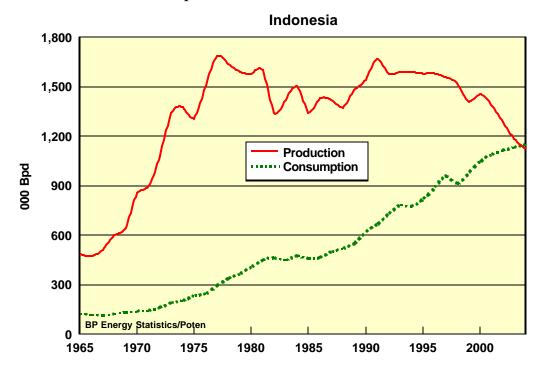


The Fall of Oil Empires

July 8, 2005

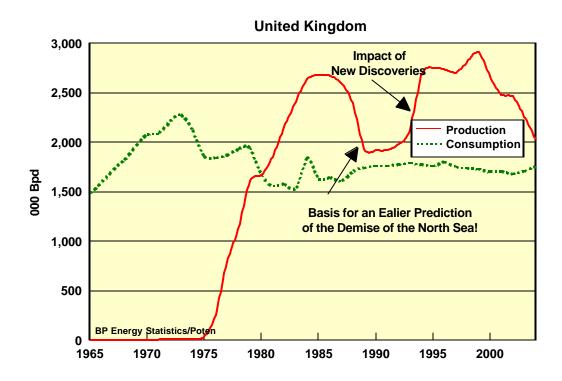
Oil market commentators have been trying to figure out who is going to increase oil production to avert the calamitous economic effects of \$100 per barrel oil. About every two weeks or so there is another declaration of soon-to-be increased production that is becoming reminiscent of the boy who cried "Wolf" once too often. Discussing who might increase production ignores the more immediate issue of whose production is slipping. Coupled with continuing oil consumption growth in China and the United States, declines in oil output make step-ups in production by other nations all the more necessary. Let's take OPEC member Indonesia as an example.



Indonesia was one of the first nations to develop its oil industry following earlier developments in the United States and Russia (Black Sea) spearheaded by the Royal Dutch Petroleum and Shell Transport and Trading. Production peaked in 1977 at 1.7 million bpd, then went into a decline until new oil fields were developed. Another peak was reached in 1991 at just under 1.7 million bpd and a decline ensued without the benefit of another oil discovery to 1.1 million bpd in 2004. With strong growth in domestic demand, Indonesia is on the cusp of becoming a net oil importer. Indonesia has recently discussed leaving or downgrading its participation in OPEC to observer membership.

U.K. Transitioning to an Oil Importer

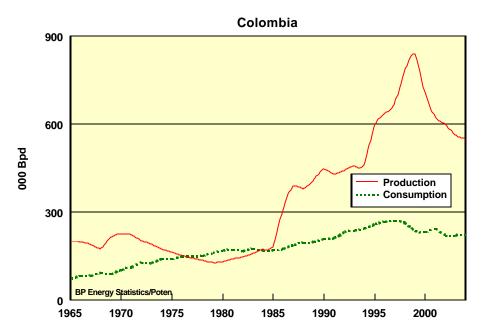
The days of the U.K. being a net exporter appear again to be numbered. North Sea production of 5.2 million bpd in 2004 is 800,000 bpd off from its peak of 6 million bpd in 1999. Norway has been able to sustain its production, but a decline is just beginning to set in. This year the shortfall in North Sea production will probably exceed 1 million bpd just as the BTC pipeline ramps up to its throughput of 1 million bpd.



Seen in this light, Caspian oil is merely a replacement for declining North Sea crude except that it has to be shipped from the eastern Mediterranean. Unless there is another major discovery, Europe will be essentially importing all its oil by 2030 as it did in the 1970s.

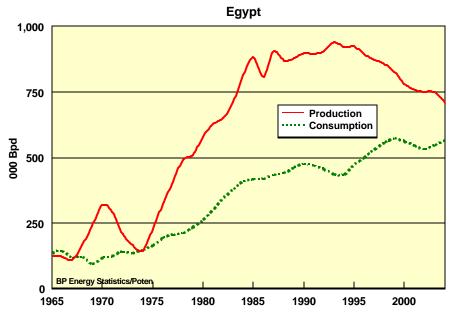
So Is Colombia

Colombia is about five years away from making the transition to a net oil importer. The problem with Colombian oil production is a combination of insurgents blowing up pipelines, kidnapping and terrorizing oil workers, and a lack of success in oil exploration to offset declining reserves. Colombia's oil production peaked at 840,000 bpd in 1999 and has subsequently declined to 550,000 bpd in 2004.



And So Is Egypt

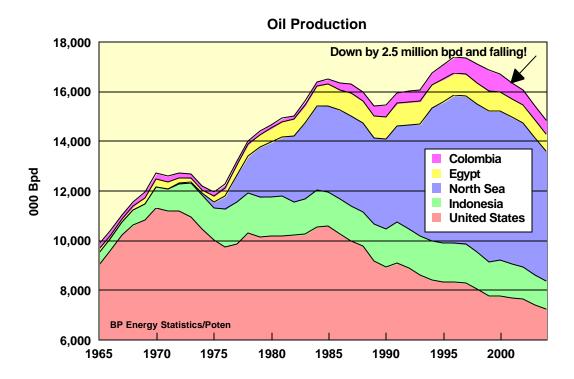
Oil exploration in Egypt has been disappointing and has failed to increase



reserves. Oil production peaked in 1995 at 925,000 bpd and has been in a steady decline since then. Oil production in 2004 was 710,000 bpd. The nation's export potential is rapidly declining from falling production and increasing consumption.

The Big Picture

The United States is also facing falling production: continuing oil development in the Gulf of Mexico has failed to stem declining Lower 48 and Alaska production. Opening up a very small portion of the Alaska National Wildlife Reserve for exploration will not impact U.S. production for another decade even if oil is discovered. Taken together, production from these five oil producing regions peaked in 1996 at 17.4 million bpd and their 2004 combined production was 14.9 million bpd, a decline of 2.5 million bpd.



The world crude situation is more urgent than simply producing more from existing fields. New large-sized discoveries are needed to fill the growing gap between escalating demand and declining production from the falling oil empires. These truly are the times that test men's energy souls.