Published on *Adam Smith Institute* (http://www.adamsmith.org)

Updating the Limits to Growth [1]

Written by **Tim Worstall** [2] | Sunday 8 April 2012

I was slightly puzzled to see this piece [3] stating that the Club of Rome's predictions about the Limits to Growth have been updated. Further, guess what, civilisation is still going to fall over around 2030. For, you see, we're going to run out of everything just like they said and billions will die, empires tumble into the sea and Gaia will be displeased.

So, I thought I'd have a look around and see if I could find the original paper. I think it's this one [4]: right bloke, right subject anyway even if it might not be the most up to date edition.

The basic contention is that we're going to run out of resources and thus won't have any resources to have an economy with. Rather to my surprise, they manage to get the point about metals and minerals correct: there's no shortage of them on any reasonable (ie, centuries) timescale even with current extraction technology. Then I'm afraid that they make a rather large mistake:

> To account for substitutability between resources a simple and robust position has been taken. First, it is assumed here that metals and minerals will not substitute for bulk energy resources such as fossil fuels.

Well, that is interesting, isn't it? First we've got the ignoring of the economists' mantra that absolutely everything is substitutable. But more important than that we've got someone supposedly interested and informed in these matters claiming that we're not going to replace fossil fuels with minerals: when, of course, it is the stated intention of every government on the planet to do exactly that.

Nuclear is replacing fossil fuels with fissile (and possibly at some point fusionable) minerals. Windmills are replacing fossil fuels with aluminium, steel, a bit of copper and some rare earths for the magnets. Solar power replaces fossil fuels with silicon, gallium, germanium, indium and possibly cadmium and tellurium.

Which is something of a problem for the basic thesis that the planet goes to hell and damnation in 18 years time really: insisting that we'll not substitute what we're already substituting.

Agreed, current substitutions aren't very efficient as yet, there's a lot more work to be done, but basing your predictions of doom and gloom on the impossibility of something we're already doing seems, well, incomplete somehow, as if there's a hole in your argument.

blog comments powered by Disqus [6]

Source URL: http://www.adamsmith.org/blog/energy-environment/updating-the-limits-to-growth

Links:
[1] http://www.adamsmith.org/blog/energy-environment/updating-the-limits-to-growth
[2] http://www.adamsmith.org/taxonomy/term/5778
[3] http://news.yahoo.com/blogs/sideshow/next-great-depression-mit-researchers-predict-global-economic-190352944.html
[4] http://www.csiro.au/files/files/plje.pdf

[5] http://disqus.com/?ref_noscript
[6] http://disqus.com