

September 4, 2003

## Energy research helping reduce CO

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Edmonton...Government and industry representatives officially opened a new heavy oil extraction test facility near Fort McMurray on September 4 to explore a technology that could reduce carbon dioxide emissions by 85 per cent.

Last fall, the Alberta government announced it was joining forces with nine leading Canadian oil and gas producers (the DOVAP consortium) to invest in a \$30 million heavy oil research project to test the economic, environmental and technical viability of a new recovery technology.

"This project is a long-term investment in the future of Alberta's energy industry," said Victor Doerksen, Minister of Innovation and Science. "We continue to build on our past successes and invest in new energy technologies that ensure economic prosperity and environmental protection. The outcome of this project could be cost-effective, viable alternatives to heavy oil extraction that address important issues such as climate change and water conservation."

This recovery method, known as the VAPEX Process, involves injecting vapourized solvents into heavy oil and has the potential to lower greenhouse gas emissions and significantly reduce water consumption, as compared to other extraction technologies currently being used.

The Alberta government, through the Alberta Energy Research Institute (AERI), has committed \$7.5 million to the project from their existing budget, and the DOVAP consortium is contributing \$15 million. The federal government, through Technology Partnerships Canada, previously announced its \$7.5 million contribution in June 2001.

"Successful VAPEX that would cut development and operating costs, and reduce environmental impacts, would be great news for everyone," said Energy Minister Murray Smith, on hand for the opening. "I wish Devon Canada the greatest possible success in this important project over the coming years."

The long-term research project will be conducted at the Dover site in Fort McMurray and will be operated by Devon Canada. The project is being integrated with existing facilities to reduce costs and is expected to last between 5 and 10 years.

"Since 1998, Devon Canada has been contributing to the advancement of in situ bitumen recovery methods at the Underground Test Facility at our Dover site," says John Richels, Devon Canada's President and CEO. "It seems appropriate that the DOVAP Project, which has evolved with that same spirit of innovation and collaboration among industry and government as SAGD technology, also be established at Dover."

AERI was established in 2000 and is responsible for energy-related research for the province. AERI advises the Minister of Innovation and Science and the government regarding energy research and the development of resources in the interest of Albertans. AERI provides strategic direction to position Alberta for the future in energy development, and invests in research and technology to enhance the sustainable development of the province's abundant energy resources.

The DOVAP Consortium is an association of Canadian oil and gas producers, including Devon Canada, Canadian Natural Resources, Chevron Canada Resources, ConocoPhillips, Imperial Oil, Nexen Petroleum Canada, Petro-Canada, Suncor Energy, and TOTAL E&P Canada.

Attachment: Backgrounder - The DOVAP Heavy Oil Research Project

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## Backgrounder

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### **The DOVAP Heavy Oil Research Project**

What is DOVAP?

The term DOVAP (Dover/VAPEX Process) is a combination of the place name **Dover**, the location of a former Underground Test Facility site in the Athabasca oil sands near Fort McMurray, and the **VAPEX Process**, where vapourized solvents are injected into heavy oil.

### **Why is the DOVAP Project important?**

Since the VAPEX Process is a non-thermal recovery method, it cuts carbon dioxide emissions and significantly reduces the water consumption compared to current technologies. It also has significant economic advantages because it can recover bitumen from zones too thin for traditional, thermal recovery. Bitumen products from both thermal and non-thermal oil sands projects are expected to account for 50 per cent of Canada's crude oil production by 2005.

### **What is the scope of the project?**

This heavy oil research project will consist of two horizontal well pairs and some associated monitoring wells for the purpose of evaluating and practicing the effect of the VAPEX Process in the commercial production of bitumen. One well pair will test a cold start-up process and the second well pair will potentially test a hot start-up (jump-start with steam stimulation) of the VAPEX process.

### **What is heavy oil?**

Heavy oil refers to oil that is thick and does not flow well, requiring specialized recovery, dilution and upgrading processes that allow it to be transported and refined.

### **When will Albertans see results from the DOVAP project?**

This project should be considered long-term. It will be some time before results are seen as the project is expected to last between 5 and 10 years.

### **Why is energy research important?**

During the next 25 years, Alberta's petrochemical industry will undergo a major transition as supplies of natural gas liquids (used as feedstock) decline and petrochemical demand increases. Alberta's energy industry also faces an enormous and complex challenge as it shifts to developing sustainable, clean energy.

### **What types of energy research is the Government of Alberta conducting?**

The Government of Alberta's commitment to energy research is more important today than ever before. A comprehensive strategy has been developed by the Alberta Energy Research Institute in consultation with various industry and government stakeholders. This strategy will help the province address environmental concerns while developing an integrated energy industry focused on Alberta's conventional and non-conventional resources. A copy of the strategy can be found at **[www.aeri.ab.ca](http://www.aeri.ab.ca)**

The Alberta Research Council is continuing with lab studies looking at the various aspects of the VAPEX Process and expects to be further involved with lab and interpretive work in this and other areas. All energy research in Alberta is undertaken within the context of environmental sustainability.

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