



## Oil Watch - World Total Liquids Production

Posted by [Euan Mearns](#) on November 21, 2012 - 8:28am

World total liquid fuel production data published by the [International Energy Agency](#) (IEA) suggests that global liquid fuel production has risen steadily (in stages) from 76.3 million barrels per day (mmbpd) in January 2002 to a recent high of 91.3 mmbpd in July 2012. +15 mmbpd represents a 20% uplift in liquid fuel supply in little over a decade.

**Figure 1** World total liquid fuel production based on data extracted from the IEA monthly [Oil Market Reports](#) (OMR). Chart not zero scaled. All charts are clickable to get a larger version.

From May 2007 to August 2010, [Rembrandt Koppelaar](#) published an e-report called [Oil Watch Monthly](#) that summarised global and national oil production and consumption data from the International Energy Agency (IEA) of the OECD and Energy Information Agency (EIA) of the USA. Owing to time pressure involved in compiling the statistics, the publication was discontinued. Rembrandt has kindly provided me with his database and I have begun the task of updating the last 2 years of data with a view to re-instating **Oil Watch Quarterly**. This is the first in a series of interim reports that are co-authored with Rembrandt.

## Where has 15 mmbpd come from?

**Figure 2** Non-OPEC supply has risen slowly from 45.6 mmbpd in January 2002 to 49.0 mmbpd in July 2012. The recent peak in non-OPEC C+C+NGL production was 49.9 mmbpd in January 2011.

**Figure 3** OPEC supply has risen steadily in stages from 28.5 mmbpd in January 2002 to 37.9 mmbpd in July 2012. Figures 2 and 3 have the same range in y-axis scale., i.e. 20 mmbpd.

### A note on nomenclature:

C = crude oil

C+C = crude oil + condensate

NGL = natural gas liquids

processing gains = volume expansion of liquids during the refining process

biofuels = mainly sugar cane ethanol from Brazil and corn ethanol from the USA

---

**Figure 4** Biofuels production has risen from 0.35 mmbpd in January 2002 to 2.15 mmbpd in July 2012. As data recording techniques have improved a clear annual cyclicality is emerging in global biofuels production. Production has been flat for 3 years. Note that biofuels have a significantly different energy balance than fossil based liquid fuels. Substantial quantities of natural gas, diesel and electricity are required to produce ethanol and biodiesel, in many cases with little energy gain.

---

**Figure 5** Refinery processing gains have risen from 1.82 mmbpd in January 2002 to 2.17 mmbpd in July 2012. The volume expansion of liquids during refining does not represent energy gain. The chemical alteration due to refinery processes results in lower density products relative to crude oil inputs. The slight rise in processing gains reflects the shift in global oil supply from light sweet crude to heavier grades that provide more volume expansion during processing.

---

**Figure 6** Comparison of IEA C+C+NGL monthly data with the annual data published by [BP](#). In general terms there is a good correspondence.

## Summary

From January 2002 to July 2012, according to the IEA, global liquid fuel production rose from 76.3 to 91.3, an increase of 15 mmbpd. The sources of this rise are as follows:

OPEC C+NGL 28.5 to 37.9 = +9.4 mmbpd  
non-OPEC C+C+NGL 45.6 to 49.0 = +3.4 mmbpd  
Biofuels 0.35 to 2.15 = +1.8 mmbpd.  
Processing gains = 1.82 to 2.17 = 0.35 mmbpd

$9.4+3.4+1.8+0.35 = 14.95$  mmbpd

OPEC accounts for 63% of the rise in liquid fuel production, non-OPEC accounts for 23% in the studied period.



This work is licensed under a [Creative Commons Attribution-Share Alike 3.0 United States License](#).