

The IEA World Outlook 2023

By Charles Daly, Channoil Energy

Then International Energy Agency (IEA) in Paris, was established after the major oil price shock of 1973, following a deliberate curtailment of supplies by, mainly, the US Gulf Oil producers to force the USA to stop Israel from its land grab in the Sinai and the Golan Heights. In the period to May 1974 this caused a substantial shortage of oil, it being the major fuel for the planet at the time.

The IEA's remit was to monitor the oil stocks in the developed world and to encourage the establishment of strategic oil reserves. Like every good bureaucratic NGO, it has grown itself to be one of the main providers of forecasts of energy supply and demand.

This year's review shows the IEA producing not one forecast but three. The three forecasts are labelled STEPS (Stated Policy Scenario) this means that they consider what is really happening within governments around the world.

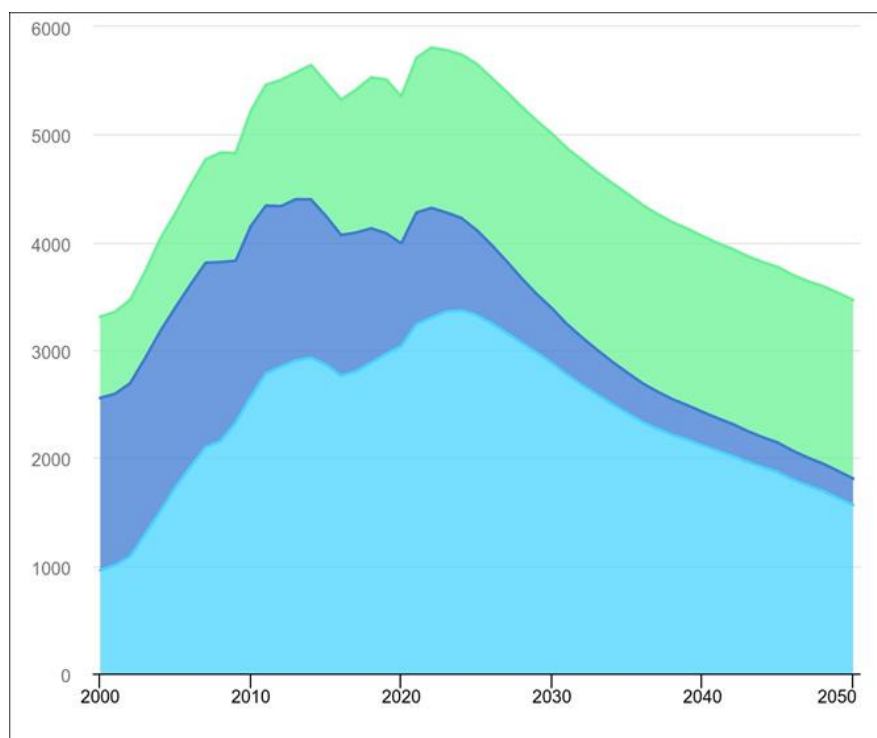
APS (Announced Pledges Scenario) this purports to reflect what was promised would be done at the various COP meetings. What Governments promise to do and what they can actually achieve are two very different things.

Then we have the NZE (what we need to do to achieve Net Zero by 2050).

As you can imagine none of these scenarios is likely to be the one that we see by 2050. Therefore, there is no realistic forecast in this outlook.

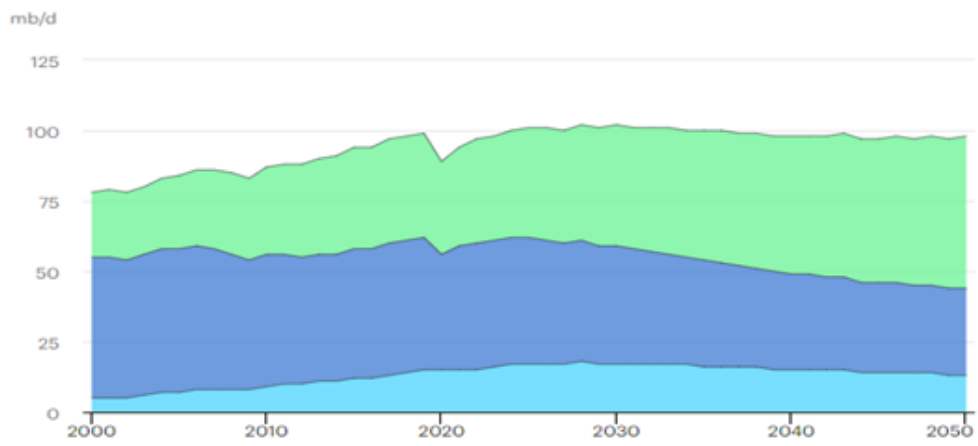
Here are the three scenarios for Coal Oil and Gas consumption put out by the IEA in the STEPs scenario:

Coal demand by region in the Stated Policies Scenario, 2000-2050



Million tonnes per year

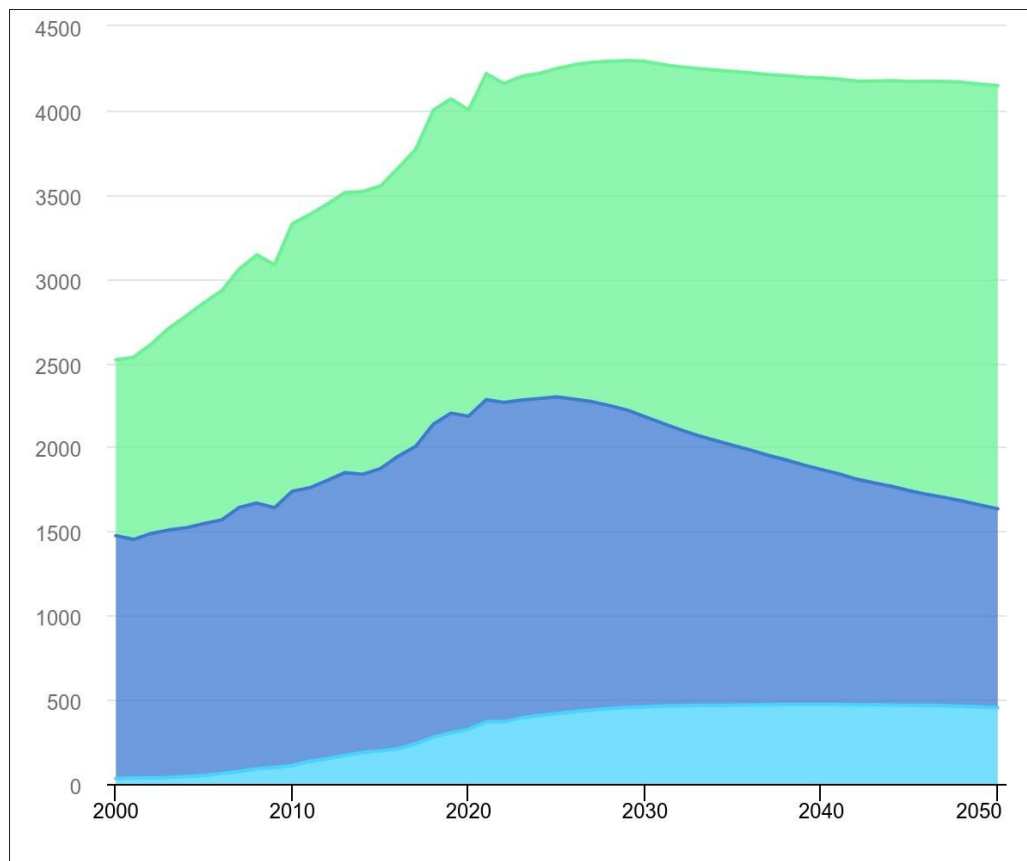
Oil demand by region in the Stated Policies Scenario, 2000-2050



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● China ● Advanced Economies ● Other emerging markets and developing economies

Natural gas demand by region in the Stated Policies Scenario, 2000-2050 mbcmm



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As can be seen in this scenario, which I think is the more realistic outcome, the demand for oil and gas hardly changes. The peak for oil is about 100 mmbd, which is slightly lower than were we are today and for gas 4.2 trillion cubic meters. The only fuel that declines is coal. This is based on assumptions regarding phase out of coal in India, China, USA, Australia and S Africa.

However, as we know, in democratic countries, when elections come around any idea that voters are going to be asked to pay more for their power, usually disappears as quickly as the morning dew. In command economies this might be feasible, but dictators can be and are overthrown.

Another area of optimism is that Africa and other lesser developed nations can be persuaded to change to clean cooking. In most African countries this can only be achieved via LPG (Liquified Petroleum Gas). The reason for this is logistics. Without funds for a gas grid, the only way of supplying gas is in bottles. This assumes that families can be persuaded to shift from 'free' wood burning to paying for expensive gas. My guess is that this is unlikely.

The other type of government is the populist one. If, as seems likely, Trump returns to the Whitehouse next January, he will discard any promises to the Paris accord, as he has done before, and encourage drilling and fracking for oil and gas, to Make America Great Again. As one of the largest polluters on the planet this will negate all the work done by the Europeans and others.

The problems of meeting net zero by 2050 are so great that no democratic politician wants to enumerate them to their voters. A number of commentators have tried but not succeeded. The mainstream media are not interested in what they term 'Climate Deniers'. Therefore, all the useful scientific articles on the cost of net zero get buried in specialist publication or the business news sections of the newspapers.

Professor Dieter Helm, a distinguished economist at Oxford University and a great support of the net zero argument has recently released a pod cast in which he exhorts politicians to tell the people the truth about the cost of net zero.

Then there is the physics that tells us logically that intermittent energy cannot be effective unless we build massive over capacity and have the transmission systems to go with it. Take the Electric car as an example. Those who virtue signal by buying an electric car is not going green. The electricity they use to charge their batteries comes, at least 50% of it, from fossil fuelled power stations.

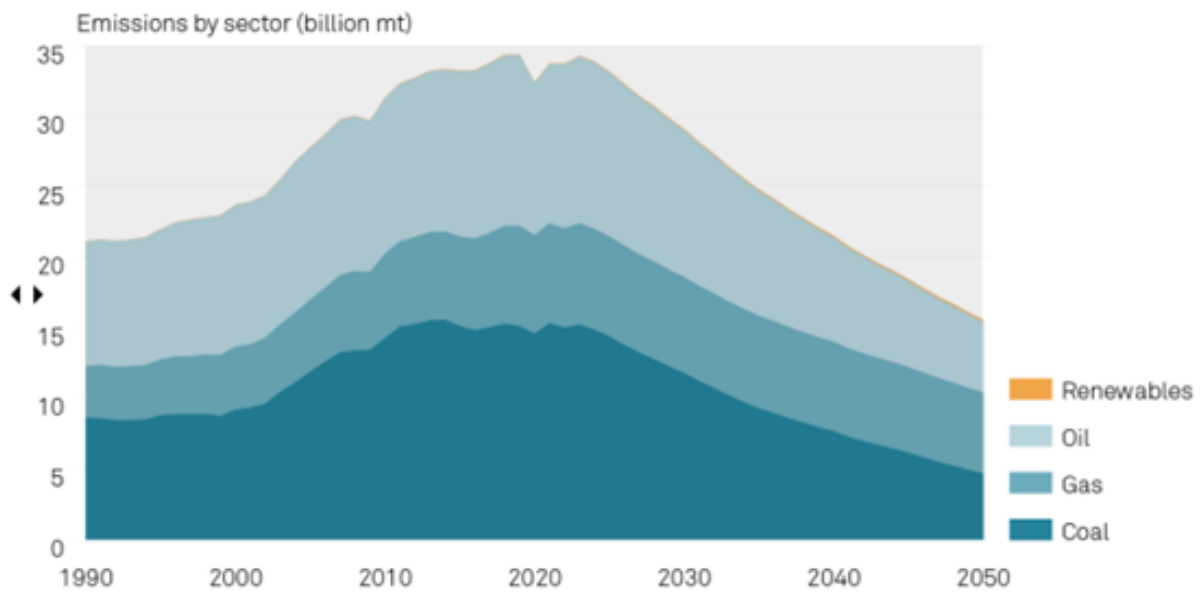
It is a little-known fact that, in most developed economies, the motor car produces as much power as is generated concurrently in the form of electricity. Thus, to phase out all fossil fuelled cars, these economies will have to increase their generation capacities by 100%. Can anyone see this being done by 2050?

The final thing that I would like to add is this. Emissions started to rise dramatically only after 1990. Whereas they had been relatively static prior to that. Global temperatures also started to rise from about that time. Is it a coincidence that this is approximately the time that China and India started to boom, growing at double digit GDP per annum?

The chart below produced by S & P shows this starkly. So, when the developing world starts to ask for contributions from the developed world for reparations due to the harm generated by fossil fuel consumption, send them to China.

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Two degrees case outlook



Source: S&P Global Commodity Insights' Global Integrated Energy Model

In this scenario the peak fossil fuel demand is reached in 2024, i.e. now and then demand needs to drop off dramatically thereafter if we are to meet a 2 Deg C scenario.

My conclusions are, unless we can perfect the Carbon Capture and reuse technology, then we can only hope that fusion breaks through or that we start building nuclear capacity as fast as possible. Anything else is unreliable and demands more from the environment than it takes out. This will primarily be in the form of mining for the metals that we will need to drive wind and solar energy.

The other loss would be from perfectly good arable land being taken over by solar farms.

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