

# Bringing climate back from the brink

**JACK SANTA BARBARA**

**OPINION:** The rapid spread of climate emergency declarations around the world (thousands and counting) has been welcomed by many but drawn criticism from others.

Technically speaking, “emergency” may not seem like the correct term for our climate challenges. An emergency is defined as “something dangerous... that happens suddenly or unexpectedly,” like a fire or flood.

Up to this point climate change is happening slowly, which is partly why it is difficult to get our minds around. But the slow changes associated with climate change may accelerate rapidly, and the dangers increase beyond our control. And the science tells us this rapid change is coming soon unless we act urgently. Perhaps “crisis” or “catastrophe” would be more accurate terms.

More important than the term used to describe our climate situation is understanding the dynamics underlying our concern.

The facts justifying declaring an emergency or crisis have to do with a series of natural phenomena that, at a certain point of temperature increase, will trigger runaway climate chaos that will make planet earth virtually uninhabitable. And globally we are on track to reach those tipping points to climate breakdown in the next decade.



Globally we are on track to reach tipping points to climate breakdown in the next decade. 123RF

The good news is that scientists are telling us there is still time, just, if we pull together and make a series of changes to avoid reaching those tipping points. We can still pull off a victory against our own bad habits with the right teamwork.

So what are the tipping points and how do we avoid them?

There is a long list of potential tipping points. The thawing of arctic permafrost is one. As it melts it releases large amounts of methane – a very potent short term greenhouse gas. So the warmer it gets the more methane is released and the more methane released the hotter it gets, creating a feedback cycle that makes things worse very fast.

There are literally dozens of such feedback mechanisms which at a certain temperature

increase will reach a tipping point where climate breakdown becomes inevitable and irreversible. Think of global temperature increases not just of 1.5 or 2 degrees, but of 4, 5, 6 degrees, or more, which will cause climate chaos of an unprecedented order. Think of a Gita-like storm (only more intense), and a Pigeon Valley fire (only bigger) not only every other year, but every few months. Add in some plant and animal diseases never encountered before in our area, as well as human diseases we are not prepared for. Think of disruptions in supply chains for critical goods because other areas are experiencing the same disasters. We would be overwhelmed quickly by such events.

The scientists are telling us

these terrible events can be avoided if we get the team together and reach the goal of emissions reductions needed to avoid the worst. But scientists are also telling us we may only have a decade to reduce emissions to this safe level, if we are serious about avoiding the worst. That is why recognizing the nature of this unusual emergency, crisis, catastrophe is so critical. These disasters won't necessarily happen in a decade, but reaching these tipping points will lead to inevitable and irreversible climate collapse.

Most importantly, we also need to understand that there are already effective solutions available. If research produces new ones so much the better, but it would be folly to wait when we already know what to do.

What to do? Check out Project

Drawdown (<https://www.drawdown.org/>) for a long list of proven methods for changing the way we use land, generate energy, eat, move about, etc. to drawdown our emissions. Many of these changes will not necessarily be easy to achieve. But they are effective and they can also provide many side benefits. Change may be inconvenient but not as inconvenient as the total collapse of human society.

The magnitude of such risk is why calls are being made to treat our climate challenge as though we are at war. Everyone is affected and involved. We all make sacrifices to achieve our goal. We put aside our normal routines and pitch in however we are able. We recognize that some will have to make greater sacrifices than others, and we support them and bestow great honours upon them.

The stakes for our children's and humanity's future could not be higher. Time to put aside the partisanship, the chatter over what we call it, the bureaucratic red tape, the fear of being inconvenienced, and the sanctity of the economy. The team needs to work with clarity of common purpose, a sense of urgency, a willingness to sacrifice, and acknowledge the sanctity of life itself as our overriding common goal.

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