



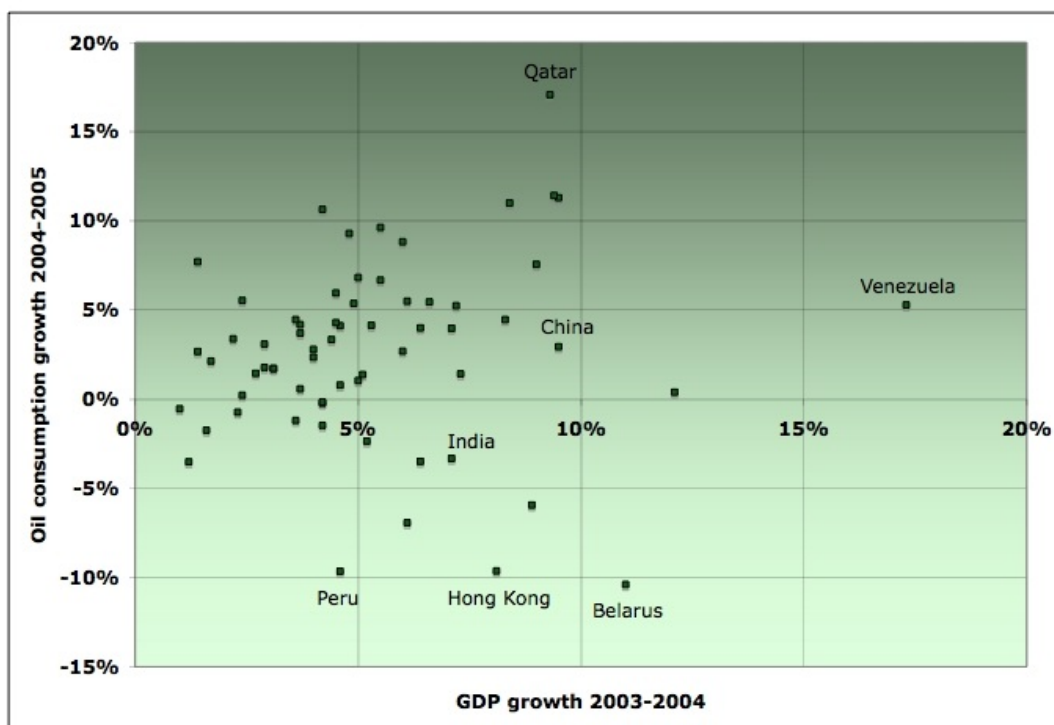
Consumption Winners and Losers

Posted by [Stuart Staniford](#) on June 16, 2006 - 9:40am

Topic: [Demand/Consumption](#)

Tags: [peak oil](#) [[list all tags](#)]

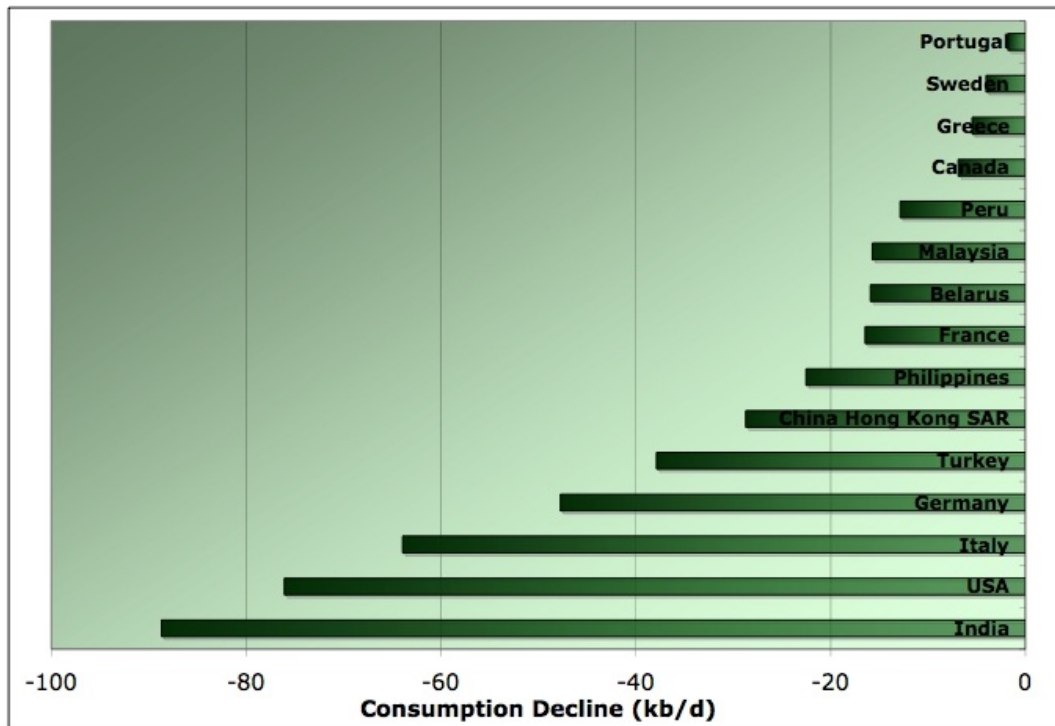
[editor's note, by Prof. Goose] Hey folks, see these buttons to the left? Note that they include reddit and digg. If you recommend TOD articles at these sites (account required, but they take seconds to set up, and once setup and logged in, all you have to do is click!), we can get more traffic driven over here!



Oil consumption percentage change from 2004-2005 for countries in BP report, versus GDP percentage change 2003-2004. Source [BP Statistical Review of World Energy 2006](#) for oil consumption data, and [United Nations Statistics Division](#) for GDP data.

Continuing with exploration of what's in the new BP report, I wanted to update information on how consumption changed in various countries as a result of the tightening of world supplies through 2005. I looked at this question in [Who has to conserve how much?](#) based on EIA data, but the BP data breaks out a lot more countries.

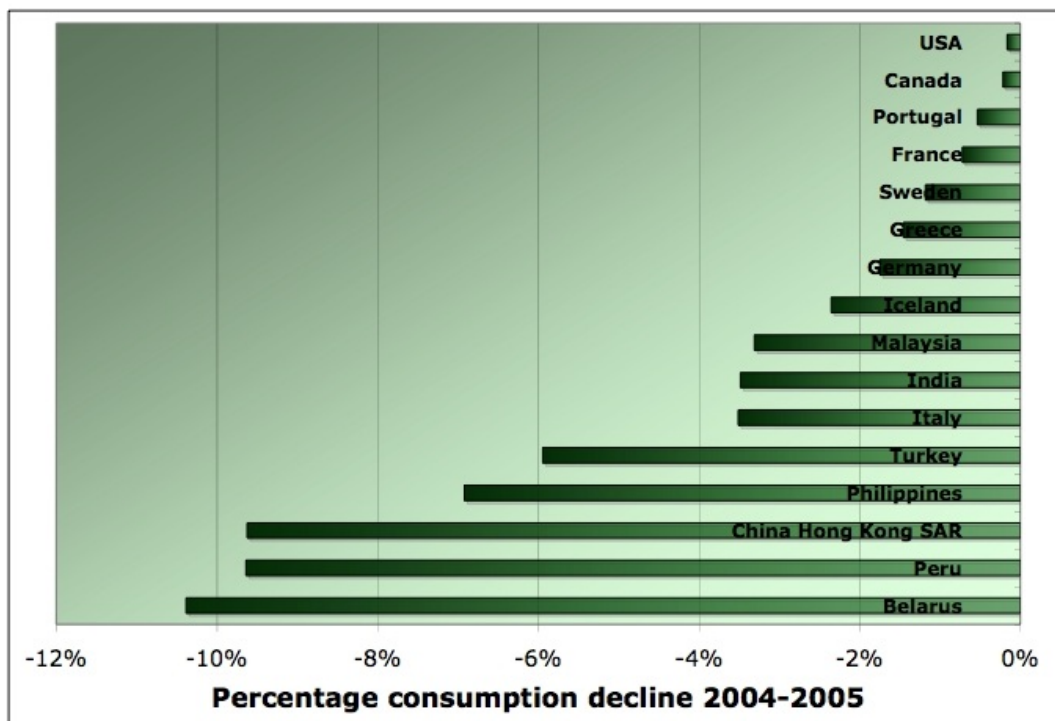
Let's start by looking at those countries that reduced their usage from 2004 to 2005, ordered by the absolute change in usage:



Top countries by absolute decline in oil usage 2004-2005. Source [BP Statistical Review of World Energy 2006](#).

The surprising leader was India, with the US closely following behind. After that we get mostly European countries, with a scattering of middle income developing countries in there too.

Let's look now at the countries that declined based on how big the decline was as a percentage of their 2004 usage:

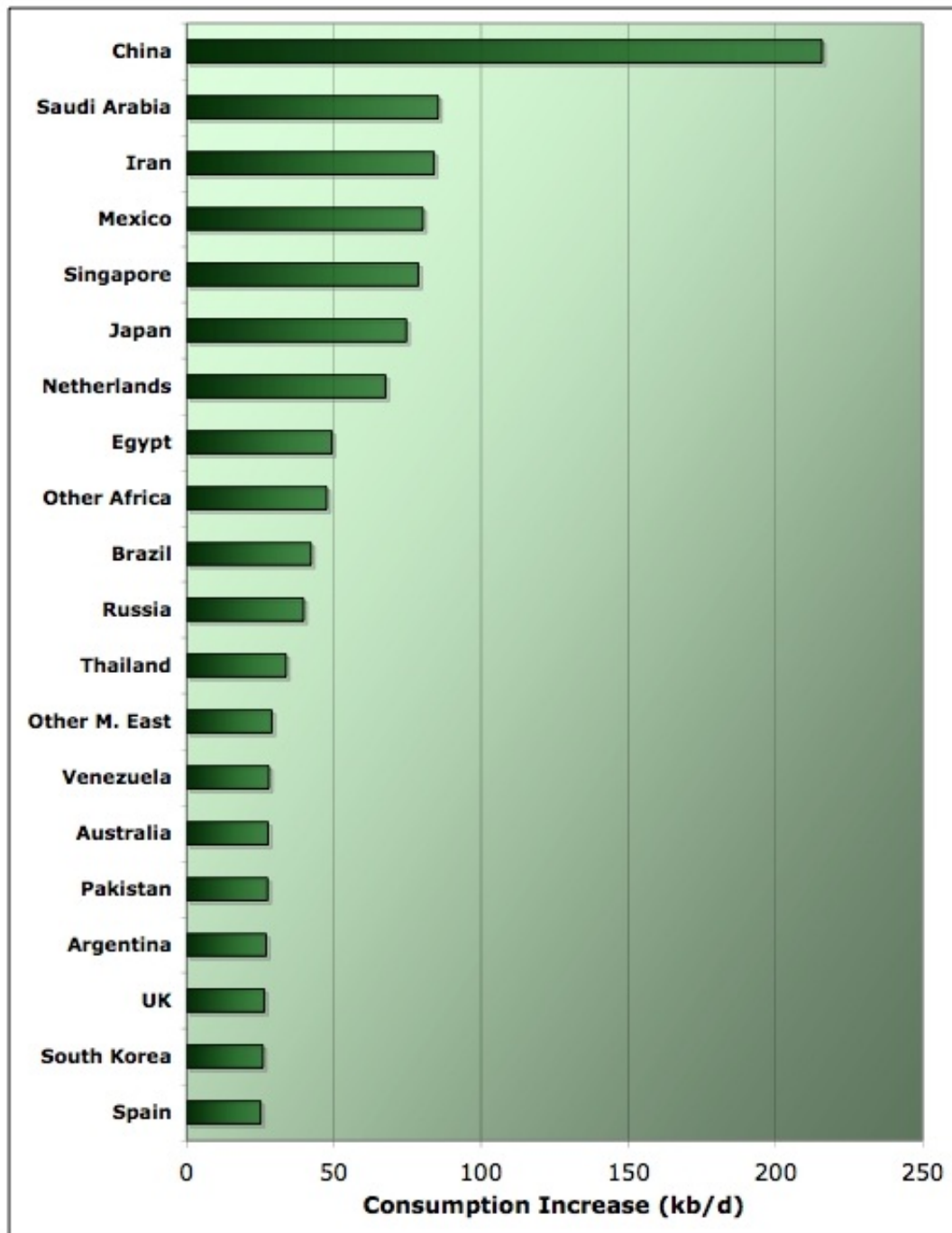


Top countries by percentage decline in oil usage 2004-2005. Source [BP Statistical Review of World Energy](#)

[2006](#).

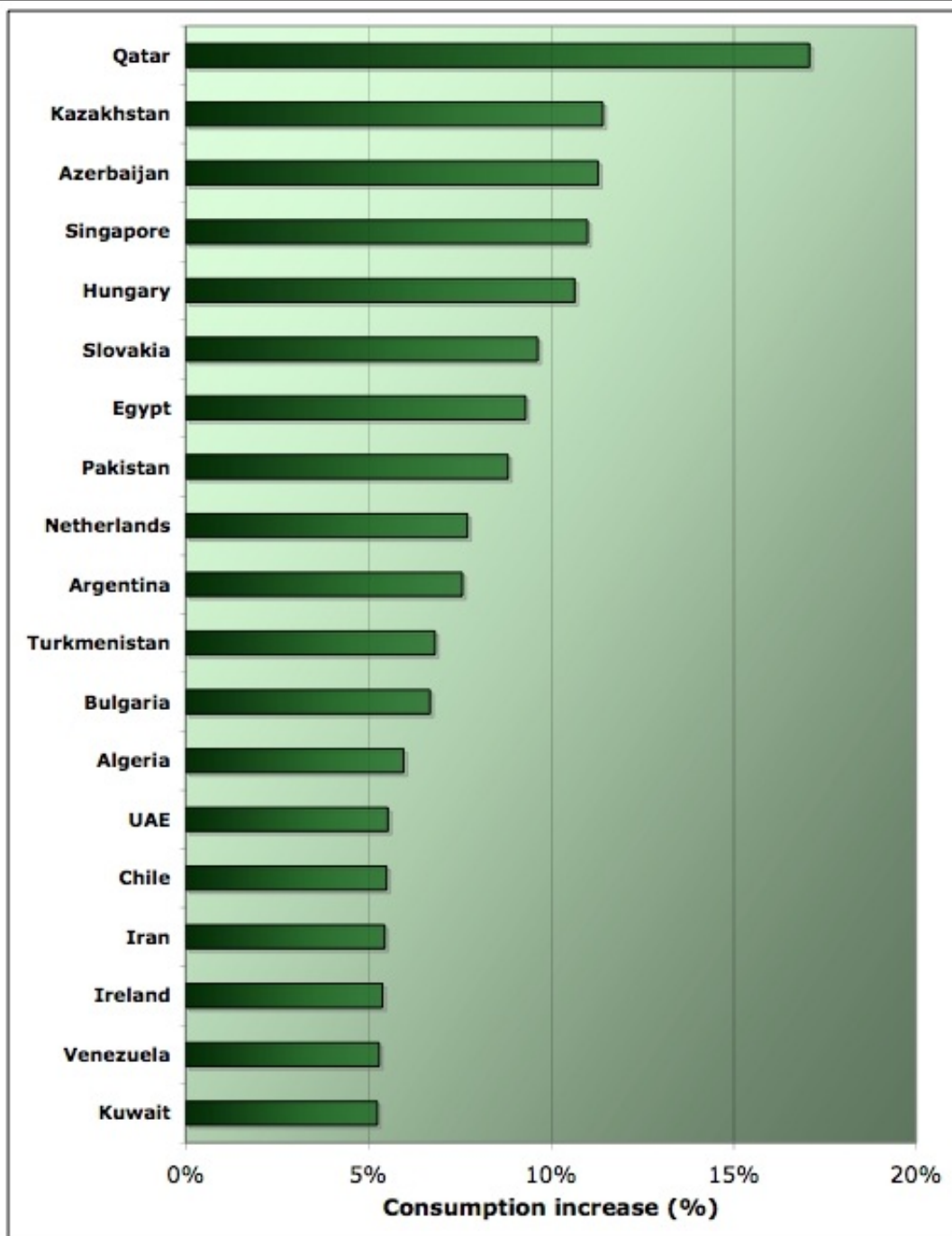
The list is the same, but it was the middle income countries making the largest percentage cuts, and the US made the smallest percentage cut of any country that reduced oil demand at all.

Turning now to countries that increased their usage (all those who increased by 25kb/d or more):



Top countries by absolute increase in oil usage 2004-2005. Source [BP Statistical Review of World Energy 2006](#).

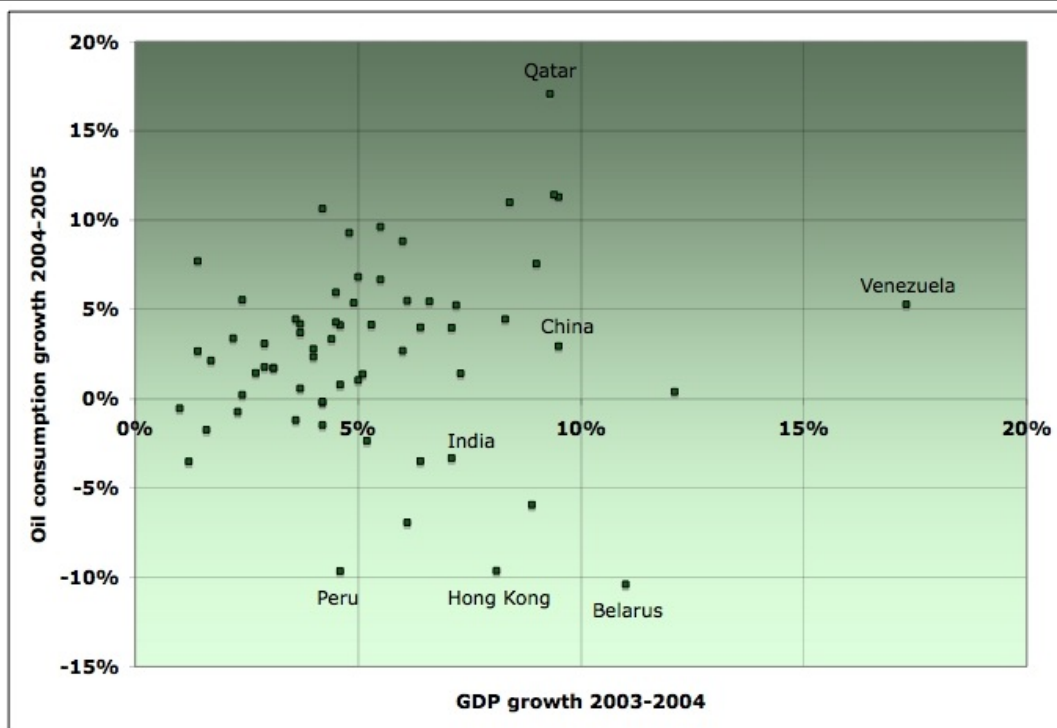
Here China dominates, followed by a group of oil exporters and then a mixture of western and developing countries with no obvious pattern. If we look at it on a percentage basis (for countries that increased 5% or more):



Top countries by percentage increase in oil usage 2004-2005. Source [BP Statistical Review of World Energy 2006](#).

Well, certainly the oil exporters dominate this list, but there's plenty of random developing countries in there too, along with former communist nations. Two western developed countries made this list: Ireland and the Netherlands.

A theory I had was that general economic growth would be a good predictor of who would have to conserve oil usage, versus who could continue to grow it. Unfortunately, I couldn't find 2005 GDP stats, so I had to make do with 2004 GDP growth stats from the UN. These have very little explanatory power for oil usage changes:



Oil consumption percentage change from 2004-2005 for countries in BP report, versus GDP percentage change 2003-2004. Source [BP Statistical Review of World Energy 2006](#) for oil consumption data, and [United Nations Statistics Division](#) for GDP data.

For example, fast growing (economically) India conserved oil quite significantly. Some oil producing countries had massive GDP expansion, but they varied widely in how much oil usage expansion there was as a result. Clearly, a more complex analysis is required to determine how things are going to go (if indeed it can be predicted).

For those reading Dave's [Thailand study](#), I note that Thailand is in the middle of the pack, with fairly strong 2004 economic growth of 6.4% and an oil usage increase in 2005 of 4.0%.



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