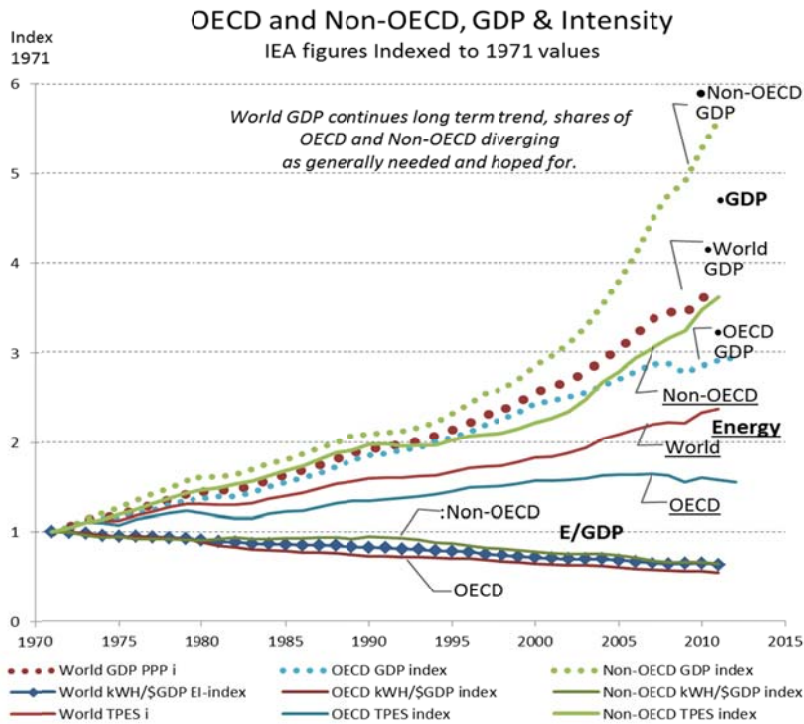


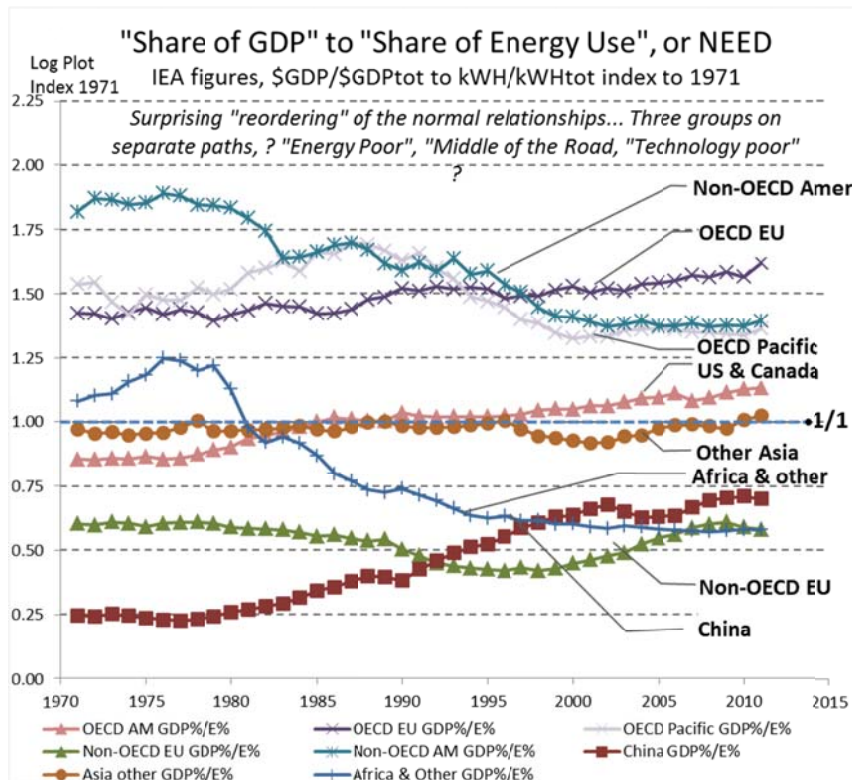
A World View of Off-Shore Energy use

A country's Share of the World's GDP per Share of World Energy, (Relative Economic Energy Dependence 'NEED') is a strong indicator of how much of its economy is fed by off-shore, mostly 'fossil', energy services, most often not being counted in national energy accounts. Countries do have different energy productivities, but World competition actively selects competitive energy uses wherever they are found. So like waves on a pond... the national accounts vary in relation to each other, and the global accounts are smooth and reflect the gradual changes of the system as a whole.



a. We see strong diverging trends in Energy use and GDP for OECD and Non-OECD groups over the past 40 years

- As the less developed remain smaller, but grow faster, the more developed are giving them development space.
- The Energy/GDP (intensity) is continuing it's long historic path of quite steadily decline, facilitating both rapid growing GDP and total energy use, at the compound rate as before.
- The Energy/GDP (Intensity) curves are NOT diverging, though, showing how smoothly the interlocked productivities of the world economy "level the playing field" for energy services, delivered to where they are most valued.



b The NEED of the 'major 8' World Sectors show much more variation. You can see some of the fitting shapes making the world value a straight line, 1/1.

- The US & Canada are close to the 1/1 average, but steadily rising.
- The EU, Japan and Australia are ~1.5/1, rather dependent on Off-Shore energy services, lacking abundant sources.
- So the rich "Energy Poor" economies need to purchase more of their energy in the form of energy services from their neighbors, "how economies work".
- It causes a likely mistaken impression the EU is more "sustainable", greatly outperforming the US & Canada.
- National Energy Accounts don't trace trade in energy services, only trade in energy materials, needing a "Shares of GDP" proxy measure as here to find it.