



The Capacity to Adapt

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The big question that most people who are peak oil aware ask themselves, continue to debate and offer solutions is: CAN WE ADAPT? Do we have the capacity to maintain a relatively high level of civilization, highly complex living systems and continue technological advancement all while adapting to a lower energy (or at least lower oil) future?

It's certainly possible. Knowledge can be retained and technology can advance even in the harshest environments. Highly complex systems existed long before oil became so prominent. The question is will we be able to adapt? I'm not a doomer, but I'm not an optimist either. In general, I think we will have a few major pivot points where we CAN make decisions that move toward positive adaptation. I think we will react in ways that we never expected. I worry that the dark angels will throw all their efforts behind propping up the status quo, the non-negotiable love affair with the automobile and overconsumption.

Today's NY Times has an [Opinion piece on this subject by Stephen Sass](#), a Cornell University engineering professor. The viewpoint starts off sounding cornucopian, but it strikes a skeptical note about midway through:

The bottom line is that the very process of developing alternative sources of energy to replace fossil fuels may yield benefits beyond our imagining. But if instead we fail to innovate, the consequences could be devastating.

In the article he talks about how ancient civilizations were forced to innovate better processes to make Iron as Tin, a formerly easily accessible raw materials began to run out and how the British replaces wood stoves with coal. He suggests that these transition each happened to adapt to new realities of the day. And indeed, the civilizations that adapted to these new realities earlier were forced to innovate another way while others that did not were left behind. He also gave an example of an ancient North American Indian village that ran out of wood and was forced to abandon their village after 100 years.

After the past century and a half of oil consumption, our civilization now faces this challenge and how we adapt will make all the difference. I don't believe that collapse is fate, but rather that as Jared Diamond made a case for in his book "Collapse", societies either choose to collectively adapt or they will self destruct. In both cases, the final outcome is completely based on human decisions, often at the highest levels of leadership.

And this pretty much where Prof. Sass concludes too:

If there is anything to be learned from history, it's that we need to face the harsh reality of fossil fuel scarcity and begin something like a Manhattan project to develop clean, economical, and preferably sustainable new sources of energy. Just as importantly, we need to innovate on the side of conservation and efficiency. The Indians of Mitchell were

able to move to the Missouri, but if we use up, or more realistically, greatly deplete, the resources of this earth, we have no place to go.

A Manhattan project indeed. Sort of like what the folks at the NY State [Apollo Alliance](#) are calling for....

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