

History

The Knowledge Centre was originally developed as a subject specific information service, known as the Technology Centre for Natural Gas (TCNG). The Centre provided public access to non-proprietary information on commercially available advanced natural gas exploration, production and processing technologies, with some focus on sustainability issues for gas development and coal-bed methane. The Centre also provided literature searches on selected technical energy databases, direct or indirect access to web-based resources and hard copy documents. In support of the Canadian Technology Transfer Agency (CTTA) program, funded by the Gas Technology Institute (GTI), the Centre was well established and handled approximately 80 information requests per month. The TCNG's focus was on identifying and providing information on natural gas related technologies, which made it an invaluable tool for the CTTA. The service was valuable because the staff was knowledgeable in identifying and searching relevant energy databases, plus had access to technical expertise via GTI and the CTTA, to identify key technology areas. This was a unique and useful service offered to the western Canadian oil and gas industry to

- provide rapid responses for common questions,
- avoid duplicate searches by multiple users and
- maintain copies of the most useful materials to expedite document delivery.

The CTTA program was discontinued mid 2002 and the TCNG transitioned into the Knowledge Centre, which has been managed through PTAC since July 2002.

Why is a Knowledge Centre Needed?

With the closure of CTTA/TCNG program, PTAC believed there was a need to redirect the efforts of the TCNG. In response to the high demand by upstream oil and gas producers and PTAC's technology transfer facilitation, the objective was to add value by creating the "Knowledge Centre" and expand the collection to include information focusing on sustainable technologies. Without access to technology knowledge, technology transfer cannot be effectively achieved.

Numerous public and corporate document collections, technical databases and library services are available to the hydrocarbon energy industry. Most databases are designed to be accessed by professional researchers, who are familiar with the content and layout of the databases, and are experts in the target technology area. It requires time and motivation to identify and read technical documents, which may or may not be relevant to the questions for which they are seeking answers. Often the document retrieval process is slow so it may take weeks to obtain documents once identified. Therefore, databases are often of minimal use to those in the hydrocarbon energy industry who are looking for timely responses to pressing questions. The answers must be found with little expenditure of the searchers time or money. Most end-users of technical databases receive very little perceived value from these retrieval systems, which means that much of the information in these databases is rarely accessed or put to use.

A topic-specific Knowledge Centre, with access to input from subject experts, provides value by:

- accelerating responses to specific questions,
- improving the quality of the response and
- eliminating wasted time, cost and effort for the clients.

Goal of the PTAC Knowledge Centre

To provide all stakeholders, with efficient access, to non-proprietary information and knowledge on technologies supporting sustainable development in the hydrocarbon energy industry.

Focus of the PTAC Knowledge Centre

- Respond quickly and cost effectively to all information requests.
- Aid technology transfer, and avoid time-consuming and costly duplicate research, by identifying documentation and web-based resources on important existing sustainability technologies.
- Build a matrix of sustainability technology expertise, by working closely with PTAC's President, the Director of Technology Transfer and with the support of PTAC members.
- With support from PTAC Technology Committees, proactively facilitate joint industry searches, to develop high quality bibliographies.
- House identified documents on sustainability technology topics of highest interest to the industry.
- Focus on technologies that support sustainable development within the oil, natural gas, heavy oil, oil sands, and pipeline sectors and expand the on site (downtown Calgary) document collection and services.
- Facilitate delivery of high-quality services, through collaboration with experts and other information sources, to support the extended PTAC mandate initiative of PTAC members, industry, government and academia.

Funding of the Knowledge Centre

Most information services and libraries charge for services on a per search basis (cost+ or \$90-\$100/hr fee) and charge \$20-\$25+ per document, including copyright fees. A relatively straightforward search could cost more than \$1000 for search fees and document retrieval charges. This cost excludes the cost of the end-user's time to review all the documents to find the one paper or specific piece of information they are seeking. This cost is repeatedly incurred every time someone looks for the same information or literature,

The concept of the PTAC Knowledge Centre is to identify information on sustainability and eco-efficiency technology questions only once, at lowest cost source. Sources might include subject matter experts, citations, a specific paper or a summary of a literature review. Once identified, the material could be obtained and retained for viewing, copying or electronic distribution, added to a topic area annotated bibliography, or developed into a topic area summary report. Based on this model, an initial investment would be required (from outside sources or through joint industry funds) to perform searches and build the sustainability technology knowledge base and a matrix of subject experts. Over time, the costs of accessing knowledge would be reduced. A fee structure for new searches could be implemented, based on cost-recovery for fixed and variable costs for the information specialist and fixed facilities. Expert support could be accessed through PTAC members. Joint Industry Projects (JIP) could be initiated through PTAC workshops to determine topics of common interest and importance to be pursued. The cost of the Knowledge Centre administration would remain relatively small and fixed.

PTAC Knowledge Centre Model vs. Traditional

