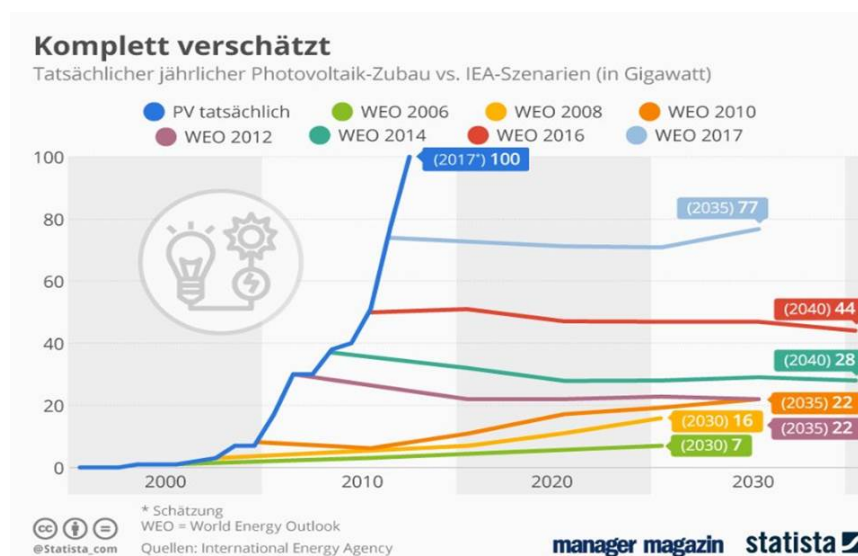


International Energy Agency still gets its World Energy Outlook wrong

The International Energy Agency (IEA) has been heavily underestimating the potential growth of renewable energy sources and overestimating the utilization possibilities of fossil and nuclear energy. The Energy Watch Group (EWG) and Lappeenranta University of Technology (LUT), have [documented and analyzed](#) the long history of IEA's misleading and false projections on the renewable energy development.

On November 14, the IEA presented its flagship report, the “[World Energy Outlook 2017](#)” (WEO). In a new analysis of the World Energy Outlook 2017 by the EWG, LUT together with Association for the Study of Peak Oil and Gas Germany have looked closely into the misleading projections of the IEA on solar energy and oil production.

Solar Energy:



Although the IEA revised its extremely pessimistic forecast on renewable energy, following a wave of international critique, it consistently ignores their exponential growth over the last years.

Especially growth rates of solar PV are underestimated. The IEA estimated annual

installations of PV from 2018 till 2030 constantly below 80 GW, even though the past years have displayed consistent growth, showing that by 2017 annual installations of 100 GW are expected.

Crude Oil:

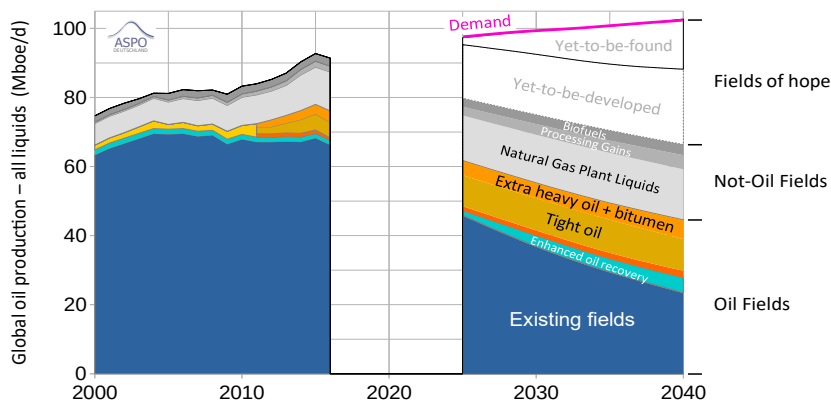
Regarding oil production, the IEA still propagates the projection that by 2040 oil consumption can surpass the peak value of 2015, which accounted 92,7 Mboe/d, by more than 100 Mboe/d.

Taking a closer look at the results and facts in the WEO 2017 “new policy scenario”, one might be surprised that the euphoria, which the IEA has spread regarding the availability of crude oil, cannot be found and verified in their own detailed analysis.

The German branch of the “Association for the Study of Peak Oil and Gas” presented a [detailed analysis](#) on the predictions of the WEO regarding crude oil ([press announcement](#)).



Oil production – New Policies Scenario (4)
 World Energy Outlook 2017



(Source: ASPO)

- 2015 was the year of peak oil (all liquids)
- The future gap between supply and demand shall be filled by fields of hope

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- In 2015 a maximum in oil production (all liquids) of 92,7 Mboe/d was reached, following a slight 1,4% decrease in 2016 to 91,4 Mboe/d.
- Future predictions foresee that oil production from conventional sources, even in the traditionally optimistic scenarios of the IEA, is to decline by more than a half from today’s level of 64 Mboe/d to less than 30 Mboe/d by 2040, and
- Oil production from unconventional sources from today’s 10 Mboe/d is about to more than double to 20 Mboe/d by 2040¹.

In the light of significantly higher production costs (especially compared to the drastically declining costs of renewable energy), the much higher greenhouse gas emissions levels and the increasing global movement against local environmental damages, e.g. caused by fracking and open pit mining of oil sands, the EWG is certain that there will be no rise in conventional methods of oil production as forecasted by the IEA.

The IEA is relying on its usual ploy, accounting oil production from not yet discovered and commissioned oil fields till 2040. When looking at the dramatic decrease of investments in oil exploration over the past years, and the ongoing divestment movement of big finance institutions, the question arises how new large-scale exploration is going to take place.

¹ ASPO Germany has extracting the data from table 4.5 and 4.8 in its analysis, the tables can be found in the official World Energy Outlook 2017 by the IEA

The IEA itself came to a conclusion that the discovery of new oil fields in the past years has reached a historic low with no turnaround in sight (IEA Analysis on Rystad Data, 27.4.2017).

Miscalculation of the USA

Major differences can also be found in the forecast for the USA. According to the IEA, the USA will be switching its role from lead importer to exporter in the field of crude oil and gas by no later than 2025. This hope builds solely on the exploration of shale gas and tight oil by means of fracking, which is forecasted to increase by 50% till 2030 and being able to hold that level till 2040. It is a purely speculative assumption, based on the belief that resources are larger than expected and that the costs are considerably decreasing:

- The IEA's estimation of available shale gas resources is much higher than that of the United States Geological Survey (USGS). In the past 10 to 15 years, the most promising areas were connected with a dense net of drilling points, the richest sources (so called sweet spots, with the highest production rate) are well known and need to be upgraded by more cost intensive drilling methods (Citation WEO p.69: "The rise in the US production is not yet done"...."Mainly on the back of higher resource estimates").
- Furthermore, the IEA expects that enough investments in new drillings will be commissioned. This is highly unlikely when the shale-gas and tight-oil boom was driven by extreme debts, only possible under the guideline that companies were able to receive interest-free loans (Citation WEO p.69: "....a strategic shift by some major companies in favor of investment in shorter cycle projects and continued cost reductions and efficiency gains").

Despite similar announcements in the past, the USA have not become the lead exporter in oil and gas and is unlikely to do so in the future when taking into account the decreasing production of conventional oil and gas fields. Additionally, conventional sources become more cost intensive than renewables and pose high damage to the environment.

Conclusion

As it has been the case in the past, the IEA still leads a wrong belief that the global oil economy is able to cover the increasing demand worldwide. A transition to renewables is under the light of today's energy supply by fossils not necessary and the consistent low and non-exponential growth of renewables is inefficient in providing sufficient energy in the future. The IEA is therefore a key factor, mainly responsible for keeping the conventional, fossil based power system running, despite their very own measures to limit the effects of climate change.