

## **PEAK OIL & HAMILTON LAND DEVELOPMENT**

Peak Oil is not a new theory, nor is it a theory new to debate. Nonetheless, this subject matter seems to have become either a catalyst to evoke panic or a conduit to substantiate arguments against community development. While no one disputes the fact that finite resources are non-renewable, we must also agree that the issue of peak oil cannot be used alone in presenting a balanced argument. One cannot simply exclude all other resources available, nor can they exclude other features that are impacted, such as economic development and job growth.

The peak oil theory is being used in Hamilton by a number of individuals attempting to halt development of approximately 3000 acres of land surrounding Hamilton's airport. If the issue of peak oil is going to be used as the foundation for these arguments, then we need to look at the issue of peak oil itself, and if a balanced argument is to be met, then we need to look at all other existing resources available, not just this one.

Marion King Hubbert, an American geologist, created the peak oil theory. It is the prediction of the continued existence of a source based on its extraction and depletion rates. While there is some agreement on a number of Canadian and American peak oil dates, the dates for worldwide peak are ambiguous at best. Those dates, as predicted by Hubbert and others, have already passed and therefore have met with criticism.

Regardless of all the timeline arguments, the majority of the population does not dispute the inevitable decline of this resource, so there are other essential aspects that need to be addressed here. First and foremost we need to address the primary concern behind the peak oil theory – the prediction of the sources' rapid decline.

Petro-Canada is one of the largest integrated oil and gas companies in Canada. It has considerable resources, including the Hibernia field in which Petro-Canada has an operational interest of 20 per cent. This site not only includes the Hibernia reservoir, but also the Ben Nevis Avalon reservoir. These sites are estimated to have a remaining production life of between 20 and 25 years. Petro-Canada also has a 27.5 per

cent operational interest in the White Rose project, a \$2.3 billion offshore development located 350 km east of St. John's, Newfoundland. This development plan incorporates the drilling of approximately 20 wells to retrieve an estimated 200 to 250 million barrels of oil over a decade. Petro-Canada also holds a 23.9 per cent development interest in several other new discoveries off Canada's east coast.

According to Imperial Oil, the world's oil and gas resource base is still very large and should be sufficient to cover the growth and demand through 2020 and beyond. The conventional liquids resource base is thought to be about three trillion barrels. One of Imperial Oil's current projects includes the drilling at Cold Lake. Imperial Oil also has one of the largest in-situ oil sands operations in the world and a premier in-situ project in Canada. They indicate that Cold Lake produces over five percent of Canada's crude oil, with production of over 50 million barrels in 2005—a production entirely owned by this Canadian company.

These are not the only two Canadian Oil companies who are involved in new resource developments. Canada's other leading oil producers are also currently involved in the developmental stages of extraction and/or discovery—companies such as: Suncor Energy, Talisman Energy, EnCana Corp and Shell Canada, et al.

In addition to all the expansion efforts of Canada's leading oil producers, there are several other viable resources that require attention.

Biodiesel is an alternative fuel source that is produced from vegetable oils that are locally produced and renewable. Biodiesel has been approved by Environment Canada and has already become a substantial alternative to our current dependency on petroleum diesel. Biodiesel can stand alone, or be combined with petroleum diesel. It is biodegradable, nontoxic, and virtually sulfur free.

In July 2005, the Canadian government announced that five major Canadian corporations would receive a second round of funding in the amount of \$46 million

dollars for the growth of ethanol plants under the government's \$118 million dollar Ethanol Expansion Program (EEP).

Canada also has a vast supply of natural gas from existing sites, newly discovered sites, and undiscovered sites where surveying is currently underway. Although natural gas is another finite resource, there are still a significant number of potential supply sites in Canada's northern and offshore regions that have yet to be utilized. For example, Imperial Oil is in charge of a joint-venture project regarding the discovery of natural gas in the Mackenzie Valley region of the Northwest Territories. This resource has already proven effective in reducing greenhouse emissions in vehicles. Currently, there are more than 700,000 natural gas vehicles (NGVs) operating in 38 countries, and they are currently in production at Ford, Chrysler and General Motors.

Another viable resource is nuclear power. Using hydrogen as transportation fuel also reduces greenhouse gases and pollution. The Atomic Energy Council of Canada states that building one CANDU reactor each year for 20 years would supply enough clean electricity to power 13 million hydrogen-powered vehicles. They claim that this would reduce emissions by up to 120 million metric tonnes per year.

These are just three examples of effective alternative resources. Canadians are not just sitting around waiting for the petroleum oil supply to be used up. In fact, the effort to find new energy supplies has been effectively going on for many decades. We should not be looking at the issue of peak oil as an inevitable crisis; we should be looking at it as an opportunity to reduce greenhouse emissions and a chance to improve our quality of life. In fact, relying heavily on one source of fuel is exceedingly dangerous. Doing so only contributes to panic when the main source is compromised in some way.

Several European countries have already taken the initiative to move away from fossil fuels. In fact, Sweden is taking the initiative by weaning itself off of oil completely. Within the next 15 years, the country of 9 million plans on being the world's first oil-free country. This initiative is not only providing a positive change for the environment, but also creating new jobs and stimulating economic growth.

Remember the Y2K panic? The issue of peak oil should not be used to instill fear; it should be used to promote change. Our ability as humans to adapt and advance is paramount, especially when we are prepared. The development of Hamilton's proposed development surrounding its airport is a change for the better. It would not only stimulate economic growth in our community but also aid in job growth, helping to alleviate part of Hamilton's 7.7 per cent unemployment rate.

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