



Sustainable development



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» **When we have defeated nature, we will find ourselves on the losing side.**

Translated quote from Konrad Lorenz, biologist and Nobel Prize winner.

» The world is changing – environmentally, socially, economically. The only uncertainties are the pace and direction of that change, and whether societies will find pathways to long-term sustainability and prosperity or instead settle for increasing volatility and accelerating decline.

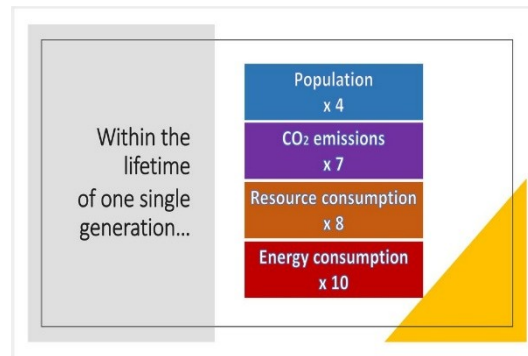
Transitions are very rarely smooth, and the sustainability transformation is perhaps the most difficult that global societies have faced. Seemingly contradictory truths and deep uncertainties must be factored into short-, medium-, and long-term plans.

Like previous transitions – the ongoing digital transformation is a good example – significant value is at risk, and enormous value can be created.

Jacco Kroon et al. 2024. Report: [Catching the wave - Seizing the opportunities of sustainability transformation](#). Executive Summary. ERM Sustainability Institute and World Business Council for Sustainable Development. PDF

We are not on a sustainable path. Within the lifetime of *one single generation* the world population, global CO₂ emissions, resource and energy consumption increased at an unprecedented rate.





Data source: Christian Berg. 2020. Online presentation of the new report to the Club of Rome - Sustainable Action. Overcoming the Barriers.

Sustainable development is hardly conceivable without

- an economic transformation inclusively moving towards a consistent circular economy,
- simultaneously cutting back on over-consumption,
- the decisive action to drastically reduce socio-economic inequalities,
- rapidly reducing CO₂ emissions and
- a fundamental change in the way we manage land.

We must move from the deeply internalized attitude of *competition* and *self-interest* to a basic attitude of *cooperation* and *common good*, if for example, we really want to curb global climate change.

Definition of Sustainability

Sustainability is a development that satisfies the needs of the present without risking that future generations will not be able to meet their own needs.

Brundtland Report - Our Common Future. World Commission on the Environment and Development, 1987

Sustainability [ecology] is a principle according to which no more can be consumed, than can respectively be regrown, regenerated, and provided again in the future.

Translated from: Duden German Dictionary

Sustainability means - concisely formulated - good life for about ten billion people within the ecological boundaries on our planet.

Translated from: Uwe Schneidewind. Book: Die Grosse Transformation - Eine Einführung in die Kunst gesellschaftlichen Wandels. 2018

Sustainability is a guiding concept to secure and foster humane living conditions for all people worldwide, in the present and future, and to facilitate restoring and preserving the environmental foundations to enable this.

Mark Lawrence. 2023. [How can I live sustainably?](#) RIFS Research Institute for Sustainability. Helmholtz Centre Potsdam.



As simple as these definitions are, it is difficult to achieve a unified, shared understanding of sustainability.

But without a common understanding of sustainability, the transformation to a more sustainable society can hardly be accomplished.

17 Sustainable Development Goals UN 2030 Agenda

Overview and explanations



» These goals answer all three design questions for good policymaking in the 21st century:

What are our needs? What are the circumstances? Which resources are key?

In detail, they are:

1. Overcome poverty
2. End hunger and ensure healthy nutrition
3. Improve health and well-being
4. Guarantee quality education
5. Guarantee gender equality
6. Guarantee clean water and sanitation
7. Provide affordable and clean energy
8. Decent work and sustainable economic growth
9. Sustainably renew industry, innovation and infrastructure
10. Reduce inequality between and within countries
11. Develop sustainable cities and communities
12. Sustainable consumption and production
13. Climate protection measures



14. Preserve life under water
15. Sustain life on land
16. Peace, justice and strong institutions
17. Partnerships to achieve the goals

Translated from: Maja Göpel. Book: Werte – Ein Kompass für die Zukunft. 2025

» Transformation means that we determine what we want to keep and preserve - and at the same time what we want to part from.

Translated from: Stefan Brunnhuber. Book: Die Kunst der Transformation – Wie wir uns anpassen und die Welt verändern. 2023

» Humanity is at a crossroads. Unbounded growth is endangering planetary support systems and increasing inequalities, the rich are getting richer and the poor even poorer. The transformation towards sustainable futures is an alternative possibility for people and the planet – a just and equitable world for all. This is exactly what the United Nations 2030 Agenda offers and is thus a great gift to humanity.

Transformation towards a sustainable future is possible but ambitious action is needed now. Six transformations are necessary to achieve the SDGs:

- Substantial advances in human capacity are needed through further improvements of education and health care.
- Responsible consumption and production cut across several of the other transformations, allowing us to do more with less.
- It is possible to decarbonize the energy system while providing clean and affordable energy for all.
- Achieving access to nutritional food and clean water for all while protecting the biosphere and the oceans requires more efficient and sustainable food systems.
- Transforming our cities will benefit the majority of the world population.
- Science, technology and innovations are a powerful driver but the direction of change needs to support sustainable development.

[The World in 2050. Transformations to Achieve the Sustainable Development Goals](#). International Institute for Applied Systems Analysis (IIASA), 2018

» In order to achieve the UN 2030 Agenda's Goals, we need to fundamentally change the way we do business and consume.

Although digitalization is hardly mentioned in the 2030 Agenda, it will greatly influence its implementation.

WBGU German Advisory Council on Global Change. Digitalization: What we need to talk about. 2018.



» Recent studies on the interactions between the Sustainable Development Goals identify the *conservation of biodiversity* as one of the most potent levers to achieve sustainability.

Swiss Academy of Sciences. [Achieving the SDGs with Biodiversity](#). 2021. PDF



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» The goals for a sustainable development are set. However, we currently do not know the conditions under which humanity can implement the measures to achieve these sustainability goals globally

Christian Berg. Book: *Sustainable Action. Overcoming the Barriers*. 2020

» The UN warned that without an improved performance by the G20, which makes up two-thirds of the world's population and is responsible for 75 per cent of global CO₂ emissions, the Agenda will fail.

A primary point of criticism is consumption behaviour on the part of rich industrialised countries.

If the estimates forecasting a rise in global population to 9.7 billion by 2050 are correct, humanity and the planet will face immense challenges. Asia's rise will certainly lead to greater energy demand, consumption, and production.

This is not a call for a backward-looking «ecological agenda», but instead for overdue reforms regarding economic modernisation, climate protection, and innovation.

Sabina Wölkner. 2030 Agenda: *The courage to achieve sustainability*. Konrad Adenauerstiftung. International Reports 3/2019.

» Sustainability is on everyone's lips, in politics, business and in private life. Everyone has an idea of what the term means and sets different priorities. The term is therefore in danger of meaning «everything and nothing».

Translated from: Agentur für Forschung. 2019. *Wahrnehmung von "Nachhaltigkeit" - Bericht zur qualitativen Studie*. Mannheim, 05. September 2019

» Greenwashing

A research project funded by the European Union (2023) revealed that more than half of the



environmental claims made regarding products and services - 53% to be exact - are either ambiguous, deceptive, or unfounded, with 40% of claims lacking evidence altogether.

Alexandra Walker and H el ene Guadin. Paint it Green: Strategies for Detecting and Combatting Greenwashing in ESG Ratings. Sustainability Institute. 2024

» **The 2030 Agenda progress report shows at the mid-term that just 12 percent of the Sustainable Development Goal (SDGs) targets are on track. Progress on 50 percent is weak and insufficient. Worst of all, we have stalled or gone into reverse on more than 30 percent of the SDGs.**

Antonio Guterres. Secretary-General's remarks to launch the Special Edition of the Sustainable Development Progress Report. 25. April 2023



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Anyone who really wants to change something cannot get around thinking about the dogma of «ALWAYS MORE».

» In the race for «more», we lose sight of the fact that «better» is a completely different objective.

Translated from: Maja G opel. Book: Werte. Ein Kompass f ur die Zukunft. 2025

» No intelligent person still believes that the existing economic system and the level of consumption of the present can be continued for another one or two generations, a thought that would have been self-evident in 1900 or 1950. This makes it clear: we are at the end of something.

Translated from: Blom Philipp. Book: Das grosse Welttheater. Von der Macht der Vorstellungskraft in Zeiten des Umbruchs. 2020

» As restrictions on consumption are not actually being pursued owing to their unwanted consequences, business and politics are focusing instead on a strategy of promises, and consumers on symbolic surrogate actions.

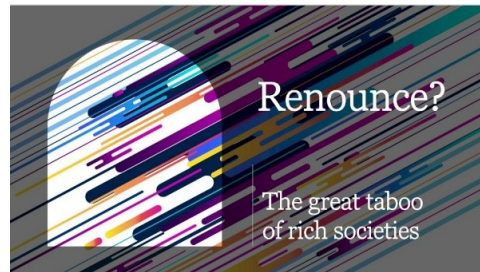
The order of the day is for example: fewer cars, fewer cruises, and smaller homes. But this will not happen. Since economic growth and consumerism are built into the DNA of the system, a politically prescribed contraction of the economy is simply not feasible.

Beckert Jens. Book: How We Sold Our Future. The Failure to Fight Climate Change. 2025



» The idea that consumption should be limited according to the needs of a planet shared in common by eight billion is, for many, especially in privileged nations, unthinkable as an individual orientation and forgettable as a political program.

Anna Katsman. Planetary Commons. The New Institute. 25.05.2024



» It is understandable that the idea of having to renounce some of the wealth you have gained causes anxiety. It helps to realise that a fulfilled life cannot be measured by the number of cruises taken or the size of your wardrobe.

Renunciation is often associated with loss, which leaves a gap *forever*. But where there are gaps, there is also space for something new.

Translated from: Silvia Liebrich. Wir müssen lernen zu verzichten. Süddeutsche Zeitung. 30. Juli 2022.

» Many people in the global North have been making the wrong comparison. They look at their current, comparatively relaxed lives of prosperity and freedom and compare them with a complex transformation that, it seems, would involve a great deal of sacrifice, change and uncertainty. The comparison is wrong because it relies on the utopia of continuing as before, which is not actually a viable alternative.

A more honest comparison would be between a society that stabilises today's exponential trends and the catastrophic social collapse that will occur if these trends *) are not stopped in time.

Translated from: Emanuel Deutschmann. Book.. Die Exponentialgesellschaft. Vom Ende des Wachstums zur Stabilisierung der Welt. 2025.

**) e.g. primary energy consumption, global economic power, world population, carbon dioxide, water consumption, fertiliser consumption, ocean acidification, plastic production, urban population, international tourism and many more.*

» We do not have to renounce happiness, well-being and justice, but excessiveness, abundance, stress and consumption decadence.

Translated from: Stefan Brunnhuber. Book: Die Kunst der Transformation. Wie wir uns anpassen und die Welt verändern. 2023

» **In rich countries, renunciation means actually nothing more and nothing less than refraining from ruining the planet and in return preserving the basis of life in the future. That's a big word, of course. Couldn't it be a little bit smaller? Unfortunately not.**

Translated from: Maja Göpel. Book: Unsere Welt neu denken. Eine Einladung. 2020

