## Our Planet









## Carbon dioxide concentration



Carbon dioxide concentration



Source: climate.nasa.gov



#### **GROUND DATA: 1870-2013**

Data source: Coastal tide gauge records. Credit: <u>CSIRO</u>



Sea level rise (over century)

Sea level rise (over 20 years)



Source: climate.nasa.gov

#### **GREENLAND MASS VARIATION SINCE 2002**

Data source: Ice mass measurement by NASA's GRACE satellites. Credit: NASA **RATE OF CHANGE** 

↓286.0

Gigatonnes per year margin: ±21





Ice Mass decrease

# Ice Mass change

2017

**O**2017

#### TIME SERIES: 1979-2017

Data source: Satellite observations. Credit: NASA Scientific Visualization Studio



► 1979 **O** 

2017

1979

#### TIME SERIES: 1979-2017

Data source: Satellite observations. Credit: <u>NASA Scientific Visualization Studio</u>

▶ 1979 -



Antarctic Larson rift

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





# Earth's temperature rise

2017

#### **TIME SERIES: 1884 TO 2017**

Data source: NASA/GISS

1884

Credit: NASA Scientific Visualization Studio



#### **TIME SERIES: 1884 TO 2017**

Data source: NASA/GISS Credit: NASA Scientific Visualization Studio



## Temperature rise

#### **GLOBAL LAND-OCEAN TEMPERATURE INDEX**

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





Temperature Anomaly (C)





Hope for our thin vulnerable atmosphere





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

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



Exponential fall of costs and so growth of take-up



(Source: Navigant Research)

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





Exponential growth of low energy LED lighting

## New Clean Energy is Growing Exponentially

#### **The Rise Of Electric Cars**



### **Exponential growth of Electric Vehicles**





### **#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: <u>www.climaterealityproject.org</u>
- **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.





- website: www.dorkingsolargroup.org
- twitter: <u>twitter.com/DorkingSolarGp</u>
- email: <u>info@dorkingsolarGroup.org</u>

what can you do? <u>www.dorkingsolargroup.org/reducing-your-impact</u>