INDONESIA'S ENERGY DEFICIT

Indonesia joined OPEC in 1962 and left the cartel in 2008 when it realised it was going to become a structural net importer of energy. Funny thing is most people I polled while writing this essay were under the impression that Indonesia is still part of OPEC!

Oil production has been since 2000, from over 1.4 million barrels per day to less than 800,000 by late 2013. There was actually a period from 2007-2010 when production stabilised at just below 1 million bpd but has seen fallen steeply again. See chart below.

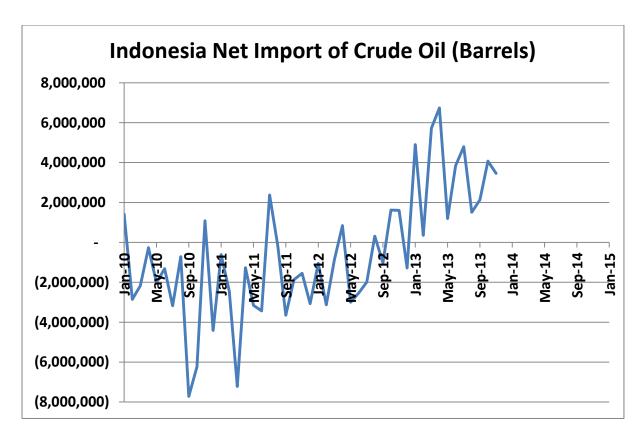
The latest data shows that Indonesia crude oil production will continue to plunge. According to Indonesia's BPPT (Agency for the Assessment and Application of Technology), crude oil production could drop to as low as 124 million barrels by 2030 or about 340,000 barrels per day.



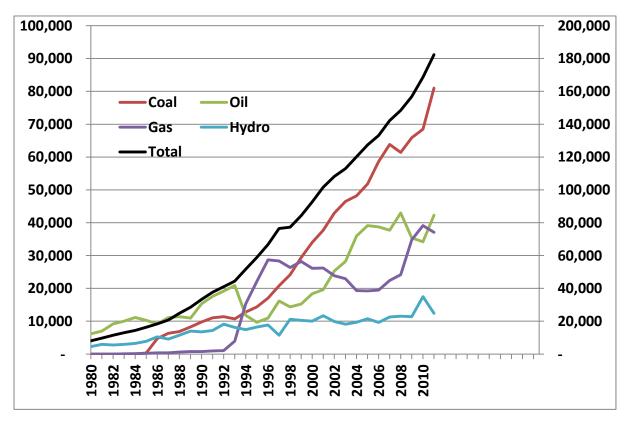
The natural consequence is net imports go up as shown in the next chart.

Actually, Indonesia only became a structural net importer of crude oil in late 2012 but since then, the deficit has accelerated. It is now in the region of 4 million barrels per month or more than US\$400 million at current oil prices.

According to BPPT, net imports could reach 408 million barrels by 2030 or 34 million barrels per month. That's nearly \$4 billion per month at current oil prices.



The deficit in oil isn't coming from the demands of electricity generation. As can be seen from the next graph, oil based electricity generation capacity has been roughly stagnant since 2004. Most of the increase in Indonesia's electricity generation since 2005 has been from coal and to a lesser extent, natural gas.





The culprit is motor vehicles as shown by the next chart of monthly motor vehicle sales in Indonesia.

From 2004-2009, Indonesia's monthly motor vehicle sales oscillated around the 40,000 level. Prior to this, it was around 25,000. But from 2010 onwards, it grew rapidly and in Sep 2013, was approaching the 120,000 level, almost 3x the level of 2004-2009 average levels.

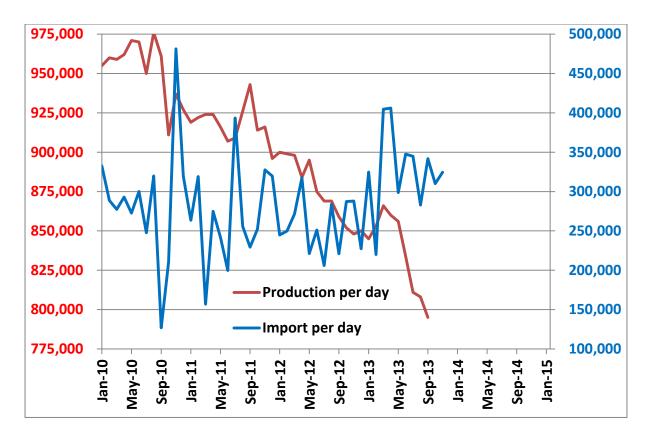
As we all know, once people own motor vehicles, they drive them around, thus needing ever growing amounts of petrol and diesel. Even if motor vehicle sales fall off from now on, the installed base cannot help but grow ever larger. If current sales levels are maintained, more than 100,000 new vehicles will pour onto Indonesia's roads every month, adding to the demand for imported oil.

The next chart shows the divergence between crude oil production and crude oil imports beginning to enlarge starting in early 2013.

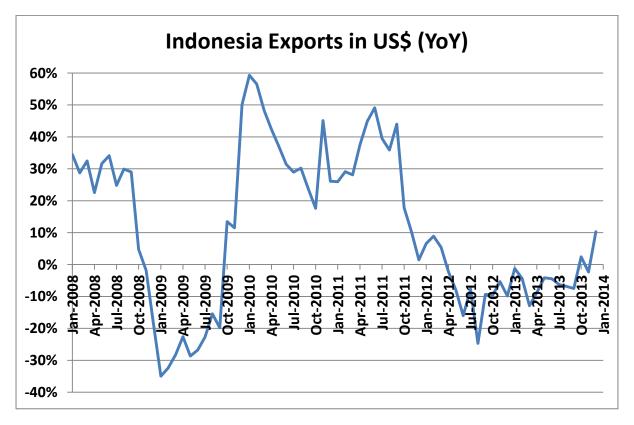
BPPT's projections show that net imports of oil will keep increasing rapidly. This means that Indonesia has to find a way to earn the foreign exchange required to pay for its net oil imports.

However, Indonesia's exports are still heavily commodity based. Other than coal, oil and natural gas, its main exports are palm oil, rubber, tin, copper and iron. Manufactured goods including textiles and shoes form less than a quarter of the country's exports. More complex manufactured goods like electronics and electrical appliances is less than 10% of exports.

A quick check will show that prices for the non-fuel commodities that Indonesia exports are in a slump. In US\$ terms, rubber is at lows last seen in 2009 while palm oil, tin and copper are back to 2010 levels. Iron ore is back to 2011 prices.



Overall, Indonesia's export growth has been very lacklustre. Note that most economists believe that the spike in Dec 2013 is not sustainable as it is due to ore exporters rushing to beat the new ore export regulation dateline.



Indonesia badly needs to boost its exports of manufactured goods and services to afford its energy imports.

Projects like <u>http://www.channelnewsasia.com/news/business/taiwan-s-foxconn-to/988290.html</u> are crucial for Indonesia's future.

The whole world will be watching Foxconn's investment in Indonesia. Big as it is, it will take 3-5 years to be fully implemented. Alone, it will not save Indonesia's balance of payments. Nor will it relieve the pressure on Indonesia's current account in the near and medium term. However, if it succeeds, Indonesia could have a very interesting future given its demographic profile.

I just find it ironic that the future of a country that has throughout history oppressed and persecuted its Chinese minority could now rest on the shoulders of a large Taiwanese (ethnic Chinese) multinational corporation!