Stuff heavier than all life on earth

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The end of the year is a good time to look back at what went well and what went wrong. In December 2020, two trends in world sustainability stood out. First, the good news. Global carbon emissions were down by 7%, the biggest decrease we've ever seen. Much of this is because of the global lockdowns. With fewer planes flying, air traffic is less than half of what it was last year, and trips by road and sea also reduced. Of course, this bit of good news came at a steep cost – loss of jobs, poverty, and near-starvation for too many.

Next, the bad news. For the first time ever, the weight of the stuff humans produce – cement and bricks to make buildings, asphalt and tar for our roads, clothes, metals and plastics to support the conveniences and pleasures of daily life – that total weight is more than the weight of all animals and plants on earth. We stand at a momentous crossroads in history. Some 120 years ago, at the start of the 20th century – before World Wars I and II, before the United Nations was founded, in the colonial era, the weight of human-created objects like bricks, concrete, and asphalt were less than 3% of the total weight of stuff on the planet. In short, negligible. In 2020, the stuff we have produced matches and threatens to exceed the weight of Nature herself.

The 20th century was a century of promise, a tribute to human ingenuity and prowess. A century in which steam-powered ships, coal-powered trains, and travel by horse and bullock-driven carts made way for speedy cars and jet planes. Does anyone remember the Concorde, the supersonic passenger plane that travelled at twice the speed of sound? Nothing seemed impossible in the last century.

But by the 1960s, scientists like Rachel Carson began to warn us of the hidden costs of this progress. Pesticides helped in producing more food but made the food more poisonous for consumption. Cars, ships and planes helped us move people and goods around the world, reducing the prices of goods, but they spewed carbon emissions into the atmosphere, heating the world to a slow boil. By the 1980s, people started hearing about climate change as a problem that would haunt humanity in the future unless swift action was taken.

This advice has, of course, been almost universally rejected, by countries, companies, and consumers across the world. More greenhouse gases have been emitted since the first predictions of future climate disasters were published by the IPCC in 1988, than in all the previous decades. Climate change is "everything change." More than one million species are at risk of extinction. Amongst them are the charismatic black rhinoceros, which is critically endangered, as well as the humble honeybee, whose colonies have crashed worldwide. If we lose honeybees, we lose much more than honey. We lose their capacity to pollinate fruits, vegetables and nuts that we eat daily – services that we take for granted. And yet, we cut down millions of trees and raze wetlands and forests across India to make way for more highways, railway lines, ports, dams and industries. More sand is extracted from drying rivers to make more concrete, to create corridors of transport to feed our growing cities with stuff.

Our homes, shops, offices and streets are full of stuff. The end of the year is the time for Christmas shopping. End-of-year discount sales and advertisements prompting us to buy more, cheap, shiny, happiness-giving stuff. Even Black Friday, that insane post-Thanksgiving shopping weekend of consumer excess that used to be such a peculiarly American phenomenon, has now made its way to India. The 'high' that comes from shopping is temporary. The stuff, unfortunately, is permanent.

For those interested, the weight of human-made stuff is now 1.1 tera-tonnes. That's 1,000,000,000,000 metric tonnes, or if you prefer a more familiar unit - 1,000,000,000,000,000 kilograms. If this trend continues, 20 years from now, we can expect the weight of stuff to double. When do we reach the point of collapse?

NEXT STORY



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