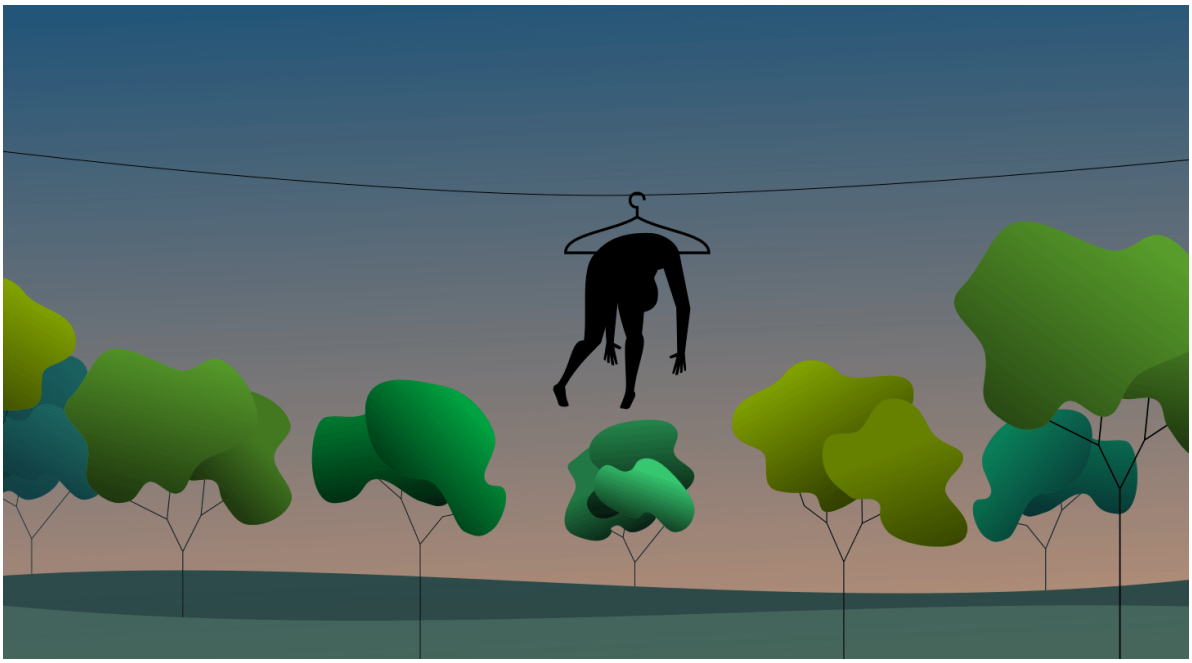
THE 2030 AGENDA AS A BLUEPRINT

The transition to a circular economy in the context of the 2030 Agenda

Jordi Oliver



Illustrator: Fernando Prado

A little over 100 years ago, a group of farmers from the Plain of Vic, including my great-great-grandfather Joan Solà, boarded a train bound for the Netherlands with a mission: to buy Frisian dairy cows and bring them back to the county. They did not speak the language or know what challenges they'd face along the way, but with wads of notes hidden under their belts and a considerable dose of determination, they crossed Europe and returned home with dozens of cattle.

The superior milk production of the Frisian cows allowed them to set up a business collecting milk from different farms on the plain and selling it through a modest network of dairies in Barcelona, run first by their children and later by the grandchildren of those original pioneers. Despite the delivery vans breaking down, their precarious engines overheating as they trundled along dilapidated roads, and having to pass the tollbooths that guarded the entrance to Barcelona (a type of municipal customs for provisions entering towns and cities) at a time of widespread smuggling and corruption, the milk produced by those Friesian cows made its way to Barcelona every day.

And so, my grandfather Josep Solà grew up and worked from a young age in the family dairies, among the cheese jars, the butter-making utensils, the huge pots they used to pasteurise the milk, and containers they used to dissolve it with different proportions of water to make it go further and thus offer cheaper alternatives for meagre post-war budgets. The wealthiest customers completed their purchases with an almost luxury product: Danone yoghurts, made locally and packaged in wooden boxes and returnable earthenware containers, distributed daily by vans.

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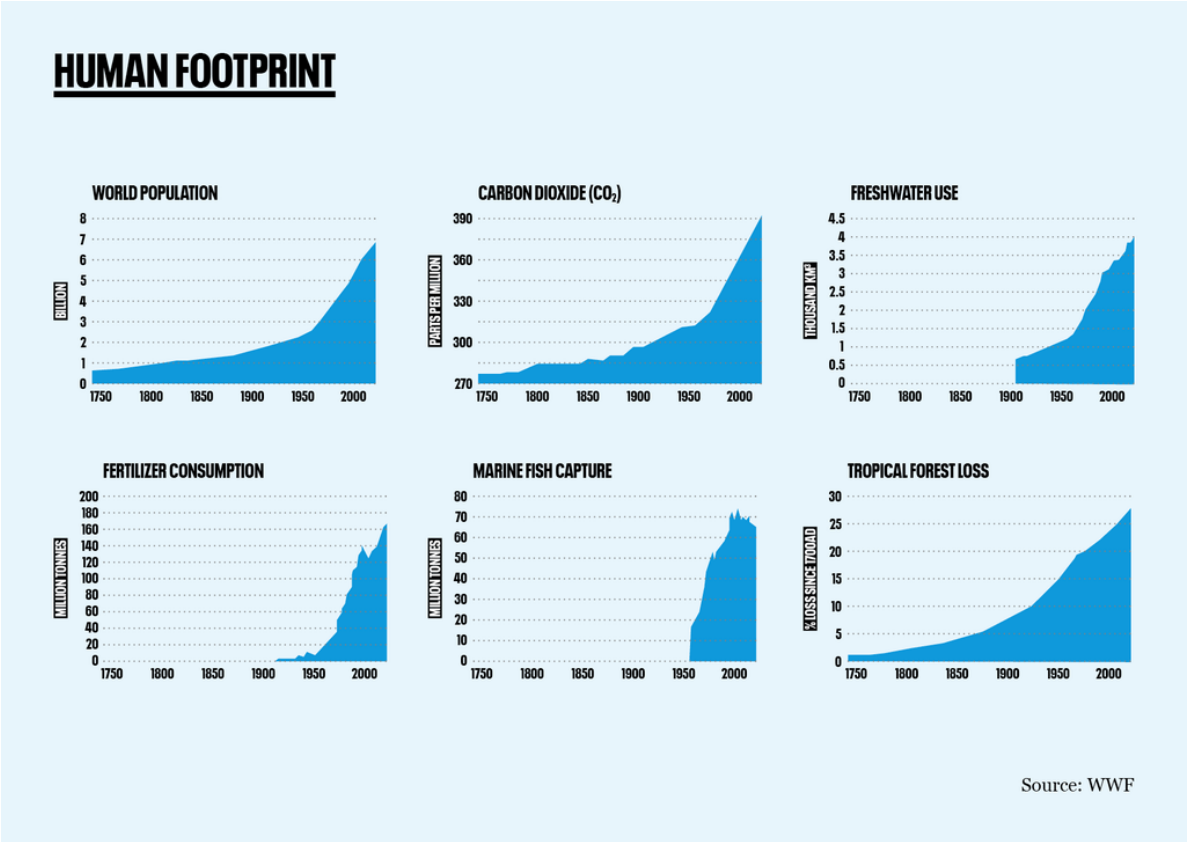
Based on the differences between what I have just described and the reality we live in today, it might seem like centuries have passed. However, it has only been 70 years since my grandfather was behind the counter in a dairy. It was 60 years ago that the Local Tax Authority Reform Law (1962) removed the tollbooths; and it's been 50 years since the 1970s when, for better or for worse, the world went into overdrive (figure 1).

Figure 1. Evolution of world population, resource consumption, and emissions



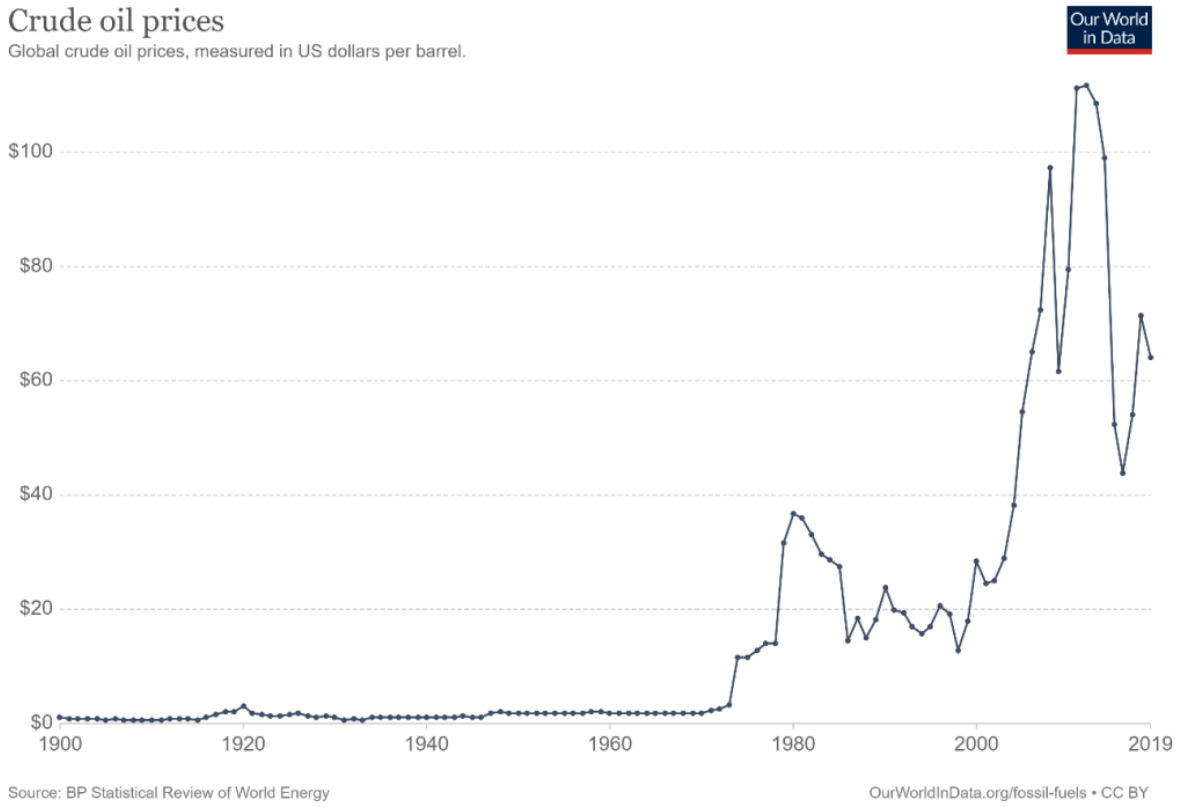
Source: https://populationmatters.org/resources-consumption

Nowadays, when we talk about the circular economy and decarbonising the economy, we often approach it with a mentality that assumes the reality lived by the current generation and, at most, the previous two is normal. Nevertheless, this is simply not the case. We are

an exception; we have lived in a historical anomaly of economic and energy resources that have facilitated progress, extended life expectancy and improved the material well-being of much of humanity to unprecedented levels while completely overlooking one thing: the environment.

According to the *McKinsey Consumer Price Index 1900-2010* [1], the price of raw materials decreased steadily throughout the twentieth century. Moreover, the price of oil remained constant and below $2 a barrel from 1900 until the oil crisis in the 1970s (Figure 2).

Figure 2: Evolution of crude oil prices between 1900 and 2019



This circumstance allowed us to access natural resources, create global value chains, and develop a dazzling array of new materials, especially plastics, which revolutionised the way we produce, package and consume.

By the 1980s and 1990s, the limits to growth had –apparently– disappeared, and once the Soviet Union crumbled, it seemed nothing could stop the Western model of life. It was supposed to be the end of history [2], but…

Becoming aware that we're living in a historical anomaly

… history continued, and as we enter the second decade of the twenty-first century, the environmental externalities overlooked for decades have become a ticking time bomb that threatens the survival of humanity. The economic system as we know it today was constructed without a thought for the environmental impact of extracting natural

resources, destroying biodiversity, greenhouse gas emissions, generating wastewater and solid waste, etc. The underlying problem is that if polluting is free, there are no incentives to deal with it. On the positive side, however, changes can be quick if we put incentives in the right place.

The linear model of production and consumption —popularly known as the *take, make, use and dispose* model— that was developed after World War II and accelerated from the 1970s and 80s onwards, is based on extracting raw materials and processing them into consumer goods which, sooner or later, end up as waste. In contrast to the linear model, the highest echelons of business and government (the Ellen MacArthur Foundation was created in 2010, and the 2030 Agenda and the EU Circular Economy Package were approved in 2015) are now proposing we move to a circular economy that centres on preserving the value of products, components and materials for as long as possible, representing a "new" way of conceiving the relationships between the markets, customers and natural resources.

So, how circular is our economy? According to the Circularity Gap Report [3] the world economy consumes 100 billion tonnes (100 gigatonnes) of materials annually, and only 8.6% of them have a second life after the first cycle of use. In other words, in 2021, the world economy is 91.4% linear. That's 91.4% take, make, use and dispose.

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But what is the circular economy, and what strategies does it use? The circular economy is an economic model aimed at achieving more efficient and resilient production and consumption systems that preserve resources within a continuous cycle and optimise their value. In other words, it affects the entire value chain (including consumers), considers all kinds of resources (materials, energy, water, emissions, services, information, people, land, etc.), aspires to transform the linear model of use and transition to a model with networked and circular value chains that take advantage of business opportunities arising from the new paradigm.

Getting companies to transition to a circular economy will require structural changes at various levels, as it affects their product and service strategies, production processes, supply strategy, organisational strategy, business model, etc. These present enormous challenges, not only for businesses but also for society, technology and public management. Yet, we must overcome them if we are to take advantage of the opportunities provided by the circular economy. An opportunity worth $4.5 billion [4], offering immense potential for global economic growth and capable of accelerating society toward a sustainable future. The design and development of new circular business models is taking place at the different levels of enterprise: large corporations, SMEs and entrepreneurs. A group of pioneering companies in their respective sectors are leading the adoption of eco-innovative business

concepts and managing to increase their competitiveness while simultaneously reducing their environmental impact..

However, the biggest challenge will be moving from a starting point formed by a constellation of unrelated success stories, breaking with the idea of individual enterprise and embracing the concept of a business ecosystem in which the entire value chain acts in the interest of the same goals, with cooperation as an indispensable means of progress.

Every day, millions of people make decisions on raw materials, suppliers, logistics and transportation systems, product and service design, packaging and waste management. In addition, we urgently need these millions of individual decisions made every minute of every day in business, associative, cooperative, domestic and public administration contexts to incorporate climate and environmental costs and risks. The consequences of these decisions and the complexity of the value chains have become apparent during the COVID-19 crisis, which, despite its damaging repercussions, has given us the opportunity to perform an unprecedented experiment on what happens when the world economy grinds to a halt.

One of the most interesting things we learned from the COVID-19 crisis is that when human activity is reduced, the environment recovers, and seemingly at a surprisingly fast rate. While this outcome may be predictable, the 2020 lockdown allowed us to prove it with hard data. In a way, the most challenging months of the pandemic were like an experiment that allowed us to see what would happen if we humans stopped. We have examples of improved air and water quality, reduced CO2 emissions and decreased pressure on biodiversity. The emergence of this news has led many people to link the health crisis to the environmental crisis, expressing the desire and hope that the pandemic will serve as the founding moment of a new, more sustainable era. However, if the health crisis comes and, sooner or later, goes without producing changes in between, COVID-19 will have been no more than an environmentally sterile parenthesis with a tremendous social and economic cost. If we want something positive for the planet to come out of this juncture, we must do something more than just hope; we must demand changes –and apply them– to mitigate what in Mariana Mazzucato's words [5], will follow the health and economic and environmental emergencies to become the third great crisis of capitalism.

The ephemeral environmental improvements seen during the lockdown are the mirage of a utopia that we would like to make real. We need to get there, but in an organised way, by implementing ambitious climate policies and moving towards a circular economy that conserves resources through repair, reuse or recycling, not through a pandemic. Unfortunately, it seems that in order to activate change, we humans need to feel the emergency in the form of an immediate threat to ourselves. In early 2020, we watched the health crisis unfold in China and even in neighbouring Italy as if it were something that wouldn't affect us. Something similar is happening with the environmental, resource and climate crisis. Using the term 'climate emergency' to refer to the urgent need to reduce greenhouse gas emissions has become popular in recent years, but if we compare it with the COVID-19 crisis, the vast difference between their time scales is evident. One appeared out of nowhere in a matter of weeks and will be eradicated in a matter of months or a few

years, thanks to the vaccines. By contrast, the environmental and climate crisis appeared progressively, has been worsening for decades, and there is no vaccine to solve the problem. A set of complex changes are needed at all levels, and even if now, every country in the world suddenly decided to comply with the Paris Agreement, it would still take decades to significantly reduce emissions and centuries to rebalance the CO2 concentrations in the atmosphere.

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The same goes for the pressure on biodiversity or the extraction of resources to feed the prevailing take-make-use-dispose model of consumption. We find ourselves in a difficult-to-solve prisoner's dilemma where individual action is necessary but insufficient if not accompanied by the cooperation of all agents in a collective and global change. Both situations are emergencies, but we only treat the health emergency as such because failing to take action today could affect us negatively if we get sick tomorrow. The cause and effect feel close to home, and the repercussion is individual. By contrast, not acting today to reduce emissions or biodiversity destruction and make intelligent use of resources has no obvious short-term consequences and the effects, when present, are diffuse and collective. It's a perilously perfect terrain for procrastination that prevents us from tackling the emergency while we still have time, or at the very least, attempting to mitigate its effects. It even stops us from trying to adapt to the consequences of inaction.

The 2030 Agenda as an instrument to return to circular logic

In this context, the 2030 Agenda offers a global framework, a shared vision and goals that seek to remedy, at least in part, the shortcomings of short-termism in strategic decision-making.

As a systemic transformation strategy, the circular economy is directly or indirectly related to various Sustainable Development Goals (SDGs). With SDG 12 (Sustainable Production and Consumption) as a starting point, the circular economy is also a powerful instrument for achieving SDG 13 (Climate Action). The *Circularity Gap Report* 2021 estimates that our linear economy will lead us to an average increase in temperature of between 3 and 6ºC over pre-industrial levels by the middle of the twenty-first century if we fail to implement any changes. However, the same report concludes that "only" by doubling the current material circularity, from 8.6% to 17%, would it be possible to keep the average temperature rise below 1.5ºC.

In order to consume fewer resources and keep the existing resources within the economy, we will need to introduce the aforementioned structural changes, systemic changes in terms of both production and consumption (linked to SDG 9 Industry, Innovation and Infrastructure), and the different forms of social organisation and cooperation (linked to SDG 11 Sustainable Cities and Communities).

The circular economy is a more organic and decentralised economy that emphasises relationships and does not place so much weight on nodes. An economy that generates value through both atoms and bits. In short, a regenerative economy that creates local employment. Precisely because of this, the circular economy can also be a relevant element in achieving SDG 8 (Decent Work and Economic Growth).

The processes of adaptation and transformation towards this new reality are complex problems that require leadership, coordination, and traction from the different agents involved in the economy. The changes required to accomplish the 2030 Agenda's goals will not be driven solely by the third sector, academia, legislation, private enterprise or the public sector alone. In addition, while public leadership has a critical role to play in mediating between agents, we all have a responsibility to invest in the circular economy. Thus, SDG 17 (Alliances to Achieve the Goals) stands out as the most potent instrument for coordinating and mobilising society and economic actors towards circular action. To do this, we must recognise that it is not the organisations but the people who form part of them who are really building the change.

Collaborations that make it possible for circular economy strategies to materialise within an ecosystem do not arise spontaneously or immediately. We will need to work on alliances and develop the role of the facilitator to identify opportunities and articulate cooperation between stakeholders. Above all, we will need to mitigate environmental and climate costs through taxation, because signals like these incentivise innovation and encourage the development of more efficient or sustainable solutions. Sustainable production and consumption must become the norm, the profitable and efficient way of producing and consuming. In fact, it always was, until the historical anomaly of large-scale fossil fuel usage came into play. It is important to be aware that the return to a sustainable, circular and decarbonised economy is a journey forward that learns from past strategies to reformulate and update them.

> The circular economy is a more organic, decentralised and regenerative economy that creates local employment

In the introduction, I referred to numerous elements that used to be the norm, have ceased to be so right now, but will become the norm again; this time, however, with the added benefit of twenty-first-century technology and capabilities. For example, travelling by train, local production and consumption, and the reusable packaging that was a feature of my grandparents' lives are already back on many people's political, business, and day-to-day

agendas.

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