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## Opening Address at the International Climate Change Conference — 16 February, 2109

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peaker: Stephanie Foster, President of the United States of **)** Australasia.

Good evening, honourable guests and fellow delegates, and welcome to our 100th conference. We are gathered to review the current state of global climate change and to present our continuing efforts to rebuild the environment.

The weather this year has been worse than usual. Three tropical cyclones since January and two tsunamis. The frequent extreme storms and consequential flooding and destruction have cost our government millions in infrastructure. Our \$8.4 billion coastal dyke system along the Arnhem Coast was breached and the sea water surged through, inundating 800 square kilometres of land.

As I speak, the rain is streaming down so heavily it almost obscures the spinning turbines which dot the cliffs to the horizon. Meanwhile central and south-eastern Australia remain strangled in a 63-year drought and are irreversibly damaged from soil erosion and desertification.

The radical and devastating climate changes our generation has seen are due to the mistakes made by past generations. Mass deforestation and unsustainable fossil-fuel combustion for energy and transport needs resulted in the release of millions of tonnes of greenhouse gases. By the late 21st century, the average yearly global CO2 emission was eight billion tonnes. Carbon dioxide, methane, CFCs, nitrous oxides and other gases enhanced the naturally occuring greenhouse effect, which led to the catastrophic ecological crisis we face today. The debate still rages; were our forebears aware of the inevitable consequences of their actions? Did they not have an inkling of what impacts their unsustainable activities would have in the future? So what were the effects of climate change? Weather patterns altered, with coastal and subtropical areas becoming wetter and inland regions drier. The enhanced greenhouse effect caused global surface warming, with the most profound changes occurring farthest from the equator. The 1990s were the warmest decade of the millennium; 1998 was the hottest year.

In the 20th and 21st centuries, warming seas initiated the melting of the polar ice caps. From 1974 to the mid-2000s, around 13,500 square kilometres of Antarctica's ice shelves had melted. In just 34 days in early 2002, 720 billion tonnes of ice collapsed from the former Larsen Ice Shelf into the Weddell Sea. In 2022, over a period of just six days, the five kilometre-thick West Antarctic ice sheet plunged into the ocean. That year, the Earth's oceans rose eight metres. At the time, the West Antarctic ice sheet comprised three quarters of the world's freshwater supply. Coastal areas were inundated and salt intrusion destroyed 80% of the world's remaining wetlands, marsh and mangrove ecosystems. Major international cities of the period were flooded, including New York, Tokyo, Boston, Beijing, Los Angeles, Sydney and Singapore. Low-lying regions were also flooded, most of which were home to vast populations — Bangladesh with over 35 million; the Nile Delta, including Cairo, with 16 million; the Mekong Delta in Vietnam and vast coastal regions of India. Islands in the Pacific and Indian oceans were also lost, including a collection of over 1000 islands known as "the Maldives", as well as the Marshall, Cocos, Tuvalu and Kiribati islands, displacing collectively

around 20 million people. The world had 200 million refugees. Initially, countries were very reluctant to soak up the homeless. Millions died. Eventually, international policies shifted into gear and the helpless were begrudgingly absorbed.

The then permanently frozen areas of the northern hemisphere (permafrost) slowly melted to become vast methane-producing wetlands. This formed a vicious cycle, exacerbating the greenhouse effect.

Salinity increased in rivers, bays and aquifers, as did temperature and pollution levels. Much of Australia's former vegetation could no longer survive and salt-tolerant plants took hold. A large number of species of plants and animals rapidly became extinct.

After a number of years of increasing salinity and irregular rainfall patterns, Australians became almost entirely dependent on their primitive desalination plants. (Today as you know, we consume a far superior water — desalinated, chemically treated and chemically enhanced for maximum taste and nutritional value.)

These climate shifts have impacted on our recreational activities too. The Trump Empire Snow Resort near Vostok in Antarctica was shut down 10 years ago by the International Board of Human Recreational Safety (IHRS). In 2093, 28 people drowned after a melting ice shelf gave way. These "accidents" became more frequent until the use of the island as a recreational resource was eventually banned in 2099.

Currently, the human-made beaches at Katherine are very popular holiday destinations. Sea-level rises at the start of the 21st century eroded many natural beaches, but now automatic mechanical dredges nourish the beach with filtered and dried sea-floor sand. However, even beach-going is now a high-risk activity, as unpredictable weather currents are capable of changing within hours.

The loss of 96% of the world's coral reefs has been yet another devastating consequence of climate change. Next month, The International Coral Reef Action Network (ICRAN) will

officially open "The Great Barrier Reef Park" — a small-scale replica of the historic wonder, reconstructed using archival photographs and footage. The wreck itself lies 0.5km below the surface. Changes in sea temperatures and levels were so rapid, reefs and associated life forms could not adjust fast enough. The death of algae due to warmer seas caused coral bleaching. Increasingly frequent extreme storms demolished the limestone skeletons which formed the habitat for one third of the world's fish species, now extinct.

Hard to believe, but from the 19th to the 21st centuries, Australians grew produce in the Murray Darling Bay. Back then the Bay was an exposed agricultural Basin with 89 million hectares under production in 2000. It provided 41% of Australia's gross value of agricultural products. During these years, the Basin also provided a home to 11% of Australia's population. Naturally, all this was lost as the region became useless due to increasingly arid conditions, salinity and the ever-rising sea.

My contention, ladies and gentlemen? No civilisation can know what is happening and not act. No culture — no cultured culture — can calculate the costs of inaction or delay and remain passive. No society with the capacity to make conscious decisions about the future sustainability of the only planet they have, would do nothing.

Thus, our forebears could not have known what the consequences of their actions would be. If only they had had the knowledge that we possess now. We are the same people today as they were then. It is inconceivable that they would knowingly have caused the devastation and chaos we have inherited from them — the price of ignorance has been incalculably high and it will take both our childrens' and their childrens' children's generations to repair the damage.



Stephanie Foster wrote this essay in 2007 when she was in Year 12 at the MacRobertson Girls' High School, Melbourne, Victoria.