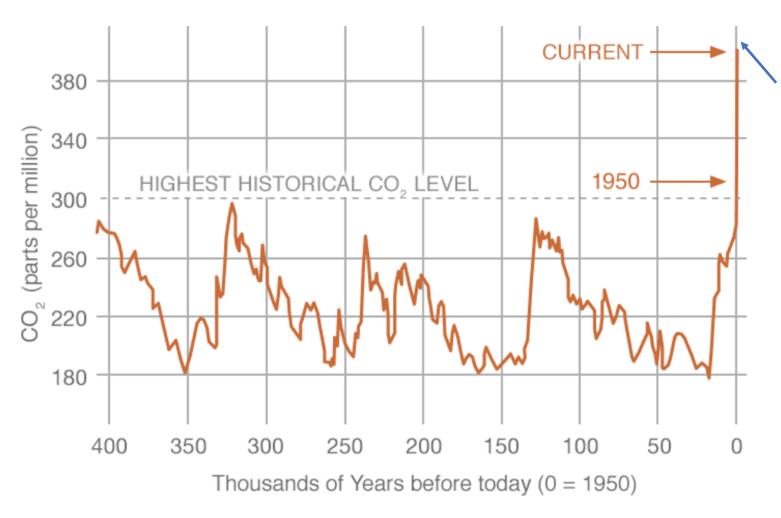


Data source: Reconstruction from ice cores.

Credit: NOAA



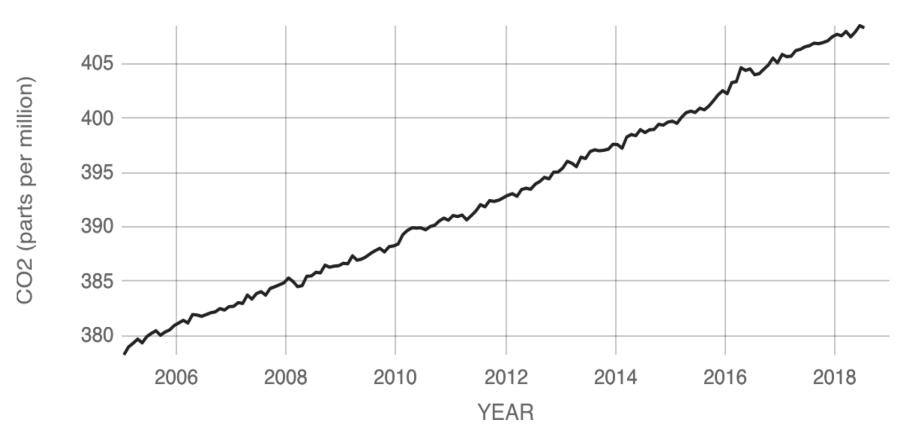
Carbon dioxide concentration

LATEST MEASUREMENT: July 2018

408 ppm



Carbon dioxide concentration



Steadily rising

Source: climate.nasa.gov

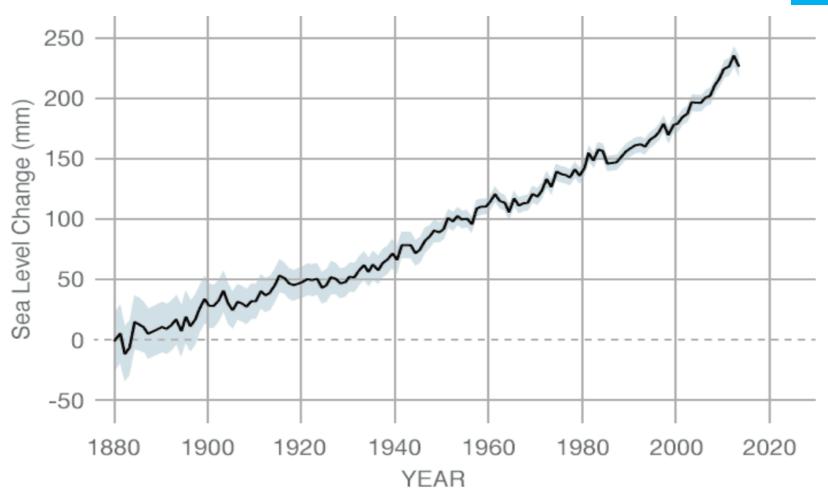


GROUND DATA: 1870-2013

Data source: Coastal tide gauge records.

Credit: CSIRO

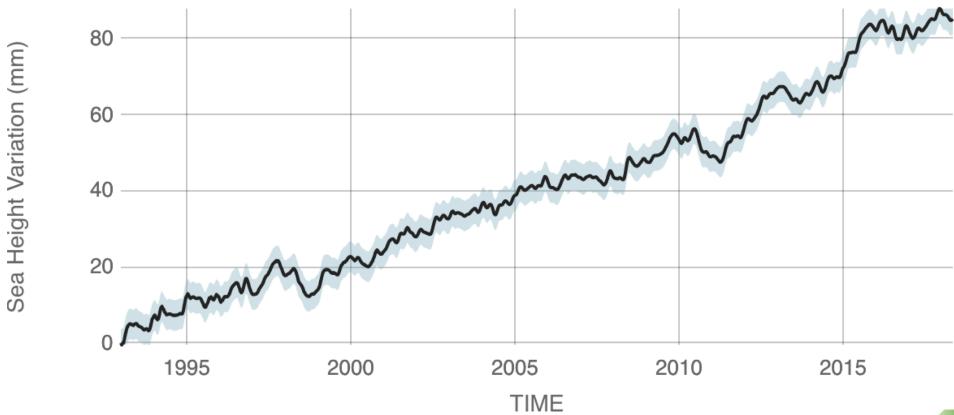
Sea level rise (over century)



Steadily accelerating up



Sea level rise (over 20 years)



Source: climate.nasa.gov



Ice Mass decrease

GREENLAND MASS VARIATION SINCE 2002

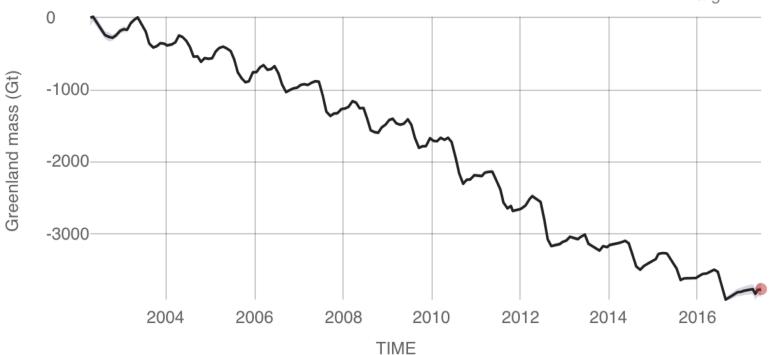
Data source: Ice mass measurement by NASA's GRACE satellites.

Credit: NASA

 \downarrow 286 0

RATE OF CHANGE

Gigatonnes per year margin: ±21





Ice Mass change

TIME SERIES: 1979-2017

Data source: Satellite observations.

Credit: NASA Scientific Visualization Studio

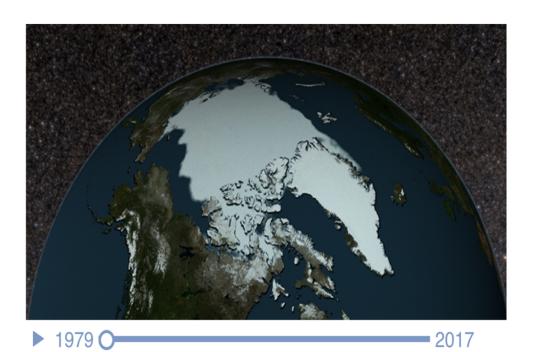
1979

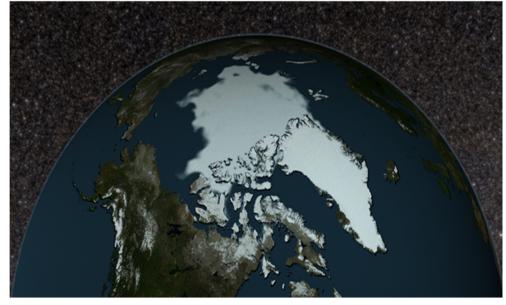
TIME SERIES: 1979-2017

Data source: Satellite observations.

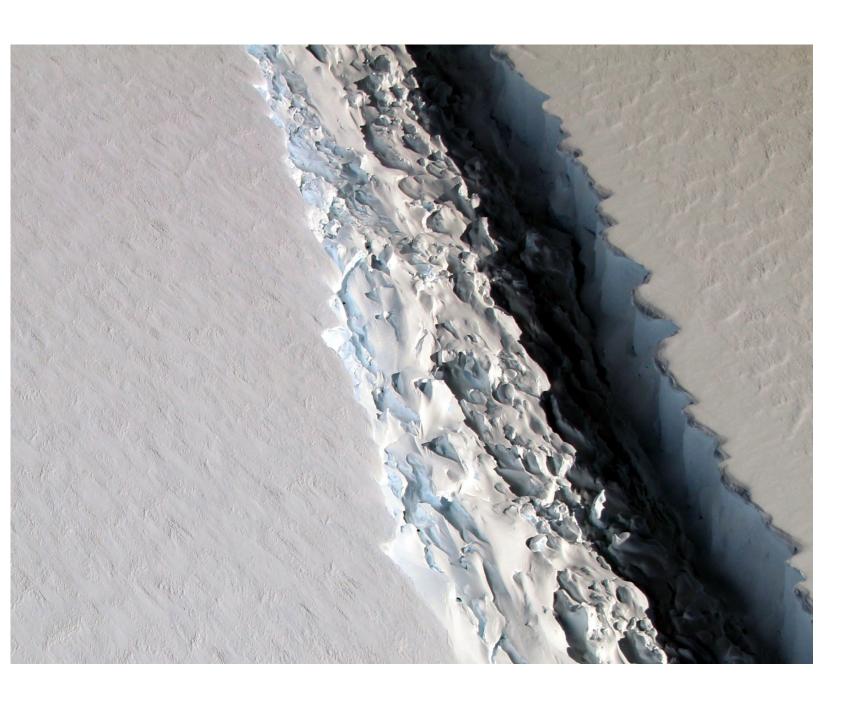
Credit: NASA Scientific Visualization Studio

2017





▶ 1979 **○**2017



Antarctic Larson rift

(section of ice bigger than France & UK combined splitting from Antarctic in 2018)





Earth's temperature rise

TIME SERIES: 1884 TO 2017

Data source: NASA/GISS

Credit: NASA Scientific Visualization Studio

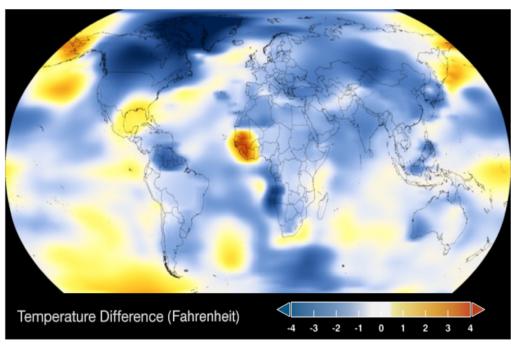
1884

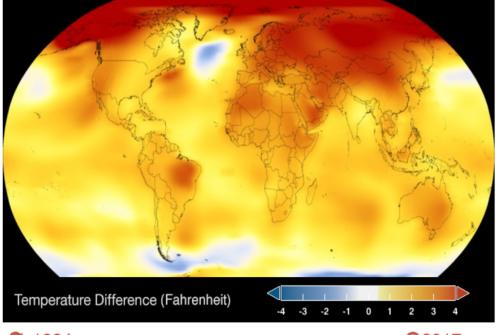
TIME SERIES: 1884 TO 2017

Data source: NASA/GISS

Credit: NASA Scientific Visualization Studio

2017





C 1884 O 2017 C 1884

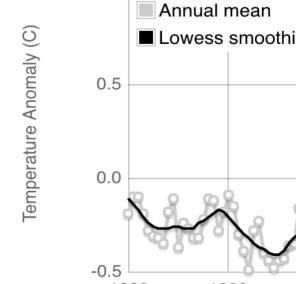
-O2017

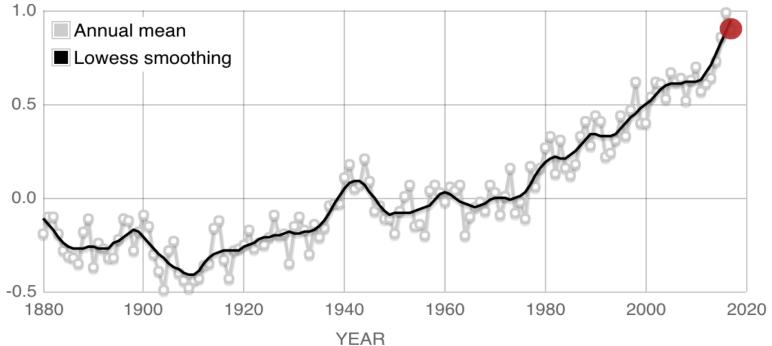
GLOBAL LAND-OCEAN TEMPERATURE INDEX

Data source: NASA's Goddard Institute for Space Studies (GISS).

Credit: NASA/GISS

Temperature rise







Now the Good News



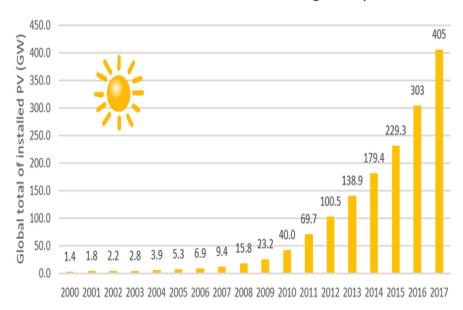


1977 price \$76.67/watt The Swanson Effect Price of crystalline silicon photovoltaic cells. 50 40 30 20 10 2013 price \$0.74/watt Scorce: Bloomleng New Stergy Finance Scorce: Bloomleng New Stergy Finance Scorce: Bloomleng New Stergy Finance

Exponential drop in solar costs

New Clean Energy is Growing Exponentially

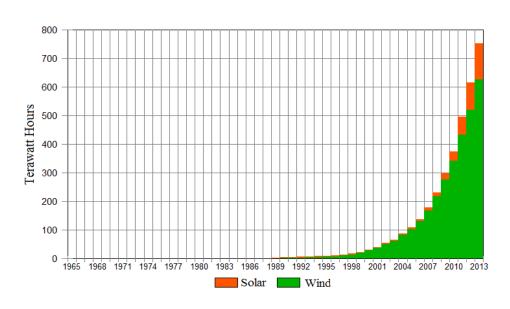
Cumulative installed solar PV globally



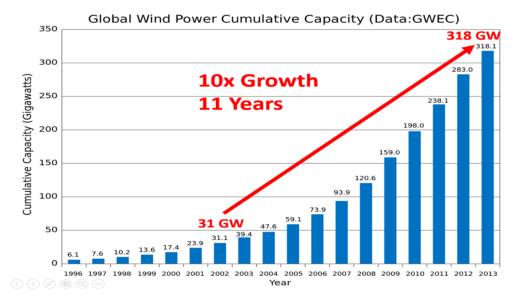
Exponential growth of solar energy



New Clean Energy is Growing Exponentially



Exponential growth of all renewable energy

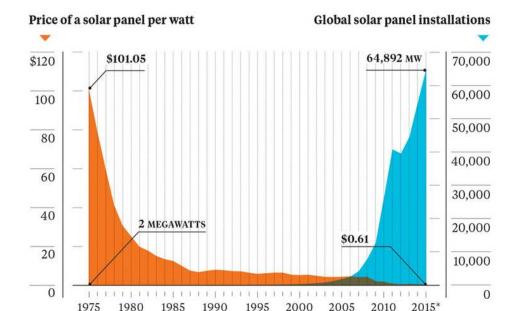


Exponential growth of wind energy



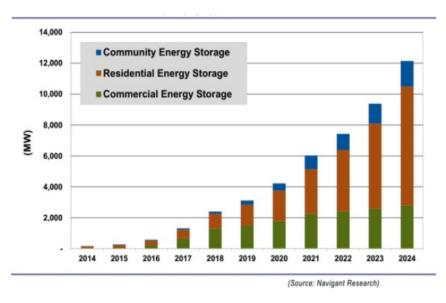


New Clean Energy is Growing Exponentially



Exponential fall of costs and so growth of take-up

Installed DESS Power Capacity by Application, World Markets: 2014-2024



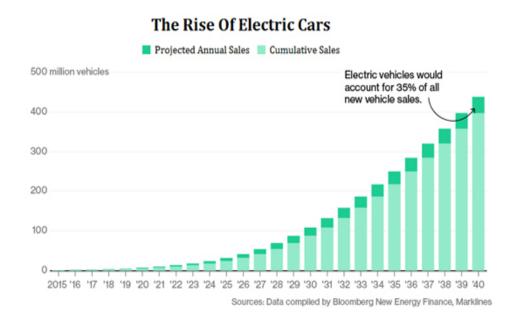
Exponential growth of energy battery storage. Will mitigate the issue of renewables being intermittent energy.



Estimated Connected LED Light Bulb Shipments And Cost US \$20 60 \$18 50 Estimated Connected Light Bulb Cost \$16 \$14 \$12 \$10 \$8 \$4 10 \$2 2014E **BI INTELLIGENCE**

Exponential growth of low energy LED lighting

New Clean Energy is Growing Exponentially



Exponential growth of Electric Vehicles

At these exponential rates new clean electricity could totally replace conventional electricity in just 16 years!







#BEINCONVENIENT

9 Ways to Act

- 1. Speak Truth to Power: Support climate change solutions at council meetings and other open forums with elected leaders. Support and vote for elected officials who will act on climate issues. Work to defeat those who will not.
- **2. Talk about Climate Change**: Watch the Al Gore film 'An Inconvenient Truth' and the sequel 'Truth to Power'. Use the 10 minute primer on the video as a great conversation starter. See: www.climaterealityproject.org
- **3. Write about Climate issues**: Write a letter to the editor, opinion piece or post on social media about the urgency of the climate crisis and climate solutions. Engage with those who do not see the problem.
- 4. Switch your Community to Renewables: Tell community leaders you want clean energy for your village, town or city.
- 5. Make your Business and Employer more Sustainable: Your business can save money while it saves the planet.
- **6. Run for Office**: There are thousands of opportunities to run for office; join a clean energy or sustainability company; or join a campaigning group; and make a difference at local, district, county, regional, national or even global level.
- 7. Walk the Walk at Home: Purchase energy efficient appliances and consider switching to solar PV and/or switching to a 100% renewable electricity provider and Electric Vehicles. Think to reduce waste (energy, water, plastic, packaging, food)
- **8. Eat with the Planet in Mind**: Eating less meat; choosing local foods; and buying organic products helps reduce your environmental impact.
- 9. Vote with your Money: Invest in or buy from companies with responsible environmental policies.





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what can you do?

www.dorkingsolargroup.org/reducing-your-impact