

Environmental Management links

Lithosphere

Interactive geology map of Britain - <http://www.bgs.ac.uk/data/mapViewers/home.html>
<http://mapapps.bgs.ac.uk/geologyofbritain/home.html>
<http://mapapps.bgs.ac.uk/geologyofbritain/home.html>

Mineral extraction industry report -
http://www.mineralproducts.org/documents/CBI_UK_Mineral_Extraction_Industry_2016_2.pdf
<http://www.mineralproducts.org>

Making edible soil activity: <https://uk.pinterest.com/pin/242561129902396783/>

<https://www.theguardian.com/world/2016/may/17/japans-coal-fired-plants-to-cause-thousands-of-early-deaths-greenpeace>

Case study:
landscape restoration - Northumberlandia - http://www.northumberlandia.com/page_details.html?PID=28&sec=ab (53 secs)

Hydrosphere

Watercycle explained - <http://water.usgs.gov/edu/watercycle.html>
Individual parts of the H2O cycle — <http://water.usgs.gov/edu/watercyclerrunoff.html>
Build an aquifer activity - <http://sciencelearn.org.nz/Contexts/H2O-On-the-Go/Sci-Media/Video/Building-an-aquifer-model>

Water risk/stress/scarcity
definition - <http://pacinst.org/water-definitions/>
Interactive global water risk map - <http://www.wri.org/our-work/project/aqueduct>

World resources Institute, water - <http://www.wri.org/our-work/topics/water>

Case studies:
comparing floods in UK and India
North Indian floods, 2013
<https://www.youtube.com/watch?v=EmAyl4roK10> - 1 something - deli floods
<https://www.youtube.com/watch?v=CnY6rIZCFA4> - 1.47
https://www.google.co.uk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=7&cad=rja&uact=8&ved=0ahUKEwjM8O-qg4bQAhUSM8AKHRieDzgQtwlIQjAG&url=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3DJfEeo4s_ziE&usq=AFQjCNHWIbu8a8HtnOLgR6TEMzJq-hqf_w&sig2=MIFtbXLppDbH1U6ekjQX7g - 2.20
wikipedia - https://en.wikipedia.org/wiki/2013_North_India_floods
<https://www.theguardian.com/global-development/2013/aug/05/india-floods-farmland-uttarakhand>

UK floods Christmas 2015/16
<https://www.youtube.com/watch?v=-pcwrTo4rRM>
<https://www.youtube.com/watch?v=UpEReBBwVMw>
https://en.wikipedia.org/wiki/2015-16_Great_Britain_and_Ireland_floods
<http://researchbriefings.parliament.uk/ResearchBriefing/Summary/CBP-7424>
<http://www.bbc.co.uk/news/uk-35891857>

Atmosphere

Interactive: Worldwide air quality - <http://aqicn.org/here/>

The ozone layer, the thin blue line - <https://www.youtube.com/watch?v=qwgfU228clE> (4ish mins)
Brian Cox trying to convince a climate change denier - <https://www.youtube.com/watch?v=LxEGHW6Lbu8> (3.22 mins - 8 mins, ish)

Whatever happened to the ozone:

<https://www.youtube.com/watch?v=0ZfBgjUnXIs>

Ozone layer on the mend (NASA):

<https://www.youtube.com/watch?v=sFTfkuae8IM>

Greenhouse Gas Emissions data:

<https://www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data>

Case studies

Air pollution:

[https://www.theguardian.com/world/2016/dec/21/smog-refugees-flee-chinese-cities-as-airpocalypse-blights-half-a-billion?](https://www.theguardian.com/world/2016/dec/21/smog-refugees-flee-chinese-cities-as-airpocalypse-blights-half-a-billion?utm_source=esp&utm_medium=Email&utm_campaign=GU+Today+main+NEW+H+categories&utm_term=205093&subid=18768254&CMP=EMCNEWEML661912)

[utm_source=esp&utm_medium=Email&utm_campaign=GU+Today+main+NEW+H+categories&utm_term=205093&subid=18768254&CMP=EMCNEWEML661912](https://www.theguardian.com/world/2016/dec/21/smog-refugees-flee-chinese-cities-as-airpocalypse-blights-half-a-billion?utm_source=esp&utm_medium=Email&utm_campaign=GU+Today+main+NEW+H+categories&utm_term=205093&subid=18768254&CMP=EMCNEWEML661912)

<https://www.theguardian.com/environment/2014/mar/25/air-pollution-kills-7m-people-a-year>

China/nuclear:

<http://www.economist.com/news/china/21707576-china-wants-its-nuclear-industry-grow-dauntingly-fast-glowing-future>

https://www.nytimes.com/2016/12/16/world/asia/beijing-air-pollution.html?_r=0

Tackling pollution from congestion:

<https://www.theguardian.com/cities/2014/mar/20/licence-plate-driving-bans-paris-ineffective-air-pollution>

<https://www.theguardian.com/environment/2015/oct/19/oslo-moves-to-ban-cars-from-city-centre-within-four-years>

<https://www.theguardian.com/world/2016/dec/07/paris-bans-cars-for-second-day-running-as-pollution-strikes>

Biosphere

Population: growth - history of... <http://www.populationeducation.org/content/world-population-video> (4ish mins)

Population pyramids - actual and projected, by country: <https://populationpyramid.net/world/2050/>
Hans Rosling, population lecture, approximately 1 hour (2015) - <https://www.gapminder.org/videos/dont-panic-the-facts-about-population/>

Hans Rosling on why most of the world is better off than you think, 9 min interview - <https://www.youtube.com/watch?v=1vr6Q77IUHE>

Interactive world population data site - <http://www.prb.org/Publications/Datasheets/2012/world-population-data-sheet/world-map.aspx#/map/population>

Agricultural revolution - (<http://study.com/academy/lesson/the-agricultural-revolution-timeline-causes-inventions-effects.html>)

Third world farmers - <http://3rdworldfarmer.com/index.html>

Malawi case study:

10 facts about Malawi - <https://borgenproject.org/10-facts-about-poverty-in-malawi/>

Malawi - <https://www.youtube.com/watch?v=8YlvAnMdxwI> - Malawi's impoverished living at the sharp end of climate change (2.28)

stopping child labour - <https://www.youtube.com/watch?v=62RosnN5m8M>

<http://www.economist.com/news/international/21700323-development-aid-best-spent-poor-well-governed-countries-isnt-where-it>

<https://www.theguardian.com/politics/2016/nov/21/uk-aid-money-spent-trying-to-boost-british-role-in-malawi-oil-sector>

<https://www.theguardian.com/global-development/2014/sep/10/malawi-budget-foreign-aid-donors-mutharika>

Hans Rosling, poverty lecture, approx. 1 hour (2015) - <https://www.gapminder.org/videos/dont-panic-end-poverty/>

Bioculture case study:

[https://www.theguardian.com/tv-and-radio/2017/jan/01/planet-earth-ii-david-attenborough-martin-hughes-games-bbc-springwatch?](https://www.theguardian.com/tv-and-radio/2017/jan/01/planet-earth-ii-david-attenborough-martin-hughes-games-bbc-springwatch?utm_source=esp&utm_medium=Email&utm_campaign=GU+Today+main+NEW+H+categories&utm_term=206608&subid=18768254&CMP=EMCNEWEML6619I2)

[utm_source=esp&utm_medium=Email&utm_campaign=GU+Today+main+NEW+H+categories&utm_term=206608&subid=18768254&CMP=EMCNEWEML6619I2](https://www.theguardian.com/tv-and-radio/2017/jan/01/planet-earth-ii-david-attenborough-martin-hughes-games-bbc-springwatch?utm_source=esp&utm_medium=Email&utm_campaign=GU+Today+main+NEW+H+categories&utm_term=206608&subid=18768254&CMP=EMCNEWEML6619I2)

Managing population articles:

http://www.bbc.co.uk/schools/gcsebitesize/geography/population/managing_population_rev1.shtml

<https://www.scientificamerican.com/article/there-are-more-boys-than-girls/>

<http://www.livescience.com/33491-male-female-sex-ratio.html>

https://www.nytimes.com/2015/10/31/world/asia/china-will-feel-one-child-policys-effects-for-decades-experts-say.html?_r=0

Population stats: <http://www.btlas.com/pp/en/china/2016/>

Urbanisation

(Urbanization and the future of cities - Vance Kite) - <https://www.youtube.com/watch?v=fKnAJCSGSdk> (4.08)

http://www.bbc.co.uk/schools/gcsebitesize/geography/urban_environments/urbanisation_medcs_rev6.shtml

Death rate/birth rate:

<http://data.worldbank.org/indicator/SP.DYN.CDRT.IN>

World biosphere reserves:

<http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/main-characteristics/>

General Topics

Carbon footprint calculator: <http://footprint.wwf.org.uk>

Climate change

A students guide to global climate change:

<https://www3.epa.gov/climatechange/kids/impacts/signs/index.html>

Hope:

<https://www.theguardian.com/environment/2016/dec/12/energy-thinktank-cuts-coal-demand-forecast-for-fifth-year-global-coal-use>

The future:

<http://climate.nasa.gov/effects/>

What to do now?:

<http://www.ucsusa.org/our-work/global-warming/solutions/global-warming-solutions-reduce-emissions#.WH1RzXecaT8>

Energy

India energy crisis:

<https://www.theguardian.com/world/2012/jul/31/india-blackout-electricity-power-cuts>

<http://www.renewableenergyfocus.com/view/29650/10-steps-to-prevent-indias-blackouts/>

http://www.biogas-india.com/events_ag_20080422_anil_dhussa_sub.pdf

<http://observer.com/2016/03/indias-looming-energy-crisis/>

Carbon capturing:

<https://www.theguardian.com/environment/2017/jan/03/indian-firm-carbon-capture-breakthrough-carbonclean>

<https://www.theguardian.com/sustainable-business/2016/dec/13/sequester-carbon-blue-planet-climate-change>

<https://www.theguardian.com/environment/2016/sep/22/soil-carbon-storage-not-the-climate-change-fix-it-was-thought-research-finds>

Carbon offsetting:

<https://www.theguardian.com/environment/2011/sep/16/carbon-offset-projects-carbon-emissions>

Irrigation:

types of irrigation:

<http://www.fao.org/docrep/s8684e/s8684e02.htm>

choosing an irrigation method:

<http://www.fao.org/docrep/s8684e/>

[s8684e08.htm#chapter%207.%20choosing%20an%20irrigation%20method](http://www.fao.org/docrep/s8684e/s8684e08.htm#chapter%207.%20choosing%20an%20irrigation%20method)

Buried clay pot irrigation:

<http://permaculturenews.org/2010/09/16/ollas-unglazed-clay-pots-for-garden-irrigation/>

Desertification:

How to green the world's deserts and reverse climate change | Allan Savory - <https://www.youtube.com/watch?v=vpTHi7O66pl> (22 mins)

www.youtube.com/watch?v=vpTHi7O66pl (22 mins)

Class Games

Over-fishing/sustainable fishing - http://ma-marine-ed.org/wp-content/uploads/2014/10/sustainability_activity.pdf

Greenhouse gas jeopardy - <https://www.airwatergas.org/resources/curriculum/greenhouse-gas-jeopardy/>

Food Web (needs adapting a bit but the cards are good) - <http://www.vtaide.com/png/habitats/index.htm>

Climate and carbon problem, stabilisation wedge game - https://cmi.princeton.edu/wedges/pdfs/teachers_guide.pdf

Films

The 33 (2015) - chilean mining accident

Deepwater Horizon (2016) - Oil spill

Film - Josh Fox, Gasland -

<https://en.wikipedia.org/wiki/Gasland>

Documentaries

Black Wave: The Legacy of the Exxon Valdez (2008)

Stephen Fry BBC deepwater horizon oil spill.

Other interesting reads

Danny Dorling - The 1%

Geography is where it is at. -

<http://www.dannydorling.org/?p=5687>

(Climate Change Ladybird Expert Book - Tony Juniper, HRH The Prince of Wales, Emily Shuckburgh., a shortened version of...)

What's Really Happening to Our Planet? - Tony Juniper, HRH The Prince of Wales, Emily Shuckburgh.