



Oil for Heating and Transportation Maine Per Capita Use is High A 2017 Perspective

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October 2017

Perspectives

- Maine Energy Marketer Background
- 2017 Reducing Oil Use. The “Why” and “How” Per capita?
- Using Oil = Human Flourishing
- Big Story = Today’s price – Future?
- Technology advancements
- Liquid Bio-Fuels

Who are We?

***The Trade Association for Maine
Energy Marketers***

Our Mission:

***Providing Advocacy, Education,
Leadership and Support to Assure
Member Success Since 1954***



Who/What is MEMA?

- 300 energy distribution companies statewide (non-utility)
- 1000 Convenience Stores
- **Over 8,000+ employees**
- Excellent pay and benefits
- State of the art educational facility and programs MTEC
- Health, Workers Comp, Dental, Life, Disability Insurance programs for members
- Providing energy products to Maine people that Maine people want: Affordably, Efficiently, Reliably



Data for Convenience Stores in Maine

- Total Stores 1028
- Total employees 16,000
- Transactions per Day: 1,469,000
- Total sales per store: \$3,558,000
- Total Sales State: \$3.66 Billion
- Total Sales Food & Merchandise 45%
- Total sales Fuel 55%
- Utility expense \$41,000 per store
- Labor Expense \$338,000 per store
- Total labor Expense: \$347,000,000



Investment in Maine?

Billions

- People – good paying jobs
- Oil and Propane Delivery Trucks = \$125,000 each
- Transports (tankers) = \$250,000 each
- Service Van = \$100,000 each, equipped
- Storage facilities = \$100,000 - \$100,000,000 each
- Property taxes – annual Multi-millions
- Excise taxes – annual Millions to municipalities

What has Changed in 50 years? Or for That Matter since 2011?

- Legacy Policies from 70's oil embargos to occasional price spikes
- 2011 Maine legislature goals. Massive Changes to energy markets since then. The US Shale market was just developing.
- Relative costs of energy to other everyday goods and services
- Why Look at downsides only without measuring the good
- Greenhouse gas emissions. Relative parity with other Fuels. CO₂, methane.
- CAFÉ standards Do more to reduce than EVs and will not be repealed.

Maine Energy Markets are Mature

Demand is Falling

- **Energy demand** in Maine has not grown in nearly 20 years.
 - Demand for all forms of energy in all sectors is either stable or falling.
- **Demand for all petroleum products** has been falling since 2005 with the exception of LPG.
- **Electricity demand** in all sectors is stable or falling.
- **Residential energy demand** in Maine has fallen sharply since 2004 with all of the decline coming from heating oil. Demand for other residential energy has not grown since 2006.
- **Motor Fuel Demand is flat at @ 1.1 Billion gallons**

Oil = scalable, affordable, efficient,

“If oil didn’t exist, we would have to invent it. No other substance comes close when it comes to scale, energy density, ease of handling and flexibility. Those properties explain why oil provides more energy to the global economy than any other fuel. (It accounts for about 33 percent, compared with coal at 30 percent, natural gas at 24 percent and hydro at 7 percent.”

The other oil equation

Without oil, life span was 40 years.

Without oil, no air travel, major food transportation, agriculture, medical advances,

Computers, cities, clothes, electric

Without oil, we could not control our living environment.

<http://www.foreignaffairs.com/articles/140750/robert-d-blackwill-and-meghan-l-osullivan/americas-energy-edge>



Maine per capita use of petroleum
High. Why?

Cold

Unconcentrated living

NY state is #1. Why?

<http://www.foreignaffairs.com/articles/140750/robert-d-blackwill-and-meghan-l-osullivan/americas-energy-edge>

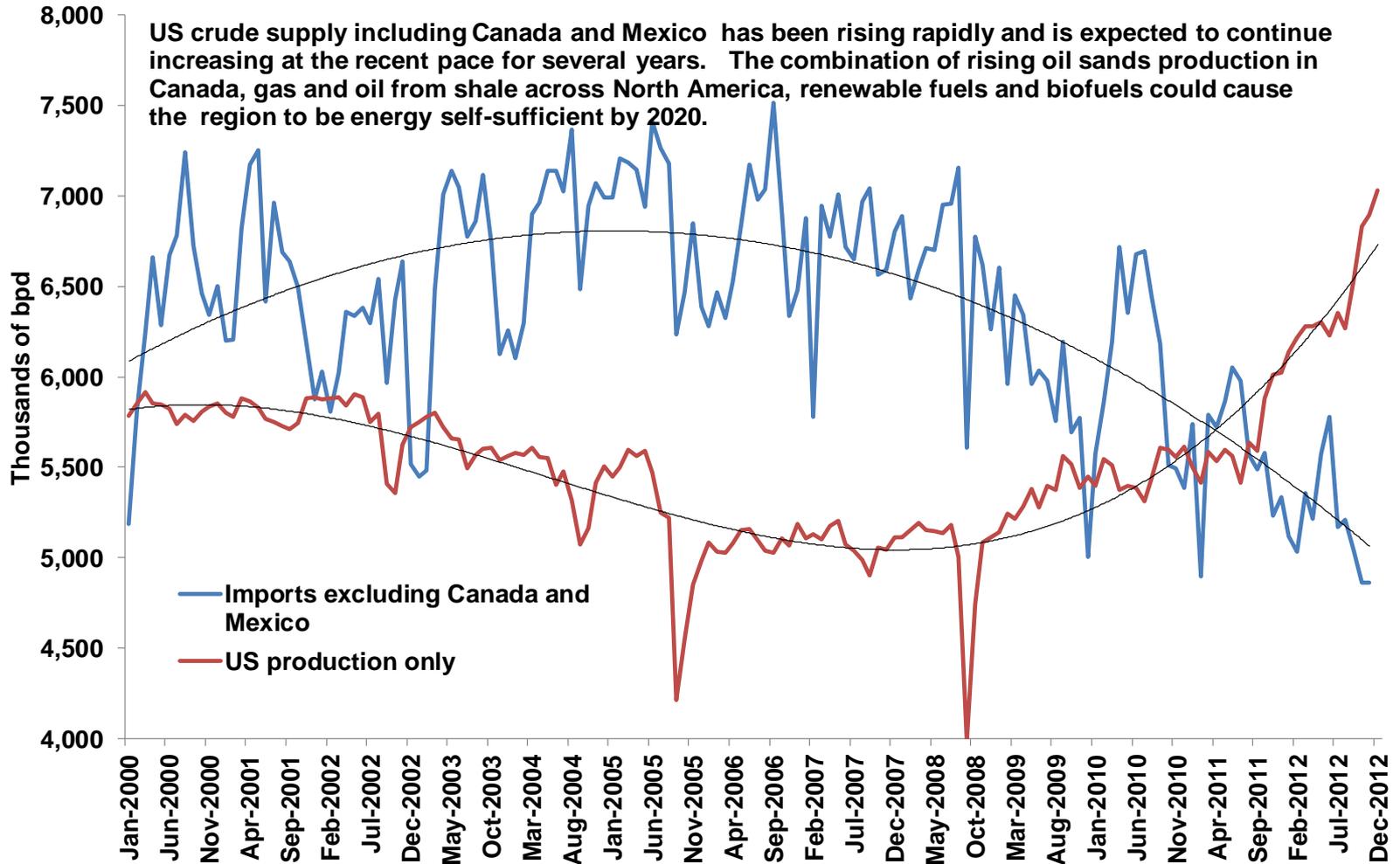


US Energy Revolution

Part 2 - How will this effect Price?

- The U.S. Geological Survey says a deposit in West Texas is the largest continuous oil and gas deposit ever discovered in the United States.
- On Tuesday, Nov. 16, 2016 [the USGS announced](#) that an area known as the Wolfcamp shale contains 20 billion barrels of oil and 16 trillion cubic feet of natural gas.
- That is nearly three times more petroleum than the agency found in North Dakota's Bakken shale in 2013.

US Crude Oil Supply: Moving Toward Independence?



Technology Advances

- **Internal Combustion Engines How much can engineers get out of them?**
- **Sales of Hybrids**
- **Battery technology limits Next generation?**
- **Infrastructure – recharge**
- **Other fuels: Propane**

80 MPG cars

Relative Costs

- 600 gallons gasoline at \$2.40 = \$1,440 per year
- Cell phone bill @ \$130/month = \$1,560
- Electric - \$100 per month = 1,200
- Cable, internet - \$150 month = \$1,800
- Food - \$200/week = \$10,400
- Set of 4 tires = \$800
- Health Insurance \$1,300/month = \$15,600
- Car payment -\$300 month (small) = \$3,600

Resources

For great data see the Fuels Institute
<https://www.fuelsinstitute.org/>

Fuels Institute