

Drilling for Natural Gas in the New York State Marcellus Shale.

What are potential gains and risks? What are the trade-offs?

Estimates of Potential Gains over 20 years of gas extraction:

Natural Gas Income at about \$22 billion¹.

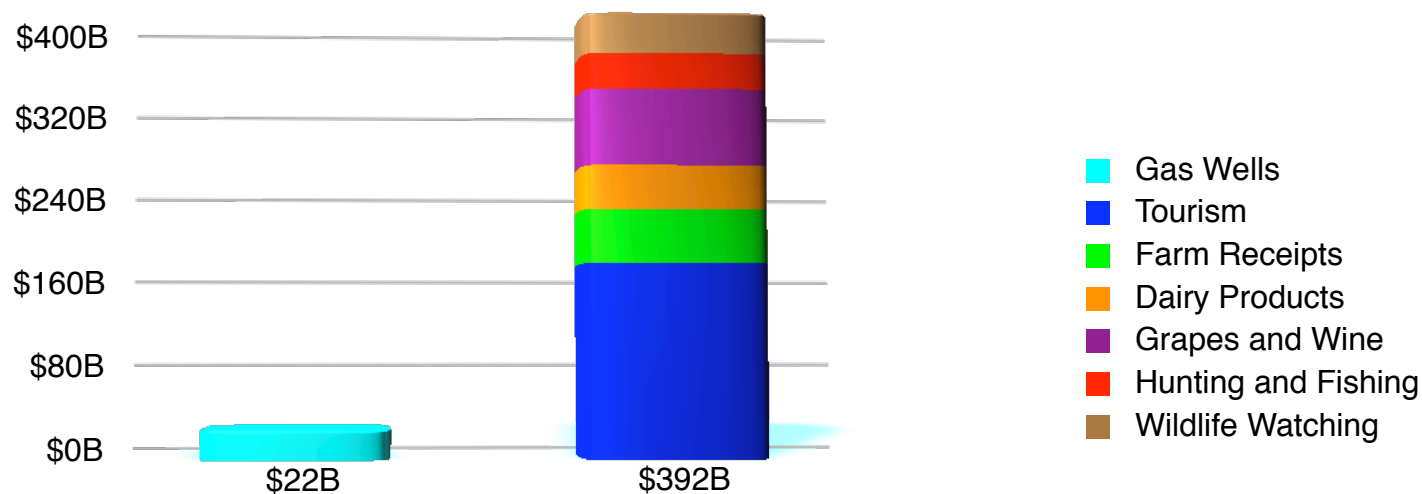
Estimates of income from sources with risks over 20 years of gas extraction.

Our rich agricultural and recreational lands and agricultural products.

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|---------------------------------|--------------|-----------------------------|--------------|------------------------------|---------------|
| Farm Cash Receipts ² | \$48 billion | Dairy Products ³ | \$39 billion | Grapes and Wine ⁵ | \$68 billion, |
|---------------------------------|--------------|-----------------------------|--------------|------------------------------|---------------|

Our attractions that bring visitors

| | | | | | |
|----------------------|---------------|--------------------------------|--------------|--------------------------------|--------------|
| Tourism ⁶ | \$173 billion | Hunting & Fishing ⁴ | \$32 billion | Wildlife Watching ⁴ | \$32 billion |
|----------------------|---------------|--------------------------------|--------------|--------------------------------|--------------|



What's missing from the data? Infrastructure costs, value of potable water, more.....

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¹ February 25, 2009 Times Leader, "Amid cheap gas, Pa. drillers carry on". State is not seeing the same reduction in Marcellus Shale drilling as other areas. By Rory Sweeney rsweeney@timesleader.com Staff Writer

http://www.timesleader.com/news/hottopics/shale/Amid_cheap_gas_Pa_drillers_carry_on_02-25-2009.html

The value was computed using a 50 trillion cubic feet estimate of recoverable gas multiplied by 25% for the fraction in New York State, \$14 per 1000 cubic feet, the high price summer 2008, and 12.5%, the royalty many land owners get. Not included are upfront lease payments, nor costs due to damage to infrastructure, loss of use of farmland or loss of potable water.

² National Agricultural Statistics Services - see New York State and Cash Receipts link(at URL below) \$3.65 billion annually over 20 years = \$73 billion from Marcellus Shale region

http://www.nass.usda.gov/Statistics_by_State/New_York/Publications/County_Estimates/index.asp

³ Stuff about States. All New York State, select dairy products. \$1.95 billion cash receipts in 2004. That's \$39 billion over 20 years for the whole state.

<http://stuffaboutstates.com/new.york/agriculture.htm>

⁴ New York total annual Hunting and Fishing income: \$1.6 Billion. Wildlife Watching \$1.6 billion from U.S. Fish & Wildlife Service New York 2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation. For all New York State over 20 years.

<http://www.census.gov/prod/www/abs/fishing.html>

⁵ New York Agricultural Statistics Service, op. cit: \$3.4 billion annually: New York's Grape, Grape Juice and Wine Industry Profile, Source, NY Agricultural Statistics, 2007-2008 Annual Bulletin, Table 34, over 20 years \$68 billion from Marcellus Shale region

⁶ "Tourism Impact in the Adirondacks." The Marcellus Shale counties constitute about 17% of the \$51 billion spent in New York in 2007. That's \$8.67 billion per year or \$173 billion over 20 years from Marcellus Shale region.

<http://www.adirondackbasecamp.com/2008/09/tourism-impact-adirondacks/>