

The Ravages of Climate Change

This is not some slow, controlled change we're talking about. It's fast, it's unpredictable and it's unprecedented during human civilization.

— Adam Markham,
World Wide Fund for Nature

When we widen our minds to take in global climate change, the thought of caring for cows, or animals who are mistreated in puppy mills, seems relatively safe, even reassuring. At least the world stays the same while we are campaigning to relieve their suffering. Global climate change is so daunting and packed with ominous warnings that it requires us to sit up sharply and pay very close attention.

The science is clear. Burning fossil fuels releases carbon from plants and trees that lived millions of years ago. The carbon mixes with oxygen to form carbon dioxide (CO₂), which traps heat in the atmosphere. CO₂ levels are rising dramatically, and so is the temperature. For a clear presentation of the science, watch Al Gore's movie, *An Inconvenient Truth*.

Here are some of the impacts we can expect if we do not get climate change under control:

- Sea levels around the world may rise by as much as 13 feet this century as the Greenland and West Antarctic ice-caps melt and warming waters expand. This will cause more than 100 million people to abandon

their homes as areas of coastal China, India, Bangladesh, Europe and the US go under water. It will also cause the loss of countless coastal wetlands, home to a myriad species of animals and birds.¹

- A third of the Earth's land will turn into desert, especially in Africa — and this may be an underestimate. Many million people will have to abandon their farms and villages, and millions of animals will die from hunger and thirst as the rains fail and rivers and water-holes dry up. Cows, goats, camels, elephants, hippos, tigers, lions, gazelles — they all need to drink.²
- Up to a quarter of all land-based animals and plants will be unable to adapt to changes caused by the rising temperature and will face extinction by 2050. That's a million species that will disappear from existence, after millions of years of evolution.³
- The polar bears face extinction as the floating sea ice they depend on to hunt seals melts away to nothing.
- The Amazon rainforest, home to a million species of animals, plants and insects, faces collapse due to unprecedented drought that is causing rivers to dry up and the forest to catch fire. Climate scientists feared this would happen by 2050, but it is happening now.⁴

These are very dire warnings, but they are premised on one condition: *if we do not act to reduce our greenhouse gas emissions*. It is important

- *An Inconvenient Truth*: www.climatecrisis.net
- *Stormy Weather: 101 Solutions to Global Climate Change*, by Guy Dauncey with Patrick Mazza, New Society Publishers, 2001: www.earthfuture.com
- Union of Concerned Scientists: www.ucsusa.org/global_warming

that we get a grasp of this, so that we can do what is necessary to move our planet to a more cooperative, peaceful, sustainable way of living.

The climate change problem has four main causes. First, it is caused by the fossil fuels (coal, oil and gas) we use to heat our homes, run our vehicles, produce our electricity and power our industries. The solution is to embrace a new energy revolution based on energy from the sun, wind, tides, biofuels and electric vehicles, combined with making every car, light bulb and appliance ten times more efficient. It involves rediscovering the pleasures of walking and cycling, investing in public transit and railways and designing our towns and cities so that it is easy to get around without a car. It involves redesigning manufacturing and industry so that everything is reused and recycled.

It also asks that we stop consuming so much. If everyone in the world lived the way people do in the West, we would need three more planets to provide the resources.

Second, it is caused by deforestation: when the trees are gone, they are no longer able to absorb carbon. The solutions are to adopt sustainable forest management practices throughout the world and plant trees in all our urban and rural areas.

Third, it is caused by farming, and cattle in particular, due to the oil that is needed to supply and feed a cow, the methane they burp from their stomachs and nitrous oxide from the use of nitrogen fertilizers.⁵ The simplest solution is to eat less meat.

Fourth, it is caused by chemicals called “F” gases (HFCs, PFCs, SF6), which industry simply needs to phase out.

There are many reasons for alarm, but there are also good reasons for hope, because many of the world’s nations, states, cities and businesses are working to reduce their emissions (see Solution 63 and Solution 97). If we care about the world, our children and the world’s creatures, this is one we can not sit out.



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