

Paper reference	Method	Author Affiliations	Leakage rate estimate
<u>Stephenson et al (2011)^</u>	Bottom up	Academic/gov	0.6
<u>O'Sullivan and Paltsev (2012) (aka the MIT study)*</u>	Bottom up	Industry	0.6
<u>Cathles et al (2012)^</u>	Bottom up	Academic/Industry	0.9
<u>Burnham et al (2011)^</u>	Bottom up	Gov	1.3
<u>EPA (2013)</u>	Bottom up	Gov	1.65
<u>Jiang et al (2011)^</u>	Bottom up	Academic	2
<u>EPA (2012)</u>	Bottom up	Gov	2.3
<u>Hultman et al. (2011)^</u>	Bottom up	Academic	2.8
<u>EPA (2011)^</u>	Bottom up	Gov	3
<u>Miller et al (2013) (aka the Harvard study)</u>	Top down	Academic/gov	3
<u>Petron et al (2014)*</u>	Top down	Academic/gov	3
<u>Howarth et al. (2011) (aka the Cornell study)^*</u>	Bottom up	Academic	3.3
<u>Petron et al (2012)^</u>	Top down	Academic/goc/industry	4
<u>Karion et al (2013) (aka NOAA 2012)*</u>	Top down	Academic	5.5
<u>NOAA et al (2013)</u>	Top down	Gov	9

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<u>EPA (2011)^</u>	3
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● - Industry Funded

■ Bottom Up

■ - Top Down (measuring atmospheric levels)

