



4. What does sustainability mean?



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Sustainability is on everyone's lips, but often only vaguely understood.

Definition

» **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.

The concept of sustainable development is a systematic extension of human rights by opening up equal development opportunities for all people on this planet and for future generations.

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

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

Without such a *common* understanding of sustainability, however, the transformation to a sustainable society can hardly be accomplished.



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...ecologically effective and socially just.

So we have to move towards a sustainable life, even if there is *no master plan* on how to achieve the transformation of our present society - with its perpetual expansion - towards sustainable development.

» The transformation towards a more sustainable development will inevitably be linked to a structural change that knows *winners* and at least temporarily also *losers*.

In this respect, in addition to the *effectiveness* and *efficiency* of environmental policies, the associated *distribution effects* must also be taken into account. Issues of justice are thus to be taken seriously as the third central measure of environmental policies in order to ensure their legitimacy and approval.

Translated from: Konrad Adenauer Stiftung Nr. 310/August 2018: Verantwortliche Umweltpolitik - ökologisch wirksam und sozial gerecht.

Sustainable business practices



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Think about what's coming in advance.

The *circular economy* is one of the expedient concepts of sustainable economic activity, but is still far too little implemented today.

In the circular economy, resource use, waste production, emissions and energy waste are minimised by closing energy and material cycles.

Products should be developed from the outset in such a way that, after use, the raw materials can be extracted and reused without any loss of quality, or fed back into the biological cycle without damaging human health or the environment.

«Only 9 % of the world economy is currently circular. Just 9 % of the 92.8 billion tonnes of material that enter the economy are re-used annually».

[The Circularity Gap Report 2019](#)

Sustainable development is hardly conceivable without a consistent circular economy. But turning away from a predominantly *linear* economy requires many political, economic and social decisions.

[Circular Economy Action Plan](#)

EU Commission 2020



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Perceive critical developments at an early stage.

The *precautionary principle* is probably one of the most effective ways of sustainably protecting our environment.

Critical developments are corrected early on, i.e. initial measures are taken at an early stage against potential critical developments.

The precautionary principle applies when scientific evidence is *insufficient* or *uncertain* and *preliminary* expert reports indicate potentially dangerous effects on the environment, human beings, animals, or plants.

The precautionary principle is becoming more and more important, since today, as far as the environment is concerned, we are likely to cause far more *new* problems than we are to solve *existing* problems.

[The precautionary principle](#)

European Parliamentary Research Service 2015

Provision and Solidarity

Among other things, for us people in the rich countries, sustainable living means,

1. Providing for the future humans on our earth.
2. Showing solidarity with other people in the world.



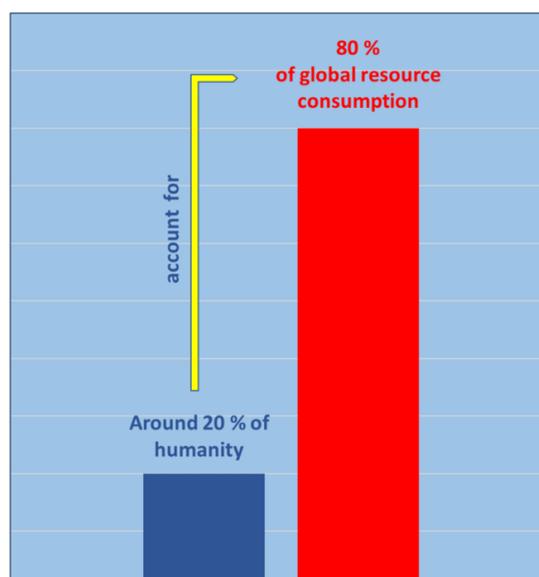
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Are we worried today? - Barely.

When it comes to action, environmental and climate protection has not yet been taken on board by the vast majority of us.

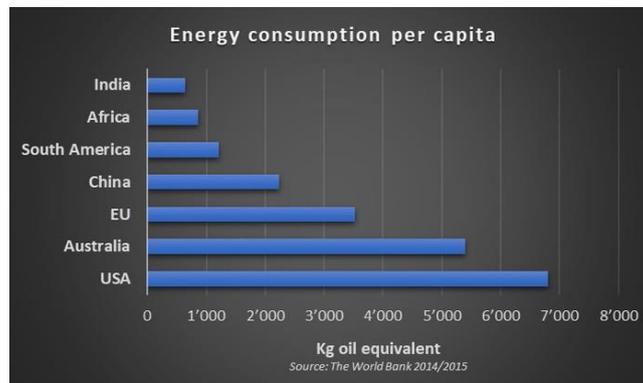
Are we in solidarity today? - Barely.

Around 20 % of the world's population, mainly in the rich countries, account for around 80 % of total global resource consumption.

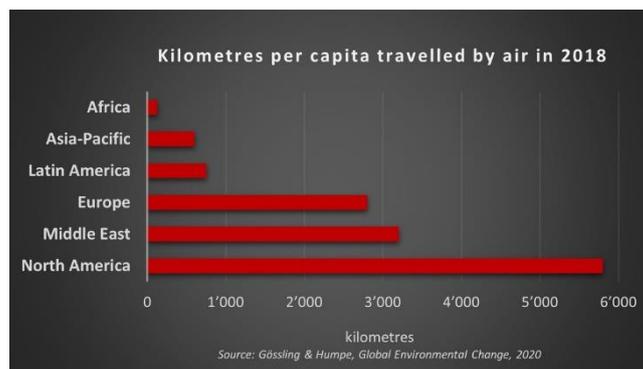


The illustration shows the magnitude, exact data are lacking.

The worldwide consumption of energy per capita shows also big differences.



The number of kilometres per capita travelled by air also varies widely around the world.



And what about greenhouse gas emissions?

» In fact, China is the single largest emitter of carbon. This is, however, largely due to goods produced in China but consumed elsewhere in the world.

If we attribute the emissions to where the consumption takes place, North Americans consume 22.5 tons of CO_{2e} per year per person, Western Europeans 13.1, Chinese 6, and South Asia just 2.2.

Overall, we get the 50–10 rule: 10 percent of the world's population [the highest polluters] contribute roughly 50 percent of CO₂ emissions, while the 50 percent who pollute the least contribute just over 10 percent.

The citizens of rich countries and, more generally, the rich worldwide, bear an overwhelming responsibility for any future climate change.

Abhijit V. Banerjee and Esther Duflo. 2019. Good Economics for Hard Times – Better Answers to Our Biggest Problems.

For example, Switzerland and its ecological footprint.

Swiss Overshoot Day 2020

On 8 May 2020, the Swiss population had already consumed more natural resources than it was entitled to for the whole of 2020.



If all the people in the world lived like we do in Switzerland, then we would need three planets as big as our Earth.

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Facts about non-sustainability

Earth Overshoot Day

This day marks the date when we - all of humanity - have used more from nature than our planet can renew in the entire year.

Earth Overshoot Day	
1970	- 29th December
1985	- 04th November
2000	- 23rd September
2019	- 29th July

Source: [Earth Overshoot Day](#)

The 8-tonne society

For a truly sustainable lifestyle Germany, for example, should reduce its resource consumption by a factor of 4 from today's approximately 30 tonnes per capita and per year to around 8 tonnes in the longer term.

This can be achieved if, on the one hand, the economy moves from a still predominantly *linear economy* to a *resource-efficient circular economy* and, on the other hand, the population reduces over-consumption.

In order to curb climate change, greenhouse gas emissions are also to be rapidly reduced in the coming years by a factor of 4 to 2 tonnes per person and year, from the current level of around 8 tonnes.

According to Uwe Schneidewind. 2018. *Die Grosse Transformation - Eine Einführung in die Kunst gesellschaftlichen Wandels*.

Calculate my own resource consumption:
www.ressourcen-rechner.de



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Within the lifetime of *one* generation...

the world population, resource and energy consumption increased at an unprecedented rate:

Population x 4
Resource consumption x 8
Energy consumption x 10

According to Christian Berg. 2020. Ist Nachhaltigkeit utopisch? - Presentation at the Münchner Forum Nachhaltigkeit.

The facts are clear,

- today we humans are clearly living at the expense of future generations,
- our descendants probably will have to pay a big price for our overuse and pollution of planet Earth, and
- at most they will have to live with severe restrictions.

Our way of life in the rich countries today is *not sustainable* and therefore no longer an option for the future people.



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Sustainability worldwide

The year 2015 - a milestone for global sustainability?

1. Pontifical Enzyklika Laudato Si

June 2015

Pope Francis proclaims his vision of the world. At the centre is the vulnerability of creation.

[Laudato Si' by Pope Francis](#) - *On Care for Our Common Home*.

2. UN Agenda 2030

September 2015

169 countries sign 17 Sustainable Development Goals to guide global policy towards sustainable development.

United Nations - Transforming our World: [The 2030 Agenda for Sustainable Development](#)

3. The Paris Climate Agreement

December 2015

196 member states of the UN Framework Convention on Climate Change agree to limit man-made global warming to well below 2°C compared to pre-industrial levels.

United Nations - [Paris Agreement](#)

Transformation of Our World - The 2030 Agenda for Sustainable Development.

The 17 Sustainable Development Goals intend to guide world politics towards a sustainable development.

This means that all states are equally challenged to solve the urgent challenges of the world together.

People should have relevant information and awareness of sustainable development by 2030 - all across the world.

17 Goals



[Agenda 2030 - Basic Law of Sustainability](#)
Konrad Adenauer Stiftung, 2019

» So, the *goals* are set. However, we currently do not know the *conditions* under which humanity can implement the measures to achieve these sustainability goals globally.

Even today, we are presumably much better at understanding the social consequences of climate change than the social conditions for limiting it.

Christian Berg, 2020. Sustainable Action. Overcoming the Barriers.

Sustainable development is more than environmental and climate protection. Sustainable development sees the *environment*, the *economy* and *social issues* as equally important and interlinked.



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» **The ideal of a world in which everyone can prosper without doing so at the expense of others, at the expense of nature or at the expense of the future, this ideal - for me the core idea of sustainability - is needed more than ever.**

Christian Berg. 2020. Sustainable Action. Overcoming the Barriers.

The question is not *how*?
The question is, *when* do we start to live sustainably?