**More ASCE & the Global Climate Threat**

(Opinion by Public Affairs Chairman, Gregory Schroeder, P.E, M. ASCE)

A constituent was requesting action by a politician, and the politician explained that unless the phone was ringing, there was nothing that they could do.  The point is that unless the public is behind an issue in some significant way, any political action will have no traction.

The public has taken a massive turn in the average view of climate change. Look at the change in the views of the public in Australia.  Consider how fast and strong public views change when the impacts are on your soil, your home, your friends, and your relatives.  When considering Australia and other tragic extreme weather events, I would say that we are already well beyond the first deaths attributable to climate change. I would contend that if the wildfires of California or Australia were 1% worse due to climate change, then fewer deaths, injuries, and destruction would have happened without climate change.  Apply this same logic to the past ten years of extreme weather events such as hurricanes Harvey, Irma, Maria, and Superstorm Sandy.

The public is now moving out in front on climate change.  Some businesses are showing leadership while most are sitting back or avoiding the issue. I am a bit amazed by the fact that the public energy utilities have shown leadership in taking action to reduce GHG emissions.  As evidence I would submit that the public energy utilities of Wisconsin met their CO2 reduction levels in 2013 several years ahead of the target dates, and they have not slowed down but are continuing to seek to lower GHG emissions.  So, the public is out front, the utilities are next, and the politicians are behind the utilities.  How far along is the engineering community, and ASCE in particular?   I hope to take up this topic in one of my next articles by reviewing the position papers, course offerings, and the national infrastructure report card, all specifically with respect to the climate crisis.  One positive for ASCE is Robin Kemper’s President’s note in the April 2019 Civil Engineer magazine where she says, “Earth Day continues to give a voice to environmental issues and remind us that we must do our part to save the planet from the harmful effects of climate change.  Climate-change-induced events are threatening lives the economy and our infrastructure. These effects will continue through this century and beyond, resulting in more frequent wildfires, longer periods of drought, stronger storms, temperature increases and elevated sea levels…”

Similar to the politician above that can’t act without public pressure, ASCE leadership cannot move significantly without a strong push from the membership.  How did the broader public’s position shift so rapidly?  I think that empathy with the suffering and fear that a climate catastrophe could happen to me are very motivating.  I am interested in increasing our focus on climate, and the only way that I know to do that is with ASCE Collaborate.  The problem is that not enough of us at the ASCE section level are using and monitoring ASCE Collaborate.  This has to change.

I now receive an email message when a comment is posted on my articles.  It’s a thrill to see some activity, whether it is supportive or challenging my positions.  The problem is that the ‘phone’ is not ringing off of the hook.  I received some very positive, supportive comments on my last article.  Those were wonderful and built and expanded on my thoughts.  I also received a respectful and thoughtful challenge to my article which was equally welcome, because a challenge has even greater potential to advance the discussion.  I felt that I did not want to create a one on one debate with this author, so I waited for others to respond.  I waited.  Then I waited.  And then I waited some more.  Alas, still waiting.  I have extreme confidence that our membership is not without opinions, the great majority are just not looking at Collaborate, nor have we learned to use it to set up notifications of postings to the WI Section Group discussions.

We as individuals and as members of various constituent groups can start to address GHG (greenhouse gas) and climate issues or we can ignore the evidence.  Whether we do or do not we will be judged by history.  I would like us to consider an application of Blaise Pascal’s law to our action or inaction on the climate crisis.  In brief, Pascal’s logical argument was that if you live a life of faith in God and there is no God you lose nothing, but if you reject God and he is in fact your judge then you have risked everything.  So, if as Americans we continue to generate more GHG per capita than others in the world and the climate crisis continues to worsen and costs more lives and threatens every aspect of life on earth we will be judged most harshly by history.  On the other hand if we aggressively address GHG emissions and then there is a sudden reversal in the warming of the earth that no one could have foreseen we have risked relatively little.  Logic would dictate that we start to take climate change seriously and work to stop or reverse the impacts without delay.

My argument has a further application to our society of Professional Engineers.  The scientific community is overwhelmingly warning of the climate crisis.  If we do not provide leadership in addressing the climate issues in our work products, and if the scientists are proven correct by disaster upon disaster, the professional engineer will be judged most harshly and deservedly so!  On the other hand what if the engineering community begins to lead in matters of climate management and reduction of GHG emissions?  The range of outcomes includes; 1) all of the science was flawed, but we acted appropriately with respect to the scientific consensus, or 2) we ignored all warnings and fiddled while the earth burned.

We differentiate ourselves (engineers) from scientists.  We get things done: the built environment as well as management of the natural environment.  We expect respect from the scientific community in what we do in our profession. Should we not respect the scientific community within their area of expertise?  The overwhelming majority of scientists believe that the earth is now in a time of accelerating climate change and that it necessitates that we reduce GHG emissions as fast as we possibly can.  Shall we appoint ourselves the scientists AND the engineers, or are we the engineers and basing our work upon the overwhelming scientific consensus?  This article will be posted on ASCE Collaborate on the Wisconsin Section discussion board by the time this reaches you via email.

Here are some valuable resources that have been recommended to me.

<https://climate.nasa.gov/scientific-consensus/>

<http://www.ipcc.ch/report/ar5/wg1/>

<https://www.epa.gov/climate-indicators/climate-change-indicators-atmospheric-concentrations-greenhouse-gases>

*The opinions expressed here are those of the author only, and do not necessarily represent the views of his employer, the Wisconsin Section, or ASCE.*