

More is better

THE MORNING SHOWER, GENERALLY AT HALF PAST six, is one of my favorite moments of the day. It always has been.

Yet the shower is a wonderful example of the excesses of the modern Western lifestyle. Despite water-saving showerheads, we rinse billions of gallons of clean water into the sewers every day while thousands are dying for lack of safe drinking water. On the face of it, my daily shower doesn't seem like a contribution to a more sustainable world.

During my morning shower, however, I undoubtedly enjoy my most creative moments of the day. With the falling water comes a flow of ideas and insights. Most of my plans are born in the shower. I think my contribution to a better world would have been diminished if I had spent less time under the shower. I would have wasted less water, yet left a smaller legacy. My conclusion: When it comes to my contribution to a better world, I had better keep showering.

The usual discussion about sustainability is like my shower dilemma. Too often we confuse sustainable growth with less growth. We are supposed to stay put because the supply of natural resources is finite or because there are already too many people on the planet. We still hear the echoes of the "limits to growth" message of the Club of Rome. But if we tiptoe around hoping Mother Earth won't notice us, we will not succeed. Climate change is the great challenge of our time. Such a challenge leaves no room for a pussyfooting approach but requires all our creativity and energy. Simultaneously, the quest for sustainability is a tremendous opportunity. The road to sustainability is the modern version of the Industrial Revolution and provides generations to come with opportunities to do meaningful work and re-organize societies. We have to maximize these opportunities. To do that, we need to abandon the defensive approach and embrace a new vision based on two core elements that are far too often overlooked: people and economic growth. We want to create a sustainable world for people—all people—so alleviating poverty has to play an integral role. We live for each other and with the planet, not for the planet. To achieve that, we need a lot of the very best we can do together: innovation, followed by economic growth and the creation of jobs.

It is a misconception that economic growth and sustainability are mutually exclusive. Nature is characterized by continuous abundant growth. I can't tell the orange tree in our garden to take it easy next season. But that is the message that citizens and businesses get all the time: *You need to reduce your CO₂ emissions*

and your ecological footprint. Those are fine objectives, but we must reach them through innovation and progress and with the enthusiasm with which we have embraced the Internet and mobile phones—not by retreating for fear of using up our resources.

Don't get me wrong. This is not a plea to maximize oil consumption. The question is: How do we grow our economies? We can already do a lot more with clean energy than we do, and governments have the tools to promote that. Germany has the highest percentage of solar panels in the world. And that's not because that Northern European country captures the most sunshine. It is very simple: If we put limits on growth, even if not in our laws but in our minds, we will have fewer solar panels—and fewer overall climate solutions.

Yes, we are running out of the fossil fuels as we know them. But the atoms (carbon and hydrogen) from which they are made continue to be available, and we will find new ways for these atoms to react with each other to produce energy. A sustainable hydrogen economy uses wind and sun to fuel the reaction of hydrogen and oxygen and generate energy in the form of electricity). No carbon or CO₂ emissions are involved. We already see the silver lining of the clean energy revolution. In 1800, carbon atoms (especially wood) were responsible for 90 percent of the combustion that generated energy. In 1935, the ratio of hydrogen to carbon was 50:50. On our way to the hydrogen economy, this tide is turning further in favor of hydrogen.

Transforming energy and related distribution systems provides tremendous opportunities for continued economic growth toward a cleaner and more prosperous world as it generates opportunities for more and more people. No company has used the opportunity of the Internet better than Google. Somewhere in the not-too-distant future, a new Google will emerge, an energy company or system that will change the world even more radically. Although the Internet is growing exponentially, billions of people still are not part of the digital revolution. But even the poorest inhabitant of the planet needs energy every day. It is hard to imagine how big the market for clean energy is and how much the pioneers of this surging energy revolution will be rewarded.

The problem is this: In almost all scenarios, clean and renewable energy advances one percentage point at a time, thus the Earth keeps getting warmer. However these scenarios are always based on known facts, but—as history shows—it is the unknown that will revolutionize the world. The horse and buggy was not replaced one percentage point at time by the car. And the advances

of television, Internet and mobile phones were never gradual. You do not have to be a prophet to predict that the clean energy revolution will surprise the world in the same way. Not decades but years from now, a coal-fired energy plant will prove hopelessly old-fashioned, much like the computer that 40 years ago occupied the entire basement of an office building. If we take history as our guide, we can rest assured that emerging energy solutions will thrash all these threatening scenarios. On one condition: We have to embrace the new sustainability enthusiastically and with dedication; we should steer the process of change and growth, but we should never disrupt or delay it.

In pursuit of the new sustainability, we sometimes have to dare to take longer showers. This might mean we accept that China builds more CO₂-spewing coal plants, simply because China—and India, and Brazil and all other developing countries—will first need more wealth. Wealth drives the economic dynamism from which solutions emerge. We cannot expect people engaged in a daily struggle for survival to be leaders in the field of renewable energy. But where poverty is overcome, opportunities emerge. Thanks to China's coal-fired plants, we are witnessing a wealth explosion in that country, and because of that wealth, China is already a leader when it comes to sustainability initiatives. In other words, thanks to its coal-fired plants, China will in the near future build the clean electric cars the world needs. To achieve this, we must accelerate, not brake.

That presents us with a challenge. We already have to deal with the consequences of climate change in the form of extreme weather conditions. Therefore, on the road to a sustainable economy we also need to use a new strategy: adaptation. Adaptation means that we adapt to climate change—by building new dykes or new irrigation systems, for example. Adaptation is not a substitute for the ultimate solution, but it is an effective strategy communities can use to lend resilience to the adverse effects of climate change in the short term.

Resilience is a magic word. Thriving societies demand agility and innovation. "Change is inevitable," said Andrés Edwards, author of *Thriving Beyond Sustainability: Pathways To A Resilient Society* (New Society, 2010), in a recent issue of *Ode*. "Change is inevitable," he says. "In the case of sustainability, you ask, 'How do I get by? How do I survive?' In the case of resilience you ask, 'How can I thrive?' Let's really look at how we can adapt our systems to achieve resilience."

The Australian inventor and entrepreneur Jay Harman shows it is possible to use jet engines ingeniously to mix air layers in the upper atmosphere where heat is now trapped. This is not a sustainable solution but a promising intermediate answer. Harman illustrates a fact that we tend to forget in the heat of battle: that we are the best problem solvers and troubleshooters evolution has produced. Even in the most monotonous housing developments in suburban areas where practically everything is the same, you find unique solutions in every garden and on every facade. We have no choice. It is just who we are. You can buy "apps" for mobile phones that solve problems you never knew existed.

The British biologist Matt Ridley illustrates this point in *The Rational Optimist: How Prosperity Evolves* (Harper, 2010). Characterizing the human race as a "collective problem-solving machine," he notes that the chimpanzee is closest to the human being from a genetic perspective. Yet chimpanzees have lived practically the same lives for 32,000 years. During the same period, the human experience has changed beyond recognition. That is because people pioneer and adapt and continue to seize new op-

portunities. The challenge of climate change invites us to continue on the same optimistic journey that has carried humankind along from being cave dwellers to being moon travelers.

The mantra of humanity is this: The more people, the more creativity, the more innovation and the more new solutions. Therefore, alleviating poverty is a key element of the new sustainability. The author of *The Ecology of Commerce and Natural Capitalism*, Paul Hawken, says, "We need to address sustainability in a Wider Sense. It is not only about humans and their environment. It's also about the social fabric of our world and the painful divide between the rich and the poor."

The current narrow view of sustainability means that the uncertain future of the polar bear seems to stand higher on the priority list than the dramatic infant mortality plaguing the global community as it has for decades. Every four seconds somewhere in the world, a child dies of hunger or disease: preventable causes. And there is a direct correlation between the dominant economic policy of the West and the ongoing flow of painful, unnecessary deaths that is still far too often ignored.

But these children will soon be further affected by the impact of climate change, so we must focus on preventing global warming, according to the common argument. Apart from the fact that this is harsh, inhumane reasoning, it is the wrong choice. We need these children and their future prosperity because they will work with our children to solve the problems humankind faces. Poor, malnourished African children are not problems; they are—like us—opportunities, instruments for new solutions. An economic policy aimed at increasing wealth for the poorest is therefore a key element of a successful sustainable strategy.

The recently deceased Indian management guru C.K. Prahalad argues in his book *The Fortune at the Bottom of the Pyramid: Eradicate Poverty through Profits* (Wharton School, 2004) that Western companies should no longer look at the 4 billion poor people in the world as victims but should see them as consumers. A policy focused on turning the poor into consumers not only generates revenue for multinational corporations; it is the most effective model for alleviating poverty. Examples abound. Mobile phone sales are rising faster in Bangladesh and Kenya than in the almost-saturated Western markets, and these phones help farmers bypass middlemen and get more money for their crops. In India, Procter & Gamble and Hindustan Lever (Unilever) make more than 60 percent of their shampoo and detergent sales with single use packages sold to "poor" households with no space for boxes and bottles.

The world needs more wealth to respond effectively to climate change. This is not a paradox but a logical next step in the development of the human potential—a process that has been going on for hundreds of thousands of years. A dynamic, vibrant, innovative and, above all, humane economy is the best response to any challenge to humanity and the planet. Every individual can make a contribution. Inspired by the always-abundant blossom in our orange tree, I opted for more, not less. I'm looking for solutions that make the world more beautiful and cleaner and more just and richer... and I know that generations before me have always found these solutions.

In a recent interview about climate change and the importance of sustainability, TNT CEO Peter Bakker asked the question: "If it was five minutes to midnight when Al Gore launched his film [in 2006], what time is it now?" My answer to Bakker: It's half past six in the morning, I'm taking a shower, and it is going to be a fantastic day. ■