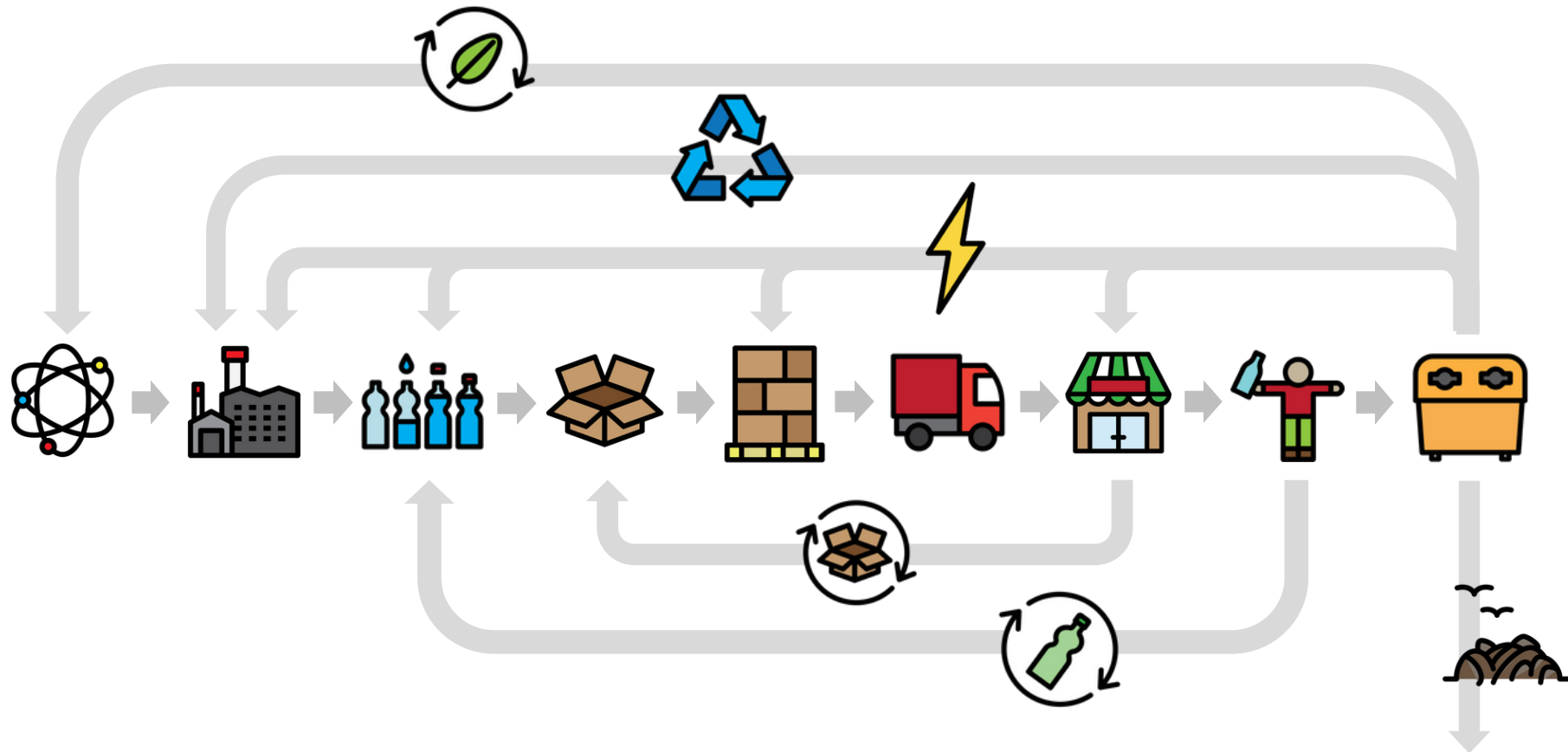
1 ton of gold ore contains
an average of 5g of real
gold.

1 ton of recycled mobile
phones contains
an average of 150g of
gold.





Vision of resource and energy flows throughout the value chain



What aspects should
you pay attention to?

(eco)Design

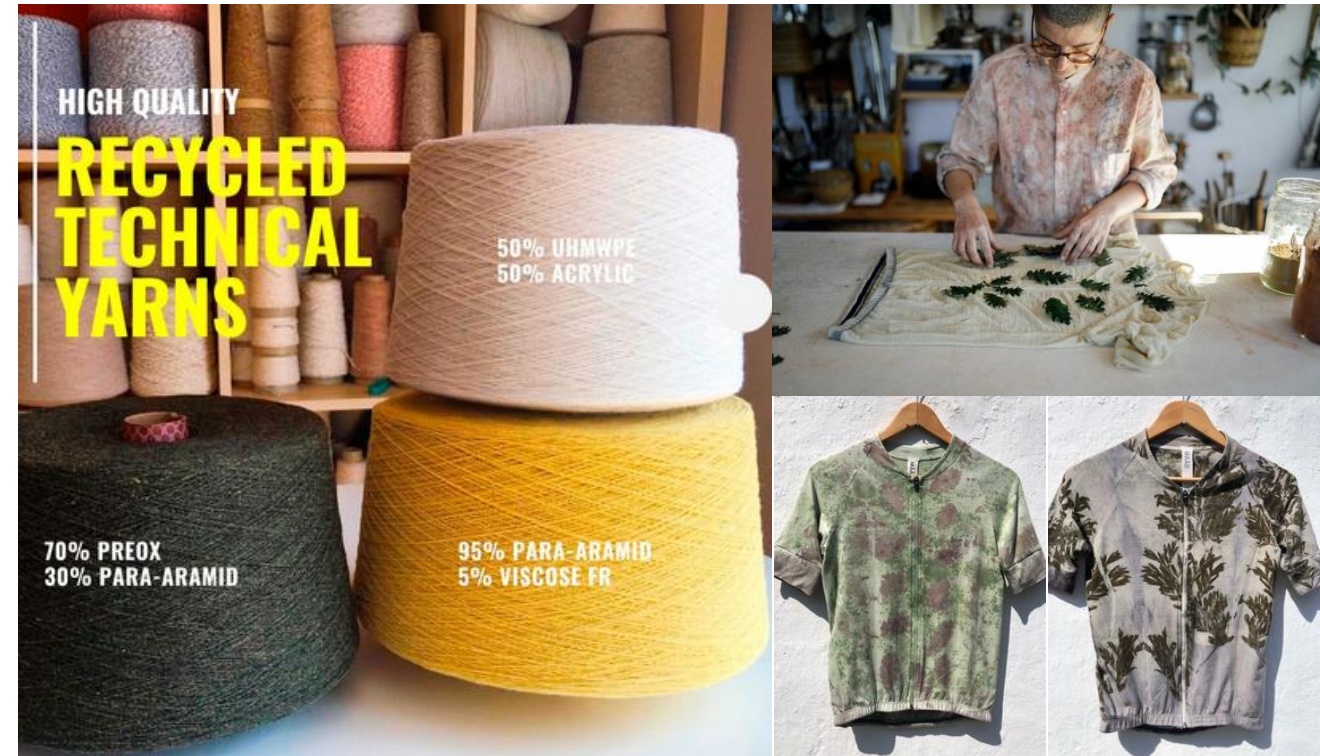
“It is estimated that more than 80% of the environmental impact related to products is determined in the design phase”

What is the raw material?

Think about the type of raw materials we choose.

Could we use a recycled fiber or a natural dye? Or look for solutions in the industry that contribute to generating the supply and demand needed for the transition.

Should we use food-grade rPET?



What is its origin?

Understand where the fibers, components, parts, raw materials (...) come from to make the product. Are we aware of what is involved in growing cotton? The production of wool? The refining of oil for synthetic fibers?

Who pays the real cost?



How is the factory?

Think about who manufactures (where) and under what conditions the products and/or their parts are made.

Workers in this sector often face long working hours, low wages and dangerous environments, all in the name of quickly producing cheap clothing.

What do we do with unsold products?



How is it packaged?

Think about its packaging at origin.

In many cases, the packaging and hangers where the clothes arrive are not considered suitable for display in stores or for shipping to customers and their packaging ends up being duplicated.

Use it only once, could we use more than 70?



How is it transported?

Think about how products and their components travel throughout the value chain.

Air transport has a much higher environmental impact than shipping, but the former is much faster.

#TshirtOnTour

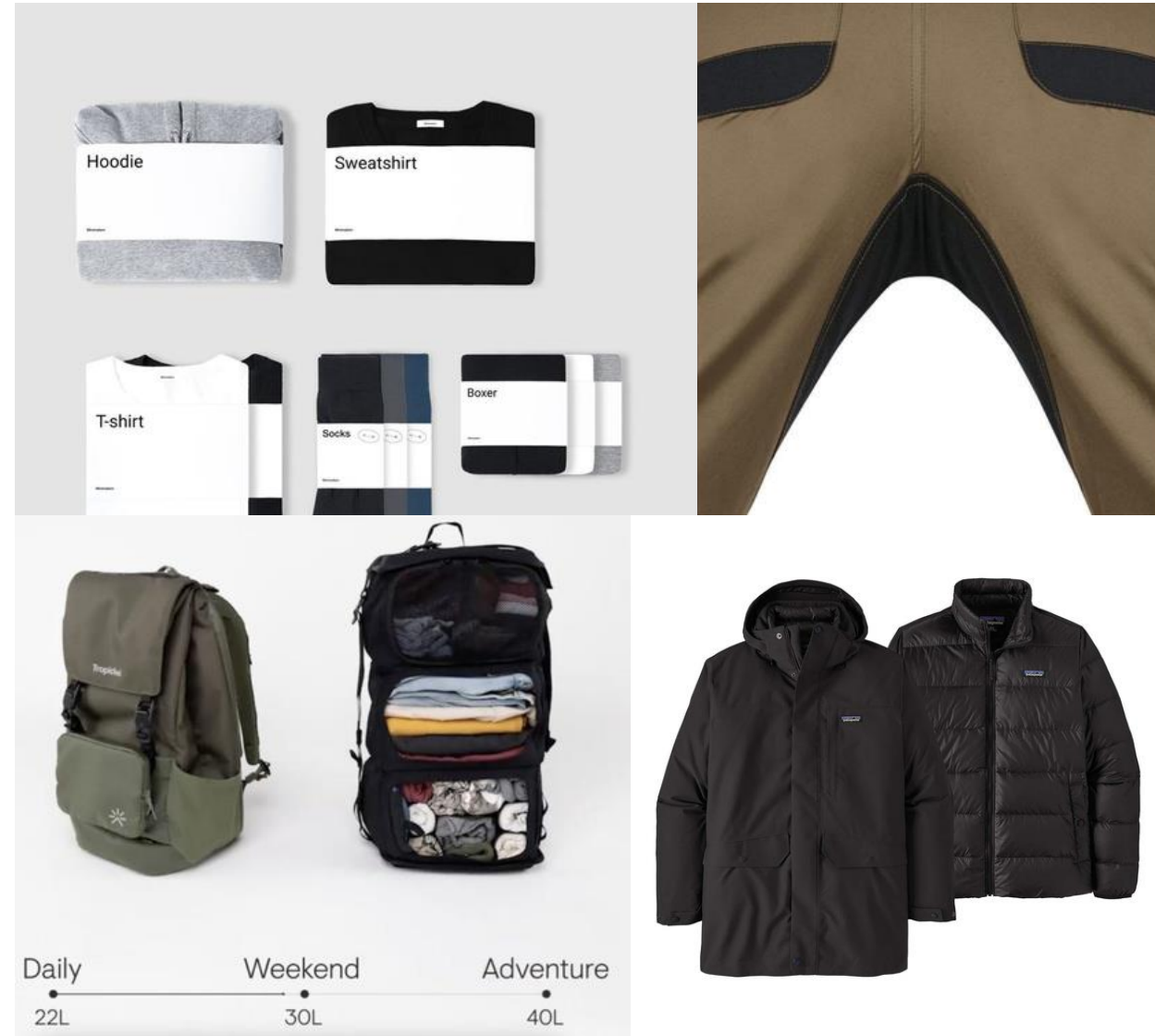


How is it used?

Think about how and why the user will use the product.

We buy more clothes than ever before (4 times more than in the 90s) and we use them less than ever before (an average of 10 times per piece).

Reinforce weak points? Make sure it doesn't go out of style? Think about multifunctionality?



How is it managed?

Think about what happens to the product at the end of its useful life.

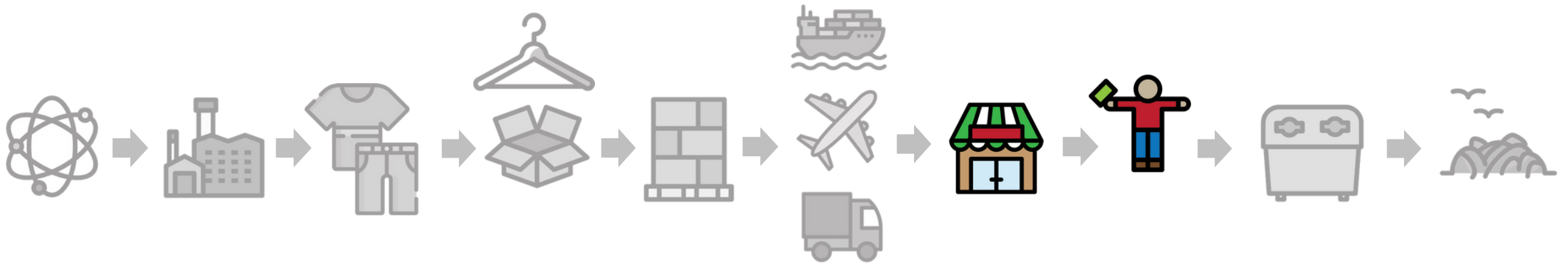
The main difficulty in recycling clothing is the presence of multiple materials in the same garment. Even a 100% T-shirt can have artificial fibers in the threads and labels.

Only 1% is recycled, the rest is mostly incinerated (even before sale).

Can we design for repairability and recyclability?



LIFE CYCLE PERSPECTIVE



75-90%

How do we preserve the
value of resources for the
longest time
possible?

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value of resources for the
longest time
possible?

How do we decouple
progress from course
consumption?

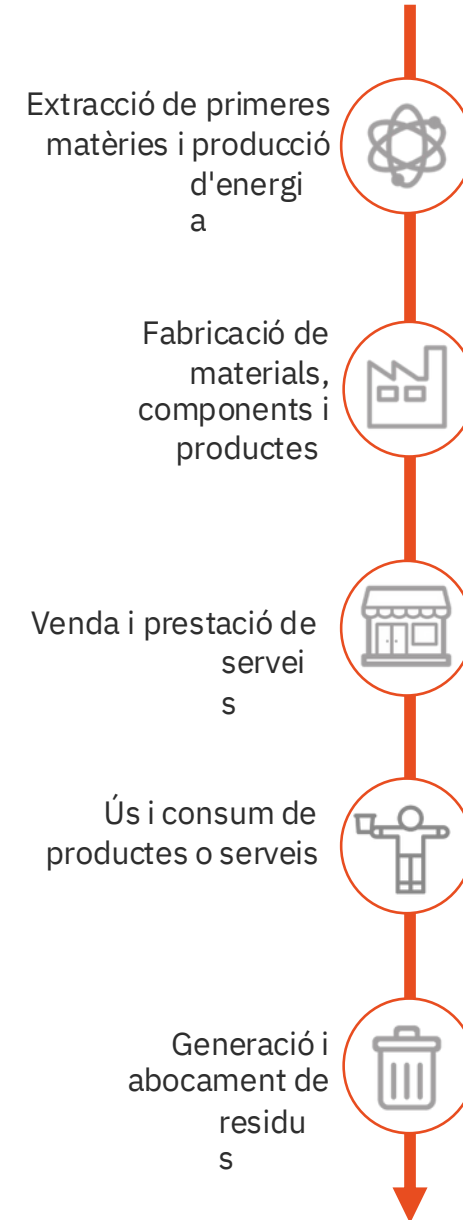
Circular Economy ⚡



The old paradigm

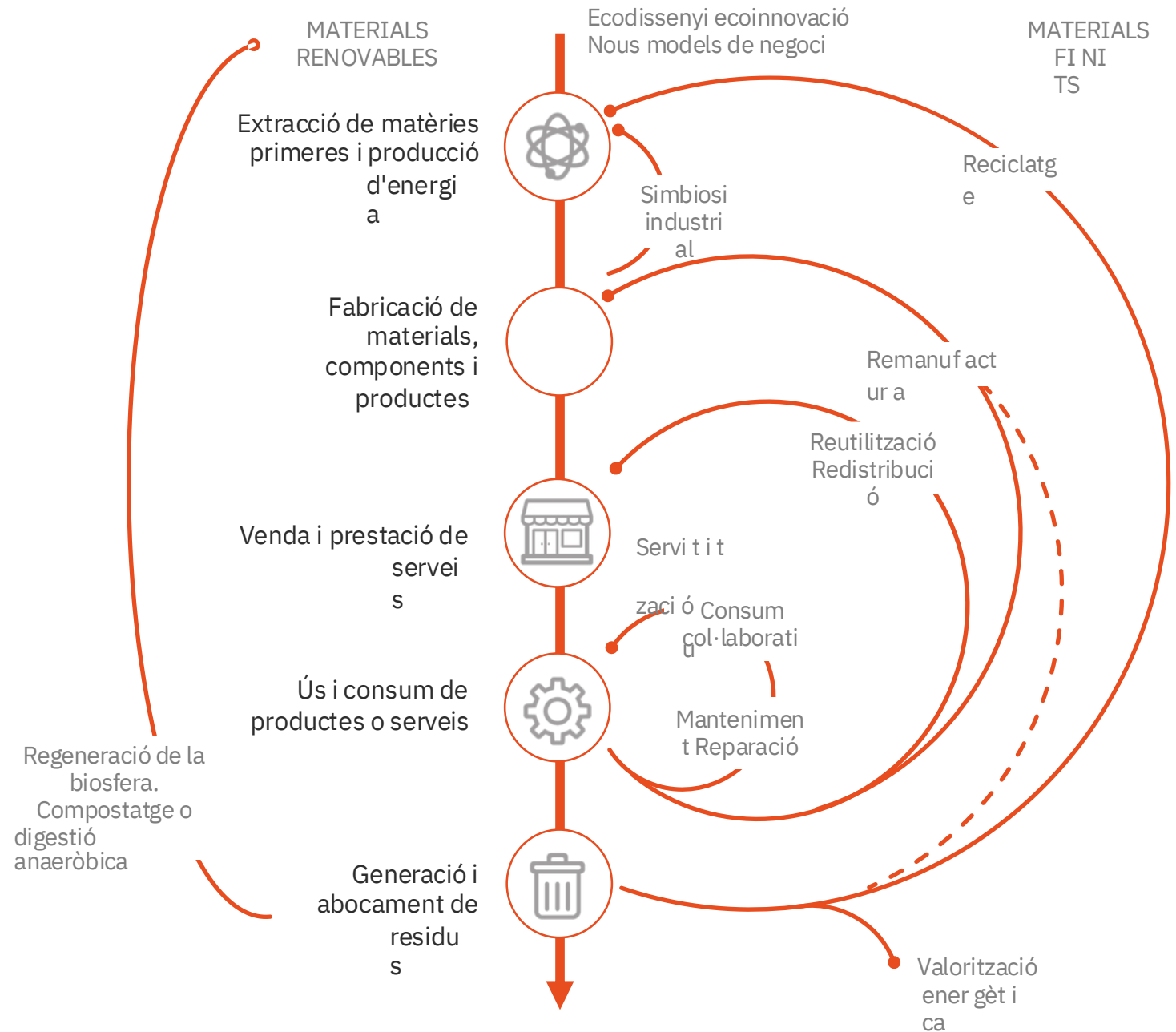
At the root of the problem is a system of production and consumption based on linear logic.

We extract resources from the earth, we make products, we buy them, we use them, we stop using them, we throw them away.



The new paradigm

A model that redefines economic progress by focusing on the generation of social benefits, decoupling it from growth and greater use of natural resources.



Circular Economy is NOT:

(only) RECYCLING GREEN CONSUMPTION

GREENWASHING



We question the reason for things (...)

Just because something is implemented and standardized doesn't mean it's good.



inédit

smart, successful
& sustainable

transiti*ns