The climate protection fallacy

ENGLISH PRACTICE – There is no doubt that we are experiencing climate change. For us, this is new. Not for our planet. Likewise, **one global challenge and crisis follows the next.** Our world has become a VUCA world – we have Volatility, Uncertainty, Complexity and Ambiguity.

Valletta – Many people - including politicians and political parties – believe radical ideas are now needed to turn the tide. Otherwise, the world would end. The motto is a complete turnaround, a complete rethink. From globalisation to deglobalisation, combustion engine to the electric car, climate-damaging emissions to zero emissions. In and out. We want to get back into coal power and out of nuclear energy – or was it the other way around?

In all this, hardly anyone considers what happens when we panic and turn the wheel.

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Panic in society as a whole

If you turn the tide, you may solve a problem quickly, but often it creates lots of new problems. Every action has consequences, complex ones in the case of significant issues. Science then speaks of "second- and third-order effects". They are what makes it so difficult for us to assess things correctly.

First-order effects are the immediate results and effects of a decision. Second-order effects are the longer-term effects. Third-order effects often show up later and in a completely different way than expected. They are rarely predictable at first glance.

The real-world complexity is similar to the phenomenon of the butterfly effect, named after the 1972 speech by US scientist Edward Lorenz (1917–2008), titled: "Does the flap of a butterfly's wings in Brazil set off a tornado in Texas?" And therein lurks the danger. Those who determine in a rush to the first option, underestimate the second and, even more so, the third-order effects. Prejudices, blinkers and too little reflection also lead to wrong decisions.

And then everything came differently

Things have often turned out differently than expected. For example, many European countries relied inherently on Russian gas and planned the next 50 years with it. Germany was 55 percent dependent, Austria 90 percent. But the Russian war of aggression on Ukraine of February 2022 destroyed these plans within a few days.

> **Even with innovations, the second- and third-order effects are rarely considered holistically.**

Or consider the Club of Rome's infamous 1972 report "The Limits to Growth": "If the world's population continues to grow at this rate, humanity will soon have used up all natural resources, from oil to metals and minerals. Copper would be exhausted in 2008 if the Chinese also got telephone connections."

As the US economist Julian Simon asserted as early as 1981 in his book "The Ultimate Resource", the Club of Rome's theories were wrong on almost every point. We have never run out of resources; more have been found, some have quadrupled, without becoming more expensive in real terms.

Even air pollution soon declined – the top six air pollutants by more than two-thirds between 1980 and 2014, according to the US Environmental Protection Agency (EPA).

After the warnings of forest dieback in the 1970s and 1980s, many feared that acid rain would turn European forests into chemical deserts. However, this did not happen – partly because pollution levels declined and the warnings were exaggerated. Even deforestation came to a halt in the wealthy countries. The forest area in Europe grew a little between 1990 and 2015.

Many forecasts underestimate human creativity, the potential of technological change, the more efficient use of resources and the discovery of new deposits and substitutes. The dependence on copper decreased due to alternative materials – we increasingly make phone calls via fibre optics and radio signals. The doomsayers seem to assume that there is no progress fundamentally.

But people find solutions. By their very nature, intelligent, sustainable solutions to problems require broader thinking and time. Sometimes it is better to take small steps than to turn the tide. That way, mistakes can be corrected before the damage is too significant.

Away from climate protection, towards human protection

Indeed, our disrespectful treatment of nature has accelerated climate change. But it is not solely the work of humans. For this reason alone, the idea that humanity can protect the climate is abstruse. From whom? From us humans? No human being can prevent natural disasters or the next ice age. The forces of nature do that all by themselves.

Therefore, moving away from "climate protection" and protecting people from climate change would make sense. We don't know how exactly the climate will develop in 30 years.

Forecasts, as mentioned before, are complicated - we can't even accurately predict the evening's stock prices in the morning. So how could that be possible for decades, given the complexity of the climate?

But we are experiencing irresponsible panic about a future scenario that no one is betting their lives on happening. Even if our planet were to experience persistent global warming, as it has since time immemorial, it would make much more sense to look now at how we can best protect humanity. Where and how do we live and build? What will agriculture look like? And we should not pretend that CO_2 is the main problem.

First, empower poorer countries to protect the environment

Yes, we must finally cut back, help to reduce our emissions and pollutants, use significantly fewer resources and energy, and not put an undue burden on nature.

But we should not forget that only about six percent of the world's population lives in the EU countries – so our leverage effect is small. China, the world's largest greenhouse gas emitter, is building new coal-fired power plants. How are we going to counterbalance that?

However, the situation in poorer countries is getting worse. That is why we should first help them to be able to afford modern ecological technologies. Because whatever we do in terms of climate protection, the majority of the world will not support it without help.

As Indian Prime Minister Indira Gandhi already stated in her brilliant speech in 1972 at the first global conference on the environment in Stockholm: "Are not poverty and need the greatest polluters? The environment cannot be improved in conditions of poverty."

It would therefore make sense to take measures that save resources and energy and reduce the excessive emissions of our luxury society. It would be wise, for example, to abolish cruises, the luxury class of all cars and private jets, and to limit flights to a moderate level.

And since concrete production is known to be a climate killer: why don't we erect timelessly beautiful, more sustainable buildings and preserve them for the long term instead of tearing them down again after a few decades?

But we are not doing any of that. Instead, we switch to electric cars, whose electricity only seems to come from the socket and whose ecological balance sheet is bad. Climate protectionists are incredibly reluctant to talk about the production and disposal of batteries.

However, we are becoming fixated on a single concept and politically blocking the development of other technologies.

Highly heated digitalisation

We also need to talk about digitalisation's gigantic and rapidly increasing energy consumption. The worldwide electricity consumption for streaming feature films, YouTube videos, TV and music alone is around 200 billion kilowatt hours per year. That is roughly equivalent to the combined electricity consumption of all private households in Germany, Italy and Poland. Blockchain technology for cryptocurrencies or artificial intelligence also consumes excessive electricity and water to cool the data centres. For example, each ChatGPT conversation alone "swallows" half a litre of water.

In 2020, almost ten percent of the world's electricity consumption was used to produce and operate digital devices. By 2030, this is expected to increase by up to 80 percent, possibly even doubling within 15 years.

We could save much of this if we did not expand the modern media ever more unbridled.

Instead of considering how we can reduce CO_2 locally in the short term, we would be better off tackling the main problem: waste. Nowhere did nature ever have the idea of residual waste. Instead, everything in nature is a cycle. Nothing remains useless or worthless. Nature has always recycled wisely. If we were to adapt this concept and design all systems in cycles, no CO_2 would be produced as "waste" but would remain in a process.

But we only look at the CO_2 as just one symptom of many. We think that if we turn this screw, everything will be better. But that is a mistake. It's the other way around: if we live in cycles in the spirit of nature, the CO_2 problem becomes superfluous.

We should take nature's concepts as a model so that the many adverse effects do not arise in the first place.

It should alarm us that we already consume an average of five grams of microplastic, the weight of a credit card, per week with our food alone. In the meantime, the Medical University of Vienna has proven that these tiny micro- and nano-plastic particles even cross the blood-brain barrier and enter the brain.

There would be countless sensible ideas: We don't have to have twelve fashion collections a year, products don't have to be packaged several times for exaggerated hygiene reasons and much more. But we produce rubbish without end.

Thinking through innovations better

Even with innovations, the second- and third-order effects are rarely considered holistically. For example, although LEDs consume up to 90 percent less electricity, their production and disposal are much more problematic than that of the old incandescent lamps, which consisted only of glass and little metal. Moreover, LED luminaires rarely last the promised 30,000 hours because their ballasts often break down far earlier and cannot be repaired.

And their components – from plastics to electronics to rare earth, the mining of which is associated with significant environmental damage – de facto end up in the residual waste because proper recycling is too expensive. In addition, there is the rebound effect: because LEDs are economical, consumers use many more lamps than before.

Learning from nature

Whether electric cars or LEDs: the second- and third-order effects were not intended in this way, although they could have been foreseen with proper thought.

This does not happen to nature. Humans should fit into nature's cycles. As soon as we have built all our systems on the idea of recycling, we will no longer have to worry about man-made CO_2. We will not be able to avoid taking the principle of sustainability seriously: "As much as necessary and as little as possible."

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