

AUSTRALIA'S CLIMATE FUTURE: STRATEGIES TO SURVIVE

Australia is one of the developed countries most vulnerable to climate change. Maintaining resilience in a changing climate requires the informed engagement of people and institutions at all levels. The average temperature of each future year is now expected to be warmer. This is scientifically referred to as climate change 'emergence'. This leads to Australia's record annual average temperature, for example, record set in 2005 was subsequently broken in 2013 and then again in 2019. The average temperature of the next 20 years is virtually certain to be warmer than the average of the past 20 years. Changes that are currently occurring include rising temperatures, changing rainfall patterns, sea level rise and ocean acidification.

In coming decades, Australia is projected to experience:

- Continued warming, with more extremely hot days.
- Continued drying in the south-west of Western Australia, especially during winter and spring.
- A longer fire season for the south and east, and an increase in the number of dangerous fire weather days.
- Fewer tropical cyclones, but a greater proportion projected to be of high intensity, with ongoing large variations from year to year.

A good indicator of heat in the climate system is the temperature of the oceans: since 1971, 90 % of the extra energy accumulated in the climate system has gone into the oceans, and the temperature of the upper 700 m of the ocean has risen.

Australia has already warmed by around 1,4°C since pre-industrial times. The government are suffering significant losses from accelerating climate change, and worse is on the way. The passing of the climate bill into law has set the floor for action. Now, must immediately build cleaner future – because waiting until the 2030s will be much too late.

In order to preserve nature, a large number of national parks have now been created in the country, but even under the protection of the state, they are regularly polluted by industrial waste, including that from a uranium mining company. Deforestation leads to soil erosion and, as a consequence, the deterioration or even extinction of forage lands. This state of affairs is keenly felt by the aborigines, whose traditional life directly depends on the number of livestock, the quantity of edible plants and the quality of water bodies.

Australia monitors the use of chemicals used in agriculture. The country also has two drainage systems, for sewage and for rainwater, which helps prevent man-

made waste from flowing into bodies of water. Despite some environmental problems in the country, the state and residents try in every possible way to get rid of these woes. “Green Australia is a green policy.”