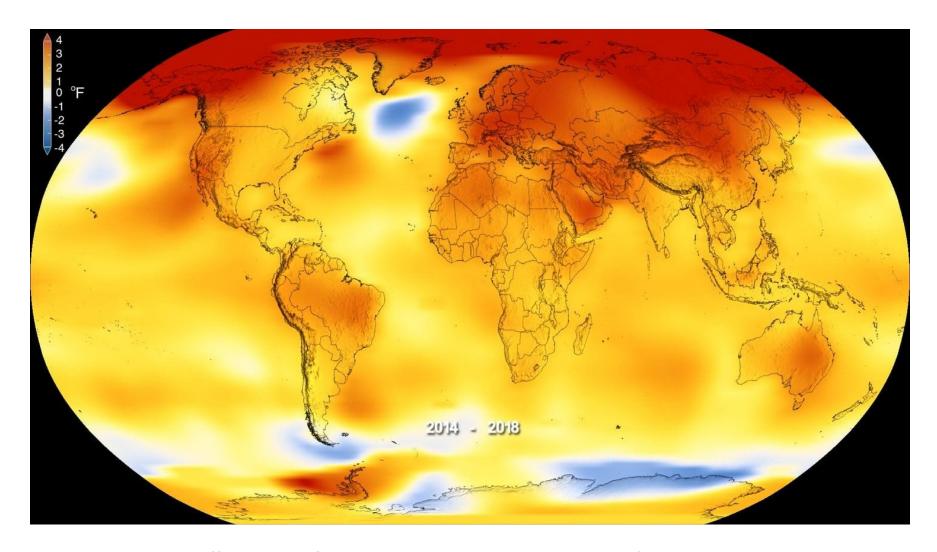
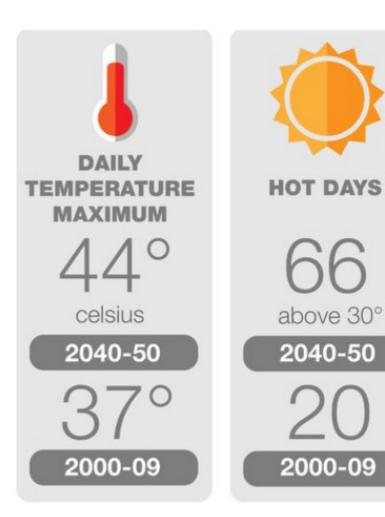
#### 2019 Budget

General Issues Committee February 11, 2019 Don McLean



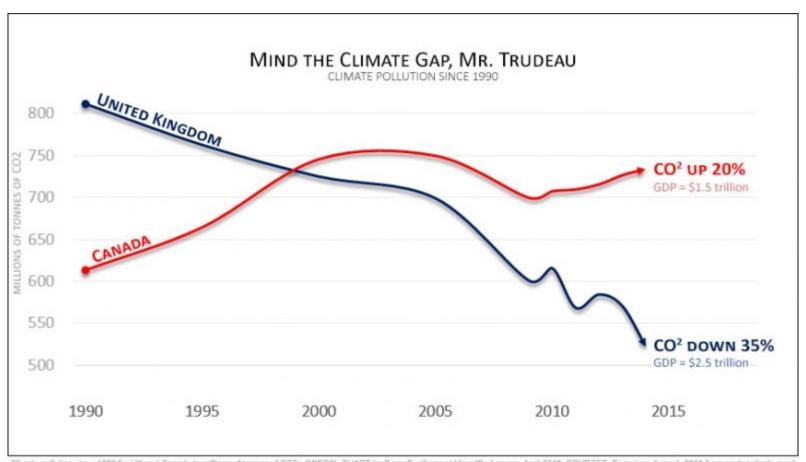
Temperature differences from normal around the globe for the planet averaged over the past five years (2014-2018). (NASA)







Calling all Torontonians to work together for a safe climate future for Toronto!



Climate pollution since 1990 for UK and Canada in millions of tonnes of CO2e (MtCO2). CHART by Barry Saxifrage at VisualCarbon.org. April 2016. SOURCES: Emissions through 2013 from each nation's most recent official National Inventory Reports to UN. National GDP from World Bank as PPP in constant 2011 international dollars.

# World 'nowhere near on track' to avoid warming beyond 1.5C target

UK Guardian Sept 27, 2018

Exclusive: Author of key UN climate report says limiting temperature rise would require enormous, immediate transformation in human activity



▲ Avoiding a temperature increase of more than 1.5C will be 'extraordinarily challenging', says the report's author. Photograph: Matt Brown/AP

## We have 12 years to limit climate change catastrophe, warns UN

UK Guardian Oct 8 2018

Urgent changes needed to cut risk of extreme heat, drought, floods and poverty, says IPCC

Overwhelmed by climate change? Here's what you can do



▲ A firefighter battles a fire in California. The world is currently 1C warmer than preindustrial levels. Photograph: Ringo HW Chiu/AP

The world's leading climate scientists have warned there is only a dozen years for global warming to be kept to a maximum of 1.5C, beyond which even half a degree will significantly worsen the risks of drought, floods, extreme heat and poverty for hundreds of millions of people.

## Global warming of oceans equivalent to an atomic bomb per second

UK Guardian Jan 7 2019

Seas absorb 90% of climate change's energy as new research reveals vast heating over past 150 years



▲ An Argo float is deployed into the ocean. Photograph: CSIRO

Global warming has heated the oceans by the equivalent of one atomic bomb explosion per second for the past 150 years, according to analysis of new research.

## Met Office: global warming could exceed 1.5C within five years

UK Guardian Feb 6 2019

Lowest Paris agreement target may temporarily be surpassed for first time between now and 2023



▲ Elevated water temperatures from global warming can kill coral, leaving behind a bleached white coral skeleton. Photograph: Mark Conlin/Getty Images

Global warming could temporarily hit 1.5C above pre-industrial levels for the first time between now and 2023, according to a long-term forecast by the Met Office.

## A third of Himalayan ice cap doomed, finds report UK Guardian Feb 4, 2019

Even radical climate change action won't save glaciers, endangering 2 billion people



▲ Melting ice on Khumbu glacier in the Everest-Khumbu region. Himalayan glaciers are a water source for 250 millions people. Photograph: Alex Treadway/ICIMOD

At least a third of the huge ice fields in Asia's towering mountain chain are doomed to melt due to climate change, according to a landmark report, with serious consequences for almost 2 billion people.

#### Plummeting insect numbers 'threaten collapse of nature'



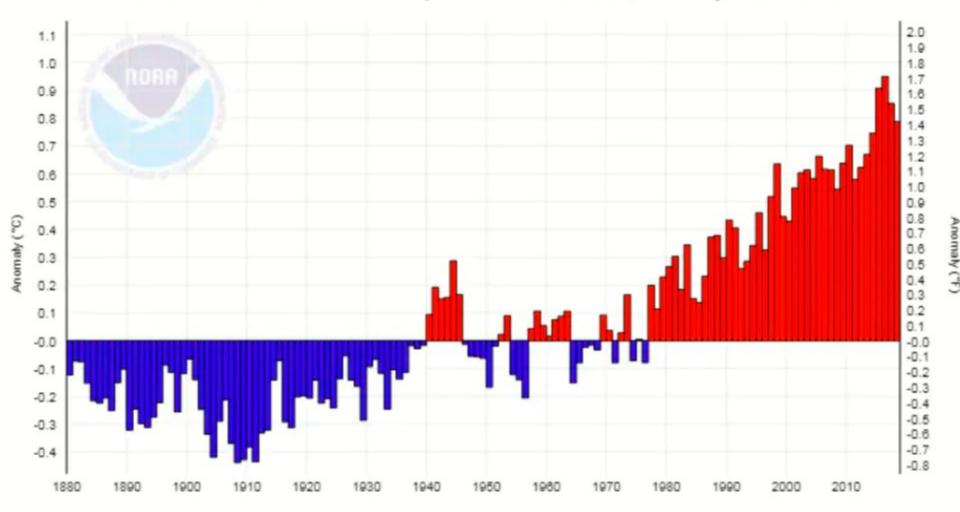
▲ The rate of insect extinction is eight times faster than that of mammals, birds and reptiles. Photograph: Courtesy of Entomologisher Verein Krefeld

Exclusive: Insects could vanish within a century at current rate of decline, says global review

Advertisement

UK Guardian – February 10, 2019

#### Global Land and Ocean Temperature Anomalies, January-December



Annual global temperature difference from long-term average, 1880 to 2018. Red years are above average, blue years are below average. (NOAA)