## We Hold Truths to be Self-Evident

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Sophie, my oldest grandchild, and I made a video ( concerning the crucial issue of how the climate matter can be solved in democracies.

Stopping human-made climate change is inherently difficult, because of the nature of the climate system: it is massive, so it responds only slowly to forcings; and, unfortunately, the feedbacks in the climate system are predominately amplifying on time scales of decades-centuries. The upshot is that there is already much more climate change "in the pipeline" without any further increase of atmospheric greenhouse gases (GHGs). That does not mean the problem is unsolvable, but it does mean that we will need to decrease the amount of GHGs in the relatively near future.

The ponderous response of the climate system also means that we don't need to instantaneously reduce GHG amounts. However, despite uncertainties about some climate processes, we know enough to say that the time scale on which we must begin to reduce atmospheric GHG amounts is measured in decades, not centuries. Given the fact that the fastest time scale to replace energy systems is decades, that means that we must get the political processes moving now. And that won't happen until the public has understanding of what is actually needed and demands it.

Democracies played an outsize role in creating the climate problem, the U.S. and Europe each responsible for more than a quarter of the excess CO<sub>2</sub> in the air, and they must play a major role in the solution. The difficulty is the swamps that have developed in the capitals of almost every democracy. As Sophie and I discuss, the swamps are teeming with lawyer/lobbyists "in alligator shoes," representing financial special interests. The swamp may be deeper and the stench more rancid in Washington, where there are 5 lobbyists for every congressperson, and an uncountable number of unregistered lobbyists, but I found similar situations in more than a dozen countries.

Democracies still have the capability to overcome the obstacles and solve the climate problem, indeed to convert it into an opportunity to create a brighter future for young people, despite the fact that the swamp now engulfs the congressional and executive branches of most governments.

Solution in a democracy requires a one-two punch, which Sophie and I discuss in the video. First, the judiciary must lay a requirement on the other two branches of government, as they did in the case of civil rights in the U.S. Second, the executive and legislative branches must respond with a program that would actually work. Public support is required for these things to happen. Courts did not demand action on civil rights until public outcries began. The climate case is even a bit harder, because, even when courts demand action, the actions must be the actions that are needed, not actions defined by the Washington swamp.

Our Children's Trust (OCT) is leading the effort to achieve the first punch. The Juliana et al versus the United States case, discussed in a prior Communication (Emphatic Ruling), should be the historic case, comparable to Brown versus Board of Education for civil rights. Judges Coffin and Aiken not only have rejected requests for dismissal by the government and fossil fuel

interveners, they have also indicated that they will proceed expeditiously to trial, probably late next summer or early fall. Please support OCT – web site <a href="https://www.ourchildrenstrust.org/">https://www.ourchildrenstrust.org/</a>.

<u>Citizens Climate Lobby</u> (CCL) simultaneously needs your financial support and/or your time. They now have several hundred chapters and thousands of volunteers, who write letters-to-the editor and visit congressional representatives, so that, when the court gives the order, there will be understanding and support for the approach that can actually work: an across-the-board rising carbon fee with the funds distributed equally to all residents.

Finally, I note that we also need support for our Columbia University program Climate Science, Awareness and Solutions (CSAS), which is providing the scientific basis for the legal cases, and/or for the 501c3 CSAS, Inc, which provides an overhead-free mechanism to support our work. In the past year legal costs paid via CSAS, Inc¹ have amounted to almost \$100K including a \$25K grant to OCT and partial support of one of the OCT lawyers (Dan Galpern), who works with me in preparation of testimony and briefs for the Oregon and other legal cases. Two years ago we received a generous grant, which together with continued support from several other donors allowed us to focus on several papers² (donors are listed in acknowledgements of the papers), but with that major grant finished in 2017 must soon revert to fund-raising – support that allows that diversion to be postponed would be very helpful.

<sup>&</sup>lt;sup>1</sup> Officers of CSAS, inc. are President (Betsy Taylor), CEO (Jim Hansen), Secretary & Treasurer (Jay Halfon), Board Members (Bill McKibben, Jim Miller and Larry Travis). Donations for CSAS, Inc. should be sent to Climate Science, Awareness and Solutions, Inc., c/o Geoff Boehm, 45 West 36<sup>th</sup> St., New York, NY 10018

<sup>&</sup>lt;sup>2</sup> Principal papers published this year being:

Hansen, J. and M. Sato: Regional climate change and national responsibilities. *Environ. Res. Lett.*, **11**, 034009, 2016 <a href="http://iopscience.iop.org/article/10.1088/1748-9326/11/3/034009">http://iopscience.iop.org/article/10.1088/1748-9326/11/3/034009</a>.

Hansen, J. et al.: <u>Ice melt, sea level rise and superstorms: Evidence from paleoclimate data, climate modeling, and modern observations that 2°C global warming could be dangerous</u>. *Atmos. Chem. Phys.*, **16**, 3761-3812, 2016. Hansen, J. et al.: Young People's Burden: Requirement of Negative CO₂ Emissions, Earth Syst. Dynam. Discuss., doi:10.5194/esd-2016-42, in review, 2016 <a href="http://www.earth-syst-dynam-discuss.net/esd-2016-42/">http://www.earth-syst-dynam-discuss.net/esd-2016-42/</a>.