TOWN OF BRATTLEBORO PEAK OIL TASK FORCE



BRATTLEBORO REGION INITIAL PEAK OIL REPORT

February 19, 2008

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1. INTRODUCTION:

On May 21, 2007 the Brattleboro Selectboard formed a regional Peak Oil Task Force to examine whether Peak Oil as an energy issue was valid, and if valid, what were the potential impacts on and possible mitigation strategies for the Town and Region. A group of 9 individuals volunteered to serve on the Task Force. Selectperson Rich Garant has served as liaison between the Selectboard and the Task Force.

The first meeting of the Task Force, chaired by Selectperson Audrey Garfield, was held September 27, 2007 at the Town Offices. Since then, the Task Force has met on the 2nd and 4th Thursdays of the month to further define the approach to the problem and to exchange information on Peak Oil.

Though our original mandate called on us to report back to the Selectboard within 6 to 9 months with our findings about Peak Oil, we have decided that our study, as well as the developments during the past year, warranted making our initial report at this time.

2. WHAT IS PEAK OIL?

The term "Peak Oil" means a certain point in time when world production has reached its maximum capacity. In this case, capacity is limited by readily exploitable reserves of crude oil in the earth.

3. REPORT OF INITIAL FINDINGS

The question that we were asked to address during our first phase was: Is there a factual basis to believe Peak Oil has occurred or will occur in the near future, defined as within the next 5 years? After reviewing the literature referenced in the Bibliography, the Task Force concludes there is a factual basis to Peak Oil and that, in fact, there is reason to believe that Peak Oil may have already occurred.

We have found this concern to be increasingly shared by people—industry CEO's, geologists, bankers, Wall Street investors—who make it their business to follow closely the daily developments of petroleum. Even critics of Peak Oil are worried about the impact of higher oil prices on our economy and way of life. Most of these people also agree that we are looking at a future of increased fuel prices due to a worldwide growing demand for fossil fuels, particularly from nations like China and India. Whether or not you wish to label what is happening as "Peak Oil", it is nevertheless prudent to take serious measures to mitigate the far reaching challenges we will be facing from an almost certain approaching energy crisis. Finally, Peak Oil is now mentioned routinely on TV, in the press and on the radio.

Furthermore, we have found during the nearly 5 months of our investigation that crude oil and refined product prices have been reaching historic high prices on a daily basis. World crude oil production rates have plateaued at approximately 85 million barrels a

day since December 2005, while demand continues to rise, putting upward pressure on prices that show every sign of continuing. While factors such as speculation and economic swings can temporarily depress oil prices, this task force believes the inevitable long-term trend is an upward swing. Early this year, the crude oil price reached \$100 per barrel, something that was thought not possible just a short while ago. This has resulted in record prices for gasoline and diesel, and is a reflection of a worldwide growing gap between crude oil supply and demand which is one of the characteristics of Peak Oil.

Because so much of our civilization is dependent upon fossil fuels, we are now seeing alarming developments in other societal areas. We all know about the rising cost of home heating fuel, for example; the world food supply is dwindling, and food prices are soaring to historic levels partly caused by rising transportation costs; construction and infrastructure repair costs are straining municipal budgets because of the rising prices for asphalt, fuel, and other petroleum-based products; and in parts of the world, the electric grid is shutting down for long periods each day, some of which is due to the price of oil which has simply become too expensive to use in thermoelectric generating stations.

When followed logically, this trend threatens to drive the prices of fossil fuels currently relied upon by the Town Government and the regional economy and population beyond the range of affordability and accessibility within the next two to ten years. Like similar governmental task forces in other states and municipalities, the Brattleboro Peak Oil Task Force finds an urgent need for planning to mitigate and offset the economic, social and government disruptions that will result from these developments.

Having concluded that Peak Oil is a true energy issue for the Town and Region, the Task Force has done an initial examination of the possible impacts of this occurrence. The primary short term impact will be the high cost and potential shortages of liquid fuels. This will affect:

- The ability of individuals to commute to work.
- The ability of businesses to provide continuous employment (lumber mills, retailers, etc.).
- The ability to heat a building in the winter.
- The ability to provide government services like snow plowing, street repair, heating of public buildings, recycling, as well as the impact on fire, police and rescue services.
- School busing and school operation.
- The ability of transport-dependent local businesses like C&S to continue business as usual.
- The important hospitality and tourism sector.
- The availability and affordability of food.

4. INITIAL RECOMMENDATIONS TO THE SELECTBOARD

On the basis of these findings, the Task Force makes the following recommendations:

- Most importantly, the Selectboard provide leadership to help organize and build the community effort required to reduce our dependence on fossil fuels.
- That through an official statement, the Selectboard recognize Peak Oil as a critical problem that the town and county need to address;
- That the Selectboard endorse and co-sponsor with its Task Force public education efforts:
- That the Selectboard expand the stakeholders involved with this process and make a special effort to include representatives of the business, government, agriculture, education, health, and social services communities in the Task Force.

5. NEXT STEPS FOR THE TASK FORCE

- Assess the impact of Peak Oil on the Community, Business, and Government in both Brattleboro and Windham County.
- Identify possible mitigation measures. Assign priorities to mitigation efforts to ensure proper allocation of limited resources.
- Provide Public Education.

6. CONCLUSION

Peak Oil is not debatable. Whether we've reached peak or it occurs 10 years down the road, reaching a peak in oil production world wide is inevitable. The task force has concluded Peak Oil is a significant issue that will impact the Town of Brattleboro and Windham County. Mitigations of specific impacts will be addressed in the Task Force's next report. Increased energy efficiency, energy conservation and the use of renewable energy are all important mitigation strategies. These strategies amount to a local and regional insurance policy protecting us from high cost and possibly unavailable fossil fuels.

7. BRIEFING BOOK

Accompanying this report is a briefing book that introduces the reader to the underlying premises and foundation of Peak Oil. [note: this was made available to Selectboard members only.]

- 1. Peak Oil Production and the Implications to the State of Connecticut. Report to the Legislative Leaders and the Governor. Issued November 19, 2007 (41 pgs)
- 2. Daniel Lerch, "Post Carbon Cities, Planning for Energy and Climate Uncertainty", September 2007 (99 pgs)
- 3. Portland, Oregon Peak Oil Task Force Executive Summary, March 2007 (3 pgs)

- 4. Hirsch Report Executive Summary, February 2005 (7pgs)
- 5. GAO Report Executive Summary, February 2007 (6 pgs)
- 6. National Petroleum Council, "Facing the Hard Truths About Energy," Executive Summary, July 2007 (32 pgs)
- 7. Martin Payne, "Peak Oil Why it's So Difficult to Explain/Understand", January 2008 (4 pgs)

8. BIBLIOGRAPHY

Books:

Powerdown: Options and Actions for a Post-Carbon World By Richard Heinberg 2004

<u>Twilight in the Desert: The Coming Saudi Oil Shock and the World Economy</u> By Matthew R. Simmons 2005

The Empty Tank: Oil, Gas, Hot Air and the Global Fianancial Catastrophe By Jeremy Leggett 2005

The End of Oil: On the Edge of a Perilous New World By Paul Roberts 2005

Beyond Oil: The View from Hubbert's Peak By Kenneth S. Deffeyes 2004

The Last Oil Shock By David Strahan 2007

<u>The Party's Over: Oil, War and the Fate of Industrial Societies</u> By Richard Heinberg 2005

Blood and Oil, By Michael Klare 2004

Out of Gas: The End of the Age of Oil, By David Goodstein 2004

Films and Documentaries

Peak Oil: Imposed by Nature
Crude Impact
Crude Awakening

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