The Carbon Crunch: Revised and Updated
by Dieter Helm

The title may have been appropriate for the first edition, but the revised and updated edition blows the "Carbon Crunch" in the title out of the water. Dieter Helm lays out a compelling argument against the "peak" oil/coal/gas arguments. New technologies, including fracking, have created new sources of carbon-based fuels. In addition, technologies can squeeze more out of previously drilled oil and gas reserves. All of this make a transition to renewable energy as a replacement to declining carbon-based supplies not as an inevitable outcome as it appeared at the turn of the century. And, don't forget that India and China are heavy on the dirtiest form of carbon energy - COAL.

The book is written with the (correct) belief that climate change is the biggest challenge we have today, and that governments have been largely unwilling to take actions needed to keep the planet within the 2°C limit advocated by scientists. Large meetings (Kyoto, Copenhagen, Paris, etc) with no binding agreement or limits which make good press back home for the politicians without the pain of facing the voters with the costs of global warming.

Mr. Helm takes a pragmatic approach to his solutions to global warming. Many of his proposals will not warm the hearts of the environmental movement, but are a good starting point for controlling the damage of CO2 emissions. He is realistic to note that whatever the solutions are, there is only a finite amount of capital to spend, and whatever is chosen will take away from something else (maybe something as comparatively drastic as the wartime consumer deprivation in WWII to allow for the building of the war machine). His view is that coal needs to be taken out of the global energy sector as soon as possible. His solutions, however, shortchange the current efficiencies of wind and solar, and narrowly focusing on overall CO2 (not the overall greenhouse gasses) while overlooking the effective lifespan of methane that escapes into the atmosphere and its greenhouse gas equivalent. His proposal to retrofit coal plants to use methane (natural gas) would win the CO2 battle while losing the overall Global Warming war. His final solution of using future advances in technology through increased R&D (with an government emphasis similar to the Manhattan project and the A-Bomb) seems unlikely to occur if there is no peak oil moment to spur it on.

Overall, in an ideal world, this would be a great place to start the conversation towards a transition away from carbon fuels. He believes in a carbon price (tax), which would allow the efficient producers in the market to make the transition in the quest for lower costs. As he points out, the carbon reduction in Europe can wholly be attributed to the domestic de-industrialization (with a corresponding increase in Eastern Asia). But in order for it to work, countries would need to impose these taxes on imports as well as domestic production. In today's world, that would likely be found to be an infringement on free trade.

Reviewed by John Szalasny