What to do now?

© Billion Photos | Shutterstock, Inc. [US] 2023

The challenge we face is that we do not do what obviously should be done – urgently.

We should *now* take bold and ambitious measures to protect and preserve our livelihoods, while keeping a cool head. We need prudent policies without ideologies, false optimism, empty promises and without particular interests of a few.

Stop global greenhouse gas emissions

© J.M. Image Factory | Shutterstock, Inc. [US] 2024

A successful climate policy will only succeed if climate change mitigation *and* adaptation to climate change take place *simultaneously* and rapidly.

» Climate change should be of concern to *all*, who care about health, who care about economic stability and investment value and who care about intergenerational justice - which should be *every one of us*.

Christiana Figueres and Tom Rivett-Carnac. 2020. The Future We Choose - Surviving the Climate Crisis.

Redesign food system

© Feel good studio + © Fotokostic | Shutterstock, Inc. [US] 2023

» Only if there is a fundamental change in the way we manage land can we reach the targets of climate-change mitigation, avert the dramatic loss of biodiversity and make the global food system sustainable.

German Advisory Council on Global Change WBGU. 2020. Rethinking Land in the Anthropocene: from Separation to Integration. PDF

It therefore applies:

Change dietary

Global dietary patterns need to converge around diets based more on plants.

Setting aside land for biodiversity

More land needs to be protected and set aside for nature. It is the most effective way of preserving biodiversity.

Adapting the way we farm the land

We need to farm in a more nature-friendly, biodiversity-supporting way.

Tim G. Benton etal. Food system impacts on biodiversity loss. Three levers for food system transformation in support of nature. 2021. PDF.

Reduce overconsumption by wealthy people

© Jenny Sturm + © puhhha + © Dariusz Jarzabek | Shutterstock, Inc. [US] 2018

Powerful status symbols have always determined our consumer behaviour and have a big impact on environment and climate.

Large living space

It used to be the pompous castles of a few, then the spacious villas of some, the homes of many, and today the large apartments of most wealthy people.

In Switzerland, for example, each inhabitant occupies an average of 42 square metres of living space - twice as much as in 1965.

The construction of these residential buildings means a large consumption of resources and entails a large increase in energy consumption in heating in winter and cooling in summer and a large subsequent consumption, such as the purchase of furniture and many additional home furnishings.

« According to the Federal Statistical Office, the average German household now owns 10,000 items. 100 years ago, the figure was 180.

Translated from: Theresa Hein. Wann sind wir zu dem geworden, was wir haben? Süddeutsche Zeitung. 07.03.2024.

« Worldwide, construction accounts for one third of CO_2 emissions, 40 percent of final energy demand and 50 percent of material consumption.

Translated from: Interview von Christine Mattauch mit Lamia Messari-Becker. Ökologisches Wohnen darf kein Eliteprojekt bleiben. Süddeutsche Zeitung. 23. April 2022.

© Thomas Soellner | Shutterstock, Inc. [US] 2018

Big car

In the past, it was the pompous coaches of a few, then the Rolls-Royce of some, the Chevrolet of many, and today the ever-bigger car of almost all people. Since 1980, the average weight of a car has doubled.

Large consumption of meat

First, it was the feasting in the palaces of a few - in Europe 200 years ago over 90% of all people generally had no meat to eat - then frequent food in restaurants for the many, and today, almost all people eat meat daily.

« The production of meat and dairy products already takes up more than 70 per cent of global agricultural land, although it only covers 18 per cent of humanity's calorie needs.

Poore et al., Reducing food's environmental impacts through producers and consumers. Science 360, 987-992 (2018)

Align economy sustainably

© Quick Shot | Shutterstock, Inc. [US] 2018

« Given the existential threat of climate change, severe weather events, rising sea levels, loss of biodiversity, resource depletion and increasing economic inequality, we are reminded of the importance of developing a sustainable economy that balances economic issues with social and environmental responsibility.

The transition towards a more sustainable economy is a complex process, which needs disruptive innovations in many sectors and collaboration across disciplines as well as insights from practitioners, politicians and engagement with citizens.

Sustainability requires a transition towards a society and economy that are less vulnerable and more resilient in the long term.

Swiss National Science Foundation. 73 NRP. Sustainable Economy. 2023

« Getting humanity back within a safe operating space in this century may be complex and monumental, but like many other complex and monumental undertakings, it can be set in motion by a handful of well-chosen levers, by groups of committed people.

Those levers are in plain sight and waiting to be pulled. And they all reside in one sector: *the economy*. Key among them:

Creation of Citizens Funds
to distribute the wealth of the global commons fairly to all citizens.

Government intervention
(subsidies, incentives, and regulations) to accelerate the turnarounds**.**

Transformation of the international financial system
to facilitate rapid poverty alleviation in Most of the World.

De-risking investments
in low-income countries and cancel debt.

Investment
in efficient, regenerative food and renewable energy systems.

Dixson-Declève S. et.al. Earth for All. A Survival Guide for Humanity. Summary. 2022. PDF

Implement circular economy

» Waste generation is rising globally. People and businesses in the European Union alone produce more than 2 billion tonnes of waste per year, or 4.8 tonnes per capita.

Yet today, less than 10% of global economic activity is circular.

The circular economy aims to fix this by eliminating waste altogether. This can be achieved by extending the life and use of resources, materials and products, by rethinking and redesigning products and business processes.

Circular economy interventions can also halt global biodiversity loss and help the world's biodiversity recover by 2035 to the same levels as in 2000.

Circular Economy Overview 2023. European Investment Bank. PDF

Reshaping finance sector

© Andrii Vodolazhskyi | Shutterstock, Inc. [US] 2023

« Clearly, the financial sector alone cannot solve the problem of climate change. It is not the role of the financial institutes to internalise the externalities of the real economy.

However, the financial sector can play a very important role as enabler, facilitator and steering act or in the transition to net zero. Channelling financial flows into the most sustainable practices with the lowest externalities plays a key role in the transition of the real economy.

Reiser M. and Müller Ch. Whitepaper - Climate Metrics: Do they really enable positive impact? INFRAS and inrate, January 2026

« Six major shifts in the finance sector can drastically transform how investments are scaled and allocated for a sustainably future.

If these transformations are achieved together, it will enable the fundamental changes needed for the planet and people to thrive.

Measure, disclose and manage climate- and nature-related financial risks.
Accurate disclosures are needed to allow financial institutions and governments to deploy capital efficiently and monitor and manage risks.

Scale up public finance for climate and nature.
The public sector can play a significant role in the protection of climate and nature by investing directly in climate initiatives and steering private markets.

Scale up private finance for climate and nature.
Meeting climate and nature goals also depends on the participation of the private sector.

Extend economic and financial inclusion to underserved and marginalized groups.
Our current economic and financial system have failed to be inclusive in sharing economic

prosperity, resulting in historical inequities that have been perpetuated and sometimes worsened, further marginalizing already underserved groups.

Price greenhouse gas emissions and other environmental externalities.
One of the largest challenges to shifting investments to a more sustainable future is the lack of accounting for the negative external costs generated by the fossil-fuel industry and other high polluters that get passed into society.

Eliminate harmful subsidies and financing.
The public sector continues to provide significant financing and investment to fossil fuel industry via subsidies, financing from development finance institutions and fossil fuel investment from state-owned companies.

Anderson Lee. 6 Shifts the finance system can make to build a sustainable future. World Resource Institute. 03.06.2023

» In stark contrast to the trickle of climate finance, fossil fuel subsidies have surged in recent years. In 2022, total spending on subsidies for oil, natural gas and coal reached a record $7 trillion [according to IMF]. That's $2 trillion more than in 2020.

Chelsea Harvey and Zia Weise. The state of the planet in 10 numbers. Politico.eu. November 20, 2023

Place digitalization at the service of global sustainability

© Mopic | Shutterstock, Inc. [US] 2018

» We have various stages of industrialisation: mechanisation, electrification, computerisation and now we are in the digitalisation stage. The fifth stage is the ecologisation and the personalisation of our systems - and we need to get to this Industry 5.0 quickly.

It will not work without an economic transformation. We will move from *efficiency* to *sufficiency* and ask ourselves what and how much needs to be digitalised in order to develop a balanced life for people.

Translated from: Ivona Brandić, Professor for High Performance Computing Systems at TU Wien. Warum KI beim Thema Nachhaltigkeit nachsitzen muss. Profil 25. März 2025

» 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 Counsil on Global Change. Digitalization: What we need to talk about. 2018. PDF

» The enormous scope for shaping digitalisation as a formative force must be at the service of sustainable development, as the most pressing design task of the 21st century.

Wuppertal Institute (2021): Shaping Digital Transformation - Digital solution systems for the transition to sustainability: Study within the project «Shaping the Digital Transformation».

Overhaul of education

© wavebreakmedia | Shutterstock, Inc. [US] 2018

» A mindset based on nineteenth-century reductionist and linear causal relationships, as if the best way to build knowledge is to assume the world is like a machine that can be understood from the parts, is a big part of the problem.

The overhaul of education everywhere should build on two foundations: *critical thinking and complex systems thinking*. Arguably the biggest challenge in the world today is not climate change, biodiversity loss, or even pandemic. It is our collective inability to tell fact from fiction.

Most real-world systems are complex dynamic systems, whether ocean and climate or urbanization and stock markets. So, an education system that largely ignores these bedrock features until university is obsolete.

Dixson-Declève S. et.al. 2022. Earth for All. A Survival Guide for Humanity. A Report to the Club of Rome.

» The development of algorithms will be taken over by artificial intelligence. Our training should, therefore, be focussed on what is specifically human:

Social intelligence, creativity, unorthodox thinking, empathy, decision making in complex situations, interdisciplinary skills, moral and ethical questions and the resulting normative implications.

Theodor H. Winkler. Book: Living in an Unruly World – The Challenge We Face. 2019