Chapter 4: Closing Remarks

Dean Gustave Speth

First, I must on behalf of everyone here express thanks to Nick and his colleagues for what they've done in this remarkable report, for coming to Yale and spending the day with us, and even more, for putting up with Washington and making the presentations in Washington. We think that was probably the biggest contribution you could possibly make.

This report is the most comprehensive economic analysis that's been done. It will be a point of departure and reference for all future work. I see four main points coming out of it. First, that the risks are very great. Secondly, that the time is very short in at least two senses. One is that the gases are building up rapidly, and we may miss the opportunity to move to that window between 450 and 550 parts per million, and the other is that cost of stabilization is increasing, as the report points out. Thirdly, that action has got to be very significant. The report calls for 60 to 80 % reduction in the rich countries probably by 2050. And, fourthly, that the cost of mitigation can be affordable. You make these points very clearly and persuasively, and we're in your debt for making them. People will argue about many aspects of the report, I'm sure, but I suspect that these four points—these four basic conclusions—will stand up and be very robust.

The good news for all of us here in the United States is that this country has finally come alive with the issue. We seem to have passed through some threshold where it's going to be henceforth impossible for politicians to ignore it, as they have successfully done for the last quarter century.

I can't resist mentioning the fact that it was way back in the Carter administration when we said “the carbon dioxide problem should be taken seriously in new ways. It should become a factor in making energy policy and not simply the subject of scientific investigation.” That was 27 years ago.

I also have to admit that we said this, too: “In particular, we cannot presume that in order to decide whether to proceed with the carbon dioxide experiment we can accurately assess the long-term cost and benefits of unprecedented changes in global climate.” Well, anyhow, here we are. We just did it, didn't we?

But the fact that we wasted a quarter century or more here in getting busy with this problem leads The Stern Review uses the phrase "to avoid the worst," because climate change is now a chronic disease that our planet has, and we will be coping with it for a long, long time. Avoiding the worst is now the best we can do.

The momentum in the U.S. to address the issue started in the states and local governments: California's commitment to 80 % reduction by 2020, New York City is putting in place an aggressive program, and Yale has itself adopted a 43 % reduction goal by 2020.

It's now moved to Washington, and Congress is flooded with cap and trade proposals. And I think we should be excited that at long last this is happening, but we have to temper our euphoria with the knowledge that it will be a hard slog, a hard fight to get where we need to be on this problem, and we haven't got much time.

In conclusion, I have to say, Nick, that I'm one of those who worries that you may have set the stabilization target at a level that could well turn out to be dangerous, too dangerous. I'm afraid, at least based on my reading, which is a layman's reading almost, that this range of 450 parts per million CO_2 equivalent to 550 is an extraordinarily important range. At the low end of that range, we will probably have impacts that we could live with, but at the high end of that range, we're in dangerous territory.

My reading found footnote 23 in the document that you've provided us, based on subsequent work since the report, and it mentions that at 550 CO_2e, there's a 50/50 chance of exceeding warming of three degrees Celsius and that this amount of warming could lead to up to 60 % more people at risk from hunger, with half the increase in Africa and West Asia, to between 20 and 50 % of species facing extinction, and to the risk of abrupt and other major events, such as the onset of irreversible melting of the Greenland ice sheet.

And this is why, of course, the European Union has set a goal of trying to stay below 2°C warming. People like Jim Hansen and many others believe we have to come in below that level to really be safe.

And, so, we're back down at the end of the spectrum closer to 450 ppm CO_2e if we want to avoid the risks of this three-degree plus global average warming. Indeed the report itself mentions that if greenhouse gas levels could be stabilized at today's levels of

430 CO_2e, mean global temperatures would eventually rise to one to three degrees above the preindustrial level. What might we have already done, having raised the gases up to 430 CO_2e?

And the report goes on to say that sensitivity analysis implies that there is up to a one-in-five chance that the world would experience a warming in excess of three degrees Celsius above the pre-industrial levels even if greenhouse gas concentrations were stabilized at today's level of 430 parts per million. In other words, there's a 20 % chance that we've already bought the ranch, as we say.

It does seem to me that this range that you have covered is the critical range between, at the low end, something that we will have to live with and could live with at some level of damage up to something quite unacceptable at the high end.

That's my own comment. You'll have many other comments this afternoon from people who are very expert, and I'm sure that it will be a wonderful discussion. Again, thank you so much for coming and contributing and doing this report and going to Washington.