Australia: Has the War Against Climate Change Begun?

Australia is on fire, but no one knows how to suppress the wildfires.

Only abundant rain, in spite of the country's sophisticated technology, is susceptible to end this catastrophe. The time has come for a global call to arms.

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We are watching with awe as as a huge wildfire threatens a whole continent.

In Australia, since August 2019, around 100 000 km^2 of forest have gone up into flames, representing about 5% of the total forest area of the country. As a result, close to 1 billion tons CO_2 were released to the atmosphere.

Australians are used to forest and bush fires during the dry season (from November to March). Usually, their intensity is limited thanks to preventive brush clearing fires during the wet season. This strategy did not work in 2019, with its unusually prolonged and intense drought and record high temperatures.

Here, climatologists see an effect of global warming.

Wildfire control with water bombers

Once a big wildfire has started, it is very difficult to control it even with water bombers. The most efficient method is to flood a fire as soon as possible after its discovery. This implies a very efficient fire detection system. For financial reasons, most Australian water bombers are leased from the USA and Canada.

In 2019, Australia rented 7 helicopters and 9 large water bombers, at a cost of about 40 million US dollars. However, because the fire seasons last longer, they tend to overlap in the two hemispheres so that only half as many aerial firefighters were delivered to Australia in time to control the big wildfires of New South Wales and Victoria.

A considerable cost

The Australian government is planning to allocate an emergency fund of 1.4 billion US dollars as compensation for the victims of the disaster. John Quiggin of CNN Business evaluates the total cost of the fires to 70 billion US dollars.

A cost-effective investment

What would have happened if all of the water bombers had been available? The Australian firefighters evaluate the equipment that was missing to control the big New South Wales and Victoria wildfires at 15 million dollars per year. With that investment both the cost of the disaster and the amount of CO_2 emissions could probably have been cut by half.

A world scale problem

Before these wildfires in Australia, the largest so far, other large hardly controllable wildfires were observed in the past few years: in Siberia in summer 2019 with 300 000 km^2 burned; in the Amazon forest; in California; in Canada; in Greece; in Portugal. And the Mediterranean countries are at risk along with a large part of the African continent.

Need for a world scale program to monitor and control bush and forest wildfires.

The increasing frequency of large forest wildfires is a particularly bothersome consequence of global warming: the massive CO_2 emissions they entail reinforce the conditions that cause them. The only way to fight this self-sustaining process is to suppress it as soon as possible. First, the regions that are particularly at risk, i.e. regions that combine warming and drought, should be identified. These should be carefully and permanently monitored, with satellites, drones, and earth based observations. Any fire start should be immediately suppressed using the most efficient means such as water bombers. A global network of water bombers ready to take action (i.e., already carrying their water load) could be set up in such a way that any fire start can be flooded within a short time after detection, say one hour. The number of water bombers needed can be estimated at a few thousand representing an annual budget of a few billion euros. The UN and, within it, the UNEP (United Nations Environment Programme), could be in charge of managing this fire killer fleet. One may dream that it might be financed via a tax on coal extraction.

Thanks to its overseas territories, France could host several tactical groups for aerial firefighting.

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