

Cell: M11

Comment: Rick Heede:

On this worksheet we report extractive data for each company or state-owned enterprise. Three columns under crude oil and natural gas allow for data reported in one of three formats (e.g., thousand barrels per day, or million barrels per year, or million tonnes per year). Coal is normally reported in short tons or metric tonnes per year.

The subtraction of the fraction typically sequestered in petrochemicals and other non-combusted uses such as road oils, waxes, lubricants, greases, etc. Non-fuel uses are accounted for in the emission factors and applied to each entity in the oil, gas, and coal summary worksheets.

Cell: F12

Comment: Rick Heede:

Total net worldwide crude oil plus natural gas liquids produced by each company or state-owned enterprise. Where data is available, we list net production (after royalty production is deducted).

We rely on company annual reports, Form 10-k, or other company data where available. In some cases -- particularly for state-owned oil and gas companies -- we use production data from the Oil & Gas Journal in its 0GJ150 and 0GJ100.

Crude production includes natural gas liquids (NGL) unless noted.

Cell: J12

Comment: Rick Heede:

Natural gas is typically reported as dry gas; natural gas liquids are reported under crude oil.

Carbon dioxide is normally removed from the gas flow at the production site (see "Vented Carbon Dioxide").

"SCM/d" = standard cubic meters per day. "cf/d" = cubic feet per day.

Net production typically excludes a number of diverted gas streams. Quantities and fractions vary; ExxonMobil's exclusions are typical of the industry: "Net production available for sale quantities are the volumes withdrawn from ... natural gas reserves, excluding royalties and volumes due to others when produced, and excluding gas purchased from others, gas consumed in producing operations, field processing plant losses, volumes used for gas lift, gas injections and cycling operations, quantities flared, and volume shrinkage due to the removal of condensate or natural gas liquids production." ExxonMobil Corporation (2004) 2003 Financial and Operating Review, www.exxonmobil.com, p. 55.

Cell: D80

Comment: Rick Heede:

Antero Resources SEC Form 10-K for 2014, page 48: production of Oil and NGLs for 2013 and 2014, in Mb.

Cell: H80

Comment: Rick Heede:

Antero Resources SEC Form 10-K for 2014, page 48: production of natural gas for 2013 and 2014, in Bcf.

Cell: D82

Comment: Rick Heede:

Antero Resources 10-K for 2016, page 55. Company reports annual production of crude oil and NGLs + C2 ethane. CAI combines the NGL and C2, in Mb per year.

Cell: D84

Comment: Rick Heede:

Antero Resources 10-K for 2018, page 56. Company reports annual production of crude oil and NGLs + C2 ethane. CAI combines the NGL and C2, in Mb per year.

Cell: H84

Comment: Rick Heede:

Antero Resources 10-K for 2018, page 56. Company reports annual production of natural gas, in Bcf.