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Swansea University
Question 1 - Climate science
<p>Latest science which may not have made it to the report:</p> <p>Aaron-Morrison et. al. (2017), "State of the climate in 2016", Bulletin of the American Meteorological Society, Vol. 98, No. 8, p.Si-S280</p> <p>Ahmed, N. (2013), "Seven facts you need to know about the Arctic methane timebomb," The Guardian, 5 August. Available at: https://www.theguardian.com/environment/earth-insight/2013/aug/05/7-facts-need-to-know-arctic-methane-time-bomb (accessed 24 March 2018)</p> <p>American Psychology Association (2018), "The Road to Resilience." Available at: www.apa.org/helpcenter/road-resilience.aspx (accessed 24 March 2018)</p> <p>Arctic News (2018), "Warning Signs," 3 March. Available at: https://arctic-news.blogspot.co.id/2018/03/warning-signs.html (accessed 24 March 2018)</p> <p>Asay, M. (2013), "Americans Losing Faith In Technology, But Can't Break The Addiction," Readwrite.com, 12 September. Available at: https://readwrite.com/2013/09/12/americans-losing-faith-in-technology-but-cant-break-the-addiction/ (accessed 24 March 2018)</p> <p>Banos Ruiz, I. (2017) "This apocalyptic is how kids are imagining our climate future," DW.com. Available at: www.dw.com/en/this-apocalyptic-is-how-kids-are-imagining-our-climate-future/a-40847610 (accessed 24 March 2018)</p> <p>Becker, E. (1973), The Denial of Death, Simon & Schuster, New York, NY.</p> <p>Becker, R. (2017), "Why scare tactics won't stop climate change: Doomsday scenarios don't inspire action," The Verge, 11 July. Available at: https://www.theverge.com/2017/7/11/15954106/doomsday-climate-science-apocalypse-new-york-magazine-response (accessed 24 March 2018)</p> <p>Bendell, J. (2018), "After Climate Despair – One Tale Of What Can Emerge," Jembendell.com, 14 January. Available at: https://jembendell.wordpress.com/2018/01/14/after-climate-despair-one-tale-of-what-can-emerge/ (accessed 24 March 2018)</p> <p>Bendell, J. and Lopatin, M. (2016), "Democracy Demands a Richer Britain," Huffington Post, 2 December. Available at: http://www.huffingtonpost.co.</p> <p>Bendell, J., Sutherland, N. and Little, R. (2017), "Beyond unsustainable leadership: critical social theory for sustainable leadership", Sustainability Accounting, Management and Policy Journal, Vol. 8 Issue: 4, pp.418-444. Available at: https://doi.org/10.1108/SAMPJ-08-2016-0048 (accessed 24 March 2018)</p> <p>Benson, M. and Craig, R. (2014), "The End of Sustainability," Society and Natural Resources, vol.27, pp.777-782</p> <p>Bernhardt, A. (2018), "Bonds: How To Finance Climate Adaptation," Brinknews.com, 19 February. Available at: http://www.brinknews.com/bonds-how-to-finance-climate-adaptation/ (accessed 24 March 2018)</p> <p>Brand, F. S., and Jax, K. (2007), "Focusing the meaning(s) of resilience: resilience as a descriptive concept and a boundary object." Ecology and Society, vol.12, issue 1, p.23. Available at: http://www.ecologyandsociety.org/vol12/iss1/art23/ (accessed 24 March 2018)</p> <p>Brand, U., Blarney, N., Garbelli, C., et al. (2016), "Methane Hydrate: Killer cause of Earth's greatest mass extinction." Palaeoworld, vol.25, issue 4, pp.496-507.</p> <p>Britten, G. L., Dowd, M. and Worm, B. (2015), "Changing recruitment capacity in global fish stocks," Proceedings of the National Academy of Sciences. Published ahead of print December 14, 2015. Available at: www.pnas.org/content/early/2015/12/09/1504709112 (accessed 24 March 2018)</p> <p>Brysse, K., Reskes, N., O'Reilly, J. and Oppenheimer, M. (2013), "Climate change prediction: Erring on the side of least drama?" Global Environmental Change, Volume 23, Issue 1, pp.327-337. Available at: https://www.sciencedirect.com/science/article/pii/S0959378012001215 (accessed 24 March 2018).</p> <p>Canadell, P., Le Quéré, C., Peters, G., Andrew, R., Jackson, R. and Haverd, V. (2017), "Global Carbon Budget 2017", Globalcarbonproject.org. Available at: http://www.globalcarbonproject.org/carbonbudget/index.htm (accessed 24 March 2018).</p> <p>Clément, V. and J. Rivera (2016) From Adaptation to Transformation: An Extended Research Agenda for Organizational Resilience to Adversity in the Natural Environment, Organisation and Environment, Volume: 30 issue: 4, page(s): 346-365</p> <p>Climate Action Programme (2018), "\$1 billion of new funding announced for climate adaptation projects," Climateactionprogramme.org, 2 March. Available at: http://www.climateactionprogramme.org/news/1-billion-of-new-funding-announced-for-climate-adaptation-projects (accessed 24 March 2018).</p> <p>Cohen, D. A. (2017), "The Power and Peril of 'Climate Disaster Porn'," New Republic, 11 July. Available at: https://newrepublic.com/article/143788/power-peril-climate-disaster-porn (accessed 24 March 2018).</p> <p>de Sousa Frago, R.M., C.J. de Almeida Noéme (2018) Economic effects of climate change on the Mediterranean's irrigated agriculture, Sustainability Accounting, Management and Policy Journal, Volume: 9 Issue: 2, 2018</p>

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as well as

The Committee's 2018 Progress Report to Parliament.

Question 2 - CO2 and greenhouse gas emissions

With some kind of carbon dioxide equivalence system.

Question 3 - Effort share

The UK is significantly responsible for the current level of carbon dioxide in the atmosphere due to historic emissions, therefore the UK should make greater reductions of current emissions compared to other, ie less developed, nations. The emissions of whatever the UK consumes need to be accounted for and included any UK reduction target.

Question 4 - International collaboration

Technology transfer, at low or zero cost, will enable the developing world to leapfrog the carbon dioxide intensive development stages taken by the UK.

Question 5 - Carbon credits

Carbon credits are not effective, these enable trading and profit making at expense of others which is not the aim

Question 6 - Hard-to-reduce sectors

The truth is hard to swallow – aviation and the consumption of meat need to be drastically reduced, if not cut to zero. We don't have an environmentally friendly alternative to air travel, we simply have to accept this. Cheap airlines are mostly the culprit, and we cannot continue to travel in this way. Air travel costs MUST go up with their environmental costs, and ALL travel must be into carbon neutralising schemes - if you pollute, you must counter act that by direct costs into tree planting or other forestry saving schemes, for example monies should go directly to poor countries and people working in forestry to enable people of countries in with rainforest/mangroves etc profit from NOT cutting their forest

Question 7 - Greenhouse gas removal

This is so far not a viable technology and cannot be the answer at this stage, we don't know if it will work and hence cannot rely on it in the future to solve our problems. - we MUST reduce emissions NOW and not allow any future offset from this technology

hopefully it WILL work and will help fight against climate change, but it will be futile if we don't reduce emissions now and do everything we can to keep carbon in the ground

Question 8 - Technology and innovation

The skills are available to produce technological solutions, however they are being applied in the wrong sectors, ie in the defence and nuclear industries. By focussing all research and design activity on creating technologies which contribute to a zero carbon society, and deploying this technology at a global scale at low cost, emissions can be globally reduced.

We must target everyday technology and low carbon energy at local scale. Yes longterm emissions target need to be tighter but we also have to focus on short-term goals

Question 9 - Behavioural change

This will involve careful managing, the events in France illustrate how easily change can trigger a negative reaction, and should start with making the population fully aware of the scale of the problem – our politicians have been deceitful in this respect. Policy changes will be accepted more easily if the reasons are fully understood. These changes will be drastic but it will be possible to achieve a zero carbon society.

it has been shown that people are incredibly unlikely to accept change positively. regardless of the good intentions. Behaviours and societies will change (we ended slave trade didn't we, and gave women the vote, didn't we) sometimes quickly, but people will need to see immediate benefit in their own lives. If tax on fuel is increased the money needs to go straight back to people, for example in health and education to create incentives to work with these policies, or, my favourite, FREE public transport. That will really mean that tax on fuel is effective. Problem is and always will be rural areas. how to increase effective public transport in hard to access sites, is a key and must be given lot of thought. Cutting all private car use in all cities is a start, leave the rural areas to deal with this transition a bit longer

Question 10 - Policy

The current framework of the country being governed by elected politicians is not appropriate for this transition. We have ended up in this crisis because the current system is driven by career politicians and profit focussed business. The government cannot be trusted to make the bold, swift and long-term changes necessary to achieve what is demanded – initiatives and mobilisation of a similar size and scope to those enacted in times of war. Citizens assemblies are necessary to oversee this change.

Question 11 - Costs, risks and opportunities

Government will have to divert funds from nuclear weapon maintenance programs for example. Funds will have to be generated from higher taxes on finance transactions, corporate taxes and start taxing the high and very high income earners to compensate.

Question 12 - Avoided climate costs

Please see references listed in question 1. It is absolutely imperative that lowest possible target is achieved

Question 13 - Devolved administrations

Local citizen assemblies will be best placed to assess the differences in capacities in each region and devolved administrations. The measures must apply to all but reflect capacities of urban vs rural areas in responding to emission reductions

Question 14 - Work plan

please see references listed in question 1. : The existing target is no longer appropriate in the current circumstances. There have been significant changes in all key climate change parameters since the targets have been set. A revision of the targets is necessary, with a goal of zero carbon emissions by 2025, in so doing the UK will become a leader and encourage other nations to take similar action.