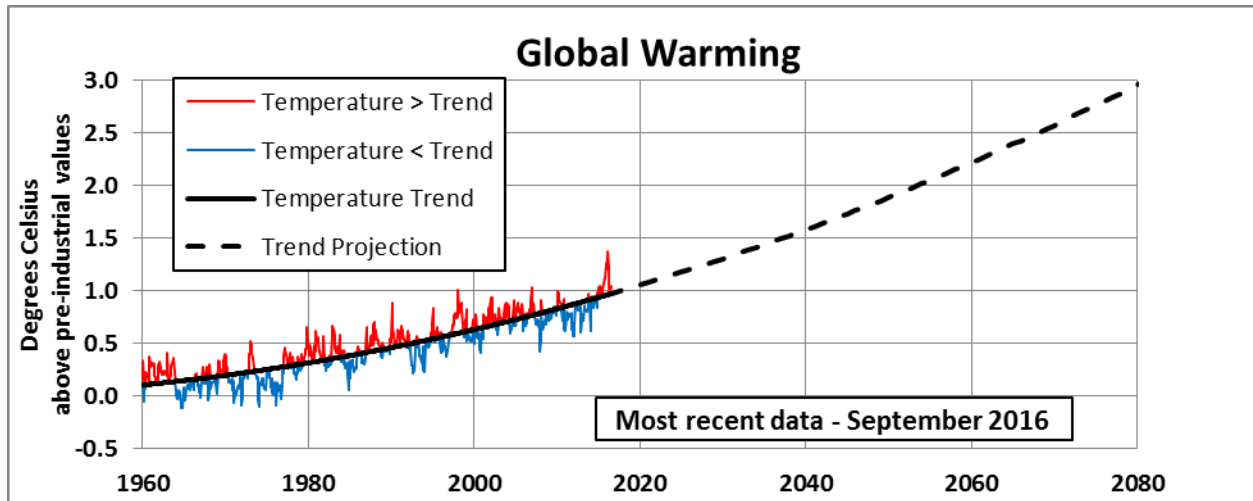


Global Warming Data, Trend and Projection
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Update Note –After 15 consecutive months of record high global temperatures, September 2016 was 0.04 °C cooler than September 2015, but still the second warmest September on record at 1.04 °C above pre-industrial values for the month. Recent temperatures are more than half the 2.0 °C target limit established by the recent Paris agreement. September 2016 temperatures were likely influenced by a developing weak La Niña condition as surface temperatures in the Eastern Equatorial Pacific Ocean are cooler than normal.

Data – Monthly global surface temperature anomaly data (red and blue lines) are monthly differences from the average temperature *for that month* during the years 1901-2000 and are available from [NOAA](#). The red (blue) lines represent monthly temperatures warmer (cooler) than the trend. Note that 0.15 °C has been added to the NOAA values to account for the difference between the 20th century average and pre-industrial values.

Trend and Projection — The trend shown in the chart is a quadratic fit to the recorded monthly global temperatures since 1960 relative to pre-industrial values. The projection is the continuation of this curve into future times. Based on this projection, the +2.0 °C target limit will be surpassed in 2053.