Driving Die Energiewende

The revolutionary “energy transition” that Germany is undergoing is being driven by a lot of forces: a very progressive public that fully embraces the concept of high tech and far fewer GHGs, a political establishment that backs the project – across the entire spectrum from right to left, and a number of visionaries like the late Hermann Scheer. I have written about the Energiewende for my old blog and for the new one.

Another one of Scheer's generation of leaders on renewables is Rainer Baake. He’s heading up a project called the Agora Energiewende which is, among other things, supporting the transition with advanced technical thinking on a range of issues and is also helping to spread the gospel of 100% renewable electricity globally.

I had the opportunity to hear him speak last week in New York at the headquarters of the venerable Environmental Defense Fund. As Baake noted, the German public loves renewable energy and hates nuclear power. The Germans, as I too have noted, really get it. Bankers and investors love renewables. Given the highly stable investment environment that the renewable energy feed-in tariff provides, how could they not? Baake told us that the political battles are over too. (Wow! Can you imagine that here? Not likely soon, but is it getting better?) Baake also said that renewable energy capacity is the least of his worries. There are already 33 GW of installed solar PV there! If you haven’t already, quit listening to the Big Lie that renewables can’t do the job.

The heavy lifting really starts when you get to integrating all the RE capacity into an advanced industrial economy. You need to have reliability, acceptable pricing, and you also need to continue to reduce consumption through any number of methods from demand response to a wide range of energy efficiency tactics and strategies. Another thing that Baake pointed out was that the need for energy storage, at least at this point in the development of a fully decarbonized and denuclearized energy economy, is not a given. There are any number of tools available to us now which fall generally under the idea of *flexibility*. (RMI puts it this way: “Operating existing electricity systems in nontraditional but proven ways can cost-effectively

manage wind and photovoltaic power's variability and uncertainty by four means: diversification in type and location, forecasting, integration with flexible generators and demand, and (if needed) real or virtual storage." See this from them, for instance.) In any event, working out some of the ways to provide that needed flexibility in the brave new grid is one of Agora Energiewende's central tasks.

Baake and the Germans are doing the most important work there is today in the world. (That's what I wrote in the copy of my book that I gave him.) What can the U.S. learn from Germany? See this interview with the very articulate Baake and this e-book, *Clean Break*.