

# The truth about climate change: Gwynne Dyer tells it like it is

**Heather Reid**

Gwynne Dyer has spent the last two years speaking to scientists and generals around the world about climate change.

"I get to go to a lot of places," Dyer says, as he gathers material for his twice-weekly column that's published in newspapers around the world.

He started hearing things about climate change in his travels and decided he wanted to delve more deeply into the subject. After about 80 interviews with people in dozens of countries, his recently released book, *Climate Wars*, is the result.

From his research, Dyer drew four conclusions.

The first is that climate change is moving faster than the models predicted. "The scientists are scared," he says.

The United Nation's Intergovernmental Panel on Climate Change got the world's attention with its 2007 report, but soon after it was released they learned that what they presented then was a rosier picture than the one they see now. The panel is made up of thousands of the world's top scientists who meet every four or five years.

What's changed is the rate at which the ice cover is disappearing from the Arctic Ocean.

"This was not supposed to happen. It wasn't showing up in their models," he says.

The panel had predicted ice-free northern oceans in the 2040s. Now they think it may be as soon as 2013.

"If we go on more or less as we are, by the end of this century we will see two to six and a half degrees hotter," Dyer adds. "Two degrees hotter is pretty hot."

He described that range as the "uncomfortable to dead range."

Dyer explains the spin-off effects and positive feedback loops that kick in once the temperature rises past a certain point and says that we need to cut our greenhouse gas emissions by 80 per cent by 2030 to avoid runaway warming.

The second conclusion he's reached is that "there will be lots of work for the military." He painted a picture of waves of hungry refugees trying to cross borders, failed states and wars between desperate countries arguing over shrinking water supplies.

"The Pentagon looks at this and they see lots of jobs for them," Dyer says and with his reputation as an international journalist, who also happens to be a Canadian, he has access to these people to ask them.

The third thing Dyer says will happen is extreme food shortages around the globe. He says that grain reserves have already started drying up and that we've used up our technological fixes to keep producing ever more to eat from the same area of land.



Canadian journalist Gwynne Dyer pauses before answering a question during a talk in Port Alberni to promote his new book, *Climate Wars*.

It will get rainier in rainy parts of the world and drier in dry parts, he says, and desertification will increase. The bread baskets of the world will dry up and it will become too hot to grow rice in some of the highest producing, and highest population, areas of today. Hungry people collapse governments and desperate governments start wars. "People always raid the neighbours before they starve," Dyer says.

He warns that there's a point we can't go beyond and says we're probably going to go past it. "This is depressing stuff."

The line not to cross, Dyer emphasizes, is past two degrees warmer than it was a decade ago. After that, the oceans warm and the permafrost melts, and basically, all hell breaks loose. Warmer oceans will emit carbon dioxide rather than absorbing it and thus further accelerate warming. A mild acid produced from that process will kill the animals at the bottom of the marine food web.

Carbon dioxide is also trapped in frozen permafrost that lies beneath the land at high latitudes. If released, that CO<sub>2</sub> would double the atmospheric amount so that even if human emissions were at zero, the temperature would keep rising. "That's where we must not go," Dyer says.

But we're already well on our way. It is half a degree warmer, speaking in global averages which are completely different than daily, seasonal or annual variations, than in 1990. And human-sourced emissions are accelerating at the same time.

"I don't meet a lot of optimists," Dyer says of his travels in gathering material for this book.

He says we have the technology to fix the problem but it's the politics that's the problem

"There's a huge problem here, which is fairness," he says. "We're the ones who put all that stuff up there. Not the Indians, not the Chinese or the Brazilians."

The wealthy, long industrialized nations, like Canada, have to take the big cuts and allow other countries to grow their economies. That's the part that the wealthy nations have had a hard time agreeing to. "It's better than dying," he says with his deadpan delivery.

"Everybody's standing on the edge of the cliff, but we built it."

Finally, in his fourth conclusion he shares a little secret. If the human race sails past the deadline, and he's quite sure we will, there's a way to cheat.

There are two ways that the temperature can be artificially held down but scientists are reluctant to talk about them because they think governments will use them to forever delay the shift from carbon-based energy sources and the expense of making that shift.

One technique is to mimic volcanic activity and spew sulphur gas into the atmosphere to block some sunlight from striking the surface of the earth. The second is to thicken up the low cloud that hangs above the oceans as a very thin stratocumulus. This would also block out some of the sun's energy and buy some time.

Dyer says he's more optimistic than he was when he started work on *Climate Wars* because he sees now that there are solutions.

"Don't feel hard done by. Every generation gets something like this," he tells the many audiences of young people that he speaks to, "you get a different problem to solve."