



Thoughts after a trip to Botswana

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The ongoing energy supply problems that have emerged from continued growth of the economies of Southern Africa, and which I wrote about following [my trip down there](#), may well be an early precursor to a future that many countries might come to face before too long. Signs that overall energy demands have been rising beyond the immediate capacity of local systems to provide supply can be transiently overcome by increasing imports of power. But when the supply of that power becomes threatened, or disappears due to factors that can range from the increasing domestic demand for power – which led South Africa to restrict exports – through the collapse of domestic order – the problems that Zimbabwe currently faces, or the inability to deliver available power (Mozambique has large hydro power reserves but cannot transmit the power to places such as Botswana) then suddenly the switches on the wall don't work.

There are lots of excuses why not to make investments in new power plants based on domestically produced energy, particularly in a changing political climate, but the failure to properly prepare for the future by building anticipated capacity, or to assume the availability of foreign supply sources (such as increased volumes of LNG) that may not be around when needed may well mean that at some point in the non-too-distant future the switches on our walls may not work either.

[SacredCowTipper](#) pointed out that there is a [new site](#) that is covering stories of energy shortages around the world and the flags on the map show that it is becoming an international problem. Underlying those stories are some societal changes that will continue to increase energy demands particularly in countries that have historically had lower consumption. Looking, for example, at Southern Africa first one can see the electrification of rural communities, and then the increasing use of air conditioning. Both will be funded, in part, by the rising price of the commodities of which many of those countries have significant untapped quantities. And thus energy demands will likely continue to grow at better than 5% p.a. into the future.

To meet that demand the lesson from the recent past is that the countries must expect to rely on their own resource, rather than on imports, and the obvious candidate is coal, of which there is a significant amount in most of the countries of the sub-continent. And so there is, understandably, a significant pressure for new power stations to be brought on line, and for pre-existing ones to be refurbished and brought back into production. Within [four years](#) it is likely that the short-term hiatus may be behind them, and growth may well resume at an increased rate, with adequate domestically produced power to underpin that growth. The choice of coal is not made out of the ability to select from a menu of opportunities. It is there, it is what they have, and it can be

brought on line fairly rapidly.

Unfortunately it is not likely to be that easy for the rest of us. True, we haven't reached the point of rolling blackouts or limited availability of power, such as now exists in parts of India and China. But we seem unable to grasp the scale of the issues that are slowly coming to pass. There has been a significant debate over ethanol but, regardless of the energy merits of that conversion, the increasing price of feed stocks for food have driven the price high enough that that particular knight may well already have fallen off his trusty steed. Wind is now apparently the "novel-energy-source" of the day, and I have to find a trip so that I can read Wendy Williams and Robert Whitcomb's book on the [Cape Wind project](#). But having watched the sprouting of turbines over the area around Durham, in the UK, and the irregularity with which they seemed to turn, I am still a little under-impressed with the system capability and their capacity to meet a significant part of the coming shortfalls in power remains questionable.

And with the demise of one, and the reduced expectation of the other, one is left wondering what new rabbit will come forth from the hat as the new energy savior of us all. Conservation is a hidden and ongoing reality, as more folk insulate and try and reduce their power costs, but it can only go so far. And will we see a drop in the National Speed limit back to 55 mph – which would indicate some level of seriousness in addressing that issue – no, I am not holding my breath.

We are, in short, three years on from the time that we founded this site, and yet while the topic has seen much debate and there is at least a peripheral awareness that all is not well in the energy world, we still remain very complacent. We are much as Southern Africa was as recently as last November, aware vaguely that something is going to go wrong sometime, but not really understanding either the size or the immediacy of the problem.

The smaller incremental drops in production from individual countries and their exports are beginning to add up to more significant numbers that I don't expect will be met. The Aramco complacency about their capacity has been tied, for a number of years, to include the roughly million barrels a day that they are going to get from Manifa. Before that comes on stream they need to have the refineries in place to treat the oil. There have been [delays](#) that I suspect, now may move that volume out beyond the time of the peak, and perhaps even the plateau.

If world oil production starts to drop off significantly in 2010 – what are we going to replace it with? OK, I'll be an optimist - If world oil production starts to drop off significantly in 2015 – what are we going to replace it with? Um! Any candidate should have the capability at that time of producing, shall we say, the equivalent of 4 million barrels of oil a day! Southern Africa has coal, and will have the power stations to use it – what do we have ?



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