

Global cooperation is essential to slowing climate change, futurist Gerd Leonhard reveals

The Swiss thinker says political unity is vital for achieving a zero-waste future

•



It hasn't been a good month for humanity. Four weeks ago, the UN Intergovernmental Panel on Climate Change (IPCC) released a widely publicized report detailing how the planet is on course to reach the crucial threshold of 1.5° C of warming as early as 2030—or, in other words, 12 years' time. If we don't transform our behaviour, extreme droughts, wildfires, floods, and food shortages—not to mention enormous displacement of populations—will become the norm in our lifetime.

That future, however, is not a foregone conclusion. Different strategies are

being explored by cities across the world, with green centres like Copenhagen, Amsterdam, and Reykjavík each running pilot projects to discover the best methods to reduce their ecological impact. One of the simplest and most cost-effective of these is the zero-waste initiative, and implementing what is known as a circular economy.

The language around the concept turns many people off, but the circular economy is an easy-to-understand idea, and one that experts suggest is fast becoming an ethical and ecological necessity. The system attempts to keep resources in service for as long as possible by designing products with materials that can be reused—a method at odds with our current process, where things are made, used, and disposed of. In order to build these creations and to power our day-to-day lives, the energy must come from renewable sources.

For Gerd Leonhard, a professional speaker who forecasts how technology will impact humanity, implementing a circular economy shouldn't be something that limits consumption but, rather, offers exciting opportunities for innovation. The Zurich-based thinker, who will be providing a keynote speech this week at the Metro Vancouver—run Zero Waste Conference—a government-supported annual event that boosts the city's image as one of the world's greenest hubs—sees the development of new technologies as an important step toward environmental sustainability.

“We have a vast potential to solve many of the current issues,” he tells the *Georgia Straight* on the line from his home in Switzerland. “In the next 15 to 20 years, we could cover 100 percent of our energy needs through solar and wind, because the science is there. We can reach a point where desalination of water becomes cheaper than using water that we have now. That's also in the cards, and every week there's news on that....The same thing with food, where we can use vertical farming: farming in a high-rise. Right now it's too expensive and takes too much energy, but you can see that a high-rise of 30 floors, fully automated, could feed a whole town of 100,000 people. And with artificial meat. Richard Branson invested in

that, in a company called Memphis Meat....Then, in 10 years, we're going to be able to make mobile phones and computers without using the minerals from mines like cobalt, because we'll have nanotechnology. We'll be able to substitute for those materials."

Even five years ago, the importance of switching to a greener system was outweighed by the expense of the technology. Plastics, for instance—one of the most abundant materials in manufacturing—have previously been cheap to create. Made using derivatives of fossil fuels (primarily crude oil and natural gas), plastics are a component in everything from basketballs to fabrics, with few items being fully recyclable. In the near future, Leonhard says, innovations in material design combined with the increasing difficulty of obtaining oil will finally make it cheaper to create cleaner products.

"Previously, one of the key problems with all of this is that we were saying 'We should be doing this because it's better; it's ethical,' " he says. "But now we have a business case. Studies say that there's going to be \$72 trillion of damage from climate change in the next 30 years or so. Soon it will be cheaper to develop and buy the tech, so it makes sense. It makes money. It will also take money, but it's much more sensible than 20 years ago, when we were talking about the end of oil as a philosophical debate. Now all the oil companies are getting out, because it's the end of oil in terms of profitability."

There are, however, some caveats to Leonhard's optimism. In order to implement a true circular economy and close the loop on externalities—the greenhouse gases and toxic chemicals released by creating unsustainable products—as well as offer solutions to the populations most affected by climate change, the world must undergo some cultural shifts. In his view, it's impossible to reconcile the West's current philosophies with the actions necessary to clean up the planet and keep vulnerable people alive.

Although new technologies might be profitable, he says, "What they will do is mean the end of the capitalist market. You cannot invest in a technology for desalination and not make it publicly available. We're talking about a

human asset here. If we sell these things like we sell Netflix, there will be a huge disparity in the developing countries—more than we have now, even. The solution can't just be an open market and saying that things will become cheaper because people are buying it. There's not enough time for that. This will be like the pharma companies. Their medication has a seven-year time frame before it can be copied for cheap. That's what I call postcapitalism. It's the realization that if we don't switch to a 'people, planet, prosperity' paradigm, we will implode.”

Making the transition to a zero-waste future, it will take global political cooperation, Leonhard believes. While discussing the importance of businesses adopting a triple bottom line—measuring their success by social and environmental gains as well as financial profit—and governments supporting trade and stock markets that use these principles, he suggests that a lack of political will is the primary reason that climate change continues at an alarming rate.

“Every single politician needs to take a position on these two issues—digital ethics [creating technology for good rather than profit] and the circular economy,” he says. “If they don't, then nobody should even consider them. I call this a driver's licence for the future.”

In his Vancouver speech, Leonhard will suggest to the audience that a circular economy doesn't just stop at reusing materials and switching to clean energy. Rather, it's part of a larger conversation about automation, wealth distribution, and social equality.

“Human nature is that we only respond to something once we have created a big problem,” he continues. “We responded to nuclear capabilities after we dropped two atomic bombs. Now we're responding because there have been some very hot summers. We need to learn out of small problems, not big ones. We need to learn that we have to make everything sustainable.”

The Zero Waste Conference is at the Vancouver Convention Centre West on Thursday and Friday (November 8 and 9).

Follow Kate Wilson on Twitter [@KateWilsonSays](https://twitter.com/KateWilsonSays)