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Why waiting for climate consensus could waste your future

The role of sustainability policy in advancing national self-interest

Economic and political realities have long made the prospect of sweeping international accords a fragile basket in which to hold all our hopes. But while the latest round of climate talks in Cancun were regarded as a modest success, a new and more powerful strategy is emerging. It is one that recognises the potential for governments to advance the global good by doing what is best for their own long-term competitiveness.

At Global Footprint Network, we ask government leaders to ask themselves a simple question: What is the best direction you can take to secure your own long-term stability and security in a time of increasing resource constraints? If leaders and their administrations truly understood the underlying resource dynamics, they would see the importance of acting quickly and aggressively, regardless of what their global neighbours are doing.

The coming crunch

Skeptics would contest: How can it be in any city or country's interest to address a problem whose costs are born by all humanity?

Climate change, first and foremost, is a consequence of the high use of fossil fuel. Even though climate change is a global problem, the fossil fuel dependence that contributes to it carries growing economic risks for the emitting country. Working our way out of this addiction takes time, and the longer we wait to radically rethink and retool our societies, the less chance we will have to alter course.

And there is another important piece of the picture beyond fossil fuel. Climate change is not an issue in isolation, but rather, a symptom of a broader challenge: humanity's systematic overuse of the planet's finite resources.

Our natural systems can only generate a finite amount of raw materials (fish, trees, crops, etc.) and absorb a finite amount of waste (such as carbon dioxide emissions). Global Footprint Network quantifies this rate of output by measuring biocapacity – nature’s ability to renew resources and provide ecological services. Biocapacity is as measurable as GDP – and, ultimately, far more significant, as access to basic living resources underlies every economic activity a society can undertake.

Up until now, we have treated biocapacity as an essentially limitless flow, to the point that our demand for nature’s services now outstrips biocapacity by 50 per cent, according to Global Footprint Network’s latest research. This means it takes a year and six months to produce all the resources and absorb all the CO₂ demanded by human activities in one year. In many individual nations, of course, the level of demand is much larger, and exceeds by a far greater margin what the planet could provide for everybody.

This accelerating gap between human demand and nature’s supply is leading us quickly to another crunch: one on biocapacity.

Consider this. No matter which way the future goes, whether we avoid climate disaster or we continue with business as usual, increasing consumption, population and CO₂ emissions will escalate the pressure on biocapacity.

Whether or not we curb climate change, biocapacity will be king

World leaders have, to a great extent, affirmed the need to stay within a 2 degrees Celsius climate alteration (at a minimum) to avoid widespread calamity. This means reducing carbon concentrations in the atmosphere to between 450 (by optimistic estimates) and 350 parts per million (by more realistic estimates). Reaching even the more relaxed target will require a massive shift away from fossil fuel now (and not in a decade or two) and a wholesale restructuring of the way we produce and use energy. Yet hardly anybody admits this mathematical truth.

Most experts acknowledge that, even with significant development of wind and solar technologies, shifting away from fossil fuel will require increased reliance on crop-based fuels and products. Add to that the resources needed to provide for a growing population, a swelling middle class, and the two billion alive today who lack enough to meet basic needs. It is clear, even in the scenario of robust international accords with binding treaties to regulate and reduce emissions, biocapacity will be under pressure as never before. Those who will have extra biocapacity will be kings.

And what if we don’t succeed in heading off climate change? Biocapacity will become even more vulnerable and, in all likelihood, subject to staggering declines. With crops failing and drought widespread, the failure of international climate co-operation will have set a poor stage for negotiating the distribution of dwindling resources. Those countries whose economies depend most on access to massive amounts of resources – especially resources from abroad – will find themselves particularly vulnerable.

Winning or losing the ‘Earth Race’

In a world facing a biocapacity crunch, the winning economic strategies will be preserving biocapacity on the one hand, and reducing demand for it on the other. And here’s a bit of good news: those also happen to be leading strategies for minimising climate change. Many believe the race to develop green technology – what New York Times columnist Thomas Friedman has dubbed the ‘Earth Race’ – will bring the spoils of the future to the early movers and adopters, and secure innovative nations and enterprises with positions of advantage on the global stage.

This is the carrot pushing green innovation. But there is an even more powerful stick. Those countries and cities trapped in energy- and resource-intensive infrastructure will not be able to adapt in time to meet the emerging resource constraints.

The weaker the international accords, the more individual countries will have to do to curb their resource demand in order to assure their long-term stability and security. Lack of international co-operation won’t give us a break from taking action – on the contrary, it will force us to work significantly harder.

As officials begin to understand this, they will approach the climate and resource challenge with an entirely different level of resolve. Some already do. We are not calling on leaders only to do what’s needed for the benefit of other nations and peoples. Rather, we are asking them to take the actions needed to responsibly serve their own.

Mathis Wackernagel, Ph.D., founder and President of Global Footprint Network, has worked on sustainability issues for organisations on all continents but Antarctica. He has lectured at more than 100 universities, authored dozens of articles, reports and peer-reviewed papers, and won awards for his work including an honorary Ph.D. from Berne University, the Skoll Award for Social Entrepreneurship and the Herman Daly Award of the US Society for Ecological Economics. While completing his Ph.D. at University of British Columbia, he and Professor William Rees created the Ecological Footprint measure, now a sustainability tool in wide use around the world.

Global Footprint Network, based in Oakland, California, is a charitable research organisation working to make ecological limits central to policy and decision-making everywhere by advancing the use of the Ecological Footprint, a resource accounting tool that measures how much nature we have, how much we use, and who uses what. By developing transparent, scientifically robust measures to help leaders monitor and protect ecological assets, Global Footprint Network is committed to fostering a world where all people can live well within the means of one planet.

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