

## Climate Change Cycles

For millions of years Earth has experienced climate cycles determined by the sun and planetary alignments.

In addition to daily and seasonal cycles, deep drilling of Antarctic ice and ocean floors shows there are longer term warm periods lasting about ten thousand years. Drill cores have revealed no historical evidence of dangerous global warming caused by CO<sub>2</sub> levels and that past levels have been more than ten times the present level. There was also no evidence that alkaline oceans became acidic. As a harmless trace gas, CO<sub>2</sub> is an essential plant food.

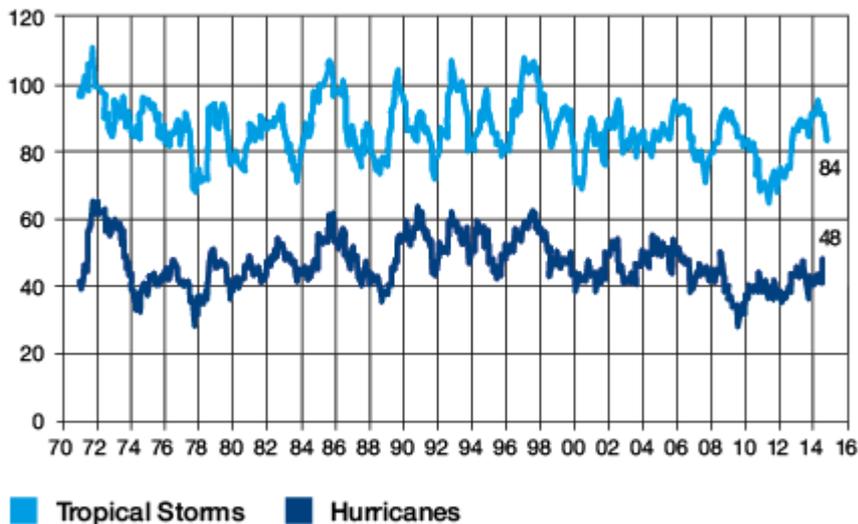
Warm periods like the present, known as the Holocene, which began eleven thousand years ago, have been good for life on Earth. These warm periods have included cooler intervals like the temperature downturn referred to as the “Little Ice Age”. The rebound from this has, independent of CO<sub>2</sub> levels, brought rising global temperatures over the past 150 years.

Cool periods have severe implications for humanity. From past records, a cool period would lead to permanent ice cover in much of Northern Europe and North America. The real climate change threat is therefore not dangerous global warming but the next cool period, which is now overdue or a repeat of the “Little Ice Age.”

Global climate observations show little change in the gradual rate of warming following the end of the “Little Ice Age” and recorded temperatures have failed to confirm the higher temperature predictions of climate models with the burning of fossil fuels.

The Earth does however experience extreme local weather events including drought periods and floods. These are caused by regional occurrences such as El Ninos, random changes in solar radiation, and for the Arctic shifting warm ocean currents and do not, despite contrary publicity, represent global trends. This is demonstrated by the stability of global cyclone and hurricane frequency (see graph 1).

### 1. GLOBAL TROPICAL CYCLONE FREQUENCY - 1971 TO PRESENT

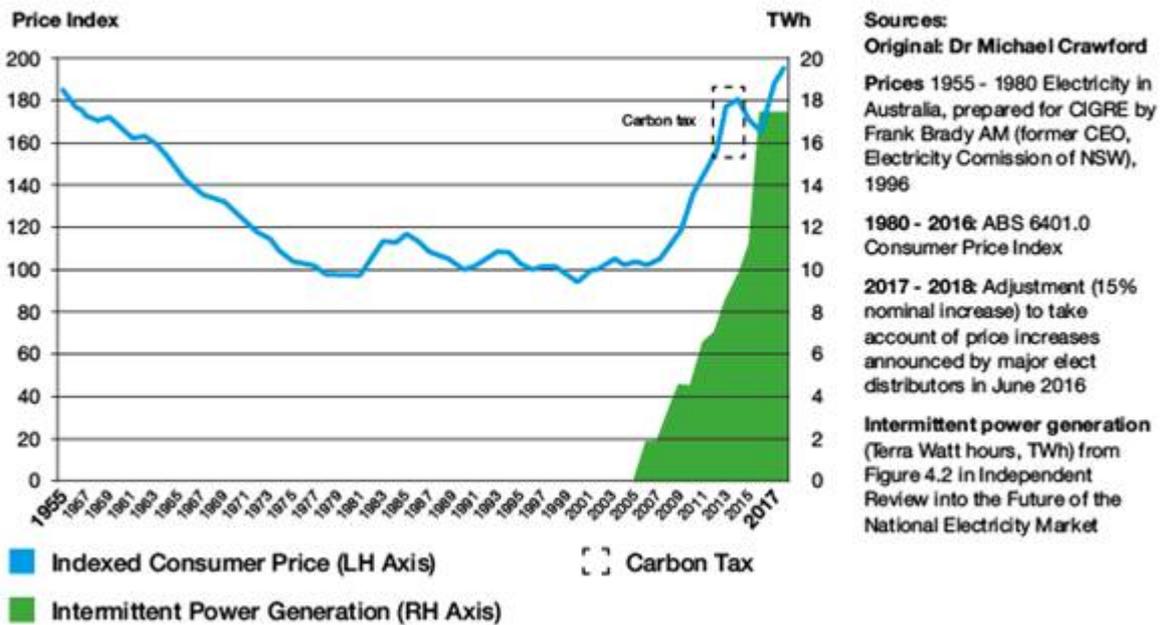


Source: Dr Brian Maue, Geophysical Research Letters, Vol. 38.

Nevertheless, government policy based on faulty models supported by “consensus” science has brought about spending of \$76 billion. This includes subsidies for renewable energy and more than \$20 billion on desalination plants.

Australian emissions of CO<sub>2</sub> from burning fossil fuels are 1.4% of the world total. If Australia holds its commitment to the Paris accord the effect on modifying projections is an inconsequential 0.003°C on world temperature. Nevertheless, policies to encourage intermittent renewables and subsidies of at least \$3 billion per year have caused coal and gas power stations to close and move Australian power costs from amongst the lowest in the world to amongst the highest (see graph 2).

## 2. INDEXED REAL CONSUMER ELECTRICITY PRICES: 1955 - 2018 (1990+100)



Families are struggling and businesses are closing due to increased electricity costs.

Other countries, including China, are aiming for lower power costs previously achieved by Australia with the planning and construction of 1,370 coal fired power stations including high efficiency/low emission power stations. Many rely on Australian coal. The Minerals Council of Australia estimated in July 2017 that high efficiency/low emission power stations built in Australia could produce power at \$40 per MWh, well below current average prices of \$85 per MWh.

The Government's response to Australia's rising electricity prices, the National Energy Guarantee (NEG), would still leave Australia with power costs much in excess of countries with efficient coal fired power stations. The extent to which any improvements to power costs rely on cross subsidisation from coal fired power stations and/or direct subsidies should be made public. A figure of total subsidies for the NEG of \$60 billion by 2030 has been mentioned in media reports.

Australia must develop a strategy that promotes reliable, efficient coal power stations including, if competitive, unsubsidised renewable energy which covers the full cost of meeting rated dispatchable generation. Our industries will then

have reliable and globally competitive power costs that they require to compete in world markets and at the same time improve living standards.